



**DICOM Conformance Statement for**  
**LISENDO 880**

Company Name: FUJIFILM Corporation

Product Name: Diagnostic Ultrasound System LISENDO 880

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## 1. CONFORMANCE STATEMENT OVERVIEW

This product LISENDO 880 implements the necessary DICOM services to download worklists from an information system, save acquired Ultrasound and Ultrasound Multi-frame images to a network storage device or storage media, print Ultrasound images to a networked hardcopy device and inform the information system about the work actually done.

Table1-1 provides an overview of the network services supported by LISENDO 880.

**Table 1-1 NETWORK SERVICES**

| SOP Classes                                                         | User of Service (SCU) | Provider of Service (SCP) |
|---------------------------------------------------------------------|-----------------------|---------------------------|
| <b>Transfer</b>                                                     |                       |                           |
| Ultrasound Image Storage                                            | Yes                   | No                        |
| Ultrasound Multi-frame Image Storage                                | Yes                   | No                        |
| Comprehensive SR <sup>1</sup>                                       | Yes                   | No                        |
| Encapsulated PDF Storage <sup>2</sup>                               | Yes                   | No                        |
| Secondary Capture Image Storage <sup>3</sup>                        | Yes                   | No                        |
| Multi-frame True Color Secondary Capture Image Storage <sup>3</sup> | Yes                   | No                        |
| <b>Workflow Management</b>                                          |                       |                           |
| Modality Worklist                                                   | Yes                   | No                        |
| Modality Performed Procedure Step                                   | Yes                   | No                        |
| Storage Commitment Push Model                                       | Yes                   | No                        |
| Verification                                                        | Yes                   | Yes                       |
| <b>Print Management</b>                                             |                       |                           |
| Basic Grayscale Print Management Meta                               | Yes                   | No                        |
| Basic Color Print Management Meta                                   | Yes                   | No                        |
| <b>Query/Retrieve <sup>4</sup></b>                                  |                       |                           |
| Study Root Information Model FIND                                   | Yes                   | No                        |
| Study Root Information Model MOVE                                   | Yes                   | No                        |
| Ultrasound Image Storage                                            | No                    | Yes                       |
| Ultrasound Multi-frame Image Storage                                | No                    | Yes                       |
| CT Image Storage                                                    | No                    | Yes                       |
| MR Image Storage                                                    | No                    | Yes                       |
| Positron Emission Tomography Image Storage                          | No                    | Yes                       |
| Encapsulated PDF Storage                                            | No                    | Yes                       |

Note: 1. SOP-LISENDO880-21 is necessary.

Note: 2. SOP-LISENDO880-70 is necessary to create Encapsulated PDF report.

Note: 3. SOP-LISENDO880-112, SOP-LISENDO880-113, or SOP-LISENDO880-114 is necessary to create Secondary Capture Image.

Note: 4. SOP-LISENDO880-59 is necessary.

Table 1-2 provides an overview of the Media Storage Application Profiles supported by LISENDO 880.

**Table 1-2 Media Services**

| <b>Media Storage Application Profile</b>          | <b>Write Files<br/>(FSC or FSU)</b> | <b>Read Files<br/>(FSR) <sup>1</sup></b> |
|---------------------------------------------------|-------------------------------------|------------------------------------------|
| <b>DVD-RAM &amp; Compact Disk – Recordable</b>    |                                     |                                          |
| Ultrasound Image Display                          | Yes                                 | Yes                                      |
| Ultrasound Image Spatial Calibration              | Yes                                 | Yes <sup>2</sup>                         |
| Ultrasound Image Combined Calibration             | No                                  | No                                       |
| Ultrasound Multi-frame Image Display              | Yes                                 | Yes                                      |
| Ultrasound Multi-frame Image Spatial Calibration  | Yes                                 | Yes                                      |
| Ultrasound Multi-frame Image Combined Calibration | No                                  | No                                       |

Note: 1. Structured Reports, SC images, and SC-mf images cannot be imported.

Note: 2. Not support Ultrasound images from other products.

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### 3. INTRODUCTION

#### 3.1 REVISION HISTORY

| Document Version | Date of Issue |
|------------------|---------------|
| 1.0              | 2016.09.30    |
| 1.1              | 2016.10.07    |
| 1.2              | 2016.10.14    |
| 1.3              | 2017.02.17    |
| 2.0              | 2017.09.08    |
| 2.1              | 2018.01.10    |
| 2.2              | 2018.04.20    |
| 3.0              | 2018.10.12    |
| 3.2              | 2019.05.29    |
| 4.0              | 2019.12.17    |
| 4.1              | 2020.12.01    |
| 4.1.1            | 2021.04.01    |
| 4.2              | 2021.10.04    |
| 6.3              | 2024.07.01    |

#### 3.2 AUDIENCE

This document is intended for hospital staff, health system integrators, software designers or implementers. It is assumed that the reader has a working understanding of DICOM.

#### 3.3 REMARKS

DICOM, by itself, does not guarantee interoperability. However, the Conformance Statement facilitates a first-level validation for interoperability between different applications supporting the same DICOM functionality.

This Conformance Statement is not intended to replace validation with other DICOM equipment to ensure proper exchange of information intended.

The scope of this Conformance Statement is to facilitate communication with LISENDO 880 and other vendors' Medical equipment. The Conformance Statement should be read and understood in conjunction with the DICOM Standard [DICOM]. However, by itself it is not guaranteed to ensure the desired interoperability and a successful interconnectivity.

The user should be aware of the following important issues:

- The comparison of different conformance statements is the first step towards assessing interconnectivity between the equipments produced by different manufacturers.
- Test procedures should be defined to validate the desired level of connectivity.

- The DICOM standard will evolve to meet the users' future requirements. FUJIFILM Corporation reserves the right to make changes to its products or to discontinue its delivery.

### **3.4 DEFINITIONS, TERMS AND ABBREVIATIONS**

Definitions, terms and abbreviations used in this document are defined within the different parts of the DICOM standard.

Abbreviations and terms are as follows:

|         |                                                          |
|---------|----------------------------------------------------------|
| AE      | DICOM Application Entity                                 |
| AET     | Application Entity Title                                 |
| ACSE    | Association Control Service Element                      |
| CD-R    | Compact Disk Recordable                                  |
| CID     | Context Identifier                                       |
| CM      | Code Meaning                                             |
| CSD     | Coding Scheme Designator                                 |
| CSE     | Customer Service Engineer                                |
| CV      | Code Value                                               |
| DVD     | A trademark of the DVD Forum that is not an abbreviation |
| DVD-RAM | DVD Random Access Memory                                 |
| FSC     | File-Set Creator                                         |
| FSU     | File-Set Updater                                         |
| FSR     | File-Set Reader                                          |
| GUI     | Graphical User Interface                                 |
| HDD     | Hard Disk Drive                                          |
| IHE     | Integrating the Healthcare Enterprise                    |
| IOD     | (DICOM) Information Object Definition                    |
| ISO     | International Standard Organization                      |
| LCD     | Liquid Crystal Display                                   |
| MPPS    | Modality Performed Procedure Step                        |
| MSPS    | Modality Scheduled Procedure Step                        |
| NEMA    | National Electrical Manufacturers Association            |
| R       | Required Key Attribute                                   |
| O       | Optional Key Attribute                                   |
| PDU     | DICOM Protocol Data Unit                                 |
| PHI     | Protected Health Information                             |
| SCU     | DICOM Service Class User (DICOM client)                  |
| SCP     | DICOM Service Class Provider (DICOM server)              |
| SOP     | DICOM Service-Object Pair                                |

|     |                      |
|-----|----------------------|
| SR  | Structured Reporting |
| TID | Template Identifier  |
| U   | Unique Key Attribute |
| UID | Unique Identifier    |
| USB | Universal Serial Bus |
| VR  | Value Representation |

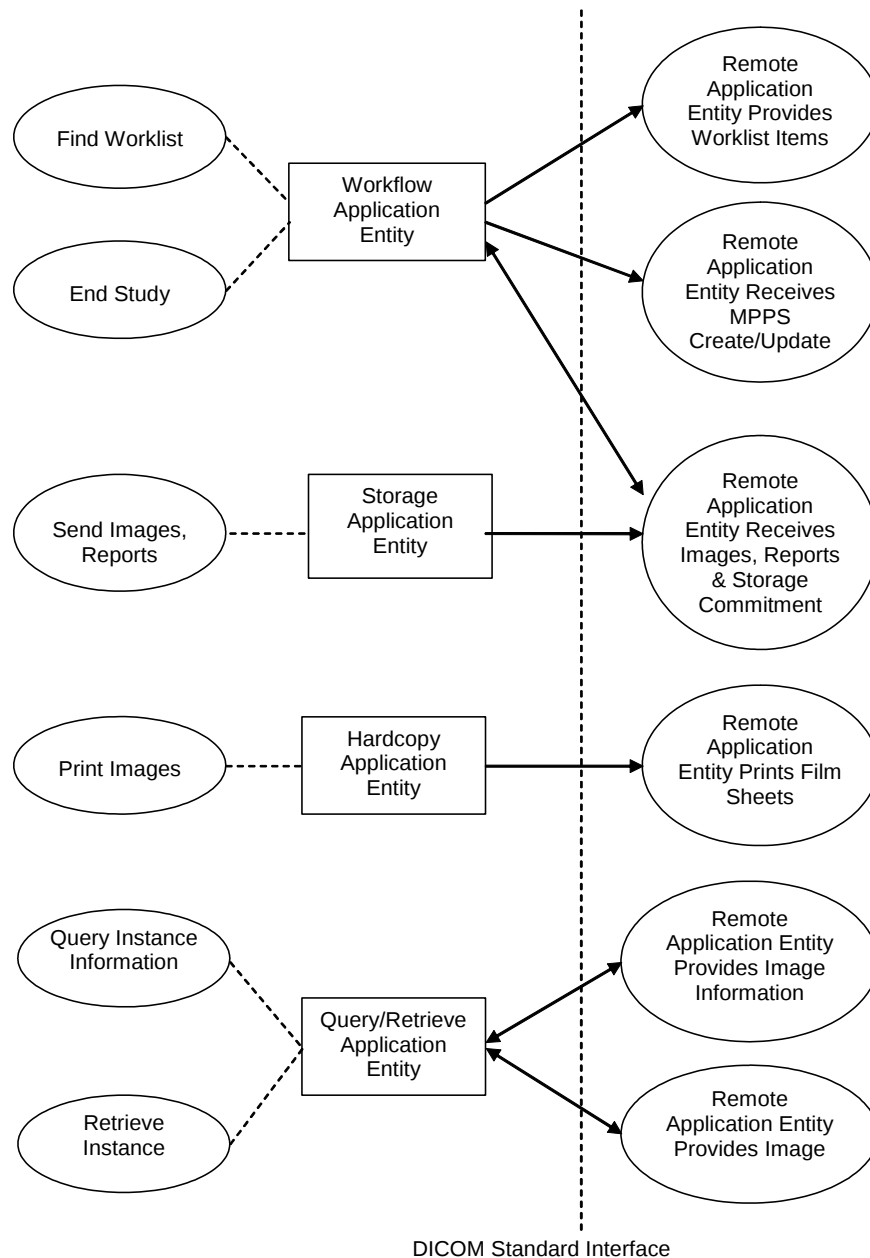
### **3.5 REFERENCES**

[DICOM]Digital Imaging and Communications in Medicine (DICOM), NEMA PS 3.1-3.18, 2013

## 4. NETWORKING

### 4.1 IMPLEMENTATION MODEL

#### 4.1.1 Application Data Flow



**Figure 4.1-1 APPLICATION DATA FLOW DIAGRAM**

- The Workflow Application Entity receives Worklist information from and sends MPPS information to a remote AE. It is associated with the local real-world activities "Find Worklist" and "End Exam". When the "Find Worklist" local real-world activity is requested by an operator the Workflow Application Entity queries a remote AE for worklist items and provides the set of worklist items matching the query

request. When "Acquire Images" local real-world activity is performed on the selected patient for the first time, the Workflow Application Entity automatically creates Modality Performed Procedure Step instance managed by a remote AE. When "End Exam" local real-world activity is requested by the operator, the MPPS Completed or Discontinued updates the MPPS instance managed by the remote AE. If the remote AE is configured as an archive device the Workflow AE will request Storage Commitment and if a commitment is successfully obtained the Workflow AE will record this information in the local database.

- The Storage Application Entity stores images(Ultrasound images, Ultrasound Multi-frame images, Secondary Capture images, Multi-frame True Color Secondary Capture images), Encapsulated PDF Reports, and Structured Reports to a remote AE. It is associated with the local real-world activity "Send Images", "Send PDF Reports", and "Send Structured Reports", respectively. An ultrasound modality displays image in real-time, and the operator acquires it by pressing the freeze button. A "Frozen" image may be sent to a remote AE or may be stored in the local HDD, DVD-RAM, CD-R buffer or USB Media for review and batch send. "Send Images" is performed upon user request for each study completed or for specific images selected. Sending Structured Reports is performed automatically at "End Exam" local real-world activity.
- The Hardcopy Application Entity prints images on a remote AE (Printer). It is associated with the local real-world activity "Print Images". "Print Images" creates a print-session within the print queue containing one or more virtual film sheets composed from images selected by the user.
- The Query/Retrieve Application Entity queries instances information of Ultrasound and/or Ultrasound Multi-frame images or CT Images or MR Images or PET Images or Documents, and retrieves the instances from a Remote AE. It is associated with local real-world activity "Query Instance Information" and "Retrieve Instance". When the "Query Instance Information" local real-world activity is requested by an operator, the Query/Retrieve Application Entity queries a remote AE for image information and provides the information list matching the query request. When "Retrieve Instance" local real-world activity is requested by an operator, the Query/Retrieve Application Entity requests a remote AE to transfer the instances.

#### **4.1.2 Functional Definition of AEs**

##### **4.1.2.1 Functional Definition of Workflow Application Entity**

The "Search Worklist" local activity is provided in the New Patient Registration GUI initiated by pressing the "NEW PATIENT" button on the console. The Patient ID, Patient Name, Accession Number, Scheduled Procedure Step Start Date, Scheduled Performing Physicians Name, and/or Requested Procedure ID may optionally be supplied before clicking the "Search" button in the GUI. Other default keys are the Modality (US), Scheduled Station AE Title (local AET), and Scheduled Procedure Step Start Date (Date of the day). When the "Search" button is clicked, the Workflow AE tries to open an association to a remote AE. If the Workflow AE establishes an association to a remote AE, it will transfer all worklist items via the open Association. During receiving the worklist response, the Workflow AE counts items and cancels the query processing, if the built-in limit of items (500) is reached. The results will be displayed in a list, which will be cleared with the next "Search Worklist" activity.

The Workflow AE automatically creates MPPS Instance when an image is sent to remote AE or stored in local drive for the first time in an examination. Further updates on the MPPS data can be performed from the "End Exam" user interface. The MPPS "Completed" or "Discontinued" states can only be set by the operator interaction. After a successful update of the MPPS Completed, the Workflow AE will issue a Storage Commitment request on images and Structured Reports already sent in the examination.

##### **4.1.2.2 Functional Definition of Storage Application Entity**

The Storage Application Entity can be requested in two modes. After the proper Worklist Item is selected or the patient identification is supplied by the operator, pressing the "STORE" button will directly send an image to the remote storage AE when it is configured to send to network. Or when it is configured to store the image in the local drive, the image is written in the drive for later reference. The images selected by the operator will be sent to the remote storage AE. A storage association will be initiated by clicking the "Send" button on the screen. or touching the "Send" button on the LCD touch panel.

A storage association for sending Structured Reports will be automatically initiated at the end of an examination if reports have been created in the examination. When measurements are performed under specific applications, Structured Reports will be created automatically at the end of the examination. Structured Reports can also be created manually by the operator.

The color of I-mark and R-mark overlaid on an image icon or the color of SR-mark overlaid on a report icon indicates the status of the image or report, respectively: **Green** - original, **Light Blue** - stored to media, **Orange** - sent to an Image Archive, and **Blue** - storage committed.

#### **4.1.2.3 Functional Definition of Hardcopy Application Entity**

The Hardcopy Application Entity locates in the "Print" button. By clicking the thumbnail the operator may select or deselect images to be printed by the remote AE. A print association will be initiated by clicking the "Print" button on the screen or touching the "Print(DICOM)" button on the LCD touch panel. After an association is established with the printer, its status is determined. If the printer is operating normally, the film sheets composed of selected images will be printed. If the printer is not operating normally, or the print returns a failure status during the association, the error is reported to the user.

#### **4.1.2.4 Functional Definition of Query/Retrieve Application Entity**

The Query/Retrieve Application Entity is provided in the Import GUI initialized by clicking the "Import" button on the "Find" Window. The Patient ID, Patient's Name, Accession Number, and/or Study Date may optionally be supplied before clicking the "Search" button. Other default key is Modality (US, CT, MR, PET or DOC). When the "Search" button is clicked, the Query/Retrieve AE will try to open an association to a remote AE. If the Query/Retrieve AE establishes an association to the remote AE, it will transfer all instance information items via the open Association. During receiving the response, the Query/Retrieve AE cancels the query processing, if the "Cancel" button is clicked by the operator. The results will be displayed in a separate list, which will be cleared with the next "Query Instance Information" activity.

When the operator selects instance information items in the list and clicks "Preview" or "Import" button, the Query/Retrieve AE will try to open an association to the remote AE for "Retrieve instance" activity. If the Query/Retrieve AE establishes an association to the remote AE, the Query/Retrieve AE opens a TCP/IP port and waits for another association requesting for the instance transfer from the remote AE. If the Remote AE establishes an association to the Query/Retrieve AE, it will transfer all instances via the Open Association from the remote AE. During receiving the response, the Query/Retrieve AE cancels the processing, if the "Cancel" button is clicking by the operator.

### 4.1.3 Sequencing of Real-World Activities



**Figure 4.1-2 SEQUENCING CONSTRAINTS**

Under normal scheduled workflow conditions the sequencing constraints illustrated in Figure 4.1-2 apply:

1. Query Worklist
2. Receive Worklist of Modality Scheduled Procedure Steps (MSPS)
3. Select Workitem (MSPS) from Worklist
4. Acquire Images

5. Create MPPS at the first Acquisition of Image, Encapsulated PDF, or Structured Report
6. Store acquired image instances
7. Create and store Structured Reports by "Send SR" user interface (optional step)
8. Create Encapsulated PDF reports (optional step)
9. Store Encapsulated PDF report instances (optional step)
10. Select Complete or Discontinue in "End Exam" user interface
11. Store unset image instances and store Structured Report instances (depends on conditions). Images are sent to remote storage AE over a separate association from Structured Report storage.
12. Complete acquisition and finalize MPPS
13. The Workflow AE will request Storage Commitment for the image and report instances, if the Image Manager is configured as an archive device.
14. Print acquired images (optional step)
15. Query Instance(Image or Document) Information (optional step)
16. Retrieve Instances (optional step)

Other workflow situations (e.g. unscheduled procedure steps) will have other sequencing constraints. Printing could equally take place after the acquired images have been stored. Printing could be omitted completely if no printer is connected or hardcopies are not required.

## **4.2 AE SPECIFICATIONS**

### **4.2.1 Workflow Application Entity Specification**

#### **4.2.1.1 SOP Classes**

This product provides Standard Conformance to the following SOP Classes:

**Table 4.2-1 SOP CLASSES FOR AE WORKFLOW**

| <b>SOP Class Name</b>                      | <b>SOP Class UID</b>    | <b>SCU</b> | <b>SCP</b> |
|--------------------------------------------|-------------------------|------------|------------|
| Modality Worklist Information Model – FIND | 1.2.840.10008.5.1.4.31  | Yes        | No         |
| Modality Performed Procedure Step          | 1.2.840.10008.3.1.2.3.3 | Yes        | No         |
| Storage Commitment Push Model              | 1.2.840.10008.1.20.1    | Yes        | No         |
| Verification                               | 1.2.840.10008.1.1       | Yes        | Yes        |

#### **4.2.1.2 Association Policies**

##### **4.2.1.2.1 General**

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-2 DICOM APPLICATION CONTEXT FOR AE WORKFLOW**

|                          |                       |
|--------------------------|-----------------------|
| Application Context Name | 1.2.840.10008.3.1.1.1 |
|--------------------------|-----------------------|

**4.2.1.2.2 Number of Associations**

This product initiates one Association at a time for a Workflow requests.

**Table 4.2-3 NUMBER OF ASSOCIATIONS INITIATED FOR AE WORKFLOW**

|                                             |   |
|---------------------------------------------|---|
| Maximum number of simultaneous Associations | 1 |
|---------------------------------------------|---|

**4.2.1.2.3 Asynchronous Nature**

This product does not support asynchronous communication (multiple outstanding transactions over a single Association).

**Table 4.2-4 ASYNCHRONOUS NATURE AS A SCU FOR AE WORKFLOW**

|                                                         |   |
|---------------------------------------------------------|---|
| Maximum number of outstanding asynchronous transactions | 1 |
|---------------------------------------------------------|---|

**4.2.1.2.4 Implementation Identifying Information**

The implementation information for this Application Entity is:

**Table 4.2-5 DICOM IMPLEMENTATION CLASS AND VERSION FOR AE WORKFLOW**

|                             |                                                |
|-----------------------------|------------------------------------------------|
| Implementation Class UID    | 1.2.392.200039.117                             |
| Implementation Version Name | 20180308<br>(subject to change without notice) |

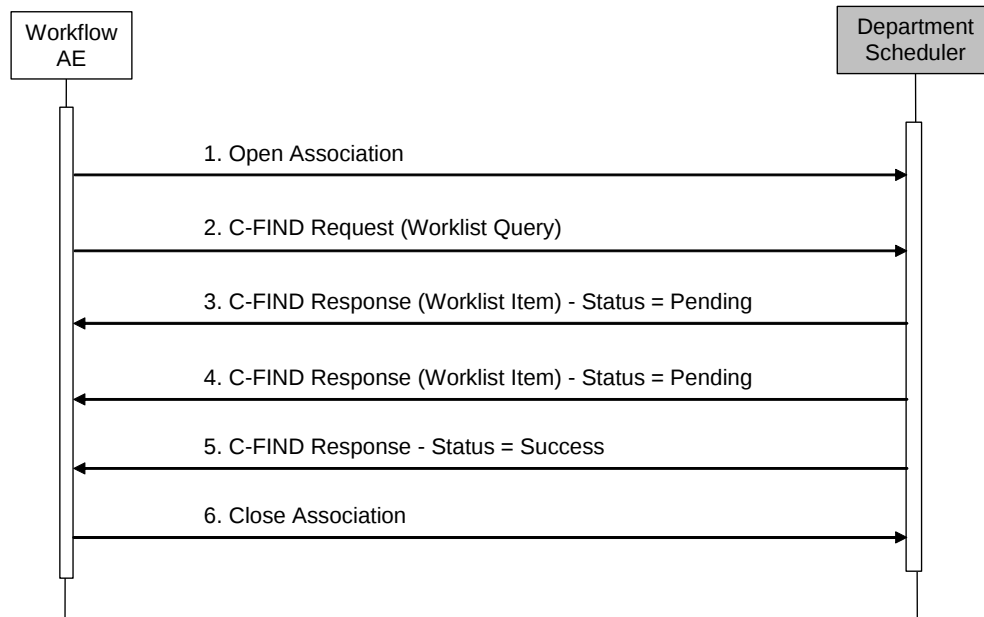
**4.2.1.3 Association Initiation Policy****4.2.1.3.1 Activity – Find Worklist****4.2.1.3.1.1 Description and Sequencing of Activities**

An interactive query for Worklist is initiated by pressing the "Find" button in the "NEW PATIENT" Registration GUI. The built-in query keys are the Modality (US), Scheduled Procedure Step Start Date (actual date). The Scheduled Station AE Title may be excluded by the configuration. Additional "Patient-based" query keys, Patient's ID, Patient Name, Accession Number, and/or Requested Procedure ID, may be supplied in the dialog by the operator.

Upon initiation of the request, this product will build an Identifier for the C-FIND request, will initiate an Association to send the request and will wait for Worklist responses. After retrieval of all responses, this product will access the local database to update patient demographic data. To protect the system from overflow, this product will limit the number of processed worklist responses to 500. During receiving the worklist response items are counted and the query processing is canceled by issuing a C-FIND-CANCEL if the limit of items is reached. The results will be displayed in a separate list.

The retrieved Worklist items are stored locally during the day, which will be cleared with the next worklist update. If the list is a latest and additional examination is to be performed on a patient, or the equipment is disconnected for mobile examination, the stored worklist items may be referenced by pressing

"Worklist" button in the "NEW PATIENT" Registration GUI. The additional examination using the same MSPS generates a second series of images coping with the Append Case among the IHE use cases.



**Figure 4.2-1 SEQUENCING OF ACTIVITY – WORKLIST QUERY**

A possible sequence of interactions between the Workflow AE and a Departmental Scheduler (e.g. a device such as a RIS or HIS which supports the Modality Worklist SOP Class as an SCP) is illustrated in the Figure above:

1. The Workflow AE opens an association with the Department Scheduler.
2. The Workflow AE sends a C-FIND request to the Department Scheduler containing the Worklist Query attributes.
3. The Department Scheduler returns a C-FIND response containing the requested attributes of the first matching Worklist Item.
4. The Department Scheduler returns another C-FIND response containing the requested attributes of the second matching Worklist Item.
5. The Department Scheduler returns another C-FIND response with status Success indicating that no further matching Worklist Items exist. This example assumes that only 2 Worklist items match the Worklist Query.
6. The Workflow AE closes the association with the Department Scheduler.
7. The user selects a Worklist Item from the Worklist database and prepares to acquire images.

#### **4.2.1.3.1.2 Proposed Presentation Contexts**

This product will propose Presentation Contexts as shown in the following table:

**Table 4.2-6 PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY WORKLIST QUERY**

| Presentation Context Table                 |                        |                                                        |                                          |      |           |
|--------------------------------------------|------------------------|--------------------------------------------------------|------------------------------------------|------|-----------|
| Abstract Syntax                            |                        | Transfer Syntax                                        |                                          | Role | Ext. Neg. |
| Name                                       | UID                    | Name List                                              | UID List                                 |      |           |
| Modality Worklist Information Model – FIND | 1.2.840.10008.5.1.4.31 | Implicit VR Little Endian<br>Explicit VR Little Endian | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1 | SCU  | None      |
| Verification                               | 1.2.840.10008.1.1      | Implicit VR Little Endian<br>Explicit VR Little Endian | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1 | SCU  | None      |

**4.2.1.3.1.3 SOP Specific Conformance for Modality Worklist**

The behavior of this product when encountering status codes in a Modality Worklist C-FIND response is summarized in the Table below. If any other SCP response status than "Success" or "Pending" is received by this product, a Worklist Error Message will appear on the user interface.

**Table 4.2-7 MODALITY WORKLIST C-FIND RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning                                                                    | Error Code             | Behavior                                                                                                                                                                                                                                               |
|----------------|------------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Success        | Matching is complete                                                               | 0000                   | The SCP has completed the matches. Worklist items are available for display or further processing.                                                                                                                                                     |
| Refused        | Out of Resources                                                                   | A700                   | The Association is closed using A-RELEASE and the worklist query is failed.                                                                                                                                                                            |
| Failed         | Identifier does not match SOP Class                                                | A900                   | The Association is closed using A-RELEASE and the worklist query is failed.                                                                                                                                                                            |
| Failed         | Unable to Process                                                                  | C000 – CFFF            | The Association is closed using A-RELEASE and the worklist query is failed.                                                                                                                                                                            |
| Cancel         | Matching terminated due to Cancel request                                          | FE00                   | If the query was cancelled due to too may worklist items then the SCP has completed the matches. Worklist items are available for display or further processing. Otherwise, the Association is aborted using A-ABORT and the worklist query is failed. |
| Pending        | Matches are continuing                                                             | FF00                   | The worklist item contained in the Identifier is collected for later display or further processing.                                                                                                                                                    |
| Pending        | Matches are continuing – Warning that one or more Optional Keys were not supported | FF01                   | The worklist item contained in the Identifier is collected for later display or further processing.                                                                                                                                                    |
| *              | *                                                                                  | Any other status code. | The Association is closed using A-RELEASE and the worklist is failed.                                                                                                                                                                                  |

The behavior of this product during communication failure is summarized in the Table below.

**Table 4.2-8 MODALITY WORKLIST COMMUNICATION FAILURE BEHAVIOR**

| Exception                                        | Behavior                                                                                                             |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Timeout                                          | The Association is aborted using A-ABORT and the worklist query is failed. A Worklist Error is reported to the user. |
| Association aborted by the SCP or network layers | The worklist query is failed. A Worklist Error is reported to the user.                                              |

Acquired images will always use the Study Instance UID specified for the Scheduled Procedure Step (if available). If an acquisition is unscheduled, a Study Instance UID will be generated locally.

The Table below provides a description of the Worklist Request Identifier of this product and specifies the attributes that are copied into the images. Unexpected attributes returned in a C-FIND response are ignored.

Requested return attributes not supported by the SCP are set to have no value. Non-matching responses returned by the SCP due to unsupported optional matching keys are ignored. No attempt is made to filter out possible duplicate entries.

**Table 4.2-9 WORKLIST REQUEST IDENTIFIERS**

| Module Name<br>Attribute Name        | Tag         | VR | M | R | Q | D | IOD |
|--------------------------------------|-------------|----|---|---|---|---|-----|
| SOP Common<br>Specific Character Set | (0008,0005) | CS |   | x |   |   | x   |

|                                         |             |    |     |   |   |   |   |
|-----------------------------------------|-------------|----|-----|---|---|---|---|
| Scheduled Procedure Step                |             |    |     |   |   |   |   |
| Scheduled Procedure Step Sequence       | (0040,0100) | SQ |     | x |   |   |   |
| > Modality                              | (0008,0060) | CS | (S) | x |   | x | x |
| > Requested Contrast Agent              | (0032,1070) | LO |     | x |   | x |   |
| > Scheduled Station AET                 | (0040,0001) | AE | (S) | x |   | x |   |
| > Scheduled Procedure Step Start Date   | (0040,0002) | DA | R   | x | x | x | x |
| > Scheduled Procedure Step Start Time   | (0040,0003) | TM |     | x |   | x | x |
| > Scheduled Performing Physician's Name | (0040,0006) | PN |     | x | x | x |   |
| > Scheduled Procedure Step Description  | (0040,0007) | LO |     | x |   | x | x |
| > Scheduled Protocol Code Sequence      | (0040,0008) | SQ |     | x |   | x | x |
| > Scheduled Procedure Step ID           | (0040,0009) | SH |     | x |   | x | x |
| > Scheduled Station Name                | (0040,0010) | SH |     | x |   | x |   |
| > Scheduled Procedure Step Location     | (0040,0011) | SH |     | x |   | x |   |
| > Pre-Medication                        | (0040,0012) | LO |     | x |   | x |   |
| Requested Procedure                     |             |    |     |   |   |   |   |
| Referenced Study Sequence               | (0008,1110) | SQ |     | x |   |   | x |
| Referenced Patient Sequence             | (0008,1120) | SQ |     | x |   |   |   |
| Study Instance UID                      | (0020,000D) | UI |     | x |   | x | x |
| Requested Procedure Description         | (0032,1060) | LO |     | x |   | x | x |
| Requested Procedure Code Sequence       | (0032,1064) | SQ |     | x |   | x | x |
| Requested Procedure ID                  | (0040,1001) | SH |     | x | x | x | x |
| Requested Procedure Priority            | (0040,1003) | SH |     | x |   | x |   |
| Patient Transport Arrangements          | (0040,1004) | LO |     | x |   | x |   |

|                                                        |             |    |  |   |   |   |   |
|--------------------------------------------------------|-------------|----|--|---|---|---|---|
| Imaging Service Request                                |             |    |  |   |   |   |   |
| Accession Number                                       | (0008,0050) | SH |  | x | x | x | x |
| Referring Physician's Name                             | (0008,0090) | PN |  | x |   | x | x |
| Requesting Physician                                   | (0032,1032) | PN |  | x |   | x | x |
| Requesting Service                                     | (0032,1033) | LO |  | x |   | x |   |
| Admission ID                                           | (0038,0010) | LO |  | x |   | x |   |
| Patient Identification                                 |             |    |  |   |   |   |   |
| Patient Name                                           | (0010,0010) | PN |  | x | x | x | x |
| Patient ID                                             | (0010,0020) | LO |  | x | x | x | x |
| Patient Demographic                                    |             |    |  |   |   |   |   |
| Patient's Birth Date                                   | (0010,0030) | DA |  | x |   | x | x |
| Patient's Sex                                          | (0010,0040) | CS |  | x |   | x | x |
| Patient's Size                                         | (0010,1020) | DS |  | x |   | x | x |
| Patient's Weight                                       | (0010,1030) | DS |  | x |   | x | x |
| Ethnic Group                                           | (0010,2160) | SH |  | x |   | x |   |
| Occupation                                             | (0010,2180) | SH |  | x |   | x | x |
| Patient Comments                                       | (0010,4000) | LT |  | x |   | x |   |
| Confidentiality Constraint on Patient Data Description | (0040,3001) | LO |  | x |   | x |   |
| Patient Medical                                        |             |    |  |   |   |   |   |
| Medical Alerts                                         | (0010,2000) | LO |  | x |   | x | x |
| Contrast Allergies                                     | (0010,2110) | LO |  | x |   | x | x |
| Pregnancy Status                                       | (0010,21C0) | US |  | x |   | x |   |
| Last Menstrual Date                                    | (0010,21D0) | DA |  | x |   | x | x |
| Special Needs                                          | (0038,0050) | LO |  | x |   | x |   |
| Patient State                                          | (0038,0500) | LO |  | x |   | x |   |
| Visit Status                                           |             |    |  |   |   |   |   |
| Current Patient Location                               | (0038,0300) | LO |  | x |   | x |   |

The above table should be read as follows:

Module Name: The name of the associated module for supported worklist attributes.

Attribute Name: Attributes supported to build a Worklist Request Identifier of this product.

Tag: DICOM tag for this attribute.

VR: DICOM VR for this attribute.

M: Matching keys for Worklist Query. An "S" will indicate that this product will supply an attribute value for Single Value Matching, an "R" will indicate Range Matching and a "\*" will denote wildcard matching. An "(S)" will indicate that keys are configurable either Single Value Matching or Universal Matching.

R: Return keys. An "x" will indicate that this product will supply this attribute as Return Key with zero length for Universal Matching.

Q: Interactive Query Key. An "x" will indicate that this product will supply this attribute as matching key, if entered in the New Patient dialog. For example, the Patient Name can be entered thereby restricting Worklist responses to Procedure Steps scheduled for the patient.

D: Displayed keys. An "x" indicates that this worklist attribute is displayed to the user during a patient registration dialog. For example, Patient Name will be displayed when registering the patient prior to an examination.

IOD: An "x" indicates that this Worklist attribute is included into all Object Instances created during performance of the related Procedure Step.

The Modality (0008,0060) matching key is configurable to "US" or zero length (Universal matching), the Scheduled Station AET (0040,0001) key is configurable to the local AET (ex. LISENDO 880) or zero length, and the Scheduled Procedure Start Date (0040,0002) key is configurable to a date, date range, or zero length.

#### **4.2.1.3.2 Activity – End Exam**

##### **4.2.1.3.2.1 Description and Sequencing of Activities**

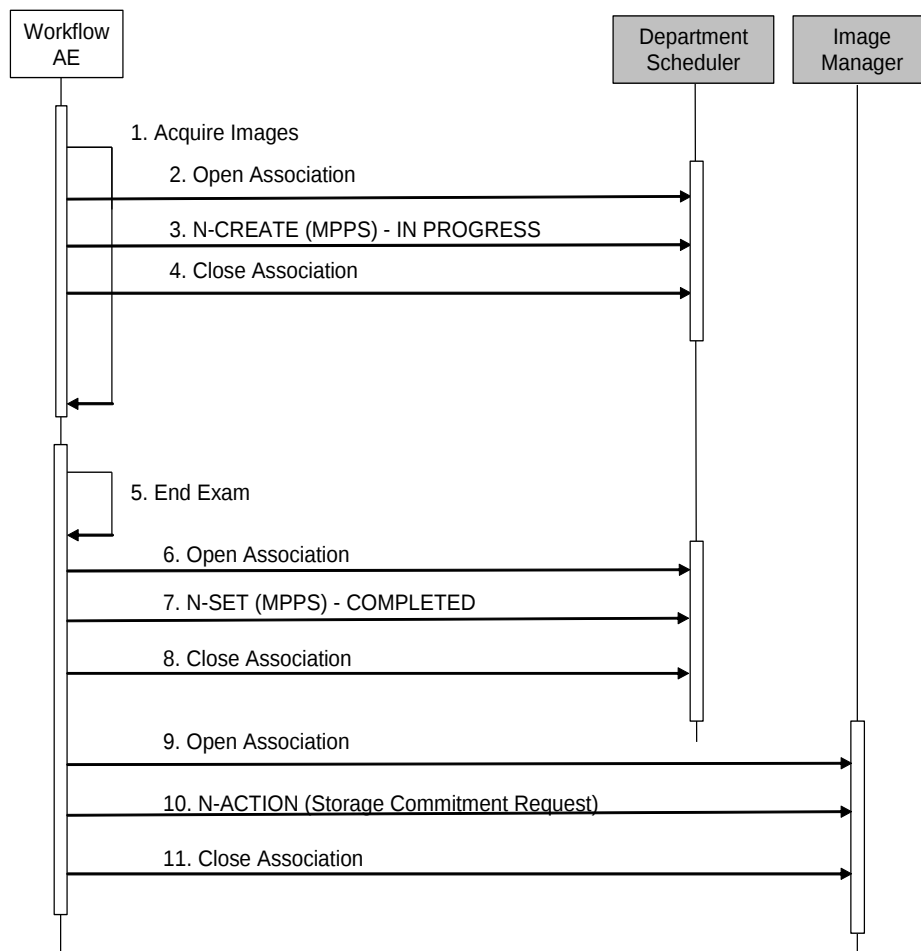
After the "NEW PATIENT" Registration, this product is awaiting local image storage or image transmission to remote Archive. The trigger to create a MPPS SOP Instance is derived from this event. An Association to the configured MPPS SCP system is established immediately and the related MPPS SOP Instance will be created.

The MPPS user interface is initiated by pressing the "END EXAM" button on the console. Only a manual update can be performed by the operator where is it possible to set the final state of the MPPS to "COMPLETED" or "DISCONTINUED". In the "Discontinued" case the user can also select the discontinuation reason from a pick list corresponding to Context Group 9300. An MPPS Instance that has been sent with a state of "COMPLETED" or "DISCONTINUED" can no longer be updated.

This product will support creation of "unscheduled cases" by allowing MPPS Instances to be communicated for locally registered Patients. This product only supports a 0-to-1 relationship between Scheduled and Performed Procedure Steps.

This product will initiate an Association to issue an:

- N-CREATE request according to the CREATE Modality Performed Procedure Step SOP Instance operation or a
- N-SET request to update the contents and state of the MPPS according to the SET Modality Performed Procedure Step Information operation.



**Figure 4.2-2 SEQUENCING OF ACTIVITY – ACQUIRE IMAGES AND END EXAM**

A possible sequence of interactions between the Workflow AE and a Department Scheduler (e.g. a device such as a RIS or HIS which supports the MPPS SOP Class as an SCP) is illustrated in Figure 4.2-2:

1. First image is acquired for the MSPS.
2. The Workflow AE opens an association with the Department Scheduler.
3. The Workflow AE sends an N-CREATE request to the Department Scheduler to create an MPPS instance with status of “IN PROGRESS” and create all necessary attributes. The Department Scheduler acknowledges the MPPS creation with an N-CREATE response (status success).
4. The Workflow AE closes the association with the Department Scheduler.
5. After all images are sent to Image Archive or stored in the local database, the operator requests “End Exam” and closes database the examination. At this time Structured Reports, if created, are sent to Image Archive automatically.
6. The Workflow AE opens a second association with the Department Scheduler.
7. The Workflow AE sends an N-SET request to the Department Scheduler to update the MPPS instance with status of “COMPLETED” and set all necessary attributes. The Department Scheduler acknowledges the MPPS update with an N-SET response (status success).

8. The Workflow AE closes the association with the Department Scheduler.
9. If the images/reports associated with the examination have been sent to the Image Manager, the Workflow AE opens independent association with the Image Manager.
10. The Workflow AE sends an N-ACTION request to the Image Manager to request the Images/reports are storage-committed. The Image Manager acknowledges the Storage Commitment Request with an N-ACTION response (status success).
11. The Workflow AE closes the association with the Image Manager.

#### 4.2.1.3.2.2 Proposed Presentation Contexts

This product will propose Presentation Contexts as shown in the following table:

**Table 4.2-10  
PROPOSED PRESENTATION CONTEXTS FOR REAL-WORLD ACTIVITY**

| Presentation Context Table        |                         |                                                        |                                          |      |           |
|-----------------------------------|-------------------------|--------------------------------------------------------|------------------------------------------|------|-----------|
| Abstract Syntax                   |                         | Transfer Syntax                                        |                                          | Role | Ext. Neg. |
| Name                              | UID                     | Name List                                              | UID List                                 |      |           |
| Modality Performed Procedure Step | 1.2.840.10008.3.1.2.3.3 | Implicit VR Little Endian<br>Explicit VR Little Endian | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1 | SCU  | None      |
| Verification                      | 1.2.840.10008.1.1       | Implicit VR Little Endian<br>Explicit VR Little Endian | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1 | SCU  | None      |

#### 4.2.1.3.2.3 SOP Specific Conformance for MPPS

The behavior of this product when encountering status codes in an MPPS N-CREATE or N-SET response is summarized in Table 4.2-11. If any other SCP response status than "Success" is received by this product, a message "Network communication error" will appear on the user interface.

**Table 4.2-11 MPPS N-CREATE / N-SET RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning                                                               | Error Code             | Behavior                                                                             |
|----------------|-------------------------------------------------------------------------------|------------------------|--------------------------------------------------------------------------------------|
| Success        | Success                                                                       | 0000                   | The SCP has completed the operation successfully.                                    |
| Failure        | Processing Failure – Performed Procedure Step Object may no longer be updated | 0110                   | The Association is closed using A-RELEASE. The error status is reported to the user. |
| Warning        | Attribute Value Out of Range                                                  | 0116H                  | The Association is closed using A-RELEASE. The error status is reported to the user. |
| *              | *                                                                             | Any other status code. | The Association is closed using A-RELEASE. The error status is reported to the user. |

The behavior of this product during communication failure is summarized in the Table below:

**Table 4.2-12 MPPS COMMUNICATION FAILURE BEHAVIOR**

| Exception                                        | Behavior                                                                                 |
|--------------------------------------------------|------------------------------------------------------------------------------------------|
| Timeout                                          | The Association is aborted using A-ABORT and the timeout status is reported to the user. |
| Association aborted by the SCP or network layers | The MPPS is failed and the status is reported to the user.                               |

Table 4.2-13 provides a description of the MPPS N-CREATE and N-SET request identifiers sent by this product. Empty cells in the N-CREATE and N-SET columns indicate that the attribute is not sent. An “x” indicates that an appropriate value will be sent. A “Zero length” attribute will be sent with zero length.

**Table 4.2-13 MPPS N-CREATE / N-SET REQUEST IDENTIFIER**

| Attribute Name                     | Tag         | VR | N-CREATE                                                                                         | N-SET |
|------------------------------------|-------------|----|--------------------------------------------------------------------------------------------------|-------|
| Specific Character Set             | (0008,0005) | CS | ISO_IR 100                                                                                       | -     |
| Referenced Patient Sequence        | (0008,1120) | SQ | Zero length                                                                                      | -     |
| Patient's Name                     | (0010,0010) | PN | From Modality Worklist or user input. The user can modify values provided via Modality Worklist. | -     |
| Patient ID                         | (0010,0020) | LO | From Modality Worklist or user input. The user can modify values provided via Modality Worklist. | -     |
| Patient's Birth Date               | (0010,0030) | DA | From Modality Worklist or user input. The user can modify values provided via Modality Worklist. | -     |
| Patient's Sex                      | (0010,0040) | CS | From Modality Worklist or user input. The user can modify values provided via Modality Worklist. | -     |
| Scheduled Step Attributes Sequence | (0040,0270) | SQ | If the procedure step creates an SOP Instance                                                    | -     |
| > Accession Number                 | (0008,0050) | SH | From Modality Worklist or user input. The user can modify values provided via Modality Worklist. | -     |
| >Referenced Study Sequence         | (0008,1110) | SQ | From Modality Worklist                                                                           | -     |
| >>Referenced SOP Class UID         | (0008,1150) | UI | From Modality Worklist                                                                           | -     |
| >>Referenced SOP Instance UID      | (0008,1155) | UI | From Modality Worklist                                                                           | -     |
| >Study Instance UID                | (0020,000D) | UI | From Modality Worklist or internally generated                                                   | -     |
| >Requested Procedure Description   | (0032,1060) | LO | From Modality Worklist                                                                           | -     |

|                                                               |             |    |                                                                                                  |                                                                                                                                                                                                                           |
|---------------------------------------------------------------|-------------|----|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| >Scheduled Procedure Step Description                         | (0040,0007) | LO | From Modality Worklist                                                                           | -                                                                                                                                                                                                                         |
| >Scheduled Protocol Code Sequence                             | (0040,0008) | SQ | From Modality Worklist                                                                           | -                                                                                                                                                                                                                         |
| >Scheduled Procedure Step ID                                  | (0040,0009) | SH | From Modality Worklist                                                                           | -                                                                                                                                                                                                                         |
| >Requested Procedure ID                                       | (0040,1001) | SH | From Modality Worklist or user input. The user can modify values provided via Modality Worklist. | -                                                                                                                                                                                                                         |
| Procedure Code Sequence                                       | (0008,1032) | SQ | From Modality Worklist, mapped from Requested Procedure Code Sequence (0032,1064)                | -                                                                                                                                                                                                                         |
| Performed Station AE Title                                    | (0040,0241) | AE | AE Title of the Equipment                                                                        | -                                                                                                                                                                                                                         |
| Performed Station Name                                        | (0040,0242) | SH | Station Name of the Equipment                                                                    | -                                                                                                                                                                                                                         |
| Performed Location                                            | (0040,0243) | SH | Zero length                                                                                      | -                                                                                                                                                                                                                         |
| Performed Procedure Step Start Date                           | (0040,0244) | DA | Actual start date                                                                                | -                                                                                                                                                                                                                         |
| Performed Procedure Step Start Time                           | (0040,0245) | TM | Actual start time                                                                                | -                                                                                                                                                                                                                         |
| Performed Procedure Step End Date                             | (0040,0250) | DA | Zero length                                                                                      | Actual end date                                                                                                                                                                                                           |
| Performed Procedure Step End Time                             | (0040,0251) | TM | Zero length                                                                                      | Actual end time                                                                                                                                                                                                           |
| Performed Procedure Step Status                               | (0040,0252) | CS | IN PROGRESS                                                                                      | COMPLETED or DISCONTINUED                                                                                                                                                                                                 |
| Performed Procedure Step ID                                   | (0040,0253) | SH | Automatically created.                                                                           | -                                                                                                                                                                                                                         |
| Performed Procedure Step Description                          | (0040,0254) | LO | Input by the user at "Study Description" in New Patient Registration.                            | -                                                                                                                                                                                                                         |
| Performed Procedure Type Description                          | (0040,0255) | LO | Zero length                                                                                      | -                                                                                                                                                                                                                         |
| Performed Procedure Step Discontinuation Reason Code Sequence | (0040,0281) | SQ | Zero length                                                                                      | If Performed Procedure Step Status (0040,0252) is "DISCONTINUED" and a discontinuation reason is selected by the user, then a single item will be present containing a user-selected entry drawn from Context Group 9300. |
| Modality                                                      | (0008,0060) | CS | US                                                                                               | -                                                                                                                                                                                                                         |
| Study ID                                                      | (0020,0010) | SH | Copied from Requested Procedure ID (0040,1001) in                                                | -                                                                                                                                                                                                                         |

|                                                       |             |    |                                                                 |                    |
|-------------------------------------------------------|-------------|----|-----------------------------------------------------------------|--------------------|
|                                                       |             |    | MWL. The user can modify values provided via Modality Worklist. |                    |
| Performed Protocol Code Sequence                      | (0040,0260) | SQ | Zero length                                                     | Zero or more items |
| Performed Series Sequence                             | (0040,0340) | SQ | Zero length                                                     | One or more items  |
| >Retrieve AE Title                                    | (0008,0054) | AE |                                                                 | Zero length        |
| >Series Description                                   | (0008,103E) | LO |                                                                 | x                  |
| >Performing Physician's Name                          | (0008,1050) | PN |                                                                 | x                  |
| >Operator's Name                                      | (0008,1070) | PN |                                                                 | x                  |
| >Referenced Image Sequence                            | (0008,1140) | SQ |                                                                 | Zero or more items |
| >>Referenced SOP Class UID                            | (0008,1150) | UI |                                                                 | x                  |
| >>Referenced SOP Instance UID                         | (0008,1155) | UI |                                                                 | x                  |
| >Protocol Name                                        | (0018,1030) | LO |                                                                 | x                  |
| >Series Instance UID                                  | (0020,000E) | UI |                                                                 | x                  |
| >Referenced Non-image Composite SOP Instance Sequence | (0040,0220) | SQ |                                                                 | Zero or more items |
| >>Referenced SOP Class UID                            | (0008,1150) | UI |                                                                 | x                  |
| >>Referenced SOP Instance UID                         | (0008,1155) | UI |                                                                 | x                  |

#### **4.2.1.3.2.4 SOP Specific Conformance for Storage Commitment SOP Class**

##### **4.2.1.3.2.4.1 Storage Commitment Operations (N-ACTION)**

The Workflow AE will request storage commitment for instances of the Ultrasound Image, Ultrasound Multi-frame Image and Structured Report Storage Classes, if the remote AE is configured as an Archive Device and a presentation context for the Storage Commitment Push Model has been accepted.

The Workflow AE will consider Storage Commitment failed if no N-EVENT-REPORT is received for a Transaction UID within a configurable time period after receiving a successful N-ACTION response (duration of applicability for a Transaction UID).

The Workflow AE does not send the optional Storage Media File Set ID & UID Attributes or the Referenced Performed Procedure Step Sequence Attribute in the N-ACTION.

The behavior of Storage AE when encountering status codes in an N-ACTION response is summarized in the Table below:

**Table 4.2-14  
STORAGE COMMITMENT N-ACTION RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning | Error Code             | Behavior                                                                                                                                                                                                |
|----------------|-----------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Success        | Success         | 0000                   | The request for storage commitment is considered successfully sent. A timer is started which will expire if no N-EVENT-REPORT for the Transaction UID is received within a configurable timeout period. |
| *              | *               | Any other status code. | The Association is closed using A-RELEASE and the failure is reported to the user.                                                                                                                      |

The behavior of Workflow AE during communication failure is summarized in the Table below:

**Table 4.2-15 STORAGE COMMITMENT COMMUNICATION FAILURE BEHAVIOR**

| Exception                                        | Behavior                                                                                |
|--------------------------------------------------|-----------------------------------------------------------------------------------------|
| Timeout                                          | The Association is aborted using A-ABORT and the timeout error is reported to the user. |
| Association aborted by the SCP or network layers | The association failure is reported to the user.                                        |

#### **4.2.1.3.2.4.2 Storage Commitment Notifications (N-EVENT-REPORT)**

The Workflow AE is capable of receiving an N-EVENT-REPORT notification if it has successfully negotiated a Presentation Context for the Storage Commitment Push Model (i.e. only associations established with archive devices).

Upon receipt of an N-EVENT-REPORT the timer associated with the Transaction UID will be canceled.

The behavior of Workflow AE when receiving Event Types within the N-EVENT-REPORT is summarized in the Table below.

**Table 4.2-16 STORAGE COMMITMENT N-EVENT-REPORT BEHAVIOUR**

| Event Type Name                                      | Event Type ID | Behavior                                                                                                                                                                                                                                                                   |
|------------------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage Commitment Request Successful                | 1             | The Referenced SOP Instances under Referenced SOP Sequence (0008,1199) are marked within the database as committed. Successfully committed SOP Instances are candidates for deletion from the local database. The least recently accessed SOP Instances are deleted first. |
| Storage Commitment Request Complete – Failures Exist | 2             | The Referenced SOP Instances under Referenced SOP Sequence (0008,1199) are treated in the same way as in the success case (Event Type 1). The Referenced SOP Instances under Failed SOP Sequence (0008,1198) are not marked as committed within the database.              |

The reasons for returning specific status codes in an N-EVENT-REPORT response are summarized in the Table below:

**Table 4.2-17 STORAGE COMMITMENT N-EVENT-REPORT RESPONSE STATUS REASONS**

| <b>Service Status</b> | <b>Further Meaning</b> | <b>Error Code</b> | <b>Reasons</b>                                                                                                                                                                                                                                                                                                          |
|-----------------------|------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Success               | Success                | 0000              | The storage commitment result has been successfully received.                                                                                                                                                                                                                                                           |
| Failure               | Unrecognized Operation | 0211H             | The Transaction UID in the N-EVENT-REPORT request is not recognized (was never issued within an N-ACTION request).                                                                                                                                                                                                      |
| Failure               | Resource Limitation    | 0213H             | The Transaction UID in the N-EVENT-REPORT request has expired (no N-EVENT-REPORT was received within a configurable time limit).                                                                                                                                                                                        |
| Failure               | No Such Event Type     | 0113H             | An invalid Event Type ID was supplied in the N-EVENT-REPORT request.                                                                                                                                                                                                                                                    |
| Failure               | Processing Failure     | 0110H             | An internal error occurred during processing of the N-EVENT-REPORT. A short description of the error will be returned in Error Comment (0000,0902).                                                                                                                                                                     |
| Failure               | Invalid Argument Value | 0115H             | One or more SOP Instance UIDs with the Referenced SOP Sequence (0008,1199) or Failed SOP Sequence (0008,1198) was not included in the Storage Commitment Request associated with this Transaction UID. The unrecognized SOP Instance UIDs will be returned within the Event Information of the N-EVENT-REPORT response. |

**4.2.1.4 Association Acceptance Policy**

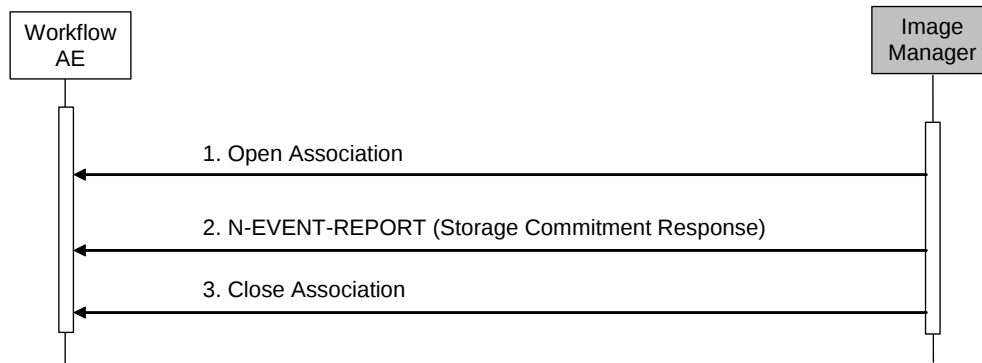
This product accepts Associations to receive N-EVENT-REPORT notifications for the Storage Commitment Push Model SOP Class.

**Table 4.2-18 NUMBER OF ASSOCIATIONS ACCEPTED FOR WORKFLOW AE**

|                                                      |   |
|------------------------------------------------------|---|
| Maximum number of simultaneous Associations accepted | 1 |
|------------------------------------------------------|---|

**4.2.1.4.1 Activity – Receive Storage Commitment Response****4.2.1.4.1.1 Description and Sequencing of Activities**

The Workflow AE will accept associations in order to receive responses to a Storage Commitment N-EVENT-REPORT Request.



**Figure 4.2-3 SEQUENCING OF ACTIVITY - RECEIVE STORAGE COMMITMENT RESPONSE**

A possible sequence of interactions between the Workflow AE and an Image Manager (e.g. a storage or archive device supporting Storage Commitment SOP Classes as an SCP) is illustrated in the Figure above:

1. The Image Manager opens a new association with the Workflow AE.
2. The Image Manager sends an N-EVENT-REPORT request notifying the Workflow AE of the status of a previous Storage Commitment Request. The Workflow AE replies with an N-EVENT-REPORT response confirming receipt.
3. The Image Manager closes the association with the Workflow AE.

The Workflow AE may reject association attempts as shown in the Table below. The Result, Source and Reason/Diag columns represent the values returned in the appropriate fields of an ASSOCIATE-RJ PDU (see PS 3.8, Section 9.3.4). The contents of the Source column is abbreviated to save space and the meaning of the abbreviations are:

- a) 1 – DICOM UL service-user
- b) 2 – DICOM UL service-provider (ASCE related function)
- c) 3 – DICOM UL service-provider (Presentation related function)

**Table 4.2-19 ASSOCIATION REJECTION REASONS**

| Result                 | Source | Reason/Diag                                | Explanation                                                                                                                                                                                                                               |
|------------------------|--------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 – rejected-transient | c      | 2 – local-limit-exceeded                   | The maximum number of simultaneous associations has been reached. An association request with the same parameters may succeed at a later time.                                                                                            |
| 2 – rejected-transient | c      | 1 – temporary-congestion                   | No associations can be accepted at this time because insufficient resources are available (e.g. memory, processes, or threads). An association request with the same parameters may succeed at a later time.                              |
| 1 – rejected-permanent | a      | 2 – application-context-name-not-supported | The association request contained an unsupported Application Context Name. An association request with the same parameters will not succeed at a later time.                                                                              |
| 1 – rejected-permanent | a      | 7 – called-AE-title-not-recognized         | The association request contained an unrecognized Called AE Title. An association request with the same parameters will not succeed at a later time unless configuration changes are made. This rejection reason normally occurs when the |

|                        |   |                                     |                                                                                                                                                                                                                                                                                                                                                 |
|------------------------|---|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |   |                                     | association initiator is incorrectly configured and attempts to address the association acceptor using the wrong AE Title.                                                                                                                                                                                                                      |
| 1 – rejected-permanent | a | 3 – calling-AE-title-not-recognized | The association request contained an unrecognized Calling AE Title. An association request with the same parameters will not succeed at a later time unless configuration changes are made. This rejection reason normally occurs when the association acceptor has not been configured to recognize the AE Title of the association initiator. |
| 1 – rejected-permanent | b | 1 – no-reason-given                 | The association request could not be parsed. An association request with the same format will not succeed at a later time.                                                                                                                                                                                                                      |

#### 4.2.1.4.1.2 Accepted Presentation Contexts

The Workflow AE will accept Presentation Contexts as shown in the Table below:

**Table 4.2-20 ACCEPTABLE PRESENTATION CONTEXTS  
FOR ACTIVITY RECEIVE STORAGE COMMITMENT RESPONSE**

| Presentation Context Table    |                      |                                                        |                                          |      |           |
|-------------------------------|----------------------|--------------------------------------------------------|------------------------------------------|------|-----------|
| Abstract Syntax               |                      | Transfer Syntax                                        |                                          | Role | Ext. Neg. |
| Name                          | UID                  | Name List                                              | UID List                                 |      |           |
| Storage Commitment Push Model | 1.2.840.10008.1.20.1 | Implicit VR Little Endian<br>Explicit VR Little Endian | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1 | SCU  | None      |
| Verification                  | 1.2.840.10008.1.1    | Implicit VR Little Endian<br>Explicit VR Little Endian | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1 | SCP  | None      |

The Workflow AE will prefer to select the Explicit VR Little Endian Transfer Syntax if multiple transfer syntaxes are offered. The Workflow AE will only accept the SCU role (which must be proposed via SCP/SCU Role Selection Negotiation) within a Presentation Context for the Storage Commitment Push Model SOP Class.

#### 4.2.1.4.1.3 SOP Specific Conformance for Storage Commitment SOP Class

##### 4.2.1.4.1.3.1 Storage Commitment Notifications (N-EVENT-REPORT)

Upon receipt of an N-EVENT-REPORT the timer associated with the Transaction UID will be canceled.

The behavior of Workflow AE when receiving Event Types within the N-EVENT-REPORT is summarized in Table 4.2-16.

The reasons for returning specific status codes in an N-EVENT-REPORT response are summarized in Table 4.2-17.

#### 4.2.1.4.1.4 SOP Specific Conformance for Verification SOP Class

The Workflow AE provides standard conformance to the Verification SOP Class as an SCP. If the C-ECHO request was successfully received, a 0000 (Success) status code will be returned in the C-ECHO response. Otherwise, the Association is aborted by A-ABORT by the Verification SCP.

## **4.2.2 Storage Application Entity Specification**

### **4.2.2.1 SOP Classes**

This product provides the following Conformance to the SOP Classes listed below:

**Table 4.2-21 SOP CLASSES FOR AE STORAGE**

| <b>SOP Class Name</b>                                  | <b>SOP Class UID</b>          | <b>Conformance</b> | <b>SCU</b> | <b>SCP</b> |
|--------------------------------------------------------|-------------------------------|--------------------|------------|------------|
| Ultrasound Image Storage                               | 1.2.840.10008.5.1.4.1.1.6.1   | Standard Extended  | Yes        | No         |
| Ultrasound Multi-frame Image Storage                   | 1.2.840.10008.5.1.4.1.1.3.1   | Standard Extended  | Yes        | No         |
| Comprehensive SR                                       | 1.2.840.10008.5.1.4.1.1.88.33 | Standard           | Yes        | No         |
| Encapsulated PDF Storage                               | 1.2.840.10008.5.1.4.1.1.104.1 | Standard           | Yes        | No         |
| Secondary Capture Image Storage                        | 1.2.840.10008.5.1.4.1.1.7     | Standard Extended  | Yes        | No         |
| Multi-frame True Color Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1.1.7.4   | Standard Extended  | Yes        | No         |
| Verification                                           | 1.2.840.10008.1.1             | Standard           | Yes        | No         |

### **4.2.2.2 Association Policies**

#### **4.2.2.2.1 General**

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-22 DICOM APPLICATION CONTEXT FOR AE STORAGE**

|                          |                       |
|--------------------------|-----------------------|
| Application Context Name | 1.2.840.10008.3.1.1.1 |
|--------------------------|-----------------------|

#### **4.2.2.2.2 Number of Associations**

This product initiates one Association at a time for the destination to which a transfer request is being processed. It does not automatically request associations to multiple destinations.

**Table 4.2-23 NUMBER OF ASSOCIATIONS INITIATED FOR AE STORAGE**

|                                                       |   |
|-------------------------------------------------------|---|
| Maximum number of simultaneous Associations initiated | 1 |
|-------------------------------------------------------|---|

Note: However, each AE for image storage, Structured Report storage, and Encapsulated PDF storage is independent. Therefore two associations for image storage and report storage may be initiated simultaneously.

#### **4.2.2.2.3 Asynchronous Nature**

This product does not support asynchronous communication (multiple outstanding transactions over a single Association).

**Table 4.2-24 ASYNCHRONOUS NATURE AS A SCU FOR AE STORAGE**

|                                                         |   |
|---------------------------------------------------------|---|
| Maximum number of outstanding asynchronous transactions | 1 |
|---------------------------------------------------------|---|

#### **4.2.2.2.4 Implementation Identifying Information**

The implementation information for this Application Entity is:

**Table 4.2-25 DICOM IMPLEMENTATION CLASS AND VERSION FOR AE STORAGE**

|                             |                                                |
|-----------------------------|------------------------------------------------|
| Implementation Class UID    | 1.2.392.200039.117                             |
| Implementation Version Name | 20180308<br>(subject to change without notice) |

#### **4.2.2.3 Association Initiation Policy**

##### **4.2.2.3.1 Activity – Send Images, Structured Reports, and Encapsulated PDF reports**

###### **4.2.2.3.1.1 Description and Sequencing of Activities**

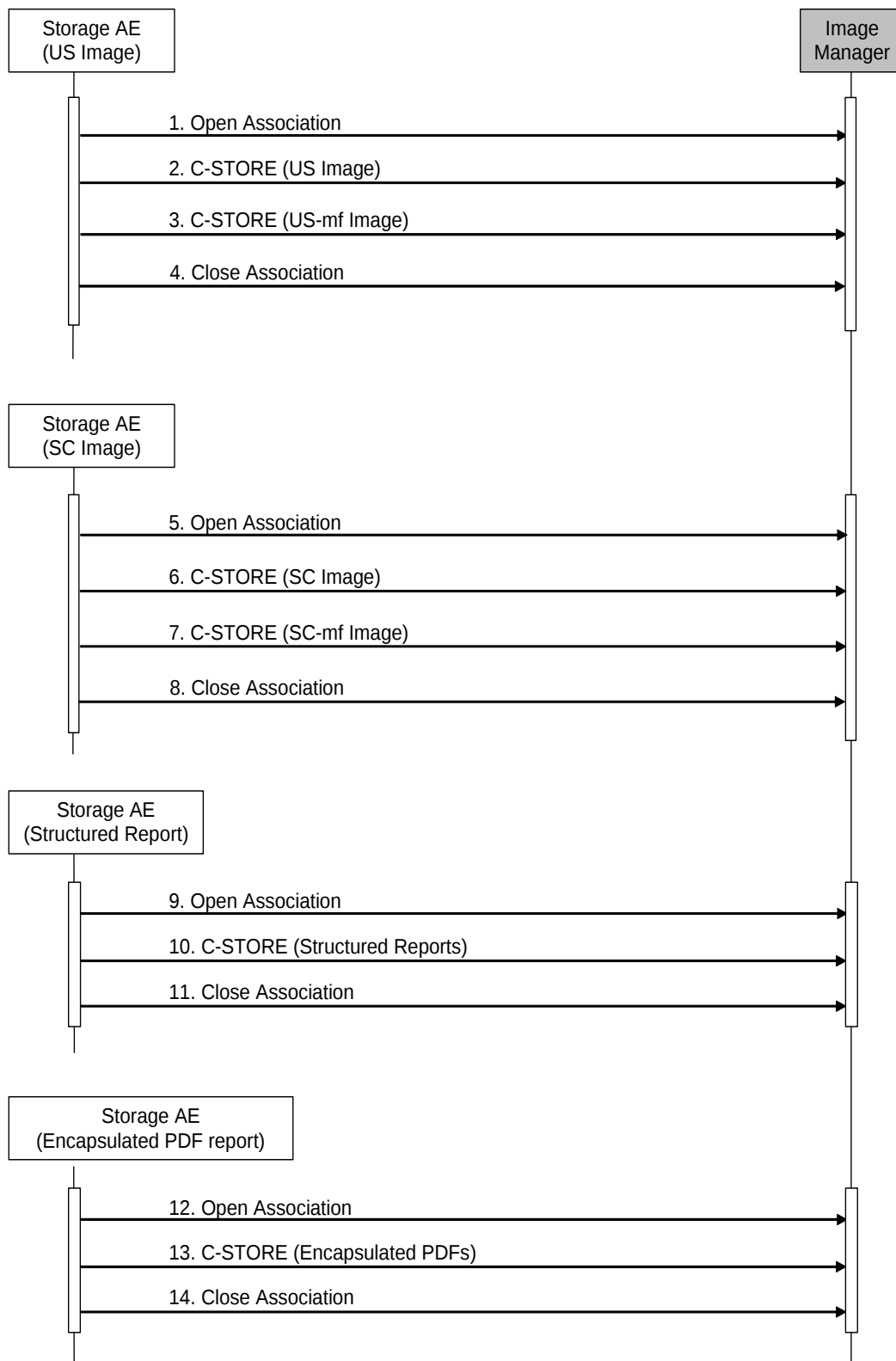
The Storage AE for sending images may be invoked in two ways. After the New Patient registration is completed selecting the worklist MSPS or by manual entry, ultrasound image is displayed in real-time. When the operator presses the "FREEZE" button on the console, the image is frozen and ready to send the image to remote storage AE or to store in a local drive. If the operator presses the "STORE" button in real-time, a multi-frame image may be acquired to send. The "STORE" button may be configured for either NET (DICOM), HDD, DVD-RAM, CD-R buffer or USB Media.

When it is configured for "NET (DICOM)" storage, pressing the "STORE" button will open an association to the remote Storage SCP. If the association is accepted by the SCP, local Storage AE will send an ultrasound Image Instance or a multi-frame image instance to the SCP, and if the SCP responds with a success status the association is closed normally. If the association is rejected or it is not responded within the configured time interval, or the Storage AE receives failure status, the association is aborted and the failure is reported to the user. The Storage AE will retain a copy of the Image Instance sent directly from the "STORE" button.

When the "STORE" button is configured for HDD storage, an Image Instance will be stored in the local HDD each time it is pressed. The Image Instances are reviewed on the "Tile" screen page or "Full screen" screen page. After the user selects one or more images, clicking the "Send" button on the screen or pressing the "Send" button on the LCD touch panel will open a storage association to the remote Archive. If the association is accepted, the Storage AE will send the all instances of the selected images to the remote Storage SCP within the single association. Each Instance successfully stored is indicated by an **orange** mark on the icon, and the storage-committed Instance is indicated by a **blue** mark. If an Image Instance is not responded by the successful status, or the Storage SCP does not respond within the configured interval, the association is aborted and the status is reported to the user. The Storage AE can be configured to retry automatically.

To create Encapsulated PDF reports, Advanced Cardiac feature needs to be configured. When the "Create DICOM PDF" button is pressed in the Advanced Reporting Window, Encapsulated PDF report will be created. The created PDF reports can be reviewed on the "Find" Window. After the user selects one or more PDF reports, clicking the "Send" button on the screen or pressing the "Send" button on the LCD touch panel will open a storage association to the remote Archive. If the association is accepted, the Storage AE will send the all instances of the selected PDF reports to the remote Storage SCP within the single association. Indication color scheme of PDF report on the icon is the same as one of image. If an Encapsulated PDF Instance is not responded by the successful status, or the Storage SCP does not respond within the configured interval, the association is aborted and the status is reported to the user. The Storage AE can be configured to retry automatically.

Images, Structured Reports, and PDF Reports are sent to remote storage AE over a separate association with each other.



**Figure 4.2-4 SEQUENCING OF ACTIVITY – SEND IMAGES AND REPORTS**

A possible sequence of interactions between the Storage AE and an Image Manager (e.g. a storage or archive device supporting the Storage SOP Classes as an SCP) is illustrated in Figure 4.2-4:

1. The Storage AE opens an association with the Image Manager
2. An acquired US image is transmitted to the Image Manager using a C-STORE request and the Image Manager replies with a C-STORE response (status success).
3. Another acquired US Multi-frame image is transmitted to the Image Manager using a C-STORE request and the Image Manager replies with a C-STORE response (status success).
4. The Storage AE closes the association with the Image Manager.
5. The Storage AE opens another association with the Image Manager.
6. An acquired SC image is transmitted to the Image Manager using a C-STORE request and the Image Manager replies with a C-STORE response (status success).
7. Another acquired SC Multi-frame image is transmitted to the Image Manager using a C-STORE request and the Image Manager replies with a C-STORE response (status success).
8. The Storage AE closes the association with the Image Manager.
9. The Storage AE opens another association with the Image Manager.
10. Structured Reports are transmitted to the Image Manager using C-STORE request and the Image Manager replies with a C-STORE response (status success).
11. The Storage AE closes the association with the Image Manager.
12. The Storage AE opens another association with the Image Manager.
13. Encapsulated PDF reports are transmitted to the Image Manager using C-STORE request and the Image Manager replies with a C-STORE response (status success).
14. The Storage AE closes the association with the Image Manager.

#### 4.2.2.3.1.2 Proposed Presentation Contexts

This product is capable of proposing the Presentation Contexts shown in the following table:

**Table 4.2-26 PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY SEND IMAGES / REPORTS**

| Send Ultrasound Image Presentation Context Table |                             |                           |                        |      |           |
|--------------------------------------------------|-----------------------------|---------------------------|------------------------|------|-----------|
| Abstract Syntax                                  |                             | Transfer Syntax           |                        | Role | Ext. Neg. |
| Name                                             | UID                         | Name List                 | UID List               |      |           |
| Ultrasound Image Storage                         | 1.2.840.10008.5.1.4.1.1.6.1 | Implicit VR Little Endian | 1.2.840.10008.1.2      | SCU  | None      |
|                                                  |                             | Explicit VR Little Endian | 1.2.840.10008.1.2.1    |      |           |
|                                                  |                             | JPEG Baseline Compression | 1.2.840.10008.1.2.4.50 |      |           |
|                                                  |                             | RLE Compression           | 1.2.840.10008.1.2.5    |      |           |

|                                                                    |                                   |                                                                                                                     |                                                                                           |             |                      |
|--------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------|----------------------|
| Ultrasound<br>Multi-frame<br>Image Storage                         | 1.2.840.10008.<br>5.1.4.1.1.3.1   | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Baseline Compression <sup>1</sup><br>RLE Compression | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5 | SCU         | None                 |
| <b>Send Secondary Capture Image Presentation Context Table</b>     |                                   |                                                                                                                     |                                                                                           |             |                      |
| <b>Abstract Syntax</b>                                             |                                   | <b>Transfer Syntax</b>                                                                                              |                                                                                           | <b>Role</b> | <b>Ext.<br/>Neg.</b> |
| <b>Name</b>                                                        | <b>UID</b>                        | <b>Name List</b>                                                                                                    | <b>UID List</b>                                                                           |             |                      |
| Secondary<br>Capture Image<br>Storage                              | 1.2.840.10008.<br>5.1.4.1.1.7     | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Baseline Compression<br>RLE Compression              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5 | SCU         | None                 |
| Multi-frame<br>True Color<br>Secondary<br>Capture Image<br>Storage | 1.2.840.10008.<br>5.1.4.1.1.7.4   | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Baseline Compression<br>RLE Compression              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5 | SCU         | None                 |
| <b>Send Structured Report Presentation Context Table</b>           |                                   |                                                                                                                     |                                                                                           |             |                      |
| <b>Abstract Syntax</b>                                             |                                   | <b>Transfer Syntax</b>                                                                                              |                                                                                           | <b>Role</b> | <b>Ext.<br/>Neg.</b> |
| <b>Name</b>                                                        | <b>UID</b>                        | <b>Name List</b>                                                                                                    | <b>UID List</b>                                                                           |             |                      |
| Comprehensive<br>SR                                                | 1.2.840.10008.<br>5.1.4.1.1.88.33 | Implicit VR Little Endian<br>Explicit VR Little Endian                                                              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1                                                  | SCU         | None                 |
| Enhanced SR <sup>2</sup>                                           | 1.2.840.10008.<br>5.1.4.1.1.88.22 | Implicit VR Little Endian<br>Explicit VR Little Endian                                                              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1                                                  | SCU         | None                 |
| <b>Send Encapsulated PDF Presentation Context Table</b>            |                                   |                                                                                                                     |                                                                                           |             |                      |
| <b>Abstract Syntax</b>                                             |                                   | <b>Transfer Syntax</b>                                                                                              |                                                                                           | <b>Role</b> | <b>Ext.<br/>Neg.</b> |
| <b>Name</b>                                                        | <b>UID</b>                        | <b>Name List</b>                                                                                                    | <b>UID List</b>                                                                           |             |                      |
| Encapsulated<br>PDF Storage                                        | 1.2.840.10008.<br>5.1.4.1.1.104.1 | Implicit VR Little Endian<br>Explicit VR Little Endian                                                              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1                                                  | SCU         | None                 |

Note: 1. except for images acquired for 3D Reconstruction.

Note: 2 only Non-Advanced Cardiac.

Presentation Contexts for Ultrasound Image Storage and Ultrasound Multi-frame Image Storage will always be proposed. An error message will be issued at sending the SOP Instance of the Presentation Context of which Abstract Syntax has been rejected by the remote AE.

Presentation Contexts for Comprehensive SR Storage and Enhanced SR Storage will always be proposed. When the remote AE accepts Comprehensive SR the reports will be sent as Comprehensive SR, or if the remote AE rejects Comprehensive SR the reports may be sent as Enhanced SR.

Presentation Contexts for Encapsulated PDF Storage will always be proposed. An error message will be issued at sending the SOP Instance of the Presentation Context of which Abstract Syntax has been rejected by the remote AE.

#### 4.2.2.3.1.3 SOP Specific Conformance for Image and Report Storage SOP Classes

All Image and Structured Report Storage SOP Classes supported by the Storage AE exhibit the same behavior, except where stated, and are described together in this section.

If Ultrasound Multi-frame Image Storage SOP Instances are included in the Send Job and a corresponding Presentation Context is not accepted then the Association is aborted using A-ABORT and the send job is marked as failed. The job failure is reported to the user via the dialog window. The remaining Ultrasound (single frame) Image Storage SOP Instances should be selected and retried by the operator.

**Table 4.2-27 STORAGE C-STORE RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status       | Further Meaning                   | Error Code             | Behavior                                                                                                       |
|----------------------|-----------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------|
| Success              | Success                           | 0000                   | The SCP has successfully stored the SOP Instance.                                                              |
| Refused              | Out of Resources                  | A700-A7FF              | The Association is aborted using A-ABORT and the failure is reported to the user. This is a transient failure. |
| Error                | Data Set does not match SOP Class | A900-A9FF              | The Association is aborted using A-ABORT and the failure is reported to the user.                              |
| Error                | Cannot Understand                 | C000-CFFF              | The Association is aborted using A-ABORT and the failure is reported to the user.                              |
| Warning              | Coercion of Data Elements         | B000                   | Image transmission is considered successful therefore the warning is not reported to the user.                 |
| Warning              | Data Set does not match SOP Class | B007                   | Image transmission is considered successful therefore the warning is not reported to the user.                 |
| Warning              | Elements Discarded                | B006                   | Image transmission is considered successful therefore the warning is not reported to the user.                 |
| Warning <sup>1</sup> | Attribute list error              | 0107                   | Object instance transmission is considered successful therefore the warning is not reported to the user.       |
| Warning <sup>1</sup> | Attribute Value Out of Range      | 0116                   | Object instance transmission is considered successful therefore the warning is not reported to the user.       |
| *                    | *                                 | Any other status code. | The Association is aborted using A-ABORT and the failure is reported to the user.                              |

Note: 1. Image storage excepted.

The behavior of Storage AE during communication failure is summarized in the Table below:

**Table 4.2-28 STORAGE COMMUNICATION FAILURE BEHAVIOR**

| <b>Exception</b>                                 | <b>Behavior</b>                                                                         |
|--------------------------------------------------|-----------------------------------------------------------------------------------------|
| Timeout                                          | The Association is aborted using A-ABORT and the timeout error is reported to the user. |
| Association aborted by the SCP or network layers | The association failure is reported to the user.                                        |

A failed storage association may automatically be restarted if so configured.

### 4.2.3 Hardcopy Application Entity Specification

#### 4.2.3.1 SOP Classes

This product provides Standard Conformance to the following SOP Classes:

**Table 4.2-29 SOP CLASSES FOR AE HARDCOPY**

| SOP Class Name                        | SOP Class UID          | SCU | SCP |
|---------------------------------------|------------------------|-----|-----|
| Basic Grayscale Print Management Meta | 1.2.840.10008.5.1.1.9  | Yes | No  |
| Basic Color Print Management Meta     | 1.2.840.10008.5.1.1.18 | Yes | No  |
| Verification                          | 1.2.840.10008.1.1      | Yes | No  |

#### 4.2.3.2 Association Policies

##### 4.2.3.2.1 General

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-30 DICOM APPLICATION CONTEXT FOR AE HARDCOPY**

|                          |                       |
|--------------------------|-----------------------|
| Application Context Name | 1.2.840.10008.3.1.1.1 |
|--------------------------|-----------------------|

##### 4.2.3.2.2 Number of Associations

This product initiates one Association at a time for each configured hardcopy device.

**Table 4.2-31 NUMBER OF ASSOCIATIONS INITIATED FOR AE HARDCOPY**

|                                             |   |
|---------------------------------------------|---|
| Maximum number of simultaneous Associations | 1 |
|---------------------------------------------|---|

##### 4.2.3.2.3 Asynchronous Nature

This product does not support asynchronous communication (multiple outstanding transactions over a single Association).

**Table 4.2-32  
ASYNCHRONOUS NATURE AS A SCU FOR AE HARDCOPY**

|                                                         |   |
|---------------------------------------------------------|---|
| Maximum number of outstanding asynchronous transactions | 1 |
|---------------------------------------------------------|---|

##### 4.2.3.2.4 Implementation Identifying Information

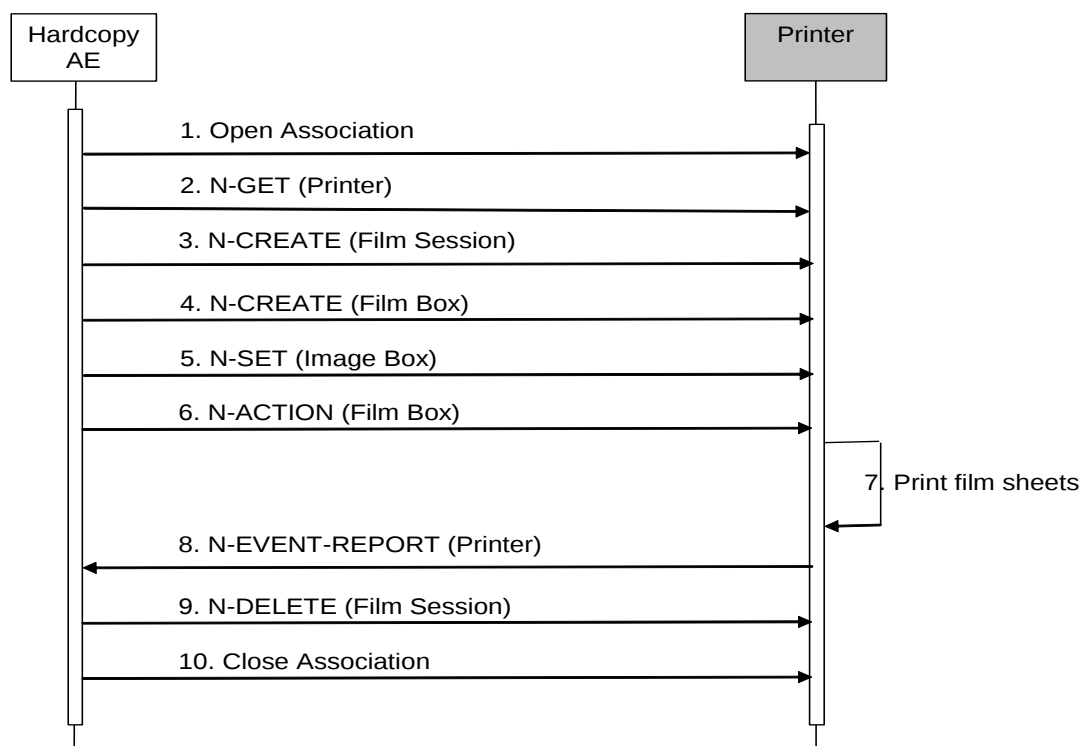
The implementation information for this Application Entity is:

**Table 4.2-33 DICOM IMPLEMENTATION CLASS AND VERSION FOR AE HARDCOPY**

|                             |                    |
|-----------------------------|--------------------|
| Implementation Class UID    | 1.2.392.200039.117 |
| Implementation Version Name | 20180308           |

**4.2.3.3 Association Initiation Policy****4.2.3.3.1 Activity – Print Images****4.2.3.3.1.1 Description and Sequencing of Activities**

When a user selects images and requests to print them, the images are sent to the PRINTER\_QUEUE folder. The virtual film sheets are composed according to the pre-defined film format. The film sheets are requests to be sent to a specific hardcopy device. The user can select the desired film format, number of copies, and other printing conditions in the Print Property GUI.



**Figure 4.2-5**  
**SEQUENCING OF ACTIVITY – FILM IMAGES**

A typical sequence of DIMSE messages sent over an association between Hardcopy AE and a Printer is illustrated in Figure 4.2-5:

1. Hardcopy AE opens an association with the Printer
2. N-GET on the Printer SOP Class is used to obtain current printer status information. If the Printer reports a status of FAILURE, the print-job is switched to a failed state and the user informed.
3. N-CREATE on the Film Session SOP Class creates a Film Session.
4. N-CREATE on the Film Box SOP Class creates a Film Box linked to the Film Session. Pre-configured number of Image Boxes will be created as the result of this operation.

5. Each N-SET on Image Box SOP Class transfers the requested image to the printer at the successive position on the film sheet. The Hardcopy does not support the Presentation LUT SOP Class.
6. N-ACTION on the Film Box SOP Class instructs the printer to print the Film Box
7. The printer prints the requested number of film sheets. The sequence 4 through 6 may be repeated when the single film sheet is not enough to contain the requested images.
8. The Printer asynchronously reports its status via N-EVENT-REPORT notification (Printer SOP Class). The printer can send this message at any time. Hardcopy AE does not require the N-EVENT-REPORT to be sent. Hardcopy AE is capable of receiving an N-EVENT-REPORT notification at any time during an association. If the Printer reports a status of FAILURE, the Print Session is terminated and the user informed.
9. N-DELETE on the Film Session SOP Class deletes the complete Film Session SOP Instance hierarchy.
10. Hardcopy AE closes the association with the Printer.

If any Response from the remote Application contains a status other than Success or Warning, the Association is aborted and the related Film Session is terminated and the status is user informed.

#### 4.2.3.3.1.2 Proposed Presentation Contexts

This product is capable of proposing the Presentation Contexts shown in the Table below:

**Table 4.2-34 PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY PRINT IMAGES**

| Presentation Context Table            |                        |                           |                     |      |           |
|---------------------------------------|------------------------|---------------------------|---------------------|------|-----------|
| Abstract Syntax                       |                        | Transfer Syntax           |                     | Role | Ext. Neg. |
| Name                                  | UID                    | Name List                 | UID List            |      |           |
| Basic Grayscale Print Management Meta | 1.2.840.10008.5.1.1.9  | Implicit VR Little Endian | 1.2.840.10008.1.2   | SCU  | None      |
|                                       |                        | Explicit VR Little Endian | 1.2.840.10008.1.2.1 |      |           |
| Basic Color Print Management Meta     | 1.2.840.10008.5.1.1.18 | Implicit VR Little Endian | 1.2.840.10008.1.2   | SCU  | None      |
|                                       |                        | Explicit VR Little Endian | 1.2.840.10008.1.2.1 |      |           |
| Verification                          | 1.2.840.10008.1.1      | Implicit VR Little Endian | 1.2.840.10008.1.2   | SCU  | None      |
|                                       |                        | Explicit VR Little Endian | 1.2.840.10008.1.2.1 |      |           |

#### 4.2.3.3.1.3 Common SOP Specific Conformance for all Print SOP Classes

The general behavior of Hardcopy AE during communication failure is summarized in the Table below. This behavior is common for all SOP Classes supported by Hardcopy AE.

**Table 4.2-35  
HARDCOPY COMMUNICATION FAILURE BEHAVIOR**

| Exception                                        | Behavior                                                                                                      |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Timeout                                          | The Association is aborted using A-ABORT and the print-job is terminated. The reason is reported to the user. |
| Association aborted by the SCP or network layers | The print-job is terminated and the print-job is terminated. The reason is reported to the user.              |

#### 4.2.3.3.1.4 SOP Specific Conformance for the Printer SOP Class

Hardcopy AE supports the following DIMSE operations and notifications for the Printer SOP Class:

- N-GET
- N-EVENT-REPORT

Details of the supported attributes and status handling behavior are described in the following subsections.

##### 4.2.3.3.1.4.1 Printer SOP Class Operations (N-GET)

Hardcopy AE uses the Printer SOP Class N-GET operation to obtain information about the current printer status. The attributes obtained via N-GET are listed in the Table below:

**Table 4.2-36**  
**PRINTER SOP CLASS N-GET REQUEST ATTRIBUTES**

| Attribute Name            | Tag         | VR | Value               | Presence of Value | Source  |
|---------------------------|-------------|----|---------------------|-------------------|---------|
| Manufacturer              | (0008,0070) | LO | Provided by Printer | ANAP              | Printer |
| Manufacturer's Model Name | (0008,1090) | LO | Provided by Printer | ANAP              | Printer |
| Device Serial Number      | (0018,1000) | LO | Provided by Printer | ANAP              | Printer |
| Software Versions         | (0018,1020) | LO | Provided by Printer | ANAP              | Printer |
| Printer Status            | (2110,0010) | CS | Provided by Printer | ALWAYS            | Printer |
| Printer Status Info       | (2110,0020) | CS | Provided by Printer | ALWAYS            | Printer |
| Printer Name              | (2110,0030) | LO | Provided by Printer | ANAP              | Printer |

The Printer Status information is evaluated as follows:

1. If Printer status (2110,0010) is FAILURE, the Hardcopy AE is terminated and status is user informed.
2. If Printer status (2110,0010) is NORMAL or WARNING, the Hardcopy AE continues to print.

The behavior of Hardcopy AE when encountering status codes in a N-GET response is summarized in the Table below:

**Table 4.2-37**  
**PRINTER SOP CLASS N-GET RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning | Error Code             | Behavior                                                                                                      |
|----------------|-----------------|------------------------|---------------------------------------------------------------------------------------------------------------|
| Success        | Success         | 0000                   | The request to get printer status information was success.                                                    |
| *              | *               | Any other status code. | The Association is aborted using A-ABORT and the print-job is terminated. The status is reported to the user. |

##### 4.2.3.3.1.4.2 Printer SOP Class Notifications (N-EVENT-REPORT)

Hardcopy AE is capable of receiving an N-EVENT-REPORT request at any time during an association.

The behavior of Hardcopy AE when receiving Event Types within the N-EVENT-REPORT is summarized in the Table below:

**Table 4.2-38 PRINTER SOP CLASS N-EVENT-REPORT BEHAVIOUR**

| Event Type Name | Event Type ID | Behavior                                                                               |
|-----------------|---------------|----------------------------------------------------------------------------------------|
| Normal          | 1             | The print session continues to be printed.                                             |
| Warning         | 2             | The print session continues to be printed. The Warning status is not reported to user. |
| Failure         | 3             | The print session is terminated. The Failure is reported to user.                      |
| *               | *             | The print session is terminated. The Failure is reported to user.                      |

The reasons for returning specific status codes in an N-EVENT-REPORT response are summarized in the Table below:

**Table 4.2-39  
PRINTER SOP CLASS N-EVENT-REPORT RESPONSE STATUS REASONS**

| Service Status | Further Meaning    | Error Code | Reasons                                                                                                                                             |
|----------------|--------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Success        | Success            | 0000       | The notification event has been successfully received.                                                                                              |
| Failure        | No Such Event Type | 0113H      | An invalid Event Type ID was supplied in the N-EVENT-REPORT request.                                                                                |
| Failure        | Processing Failure | 0110H      | An internal error occurred during processing of the N-EVENT-REPORT. A short description of the error will be returned in Error Comment (0000,0902). |

#### **4.2.3.3.1.5 SOP Specific Conformance for the Film Session SOP Class**

Hardcopy AE supports the following DIMSE operations for the Film Session SOP Class:

- N-CREATE
- N-DELETE

Details of the supported attributes and status handling behavior are described in the following subsections.

##### **4.2.3.3.1.5.1 Film Session SOP Class Operations (N-CREATE)**

The attributes supplied in an N-CREATE Request are listed in the Table below. The values are typical and may be configured by the CSE:

**Table 4.2-40 FILM SESSION SOP CLASS N-CREATE REQUEST ATTRIBUTES**

| Attribute Name    | Tag         | VR | Value                           | Presence of Value | Source |
|-------------------|-------------|----|---------------------------------|-------------------|--------|
| Number of Copies  | (2000,0010) | IS | 1 .. 9                          | ALWAYS            | CONFIG |
| Print Priority    | (2000,0020) | CS | HIGH, MED, or LOW               | ALWAYS            | CONFIG |
| Medium Type       | (2000,0030) | CS | BLUE FILM, CLEAR FILM, or PAPER | ALWAYS            | CONFIG |
| Film Destination  | (2000,0040) | CS | MAGAZINE or PROCESSOR           | ALWAYS            | CONFIG |
| Memory Allocation | (2000,0060) | IS |                                 | ANAP              | CONFIG |

The behavior of Hardcopy AE when encountering status codes in an N-CREATE response is summarized in the Table below:

**Table 4.2-41  
FILM SESSION SOP CLASS N-CREATE RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning              | Error Code             | Behavior                                                                                                          |
|----------------|------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------|
| Success        | Success                      | 0000                   | The SCP has completed the operation successfully.                                                                 |
| Warning        | Attribute Value Out of Range | 0116H                  | The N-CREATE operation is considered successful and the status is not reported to the user.                       |
| Warning        | Attribute List Error         | 0107H                  | The N-CREATE operation is considered successful and the status is not reported to the user.                       |
| *              | *                            | Any other status code. | The Association is aborted using A-ABORT and the print session is terminated. The status is reported to the user. |

#### 4.2.3.3.1.5.2 Film Session SOP Class Operations (N-DELETE)

The behavior of Hardcopy AE when encountering status codes in an N-DELETE response is summarized in the Table below:

**Table 4.2-42  
FILM SESSION SOP CLASS N-DELETE RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning | Error Code             | Behavior                                                                      |
|----------------|-----------------|------------------------|-------------------------------------------------------------------------------|
| Success        | Success         | 0000                   | The SCP has completed the operation successfully.                             |
| *              | *               | Any other status code. | The Association is aborted using A-ABORT and the print session is terminated. |

#### 4.2.3.3.1.6 SOP Specific Conformance for the Film Box SOP Class

Hardcopy AE supports the following DIMSE operations for the Film Box SOP Class:

- N-CREATE
- N-ACTION

Details of the supported attributes and status handling behavior are described in the following subsections.

##### 4.2.3.3.1.6.1 Film Box SOP Class Operations (N-CREATE)

The attributes supplied in an N-CREATE Request are listed in the Table below. The values are typical and may be configured by the CSE:

**Table 4.2-43 FILM BOX SOP CLASS N-CREATE REQUEST ATTRIBUTES**

| Attribute Name       | Tag         | VR | Value                                                               | Presence of Value | Source |
|----------------------|-------------|----|---------------------------------------------------------------------|-------------------|--------|
| Image Display Format | (2010,0010) | ST | STANDARD\m,n                                                        | ALWAYS            | CONFIG |
| Film Orientation     | (2010,0040) | CS | PORTRAIT or LANDSCAPE                                               | ALWAYS            | CONFIG |
| Film Size ID         | (2010,0050) | CS | 14INX17IN,14INX14IN,<br>11INX14IN,11INX11IN,<br>85INX11IN, 8INX10IN | ALWAYS            | CONFIG |

|                                  |             |    |                                        |        |        |
|----------------------------------|-------------|----|----------------------------------------|--------|--------|
| Magnification Type               | (2010,0060) | CS | REPLICATE, BILINEAR, CUBIC or NONE     | ALWAYS | CONFIG |
| Smoothing Type                   | (2010,0080) | CS |                                        | ANAP   | CONFIG |
| Border Density                   | (2010,0100) | CS | BLACK or WHITE                         | ALWAYS | CONFIG |
| Empty Image Density              | (2010,0110) | CS | BLACK or WHITE                         | ALWAYS | CONFIG |
| Min Density                      | (2010,0120) | US | 0 .. 329                               | ALWAYS | CONFIG |
| Max Density                      | (2010,0130) | US | 1 .. 330                               | ALWAYS | CONFIG |
| Trim                             | (2010,0140) | CS | YES or NO                              | ANAP   | CONFIG |
| Configuration Information        | (2010,0150) | ST | Set if requested by Printer            | ANAP   | CONFIG |
| Referenced Film Session Sequence | (2010,0500) | SQ |                                        | ALWAYS | AUTO   |
| >Referenced SOP Class UID        | (0008,1150) | UI | 1.2.840.10008.5.1.1.1                  | ALWAYS | AUTO   |
| >Referenced SOP Instance UID     | (0008,1155) | UI | From created Film Session SOP Instance | ALWAYS | AUTO   |

The behavior of Hardcopy AE when encountering status codes in an N-CREATE response is summarized in the Table below:

**Table 4.44 FILM BOX SOP CLASS N-CREATE RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning                                                           | Error Code             | Behavior                                                                                                      |
|----------------|---------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------------|
| Success        | Success                                                                   | 0000                   | The SCP has completed the operation successfully.                                                             |
| Warning        | Requested Min Density or Max Density outside of printer's operating range | B605H                  | The N-CREATE operation is considered successful and the status is not reported to the user.                   |
| *              | *                                                                         | Any other status code. | The Association is aborted using A-ABORT and the print-job is terminated. The status is reported to the user. |

#### 4.2.3.3.1.6.2 Film Box SOP Class Operations (N-ACTION)

An N-ACTION Request is issued to instruct the Print SCP to print the contents of the Film Box. The Action Reply argument in an N-ACTION response is not evaluated.

The behavior of Hardcopy AE when encountering status codes in an N-ACTION response is summarized in the Table below:

**Table 4.2-45  
FILM BOX SOP CLASS N-ACTION RESPONSE STATUS HANDLING BEHAVIOR**

| Service Status | Further Meaning                                                                 | Error Code | Behavior                                                                                   |
|----------------|---------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------------|
| Success        | Success                                                                         | 0000       | The SCP has completed the operation successfully. The film has been accepted for printing. |
| Warning        | Film Box SOP Instance hierarchy does not contain Image Box SOP Instances (empty | B603H      | The Association is aborted using A-ABORT and the print-job is                              |

|         |                                                                                                                                     |                        |                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------|
|         | page)                                                                                                                               |                        | terminated. The status is reported to the user.                                             |
| Warning | Image size is larger than Image Box size. The image has been demagnified.                                                           | B604H                  | The N-ACTION operation is considered successful and the status is not reported to the user. |
| Warning | Image size is larger than Image Box size. The image has been cropped to fit.                                                        | B609H                  | The N-ACTION operation is considered successful and the status is not reported to the user. |
| Warning | Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit. | B60AH                  | The N-ACTION operation is considered successful and the status is not reported to the user. |
| Failure | Unable to create Print Job SOP Instance; print queue is full.                                                                       | C602                   | The Association is aborted using A-ABORT and the status is reported to the user.            |
| Failure | Image size is larger than Image Box size.                                                                                           | C603                   | The Association is aborted using A-ABORT and the status is reported to the user.            |
| Failure | Combined Print Image Size is larger than Image Box size.                                                                            | C613                   | The Association is aborted using A-ABORT and the status is reported to the user.            |
| *       | *                                                                                                                                   | Any other status code. | The Association is aborted using A-ABORT and the status is reported to the user.            |

#### 4.2.3.3.1.7 SOP Specific Conformance for the Image Box SOP Class

Hardcopy AE supports the following DIMSE operations for the Basic Grayscale and Basic Color Image Box SOP Classes:

— N-SET

Details of the supported attributes and status handling behavior are described in the following subsections.

##### 4.2.3.3.1.7.1 Basic Grayscale Image Box SOP Class Operations (N-SET)

The attributes supplied in an N-SET Grayscale Image Box Request are listed in the Table below:

**Table 4.2-46 BASIC GRAYSCALE IMAGE BOX SOP CLASS N-SET REQUEST ATTRIBUTES**

| Attribute Name                 | Tag         | VR | Value                                                                         | Presence of Value | Source |
|--------------------------------|-------------|----|-------------------------------------------------------------------------------|-------------------|--------|
| Image Position                 | (2020,0010) | US | 1 to maximum image position allowed for the Image Display Format (2010, 0010) | ALWAYS            | AUTO   |
| Polarity                       | (2020,0020) | CS | NORMAL or REVERSE                                                             | ALWAYS            | CONFIG |
| Basic Grayscale Image Sequence | (2020,0110) | SQ |                                                                               | ALWAYS            | AUTO   |
| >Samples Per Pixel             | (0028,0002) | US | 1                                                                             | ALWAYS            | AUTO   |

|                             |             |    |                          |        |      |
|-----------------------------|-------------|----|--------------------------|--------|------|
| >Photometric Interpretation | (0028,0004) | CS | MONOCHROME2              | ALWAYS | AUTO |
| >Rows                       | (0028,0010) | US | Copied from source image | ALWAYS | AUTO |
| >Columns                    | (0028,0011) | US | Copied from source image | ALWAYS | AUTO |
| >Pixel Aspect Ratio         | (0028,0034) | IS | Copied from source image | ANAP   | AUTO |
| >Bits Allocated             | (0028,0100) | US | 8                        | ALWAYS | AUTO |
| >Bits Stored                | (0028,0101) | US | 8                        | ALWAYS | AUTO |
| >High Bit                   | (0028,0102) | US | 7                        | ALWAYS | AUTO |
| >Pixel Representation       | (0028,0103) | US | 0                        | ALWAYS | AUTO |
| >Pixel Data                 | (7FE0,0010) | OW | Pixels from source image | ALWAYS | AUTO |

The behavior of Hardcopy AE when encountering status codes in an N-SET response is summarized in Table 4.2-48.

#### 4.2.3.3.1.7.2 Basic Color Image Box SOP Class Operations (N-SET)

The attributes supplied in an N-SET Color Image Box Request are listed in the Table below:

**Table 4.2-47 BASIC COLOR IMAGE BOX SOP CLASS N-SET REQUEST ATTRIBUTES**

| Attribute Name                    | Tag         | VR | Value                                                                         | Presence of Value | Source                |
|-----------------------------------|-------------|----|-------------------------------------------------------------------------------|-------------------|-----------------------|
| Image Position                    | (2020,0010) | US | 1 to maximum image position allowed for the Image Display Format (2010, 0010) | ALWAYS            | AUTO                  |
| Polarity                          | (2020,0020) | CS | Printer may ignore the value                                                  | ALWAYS            | AUTO                  |
| Preformatted Color Image Sequence | (2020,0111) | SQ |                                                                               | ALWAYS            | AUTO                  |
| >Samples Per Pixel                | (0028,0002) | US | 3                                                                             | ALWAYS            | AUTO                  |
| >Photometric Interpretation       | (0028,0004) | CS | RGB                                                                           | ALWAYS            | AUTO                  |
| >Planar Configuration             | (0028,0006) | US | 0 or 1 (default is 1)                                                         | ALWAYS            | CONFIG <sup>[1]</sup> |
| >Rows                             | (0028,0010) | US | Copied from source image                                                      | ALWAYS            | AUTO                  |
| >Columns                          | (0028,0011) | US | Copied from source image                                                      | ALWAYS            | AUTO                  |
| >Pixel Aspect Ratio               | (0028,0034) | IS | Copied from source image                                                      | ANAP              | AUTO                  |
| >Bits Allocated                   | (0028,0100) | US | 8                                                                             | ALWAYS            | AUTO                  |
| >Bits Stored                      | (0028,0101) | US | 8                                                                             | ALWAYS            | AUTO                  |
| >High Bit                         | (0028,0102) | US | 7                                                                             | ALWAYS            | AUTO                  |
| >Pixel Representation             | (0028,0103) | US | 0                                                                             | ALWAYS            | AUTO                  |
| >Pixel Data                       | (7FE0,0010) | OW | Pixels from source image                                                      | ALWAYS            | AUTO                  |

<sup>[1]</sup> The Planar Configuration could be configured by the CSE referencing the DICOM Conformance Statement of the remote printer.

The behavior of Hardcopy AE when encountering status codes in an N-SET response is summarized in Table 4.2-48.

**Table 4.2-48 IMAGE BOX SOP CLASSES N-SET RESPONSE STATUS HANDLING BEHAVIOR**

| <b>Service Status</b> | <b>Further Meaning</b>                                                                                                              | <b>Error Code</b>      | <b>Behavior</b>                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------|
| Success               | Success                                                                                                                             | 0000                   | The SCP has completed the operation successfully. Image successfully stored in Image Box. |
| Warning               | Image size is larger than Image Box size. The image has been demagnified.                                                           | B604                   | The N-SET operation is considered successful and the status is not reported.              |
| Warning               | Requested Min Density or Max Density outside of printer's operating range.                                                          | B605                   | The N-SET operation is considered successful and the status is not reported.              |
| Warning               | Image size is larger than Image Box size. The image has been cropped to fit.                                                        | B609                   | The N-SET operation is considered successful and the status is not reported.              |
| Warning               | Image size or Combined Print Image Size is larger than Image Box size. The image or combined Print Image has been decimated to fit. | B60A                   | The N-SET operation is considered successful and the status is not reported.              |
| Failure               | Image size is larger than Image Box size.                                                                                           | C603                   | The Association is aborted using A-ABORT and the status is reported to the user.          |
| Failure               | Insufficient memory in printer to store the image.                                                                                  | C605                   | The Association is aborted using A-ABORT and the status is reported to the user.          |
| Failure               | Combined Print Image Size is larger than Image Box size.                                                                            | C613                   | The Association is aborted using A-ABORT and the status is reported to the user.          |
| *                     | *                                                                                                                                   | Any other status code. | The Association is aborted using A-ABORT and the status is reported to the user.          |

**4.2.3.4 Association Acceptance Policy**

The Hardcopy Application Entity does not accept Associations.

#### **4.2.4 Query/Retrieve Application Entity Specification**

##### **4.2.4.1 SOP Classes**

This product provides Standard Conformance to the following SOP Classes:

**Table 4.2-49 SOP CLASSES FOR AE QUERY/RETRIEVE**

| <b>SOP Class Name</b>                              | <b>SOP Class UID</b>          | <b>SCU</b> | <b>SCP</b> |
|----------------------------------------------------|-------------------------------|------------|------------|
| Study Root Query/Retrieve Information Model – FIND | 1.2.840.10008.5.1.4.1.2.2.1   | Yes        | No         |
| Study Root Query/Retrieve Information Model – MOVE | 1.2.840.10008.5.1.4.1.2.2.2   | Yes        | No         |
| Ultrasound Image Storage                           | 1.2.840.10008.5.1.4.1.1.6.1   | No         | Yes        |
| Ultrasound Multi-frame Image Storage               | 1.2.840.10008.5.1.4.1.1.3.1   | No         | Yes        |
| CT Image Storage                                   | 1.2.840.10008.5.1.4.1.1.2     | No         | Yes        |
| MR Image Storage                                   | 1.2.840.10008.5.1.4.1.1.4     | No         | Yes        |
| Positron Emission Tomography Image Storage         | 1.2.840.10008.5.1.4.1.1.128   | No         | Yes        |
| Encapsulated PDF Storage                           | 1.2.840.10008.5.1.4.1.1.104.1 | No         | Yes        |

##### **4.2.4.2 Association Policies**

###### **4.2.4.2.1 General**

The DICOM standard application context name for DICOM 3.0 is always proposed:

**Table 4.2-50 DICOM APPLICATION CONTEXT FOR AE QUERY/RETRIEVE**

|                          |                       |
|--------------------------|-----------------------|
| Application Context Name | 1.2.840.10008.3.1.1.1 |
|--------------------------|-----------------------|

###### **4.2.4.2.2 Number of Associations**

This product initiates one Association at a time for a Workflow requests.

**Table 4.2-51 NUMBER OF ASSOCIATIONS INITIATED FOR AE QUERY/RETRIEVE**

|                                             |   |
|---------------------------------------------|---|
| Maximum number of simultaneous Associations | 1 |
|---------------------------------------------|---|

###### **4.2.4.2.3 Asynchronous Nature**

This product does not support asynchronous communication (multiple outstanding transactions over a single Association).

**Table 4.2-52 ASYNCHRONOUS NATURE AS A SCU FOR AE QUERY/RETRIEVE**

|                                                         |   |
|---------------------------------------------------------|---|
| Maximum number of outstanding asynchronous transactions | 1 |
|---------------------------------------------------------|---|

#### **4.2.4.2.4 Implementation Identifying Information**

The implementation information for this Application Entity is:

**Table 4.2-53 DICOM IMPLEMENTATION CLASS AND VERSION FOR AE QUERY/RETRIEVE**

|                             |                                                       |
|-----------------------------|-------------------------------------------------------|
| Implementation Class UID    | 1.2.276.0.7230010.3.0.3.5.4                           |
| Implementation Version Name | OFFIS_DCMTK_354<br>(subject to change without notice) |

#### **4.2.4.3 Association Initiation Policy**

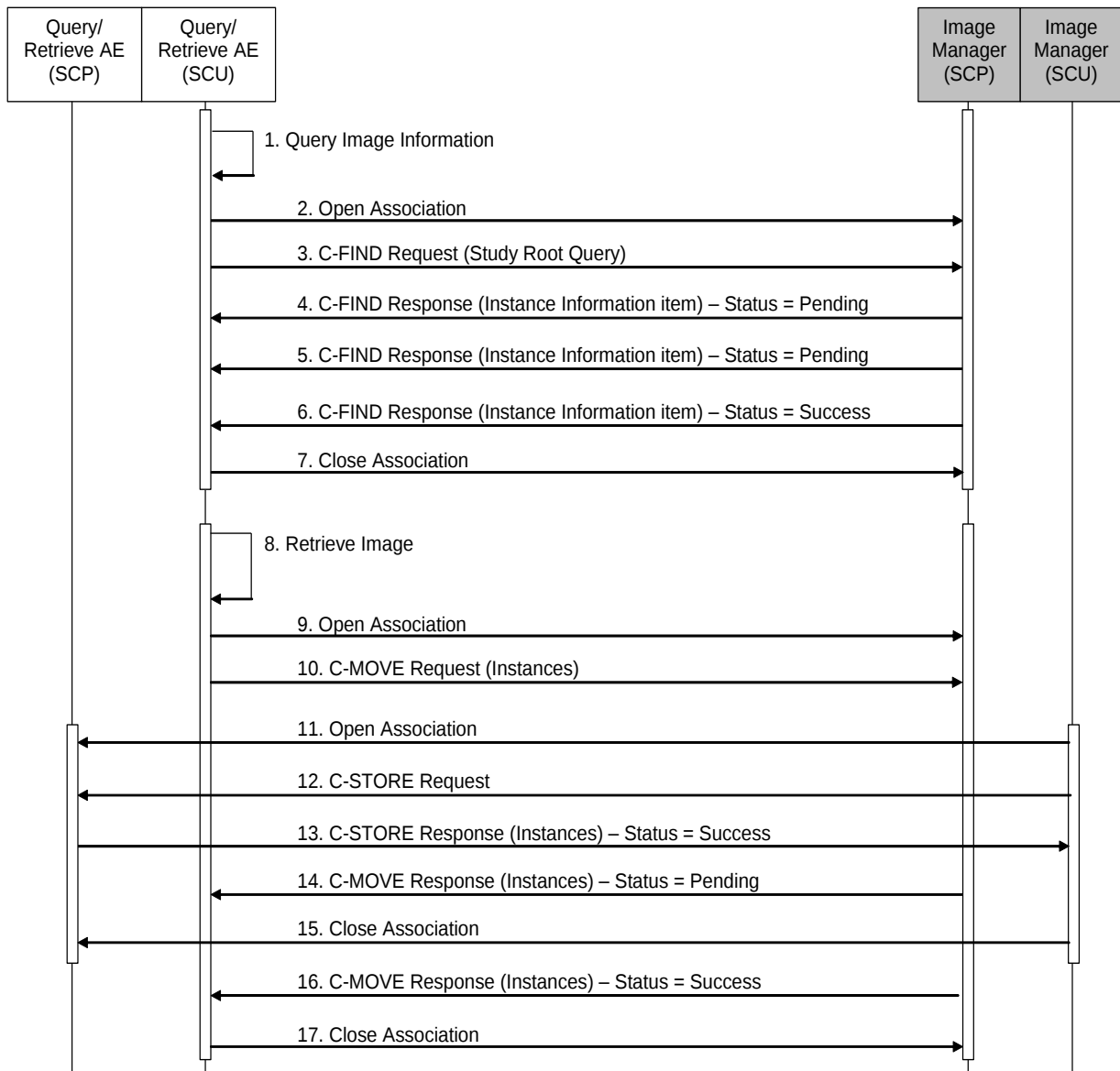
##### **4.2.4.3.1 Activity – Query Image Information and Retrieve Images**

##### **4.2.4.3.1.1 Description and Sequencing of Activities**

An interactive query for Image Information is initiated by clicking the "Search" button in the "Import" Registration GUI. In the window, Patient ID, Patient's Name, Accession Number, Study Date, and/or Modalities in Study (US, CT, MR, PET, or DOC) may be supplied by the operator as the query keys.

When the "Search" button is clicked by the operator, this product sends the C-FIND request several times with changing Query/Retrieve Level to "STUDY", "SERIES" or "IMAGE". After retrieval of all responses, this product displays the result in a separate list. During receiving the response, the query processing is canceled by issuing a C-FIND-CANCEL if the operator clicks the "Cancel" button.

When the operator selects the instance information items in the list and clicks "Preview" or "Import" button, this product sends the C-MOVE requests and waits for receiving C-Store requests from the image manager. After retrieval of all C-MOVE responses, this product displays the received instances and copies them to local HDD. During receiving the C-MOVE response, the processing is canceled by issuing a C-MOVE-CANCEL if the operator clicks the "Cancel" button.



**Figure 4.2-5**  
**SEQUENCING OF ACTIVITY – QUERY INSTANCE INFORMATION AND RETRIEVE INSTANCE**

A possible sequence of interactions between the Query/Retrieve AE and an Image Manager is illustrated in Figure 4.2-5:

1. The operator requests “Query Instance Information”.
2. The Query/Retrieve AE (SCU) opens the association with the Image Manager (SCP).
3. The Query/Retrieve AE (SCU) sends a C-FIND request to the Image Manager (SCP) containing the Instance Information Query attributes.
4. The Image Manager (SCP) returns a C-FIND response containing the requested attributes of the first matching Instance Information Item.
5. The Image Manager (SCP) returns a C-FIND response containing the requested attributes of the second matching Instance Information Item.

6. The Image Manager (SCP) returns another C-FIND response with status Success indicating that no further matching Instance Information Items exist. This example assumes that only 2 Instance Information items match the Query.
7. The Query/Retrieve AE (SCU) closes the association with the Image Manager.
8. The operator requests "Retrieve Image".
9. The Query/Retrieve AE (SCU) opens the association with the Image Manager (SCP).
10. The Query/Retrieve AE (SCU) sends a C-MOVE request to the Image Manager (SCP).
11. The Image Manager (SCU) opens the association with the Query/Retrieve AE (SCP).
12. The Image Manager (SCU) transfers instance to the Query/Retrieve AE (SCP) using a C-STORE request.
13. The Query/Retrieve AE (SCP) replies with a C-STORE response (status success).
14. The Image Manager (SCP) sends C-MOVE response to the Query/Retrieve AE (SCU) with status Pending.
15. The Image Manager (SCP) closes the association with the Query/Retrieve AE (SCU).
16. The Image Manager (SCP) sends C-MOVE response to the Query/Retrieve AE (SCU) with status Success indicating that no further instances should be transferred.
17. The Query/Retrieve AE (SCU) closes the association with the Image Manager (SCP).

#### 4.2.4.3.1.2 Proposed Presentation Contexts

This product will propose Presentation Contexts as shown in the following table:

**Table 4.2-54**  
**PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY QUERY IMAGE INFORMATION**

| Presentation Context Table                                  |                                 |                           |                     |      |           |
|-------------------------------------------------------------|---------------------------------|---------------------------|---------------------|------|-----------|
| Abstract Syntax                                             |                                 | Transfer Syntax           |                     | Role | Ext. Neg. |
| Name                                                        | UID                             | Name List                 | UID List            |      |           |
| Study Root<br>Query/Retrieve<br>Information Model -<br>FIND | 1.2.840.10008.5.1.<br>4.1.2.2.1 | Implicit VR Little Endian | 1.2.840.10008.1.2   | SCU  | None      |
|                                                             |                                 | Explicit VR Little Endian | 1.2.840.10008.1.2.1 |      |           |
|                                                             |                                 | Explicit VR Big Endian    | 1.2.840.10008.1.2.2 |      |           |
| Study Root<br>Query/Retrieve<br>Information Model -<br>MOVE | 1.2.840.10008.5.1.<br>4.1.2.2.2 | Implicit VR Little Endian | 1.2.840.10008.1.2   | SCU  | None      |
|                                                             |                                 | Explicit VR Little Endian | 1.2.840.10008.1.2.1 |      |           |
|                                                             |                                 | Explicit VR Big Endian    | 1.2.840.10008.1.2.2 |      |           |

**Table 4.2-55  
PROPOSED PRESENTATION CONTEXTS FOR ACTIVITY RETRIEVE IMAGES**

| <b>Presentation Context Table</b>          |                               |                                                                                                                     |                                                                                           |             |                  |
|--------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------|------------------|
| <b>Abstract Syntax</b>                     |                               | <b>Transfer Syntax</b>                                                                                              |                                                                                           | <b>Role</b> | <b>Ext. Neg.</b> |
| <b>Name</b>                                | <b>UID</b>                    | <b>Name List</b>                                                                                                    | <b>UID List</b>                                                                           |             |                  |
| Ultrasound Image Storage                   | 1.2.840.10008.5.1.4.1.1.6.1   | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Baseline Compression<br>RLE Compression              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5 | SCP         | None             |
| Ultrasound Multi-frame Image Storage       | 1.2.840.10008.5.1.4.1.1.3.1   | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Baseline Compression <sup>1</sup><br>RLE Compression | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5 | SCP         | None             |
| CT Image Storage                           | 1.2.840.10008.5.1.4.1.1.2     | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Lossless, Nonhierarchical, First- Order Prediction   | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.70                        | SCP         | None             |
| MR Image Storage                           | 1.2.840.10008.5.1.4.1.1.4     | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Lossless, Nonhierarchical, First- Order Prediction   | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.70                        | SCP         | None             |
| Positron Emission Tomography Image Storage | 1.2.840.10008.5.1.4.1.1.128   | Implicit VR Little Endian<br>Explicit VR Little Endian<br>JPEG Lossless, Nonhierarchical, First- Order Prediction   | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.4.70                        | SCP         | None             |
| Encapsulated PDF Storage                   | 1.2.840.10008.5.1.4.1.1.104.1 | Implicit VR Little Endian<br>Explicit VR Little Endian                                                              | 1.2.840.10008.1.2<br>1.2.840.10008.1.2.1                                                  | SCP         | None             |

#### 4.2.4.3.1.3 SOP Specific Conformance for Query/Retrieve SOP Classes

The behavior of Query/Retrieve AE when encountering status codes in C-FIND response is summarized in the table below.

**Table 4.2-56 QUERY INSTANCE INFORMATION C-FIND RESPONSE STATUS  
HANDLING BEHAVIOR**

| <b>Service Status</b> | <b>Further Meaning</b>     | <b>Error Code</b> | <b>Behavior</b>                                                                                                 |
|-----------------------|----------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------|
| Success               | Matching is complete       | 0000              | The SCP has completed the matches. Instance Information items are available for display or further processing.  |
| Cancel                | Matching terminated due to | FE00              | If the query was cancelled due to user's operation then the SCP has completed the matches. Instance Information |

|         |                                                                                    |                        |                                                                                                                                                       |
|---------|------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | Cancel request                                                                     |                        | items are available for display or further processing. Otherwise, the Association is aborted using A-ABORT and the Image Information query is failed. |
| Failed  | Out of Resources                                                                   | A700                   | The Association is aborted using A-ABORT and the Query Instance Information is failed.                                                                |
| Failed  | Identifier does not match SOP Class                                                | A900                   | The Association is aborted using A-ABORT and the Query Instance Information is failed.                                                                |
| Failed  | Unable to Process                                                                  | C000 – CFFF            | The Association is aborted using A-ABORT and the Query Instance Information is failed.                                                                |
| Pending | Matches are continuing                                                             | FF00                   | The Instance Information item contained in the Identifier is collected for later display or further processing.                                       |
| Pending | Matches are continuing – Warning that one or more Optional Keys were not supported | FF01                   | The Instance Information item contained in the Identifier is collected for later display or further processing.                                       |
| Failed  | *                                                                                  | Any other status code. | The Association is aborted using A-ABORT and the Query Instance Information is failed.                                                                |

The behavior of Query/Retrieve AE when encountering status codes in C-MOVE response is summarized in the table below.

**Table 4.2-57 RETRIEVE INSTANCE INFORMATION C-MOVE RESPONSE STATUS HANDLING BEHAVIOR**

| <b>Service Status</b> | <b>Further Meaning</b>                             | <b>Error Code</b> | <b>Behavior</b>                                                                                                    |
|-----------------------|----------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------|
| Success               | Sub-operations Complete – No Failures              | 0000              | The SCP has completed the sub-operations. All requested instances are available for display or further processing. |
| Warning               | Sub-operations Complete – One or more Failures     | B000              | The Association is aborted using A-ABORT and Retrieve Instances is failed.                                         |
| Cancel                | Sub-operations terminated due to Cancel Indication | FE00              | The Association is aborted using A-ABORT and Retrieve Instances is failed.                                         |
| Failed                | Unable to calculate number of matches              | A701              | The Association is aborted using A-ABORT and Retrieve Instances is failed.                                         |
| Failed                | Move Destination unknown                           | A801              | The Association is aborted using A-ABORT and Retrieve Instances is failed.                                         |
| Failed                | Unable to perform sub-operations                   | A702              | The Association is aborted using A-ABORT and Retrieve Instances is failed.                                         |
| Failed                | Unable to Process                                  | C000 – CFFF       | The Association is aborted using A-ABORT and Retrieve Instances is failed.                                         |
| Pending               | Sub-operations are continuing                      | FF00              | It succeeded to receive an instances and the retrieve process is continuing.                                       |

|        |   |                        |                                                                            |
|--------|---|------------------------|----------------------------------------------------------------------------|
| Failed | * | Any other status code. | The Association is aborted using A-ABORT and Retrieve Instances is failed. |
|--------|---|------------------------|----------------------------------------------------------------------------|

The behavior of this product during communication failure is summarized in the Table below.

**Table 4.2-58 QUERY/RETRIEVE COMMUNICATION FAILURE BEHAVIOR**

| Exception                                        | Behavior                                                                                              |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Timeout                                          | The Association is aborted using A-ABORT and the process is failed. An error is reported to the user. |
| Association aborted by the SCP or network layers | The process is failed. An error is reported to the user.                                              |

The table below provides a description of the Study Root Query/Retrieve Information Model. Unexpected attributes returned in a C-FIND response are ignored.

**Table 4.2-59 STUDY ROOT QUERY/RETRIEVE INFORMATION MODEL**

| Attribute Name            | Tag         | VR | M | R | Q | D |
|---------------------------|-------------|----|---|---|---|---|
| <b>Study Level Keys</b>   |             |    |   |   |   |   |
| Specific Character Set    | (0008,0005) | CS |   | x |   |   |
| Study Date                | (0008,0020) | DA | R | x | x | x |
| Study Time                | (0008,0030) | TM |   | x | x | x |
| Accession Number          | (0008,0050) | SH | * | x | x | x |
| Modalities In Study       | (0008,0061) | CS |   | x |   |   |
| Referring Physicians Name | (0008,0090) | PN |   | x |   | x |
| Study Description         | (0008,1030) | LO |   | x |   | x |
| Patient's Name            | (0010,0010) | PN | * | x | x | x |
| Patient ID                | (0010,0020) | LO | * | x | x | x |
| Patient's Birth Date      | (0010,0030) | DA |   | x |   | x |
| Patient's Sex             | (0010,0040) | CS |   | x |   | x |
| Study ID                  | (0020,0010) | SH |   | x |   | x |
| Study Instance UID        | (0020,000D) | UI |   | x | x |   |
| Requesting Service        | (0032,1033) | LO |   | x |   |   |
| <b>Series Level Keys</b>  |             |    |   |   |   |   |
| Series Date               | (0008,0021) | DA |   | x |   |   |
| Series Time               | (0008,0031) | TM |   | x |   | x |
| Modality                  | (0008,0060) | SH | S | x | x | x |
| Series Description        | (0008,103E) | LO |   | x |   | x |
| Body Part Examined        | (0018,0015) | CS |   | x |   | x |
| Series Instance UID       | (0020,000E) | UI |   | x | x |   |
| Series Number             | (0020,0011) | IS |   | x |   | x |

| Image Level Keys |             |    |  |   |   |   |
|------------------|-------------|----|--|---|---|---|
| SOP Instance UID | (0008,0018) | CS |  | x | x |   |
| Instance Number  | (0020,0013) | IS |  | x |   | x |

The above table should be read as follows:

- Attribute Name: Attributes supported to build an Instance Information Request Identifier of this product.
- Tag: DICOM tag for this attribute.
- VR: DICOM VR for this attribute.
- M: Matching keys for Query Instance Information. An "S" will indicate that this product will supply an attribute value for Single Value Matching, an "R" will indicate Range Matching and a "\*" will denote wildcard matching.
- R: Return keys. An "x" will indicate that this product will supply this attribute as Return Key with zero length for Universal Matching.
- Q: Interactive Query Key. An "x" will indicate that this product will supply this attribute as matching key, if entered in the Search item or selected item on a Import window.
- D: Displayed keys. An "x" indicates that this attribute is displayed to the user during a Import window.

### **4.3 NETWORK INTERFACES**

#### **4.3.1 Physical Network Interface**

This product supports both wired and wireless network interface. The wired network interface is always used if wired and wireless network interfaces are connected at the same time. It is necessary to assign IP Address on each network interface.

**Table 4.3-1  
SUPPORTED PHYSICAL NETWORK INTERFACES**

|                                                         |
|---------------------------------------------------------|
| Ethernet 100baseTX or 10baseT is automatically detected |
| Wireless 802.11ac/a/n/g/b                               |

#### **4.3.2 Additional Protocols**

This product may be configured to get the local configuration via the DHCP and to synchronize the system time with the NTP server. However it does not conforms to other System Management Profiles as DNS nor LDAP.

#### **4.3.3 IPv4 and IPv6 Support**

This product supports both IPv4 and IPv6 <sup>1</sup> connections.

Note: 1. Except for Storage Application Entity for Encapsulated PDF Storage.

## 4.4 CONFIGURATION

### 4.4.1 AE Title/Presentation Address Mapping

#### 4.4.1.1 Local AE Titles

All local applications share the same AE Titles and TCP/IP Address configured at the Local AET registry in the Network Setting and DICOM-Common GUI. The AE Title, Station Name, IP Address, and Port Number must be configured during installation, since no default values are provided and not automatically configured.

**Table 4.4-1 AE TITLE CONFIGURATION TABLE**

| Application Entity | Default AE Title | Default TCP/IP Port |
|--------------------|------------------|---------------------|
| Storage            | No Default       | 104                 |
| Workflow           | same as Storage  | 104                 |
| Hardcopy           | same as Storage  | 104                 |
| Query/Retrieve     | same as Storage  | 2350                |

#### 4.4.1.2 Remote AE Title/Presentation Address Mapping

The AE Titles, Station Names, IP Addresses, and Port numbers of remote applications are configured through the DICOM-Server/Worklist, DICOM-QR, DICOM-MPPS/Commitment, DICOM-SR, DICOM-Printer and DICOM-PDF GUI.

Some characters allowed for VR AE may not be used to represent the local and remote AE Titles as shown in the table below:

**Table 4.4-2 FORBIDDEN CHARACTERS FOR AE TITLE**

|                                   |                     |
|-----------------------------------|---------------------|
| Forbidden characters for AE Title | ; : " < > * \   ? , |
|-----------------------------------|---------------------|

##### 4.4.1.2.1 Workflow

The Application Entity Title, Station Name, IP Address, and the Port Number of the remote Modality Worklist SCP are registered at the Worklist row of DICOM-Server/Worklist GUI. Optionally the Application Entity Titles, Station Names, IP Addresses, and the Port numbers of remote MPPS server and Storage Commitment (Image Manager) should be registered in the DICOM-MPPS/Commitment GUI before each service is used.

Only one Storage Commitment server can be activated although the destinations of image storage and SR storage may be registered separately.

##### 4.4.1.2.2 Storage

The Application Entity Titles, Station Names, IP Addresses, and the Port Numbers of the remote Storage SCPs receiving images are registered at DICOM-Server/Worklist GUI. The remote Storage SCPs are able to register to five. Multiple storage destinations for single frame and/or multi-frame images can be activated by selecting the check box in the GUI.

The Application Entity Titles, Station Names, IP Addresses, and the Port Numbers of the remote Storage SCPs receiving Structured Reports are registered at DICOM-SR GUI. The destinations of Structured Report storage may not be same as the destinations of other storage.

The Application Entity Titles, Station Names, IP Addresses, and the Port Numbers of the remote Storage SCPs receiving PDF Reports are registered at DICOM-PDF GUI. The destinations of PDF Report storage may not be same as the destinations of other storage.

#### 4.4.1.2.3 Hardcopy

The Application Entity Titles, Station Names, IP Addresses, and the Port Numbers of the remote Hardcopy SCPs are registered in the DICOM-Printer GUI. Although the Multiple Hardcopy destinations may be registered, only one destination must be activated by selected the radio button in the GUI. The same Application Entity may be registered to configure different Hardcopy settings for selections by the user's preference.

#### 4.4.1.2.4 Query/Retrieve

The Application Entity Titles, Station Names, IP Addresses, and the Port Numbers of the remote Query/Retrieve SCPs receiving images are registered at DICOM-QR GUI. The remote Query/Retrieve SCPs are able to register to five. The local Port Number of receiving instances from the Image Manager(SCU) is also registered in the GUI

#### 4.4.2 Parameters

A large number of parameters related to acquisition and general operation can be configured using the DICOM configuration user interface. The Table below shows those configuration parameters relevant to DICOM communication.

**Table 4.4-3 CONFIGURATION PARAMETERS TABLE**

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                            | Configurable (Yes/No) | Default Value                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------|
| <b>General Parameters</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                       |                                                        |
| Max PDU Receive Size                                                                                                                                                                                                                                                                                                                                                                                                                 | No                    | 16K bytes                                              |
| Max PDU Send Size<br>(larger PDUs will never be sent, even if the receiver supports a larger Max PDU Receive Size. If the receiver supports a smaller Max PDU Receive Size then the Max PDU Send Size will be reduced accordingly for the duration of the Association. Max PDU Receive Size information is exchanged during DICOM Association Negotiation in the Maximum Length Sub-Item of the A-ASSOCIATION-RQ and A-ASSOCIATE-AC) | No                    | 16K Bytes                                              |
| Time-out waiting for an acceptance or rejection response to an Association Request (Application Level Timeout)                                                                                                                                                                                                                                                                                                                       | No                    | INFINITE                                               |
| Time-out waiting for a response to an Association release request (Application Level Timeout)                                                                                                                                                                                                                                                                                                                                        | No                    | INFINITE                                               |
| Time-out waiting for completion of a TCP/IP connect request (Low-level timeout)                                                                                                                                                                                                                                                                                                                                                      | No                    | 20 s                                                   |
| Time-out waiting a Response to a DIMSE Request (Low-Level Timeout)                                                                                                                                                                                                                                                                                                                                                                   | Yes                   | 30 s                                                   |
| Time-out for waiting for data between TCP/IP-packets (Low Level Timeout)                                                                                                                                                                                                                                                                                                                                                             | Yes                   | 30 s                                                   |
| <b>Modality Worklist Parameters</b>                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                                                        |
| Modality Worklist SCU time-out waiting for the final response to a C-FIND-RQ                                                                                                                                                                                                                                                                                                                                                         | Yes                   | 30 s                                                   |
| Maximum number of Worklist Items                                                                                                                                                                                                                                                                                                                                                                                                     | No                    | 500                                                    |
| Supported Transfer Syntaxes for Modality Worklist                                                                                                                                                                                                                                                                                                                                                                                    | Yes                   | Implicit VR Little Endian<br>Explicit VR Little Endian |

| Parameter                                                                                                                                    | Configurable<br>(Yes/No) | Default Value                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------|
| Query Worklist for specific Scheduled Station AE Title                                                                                       | Yes                      | No default                                                                                                        |
| Query Worklist for specific Modality Value                                                                                                   | No                       | US                                                                                                                |
| <b>MPPS Parameters</b>                                                                                                                       |                          |                                                                                                                   |
| MPPS SCU time-out waiting for a response to a N-CREATE-RQ                                                                                    | Yes                      | 30 s                                                                                                              |
| MPPS SCU time-out waiting for a response to a N-SET-RQ                                                                                       | Yes                      | 30 s                                                                                                              |
| Supported Transfer Syntaxes for MPPS                                                                                                         | Yes                      | Implicit VR Little Endian<br>Explicit VR Little Endian                                                            |
| <b>Storage Commitment Parameters</b>                                                                                                         |                          |                                                                                                                   |
| Timeout waiting for a Storage Commitment Notification (maximum duration of applicability for a Storage Commitment Transaction UID).          | Yes                      | 1 hours                                                                                                           |
| Maximum number of simultaneously accepted Associations by the Storage AE                                                                     | No                       | 1                                                                                                                 |
| Delay association release after sending a Storage Commitment Request (wait for a Storage Commitment Notification over the same association). | Yes                      | 5 s                                                                                                               |
| <b>Storage Parameters</b>                                                                                                                    |                          |                                                                                                                   |
| Storage SCU time-out waiting for a response to a C-STORE-RQ                                                                                  | Yes                      | 30 s                                                                                                              |
| Maximum number of simultaneously initiated Associations by the Storage AE                                                                    | Yes                      | 1                                                                                                                 |
| Supported Transfer Syntaxes<br>(separately configurable for each Presentation Context)                                                       | Yes                      | Implicit VR Little Endian<br>Explicit VR Little Endian<br>RLE Lossless <sup>1</sup><br>JPEG Baseline <sup>1</sup> |
| <b>Print Parameters</b>                                                                                                                      |                          |                                                                                                                   |
| Print SCU time-out waiting for a response to a N-CREATE-RQ                                                                                   | Yes                      | 30 s                                                                                                              |
| Print SCU time-out waiting for a response to a N-SET-RQ                                                                                      | Yes                      | 30 s                                                                                                              |
| Print SCU time-out waiting for a response to a N-ACTION-RQ                                                                                   | Yes                      | 30 s                                                                                                              |
| Supported Transfer Syntaxes                                                                                                                  | Yes                      | Implicit VR Little Endian<br>Explicit VR Little Endian                                                            |
| <b>Query/Retrieve Parameters</b>                                                                                                             |                          |                                                                                                                   |
| Time-out waiting for an acceptance or rejection response to an Association Request                                                           | Yes                      | 4s                                                                                                                |

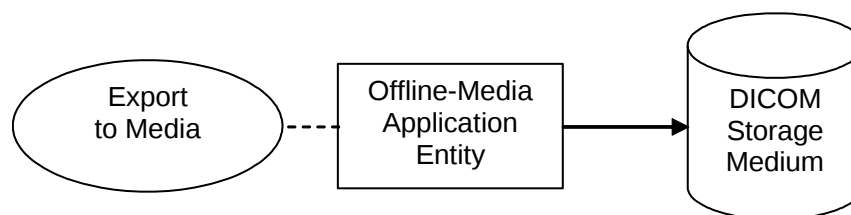
| <b>Parameter</b>                                                         | <b>Configurable<br/>(Yes/No)</b> | <b>Default Value</b> |
|--------------------------------------------------------------------------|----------------------------------|----------------------|
| Query/Retrieve SCU time-out waiting for a response to a C-FIND-RQ        | Yes                              | 150s                 |
| Query/Retrieve SCU time-out waiting for a response to a C-MOVE-RQ        | Yes                              | 150s                 |
| Query/Retrieve SCU time-out waiting for a response to a C-FIND-CANCEL-RQ | Yes                              | 1s                   |
| Query/Retrieve SCU time-out waiting for a response to a C-MOVE-CANCEL-RQ | Yes                              | 1s                   |
| Time-out waiting for a response to an Association release request        | Yes                              | 30s                  |

Note: 1. RLE or JPEG is not used for Structured Report storage.

## 5. MEDIA INTERCHANGE

### 5.1 IMPLEMENTATION MODEL

#### 5.1.1 Application Data Flow



**Figure 5.1-1 APPLICATION DATA FLOW DIAGRAM FOR MEDIA STORAGE**

- The Offline-Media Application Entity exports Ultrasound and Ultrasound Multi-frame images, and Structured Reports to some kinds of media. It is associated with the local real-world activity "STORE" button or "Copy" button.

#### 5.1.2 Functional Definition of AEs

##### 5.1.2.1 Functional Definition of Offline-Media Application Entity

The Media Application Entity can be requested in two modes. After the patient identification is supplied by the operator, pressing the "STORE" button will directly pass an image to the Offline-Media Application Entity. Or when it is configured to store the image in the local drive, the image is buffered in the drive for later reference. By pressing the "Copy" button, the images selected by the operator will be sent to the Offline-Media Application Entity. A storage association will be initiated by clicking the "Copy" button on the screen or pressing the "Copy" button on the LCD touch panel.

"CD Burning" button will export the images to the CD-R media from CD-R Buffer.

#### 5.1.3 Sequencing of Real-World Activities

At least one object instance must exist and be selected before the Offline-Media Application Entity can be invoked. The operator can insert DVD-RAM or a new CD-R media at any time before or after invocation of the Offline-Media Application Entity. The Offline-Media Application Entity will wait indefinitely for a media to be inserted before starting to write to the CD-R device. If no CD-R media is available, the export job can be canceled from the job queue.

"STORE" button will export the acquired image. "Copy" button will export the images selected by the operator. Storage device can be selected at menu setting(DVD/USB). "CD Burning" button will export the images to the CD-R media from CD-R Buffer.

#### 5.1.4 File Meta Information Options

The implementation information written to the File Meta Header in each file is:

**Table 5.1-1 DICOM IMPLEMENTATION CLASS AND VERSION FOR MEDIA STORAGE**

|                             |                    |
|-----------------------------|--------------------|
| Implementation Class UID    | 1.2.392.200039.117 |
| Implementation Version Name | ALOKA20161222      |

|  |                                    |
|--|------------------------------------|
|  | (subject to change without notice) |
|--|------------------------------------|

## 5.2 AE SPECIFICATIONS

### 5.2.1 Offline-Media Application Entity Specification

The Offline-Media Application Entity provides standard conformance to the DICOM Interchange Option of the Media Storage Service Class. The Application Profiles and roles are listed below:

**Table 5.2-1 APPLICATION PROFILES, ACTIVITIES AND ROLES FOR OFFLINE-MEDIA**

| Application Profiles Supported | Single Frame      | Multi-Frame       | Real World Activity                                                                                            | Role |
|--------------------------------|-------------------|-------------------|----------------------------------------------------------------------------------------------------------------|------|
| Image Display                  | STD-US-ID-SF-xxxx | STD-US-ID-MF-xxxx | "Store (USB)"                                                                                                  | FSC  |
| Spatial Calibration            | STD-US-SC-SF-xxxx | STD-US-SC-MF-xxxx | "Store(CD-R buffer)",<br>"STORE(DVD)",<br>"Copy(USB)",<br>"Copy(CD-R buffer)",<br>"Copy(DVD)",<br>"Burning CD" |      |

#### 5.2.1.1 File Meta Information for the Application Entity

The Source Application Entity Title included in the File Meta Header is same that of local Storage AET.

#### 5.2.1.2 Real-World Activities

##### 5.2.1.2.1 Activity – Export to Media

The Offline-Media Application Entity acts as an FSC using the interchange option when requested to export SOP Instances from the local database to a removable storage medium, DVD-RAMs, CD-Rs, or USBs.

Object Instances can be added to a storage medium and if it reaches full, the user will be prompted to replace to an empty medium. The DicomDIR will be updated each time an object instance is successfully written to it.

When the object instance is exported to CD-R, the user will be prompted to insert an empty CD-R for each export. The contents of the export job will be written together with a corresponding DicomDIR to a single-session CD-R. Writing in multi-session mode is not supported.

##### 5.2.1.2.1.1 Media Storage Application Profiles

The supported Offline-Media Application Profiles are listed in Table 5.2-1.

##### 5.2.1.2.1.1.1 Options

The Offline-Media Application Entity supports the SOP Classes and Transfer Syntaxes listed in the Table below:

**Table 5.2-2 IODS, SOP CLASSES AND TRANSFER SYNTAXES FOR OFFLINE MEDIA**

| Information Object Definition                          | SOP Class UID                     | Transfer Syntax                                                                                                 | Transfer Syntax UID                                                                                      |
|--------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Media Storage Directory Storage                        | 1.2.840.10008.1.3.10              | Explicit VR Little Endian                                                                                       | 1.2.840.10008.1.2.1                                                                                      |
| Ultrasound Image Storage                               | 1.2.840.10008.5.1.4.1<br>.1.6.1   | Explicit VR Little Endian<br>Implicit VR Little Endian<br>JPEG Baseline Compression<br>RLE Lossless Compression | 1.2.840.10008.1.2.1<br>1.2.840.10008.1.2.1 <sup>1</sup><br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5 |
| Ultrasound Multi-frame Image Storage                   | 1.2.840.10008.5.1.4.1<br>.1.3.1   | JPEG Baseline Compression                                                                                       | 1.2.840.10008.1.2.4.50                                                                                   |
| Ultrasound Multi-frame Image Storage for 3D            | 1.2.840.10008.5.1.4.1<br>.1.3.1   | Explicit VR Little Endian<br>Implicit VR Little Endian<br>RLE Lossless Compression                              | 1.2.840.10008.1.2.1<br>1.2.840.10008.1.2<br>1.2.840.10008.1.2.5                                          |
| Secondary Capture Image Storage                        | 1.2.840.10008.5.1.4.1<br>.1.7     | Explicit VR Little Endian<br>Implicit VR Little Endian<br>JPEG Baseline Compression<br>RLE Lossless Compression | 1.2.840.10008.1.2.1<br>1.2.840.10008.1.2<br>1.2.840.10008.1.2.4.50<br>1.2.840.10008.1.2.5                |
| Multi-frame True Color Secondary Capture Image Storage | 1.2.840.10008.5.1.4.1<br>.1.7.4   | JPEG Baseline Compression                                                                                       | 1.2.840.10008.1.2.4.50                                                                                   |
| Comprehensive SR                                       | 1.2.840.10008.5.1.4.1<br>.1.88.33 | Explicit VR Little Endian                                                                                       | 1.2.840.10008.1.2.1                                                                                      |
| Encapsulated PDF Storage                               | 1.2.840.10008.5.1.4.1<br>.1.104.1 | Explicit VR Little Endian                                                                                       | 1.2.840.10008.1.2.1                                                                                      |

Note: 1. Cardiac 3D Volume does not support Implicit Little Endian for offline media.

### 5.3 AUGMENTED AND PRIVATE APPLICATION PROFILES

This product does not support any augmented or private Application Profiles.

### 5.4 MEDIA CONFIGURATION

The Application Entity Title for Media Services is same that is configured for Storage Service:

**Table 5.4-1 AE TITLE CONFIGURATION TABLE**

| Application Entity | Default AE Title |
|--------------------|------------------|
| Offline-Media      | No default       |

## **6. SUPPORT OF CHARACTER SETS**

DICOM applications of PDF reports and the Structured Reports with Advanced Cardiac feature of this product support the character set below:

ISO\_IR 192 (Unicode in UTF-8)

DICOM application of Structured Report with Non-Advanced Cardiac feature of this product supports the character set below:

- ISO\_IR 144 (ISO 8859-5:Cyrillic) for Russian language configuration.
- ISO\_IR 100 (ISO 8859-1:1987 Latin Alphabet No.1 supplementary set) for other language configuration.

All other DICOM applications of this product support the

ISO\_IR 100 (ISO 8859-1:1987 Latin Alphabet No. 1 supplementary set)

## 7. SECURITY

This product supports security measures described in section 7.1.

In addition to the section, this product supports below.

- a. Incoming TCP packets to ports other than configured by Storage AE and Query/Retrieve AE listed in Table 4.4-1 are blocked.

It is recommended that any communication with external hosts and services outside the locally secured environment use appropriate secure network channels (e.g. such as a Virtual Private Network (VPN)).

Other network security procedures such as automated intrusion detection may be appropriate in some environments. Additional security features may be established by the local security policy and are beyond the scope of this conformance statement.

### 7.1 SECURITY PROFILES <sup>1</sup>

This product conforms to the Non-Downgrading BCP 195 TLS Secure Transport Connection Profile and AES TLS Secure Transport Connection Profile. The protocol has features listed in the Table below:

**Table 7.1-1 SECURITY PROFILES FEATURES**

| <b>TLS version</b>   | <b>Cipher Suites</b>                                                                                                                                                                                                                               |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TLS 1.2 <sup>2</sup> | TLS_DHE_RSA_WITH_AES_128_GCM_SHA256<br>TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256<br>TLS_DHE_RSA_WITH_AES_256_GCM_SHA384<br>TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384<br>TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384<br>TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256 |
| TLS 1.0 <sup>3</sup> | TLS_RSA_WITH_AES_128_CBC_SHA<br>TLS_RSA_WITH_3DES_EDE_CBC_SHA                                                                                                                                                                                      |

When an integrity check fails, the connection will be dropped per the TLS protocol, causing both the sender and the receiver to issue an A-P-ABORT indication to the upper layers with an implementation-specific provider reason. This product does not define the reason.

Note: 1. Only products for USA.

Note: 2. Not supported Storage Commitment Application Entity, Query/Retrieve Application Entity nor Hardcopy Application Entity.

Note: 3. Not supported Hardcopy Application Entity.

## 8. ANNEXES

### 8.1 IOD CONTENTS

#### 8.1.1 Created SOP Instances

Table 8.1-1 specifies the attributes of an Ultrasound and Ultrasound Multi-frame Image transmitted by the storage application of this product.

Table 8.1-2 specifies the attributes of an Secondary Capture and Multi-frame True Color Secondary Capture Image transmitted by the storage application of this product.

Table 8.1-3 specifies the attributes of a Structured Report transmitted by the storage application of this product.

Table 8.1-4 specifies the attributes of an Encapsulated PDF transmitted by the storage application of this product.

The following tables use a number of abbreviations. The abbreviations used in the “Presence of ...” column are:

|        |                                                                              |
|--------|------------------------------------------------------------------------------|
| ALWAYS | Always Present                                                               |
| ANAP   | Attribute Not Always Present                                                 |
| VNAP   | Value Not Always Present (attribute sent zero length if no value is present) |
| EMPTY  | Attribute is sent without a value                                            |

The abbreviations used in the “Source” column:

|        |                                                                                   |
|--------|-----------------------------------------------------------------------------------|
| MWL    | the attribute value source Modality Worklist                                      |
| USER   | the attribute value source is from User input                                     |
| AUTO   | the attribute value is generated automatically                                    |
| MPPS   | the attribute value is the same as that use for Modality Performed Procedure Step |
| CONFIG | the attribute value source is a configurable parameter                            |

Attributes in *Italic* are additions to the Standard Information Entity Modules.

The values of private attributes may be removed if the Teaching File option is set.

#### 8.1.1.1 Ultrasound and Ultrasound Multi-frame Image IODs

**Table 8.1-1 IOD OF ULTRASOUND AND ULTRASOUND MULTI-FRAME IMAGE SOP INSTANCES**

| IE      | Module                 | Reference   | Presence of Module |          |
|---------|------------------------|-------------|--------------------|----------|
|         |                        |             | US                 | US-mf    |
| Patient | Patient                | Table 8.1-5 | ALWAYS             | ALWAYS   |
|         | Clinical Trial Subject | -           | Not used           | Not used |

|                    |                            |              |                                             |                                             |
|--------------------|----------------------------|--------------|---------------------------------------------|---------------------------------------------|
| Study              | General Study              | Table 8.1-6  | ALWAYS                                      | ALWAYS                                      |
|                    | Patient Study              | Table 8.1-7  | ALWAYS                                      | ALWAYS                                      |
|                    | Clinical Trial Study       | -            | Not used                                    | Not used                                    |
| Series             | General Series             | Table 8.1-8  | ALWAYS                                      | ALWAYS                                      |
|                    | Clinical Trial Series      | -            | Not used                                    | Not used                                    |
| Frame of Reference | Frame of Reference         | -            | Not used                                    | Not used                                    |
|                    | Synchronization            | -            | Not used                                    | Not used                                    |
| Equipment          | General Equipment          | Table 8.1-9  | ALWAYS                                      | ALWAYS                                      |
| Image              | General Image              | Table 8.1-10 | ALWAYS                                      | ALWAYS                                      |
|                    | Contrast/bolus             | Table 8.1-11 | ANAP                                        | ANAP                                        |
|                    | Cine                       | Table 8.1-12 | Not used                                    | ALWAYS                                      |
|                    | Frame Pointers             | Table 8.1-13 | Not used                                    | ALWAYS                                      |
|                    | Multi-Frame                | Table 8.1-14 | Not used                                    | ALWAYS                                      |
|                    | US Region Calibration      | Table 8.1-19 | ANAP                                        | ANAP                                        |
|                    | US Image                   | Table 8.1-20 | ALWAYS                                      | ALWAYS                                      |
|                    | Palette Color Lookup Table | -            | Not used                                    | Not used                                    |
|                    | Image Pixel                | Table 8.1-15 | ALWAYS                                      | ALWAYS                                      |
|                    | Overlay Plane              | -            | Not used                                    | Not used                                    |
|                    | VOI LUT                    | Table 8.1-16 | Only if (0028,0004) equals to "MONOCHROME2" | Only if (0028,0004) equals to "MONOCHROME2" |
|                    | SOP Common                 | Table 8.1-17 | ALWAYS                                      | ALWAYS                                      |

#### 8.1.1.2 Secondary Capture and Multi-frame True Color Secondary Capture Image IODs

**Table 8.1-2 IOD OF SECONDARY CAPTURE AND MULTI-FRAME TRUE COLOR SECONDARY CAPTURE IMAGE SOP INSTANCES**

| IE                 | Module                 | Reference    | Presence of Module |          |
|--------------------|------------------------|--------------|--------------------|----------|
|                    |                        |              | SC                 | SC-mf    |
| Patient            | Patient                | Table 8.1-5  | ALWAYS             | ALWAYS   |
|                    | Clinical Trial Subject | -            | Not used           | Not used |
| Study              | General Study          | Table 8.1-6  | ALWAYS             | ALWAYS   |
|                    | Patient Study          | Table 8.1-7  | ALWAYS             | ALWAYS   |
|                    | Clinical Trial Study   | -            | Not used           | Not used |
| Series             | General Series         | Table 8.1-8  | ALWAYS             | ALWAYS   |
|                    | Clinical Trial Series  | -            | Not used           | Not used |
| Frame of Reference | Frame of Reference     | -            | Not used           | Not used |
|                    | Synchronization        | -            | Not used           | Not used |
| Equipment          | General Equipment      | Table 8.1-9  | ALWAYS             | ALWAYS   |
|                    | SC Equipment           | Table 8.1-26 | ALWAYS             | ALWAYS   |

|       |                               |              |          |          |
|-------|-------------------------------|--------------|----------|----------|
| Image | General Image                 | Table 8.1-10 | ALWAYS   | ALWAYS   |
|       | General Reference             | -            | Not used | Not used |
|       | Image Pixel                   | Table 8.1-15 | ALWAYS   | ALWAYS   |
|       | Cine                          | Table 8.1-12 | Not used | ALWAYS   |
|       | Multi-frame                   | Table 8.1-14 | Not used | ALWAYS   |
|       | Frame Pointers                | Table 8.1-13 | Not used | ALWAYS   |
|       | Device                        | -            | Not used | Not used |
|       | Multi-frame Functional Groups | -            | Not used | Not used |
|       | Multi-frame Dimension         | -            | Not used | Not used |
|       | Specimen                      | -            | Not used | Not used |
|       | SC Image                      | Table 8.1-27 | ALWAYS   | ALWAYS   |
|       | SC Multi-frame Image          | Table 8.1-28 | Not used | ALWAYS   |
|       | SC Multi-frame Vector         | -            | Not used | Not used |
|       | Overlay Plane                 | -            | Not used | Not used |
|       | Modality LUT                  | -            | Not used | Not used |
|       | VOI LUT                       | -            | Not used | Not used |
|       | ICC Profile                   | -            | Not used | Not used |
|       | SOP Common                    | Table 8.1-17 | ALWAYS   | ALWAYS   |
|       | Common Instance Reference     | -            | Not used | Not used |
|       | Frame Extraction              | -            | Not used | Not used |

### 8.1.1.3 Comprehensive SR IOD

**Table 8.1-3 IOD OF CREATED COMPREHENSIVE SR SOP INSTANCES**

| IE                 | Module                  | Reference    | Presence of Module  |
|--------------------|-------------------------|--------------|---------------------|
| Patient            | Patient                 | Table 8.1-5  | ALWAYS              |
|                    | Specimen Identification | -            | Not used            |
|                    | Clinical Trial Subject  | -            | Not used            |
| Study              | General Study           | Table 8.1-6  | ALWAYS              |
|                    | Patient Study           | Table 8.1-7  | ALWAYS <sup>1</sup> |
|                    | Clinical Trial Study    | -            | Not used            |
| Series             | SR Document Series      | Table 8.1-21 | ALWAYS              |
|                    | Clinical Trial Series   | -            | Not used            |
| Frame of Reference | Frame of Reference      | -            | Not used            |
|                    | Synchronization         | -            | Not used            |
| Equipment          | General Equipment       | Table 8.1-9  | ALWAYS              |
| Document           | SR Document General     | Table 8.1-22 | ALWAYS              |
|                    | SR Document Content     | Table 8.1-23 | ALWAYS              |
|                    | SOP Common              | Table 8.1-17 | ALWAYS              |

Note: 1. ANAP for Advanced Cardiac feature.

#### 8.1.1.4 Encapsulated PDF IOD

**Table 8.1-4 IOD OF CREATED ENCAPSULATED PDF SOP INSTANCES**

| IE                    | Module                       | Reference    | Presence of Module |
|-----------------------|------------------------------|--------------|--------------------|
| Patient               | Patient                      | Table 8.1-5  | ALWAYS             |
|                       | Clinical Trial Subject       | -            | Not used           |
| Study                 | General Study                | Table 8.1-6  | ALWAYS             |
|                       | Patient Study                | Table 8.1-7  | ANAP               |
|                       | Clinical Trial Study         | -            | Not used           |
| Series                | Encapsulated Document Series | Table 8.1-24 | ALWAYS             |
|                       | Clinical Trial Series        | -            | Not used           |
| Equipment             | General Equipment            | Table 8.1-9  | ALWAYS             |
|                       | SC Equipment                 | Table 8.1-18 | ALWAYS             |
| Encapsulated Document | Encapsulated Document        | Table 8.1-25 | ALWAYS             |
|                       | SOP Common                   | Table 8.1-17 | ALWAYS             |

#### 8.1.1.5 Common Modules

**Table 8.1-5 PATIENT MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name           | Value                                                                                                                                                                                                                               | Presence of Value | Source   |
|-------------|----|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|
| (0010,0010) | PN | Patient's Name           | From Modality Worklist or input by user. Values supplied via Modality Worklist will be entered as received. Values supplied via user input will contain all 5 components (some possibly empty). Maximum 64 characters. <sup>1</sup> | VNAP              | MWL/USER |
| (0010,0020) | LO | Patient ID               | From Modality Worklist or input by user. Maximum 64 characters. <sup>2</sup>                                                                                                                                                        | ALWAYS            | MWL/USER |
| (0010,0030) | DA | Patient's Birth Date     | From Modality Worklist or input by user <sup>1</sup>                                                                                                                                                                                | VNAP              | MWL/USER |
| (0010,0040) | CS | Patient's Sex            | From Modality Worklist or input by user <sup>1</sup>                                                                                                                                                                                | VNAP              | MWL/USER |
| (0012,0062) | CS | Patient Identity Removed | YES = Teaching File option<br>NO = Otherwise                                                                                                                                                                                        | ANAP <sup>3</sup> | AUTO     |
| (0012,0063) | LO | De-identification Method | Set "Dummy\Removed\Zero Length" if the Teaching File option is set.                                                                                                                                                                 | ANAP <sup>3</sup> | AUTO     |

Note: 1. The value may be replaced with a zero length if the Teaching File option is set.

Note: 2. The value may be replaced with a non-zero length value that may be a dummy value and consistent with the VR if the Teaching File option is set.

Note: 3. Attribute present only in image.

**Table 8.1-6 GENERAL STUDY MODULE OF CREATED SOP INSTANCES**

| Tag                            | VR | Attribute Name                         | Value                                                                                                                                                                                                                                                         | Presence of Value        | Source        |
|--------------------------------|----|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------|
| (0008,0020)                    | DA | Study Date                             | "yyyymmdd"                                                                                                                                                                                                                                                    | ALWAYS                   | AUTO          |
| (0008,0030)                    | TM | Study Time                             | "hhmmss"                                                                                                                                                                                                                                                      | ALWAYS                   | AUTO          |
| (0008,0050)                    | SH | Accession Number                       | From Modality Worklist or input by user <sup>2</sup>                                                                                                                                                                                                          | VNAP                     | MWL/USER      |
| (0008,0090)                    | PN | Referring Physician's Name             | From Modality Worklist or Input by user <sup>2</sup>                                                                                                                                                                                                          | VNAP                     | MWL/USER      |
| (0008,1030)                    | LO | Study Description                      | From Modality Worklist or input by user at Comment text box in study list. Maximum 64 bytes. Configurable in "ID Option" to be copied from Requested Procedure Description (0032,1060) or from Scheduled Procedure Step Description (0040,0007). <sup>3</sup> | ANAP                     | MWL/USER      |
| (0008,1032)                    | SQ | Procedure Code Sequence                | From Modality Worklist, mapped from Requested Procedure Code Sequence (0032,1064) <sup>3</sup>                                                                                                                                                                | ANAP <sup>1</sup>        | MWL           |
| >Include "Code Sequence Macro" |    |                                        |                                                                                                                                                                                                                                                               |                          |               |
| (0008,1110)                    | SQ | Referenced Study Sequence              | From Modality Worklist                                                                                                                                                                                                                                        | ANAP <sup>6</sup>        | MWL           |
| >(0008,1150)                   | UI | Referenced SOP Class UID               | From Modality Worklist                                                                                                                                                                                                                                        | VNAP                     | MWL           |
| >(0008,1155)                   | UI | Referenced SOP Instance UID            | From Modality Worklist                                                                                                                                                                                                                                        | VNAP                     | MWL           |
| (0008,1060)                    | PN | Name of Physician(s) reading Study.    | Entered as "Reporting Phys" in the New Patient Registration <sup>3</sup>                                                                                                                                                                                      | ANAP <sup>5</sup>        | USER          |
| (0020,000D)                    | UI | Study Instance UID                     | From Modality Worklist or generated by device                                                                                                                                                                                                                 | ALWAYS                   | MWL/AUTO      |
| (0020,0010)                    | SH | Study ID                               | Copied from Requested Procedure ID (0040,1001) in Worklist or generated by device. User may modify the value. <sup>4</sup>                                                                                                                                    | ALWAYS                   | MWL/AUTO/USER |
| (0032,1060)                    | LO | <i>Requested Procedure Description</i> | <i>From Modality Worklist</i> <sup>2</sup>                                                                                                                                                                                                                    | <i>VNAP</i> <sup>1</sup> | <i>MWL</i>    |

Note: 1. Attribute Not Present in Structured Report, PDF, SC Image, and SC-mf image.

Note: 2. The value may be replaced with a zero length if the Teaching File option is set for image.

Note: 3. The attribute may be removed if the Teaching File option is set for image.

Note: 4. The value may be replaced with a non-zero length value that may be a dummy value and consistent with the VR if the Teaching File option is set for image.

Note: 5. Attribute Not Present in PDF and analysis condition file with SC image.

Note: 6. Attribute Not Present in Structured Report, PDF, and analysis condition file with SC image.

**Table 8.1-7 PATIENT STUDY MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name      | Value                                                         | Presence of Value    | Source   |
|-------------|----|---------------------|---------------------------------------------------------------|----------------------|----------|
| (0010,1010) | AS | Patient's Age       | Calculated from DoB input on base of actual Date <sup>3</sup> | ANAP <sup>5</sup>    | AUTO     |
| (0010,1020) | DS | Patient's Size      | From Modality Worklist or user input <sup>3</sup>             | ANAP <sup>5</sup>    | MWL/USER |
| (0010,1030) | DS | Patient's Weight    | From Modality Worklist or user input <sup>3</sup>             | ANAP <sup>5</sup>    | MWL/USER |
| (0010,2000) | LO | Medical Alerts      | From Modality Worklist <sup>2</sup>                           | VNAP <sup>1, 5</sup> | MWL      |
| (0010,2110) | LO | Contrast Allergies  | From Modality Worklist <sup>2</sup>                           | VNAP <sup>1, 5</sup> | MWL      |
| (0010,2180) | SH | Occupation          | From Modality Worklist or User input <sup>3</sup>             | ANAP                 | MWL/USER |
| (0010,21D0) | DA | Last Menstrual Date | From Modality Worklist or User input <sup>3</sup>             | ANAP <sup>4, 5</sup> | MWL/USER |
| (0038,0010) | LO | Admission ID        | Empty                                                         | VNAP <sup>6</sup>    | AUTO     |
| (0038,0050) | LO | Special Needs       | From Modality Worklist <sup>2</sup>                           | VNAP <sup>1, 5</sup> | MWL      |

Note: 1. Attribute Not Present in Structured Report and PDF.

Note: 2. The value may be replaced with a zero length if the Teaching File option is set for image.

Note: 3. The attribute may be removed if the Teaching File option is set for image.

Note: 4. Attribute Not Present in Structured Report, PDF, SC Image, and SC-mf image.

Note: 5. Attribute Not Present in analysis condition file with SC image.

Note: 6. Attribute presents only in analysis condition file with SC image.

**Table 8.1-8 GENERAL SERIES MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name     | Value                                                                                                                                                                                                                              | Presence of Value | Source   |
|-------------|----|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|
| (0008,0021) | DA | Series Date        | "yyyymmdd"                                                                                                                                                                                                                         | ALWAYS            | AUTO     |
| (0008,0031) | TM | Series Time        | "hhmmss"                                                                                                                                                                                                                           | ALWAYS            | AUTO     |
| (0008,0060) | CS | Modality           | "US"                                                                                                                                                                                                                               | ALWAYS            | AUTO     |
| (0008,103E) | LO | Series Description | From Modality Worklist or input by user: Maximum 64 bytes.<br><br>Configurable in "ID Option" to be copied from Scheduled Procedure Step Description (0040,0007) or from Requested Procedure Description (0032,1060). <sup>2</sup> | ANAP <sup>5</sup> | MWL/USER |

|                                 |    |                                              |                                                                                                                                                                                |                   |               |
|---------------------------------|----|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|
| (0008,1070)                     | PN | Operator's Name                              | Sonographer field in Study list. Maximum 64 characters.                                                                                                                        | ANAP <sup>5</sup> | USER          |
| (0008,1111)                     | SQ | Referenced Performed Procedure Step Sequence | Identifies the MPPS SOP Instance to which this image is related <sup>2</sup>                                                                                                   | ANAP <sup>5</sup> | MPPS          |
| >(0008,1150)                    | UI | Referenced SOP Class UID                     | MPPS SOP Class UID                                                                                                                                                             | ALWAYS            | MPPS          |
| >(0008,1155)                    | UI | Referenced SOP Instance UID                  | MPPS SOP Instance UID                                                                                                                                                          | ALWAYS            | MPPS          |
| (0018,0015)                     | CS | Body Part Examined                           | Set by user from a pick list                                                                                                                                                   | ANAP <sup>4</sup> | USER          |
| (0018,1030)                     | LO | Protocol Name                                | Application type selected by user or Stress Echo Protocol Name.                                                                                                                | ANAP <sup>4</sup> | AUTO          |
| (0020,000E)                     | UI | Series Instance UID                          | Generated by device                                                                                                                                                            | ALWAYS            | AUTO          |
| (0020,0011)                     | IS | Series Number                                | Generated by device <sup>3</sup>                                                                                                                                               | ALWAYS            | AUTO          |
| (0020,0060)                     | CS | Laterality                                   | Set by user from a pick list                                                                                                                                                   | ANAP <sup>4</sup> | USER          |
| (0032,1032)                     | PN | <i>Requesting Physician</i>                  | <i>From Modality Worklist <sup>1</sup></i>                                                                                                                                     | VNAP <sup>4</sup> | MWL           |
| (0040,0244)                     | DA | Performed Procedure Step Start Date          | Same as Series Date (0008,0021) <sup>2</sup>                                                                                                                                   | ALWAYS            | MPPS          |
| (0040,0245)                     | TM | Performed Procedure Step Start Time          | Same as Series Time (0008,0031) <sup>2</sup>                                                                                                                                   | ALWAYS            | MPPS          |
| (0040,0253)                     | SH | Performed Procedure Step ID                  | Sequence Number <sup>2</sup>                                                                                                                                                   | ALWAYS            | AUTO          |
| (0040,0254)                     | LO | Performed Procedure Step Description         | Input by user Same as MPPS. From user input as Study Description. Maximum 64 characters. <sup>2</sup>                                                                          | ANAP              | USER          |
| (0040,0260)                     | SQ | Performed Protocol Code Sequence             | Derived from Scheduled Protocol Code Sequence or overridden by Ultrasound Protocol Types (CID 12001) when Stress Echo Mode is requested. May be modified by user. <sup>2</sup> | ANAP              | AUTO/<br>USER |
| >Include "Code Sequence Macro"  |    |                                              |                                                                                                                                                                                |                   |               |
| (0040,0275)                     | SQ | Request Attributes Sequence                  | Zero or 1 item will be present <sup>2</sup>                                                                                                                                    | ANAP              | AUTO          |
| >(0032,1060)                    | LO | Requested Procedure Description              | From Modality Worklist                                                                                                                                                         | ANAP              | MWL           |
| >(0040,0007)                    | LO | Scheduled Procedure Step Description         | From Modality Worklist                                                                                                                                                         | ANAP              | MWL           |
| >(0040,0008)                    | SQ | Scheduled Protocol Code Sequence             | From Modality Worklist                                                                                                                                                         | ANAP              | MWL           |
| >>Include "Code Sequence Macro" |    |                                              |                                                                                                                                                                                |                   |               |
| >(0040,0009)                    | SH | Scheduled Procedure Step ID                  | From Modality Worklist                                                                                                                                                         | ANAP              | MWL           |

|              |    |                        |                                          |      |          |
|--------------|----|------------------------|------------------------------------------|------|----------|
| >(0040,1001) | SH | Requested Procedure ID | From Modality Worklist or Input by user. | ANAP | MWL/USER |
|--------------|----|------------------------|------------------------------------------|------|----------|

- Note: 1. The value may be replaced with a zero length if the Teaching File option is set for image.
- Note: 2. The attribute may be removed if the Teaching File option is set for image.
- Note: 3. The value may be replaced with a non-zero length value that may be a dummy value and consistent with the VR if the Teaching File option is set for image.
- Note: 4. Attribute Not Present in SC and SC-mf image.
- Note: 5. Attribute Not Present in analysis condition file with SC image.

**Table 8.1-9 GENERAL EQUIPMENT MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name                | Value                              | Presence of Value | Source |
|-------------|----|-------------------------------|------------------------------------|-------------------|--------|
| (0008,0070) | LO | Manufacturer                  | "FUJIFILM Corporation"             | ALWAYS            | AUTO   |
| (0008,0080) | LO | Institution Name              | From Configuration <sup>1</sup>    | VNAP              | CONFIG |
| (0008,0081) | ST | Institution Address           | From Configuration <sup>1, 2</sup> | ANAP              | CONFIG |
| (0008,1010) | SH | Station Name                  | From Configuration <sup>1</sup>    | ANAP              | CONFIG |
| (0008,1040) | LO | Institutional Department Name | From Configuration <sup>1, 2</sup> | ANAP              | CONFIG |
| (0008,1090) | LO | Manufacturer's Model Name     | "LISENDO 880" <sup>1</sup>         | ALWAYS            | AUTO   |
| (0018,1000) | LO | Device Serial Number          | Built-in <sup>3</sup>              | ANAP              | AUTO   |
| (0018,1020) | LO | Software Version(s)           | Built-in                           | ALWAYS            | AUTO   |

- Note: 1. The value may be replaced with a zero length if the Teaching File option is set for image.
- Note: 2. Attribute Not Present in Structured Report, PDF, SC image, and SC-mf image.
- Note: 3. Attribute Not Present in SC and SC-mf image.

**Table 8.1-10 GENERAL IMAGE MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name          | Value                                                                                                  | Presence of Value | Source |
|-------------|----|-------------------------|--------------------------------------------------------------------------------------------------------|-------------------|--------|
| (0008,0008) | CS | Image Type              | ORIGINAL or DERIVED for value 1, PRIMARY or SECONDARY for value 2. See Table 8.1-19 for value 3 and 4. | ANAP <sup>1</sup> | AUTO   |
| (0008,0023) | DA | Content Date            | "yyyymmdd"                                                                                             | ALWAYS            | AUTO   |
| (0008,0033) | TM | Content Time            | "hhmmss"                                                                                               | ALWAYS            | AUTO   |
| (0020,0013) | IS | Instance Number         | Generated by device <sup>2</sup>                                                                       | ALWAYS            | AUTO   |
| (0020,0020) | CS | Patient Orientation     | From Pull Down Menu or Input by user.                                                                  | ANAP              | USER   |
| (0020,4000) | LT | Image Comments          | Input by user                                                                                          | ANAP <sup>3</sup> | USER   |
| (0028,2110) | CS | Lossy Image Compression | Generated by device                                                                                    | ANAP              | AUTO   |

|             |    |                      |                                                                                                                                                                              |      |      |
|-------------|----|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|
| (0028,0301) | CS | Burned In Annotation | YES = Image may contain sufficient burned in annotation to identify the patient.<br><br>NO = Image does not contain sufficient burned in annotation to identify the patient. | ANAP | AUTO |
|-------------|----|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|

- Note:
1. Attribute Not Present in analysis condition file with SC image.
  2. The value may be replaced with a non-zero length value that may be a dummy value and consistent with the VR if the Teaching File option is set for image.
  3. Attribute presents only in analysis condition file with SC image.

**Table 8.1-11 CONTRAST/BOLUS MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name            | Value                                  | Presence of Value | Source       |
|-------------|----|---------------------------|----------------------------------------|-------------------|--------------|
| (0018,0010) | LO | Contrast/Bolus Agent      | From MWL or Input by user <sup>1</sup> | ANAP              | MWL/<br>USER |
| (0018,1040) | LO | Contrast/Bolus Route      | May be input by user                   | ANAP              | USER         |
| (0018,1041) | DS | Contrast/Bolus Volume     | May be input by user                   | ANAP              | USER         |
| (0018,1042) | TM | Contrast/Bolus Start Time | Generated by device                    | ANAP              | AUTO         |
| (0018,1044) | DS | Contrast/Bolus Total Dose | May be input by user                   | ANAP              | USER         |

- Note:
1. The value may be replaced with a zero length if the Teaching File option is set for image.

**Table 8.1-12 CINE MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name                 | Value                                                       | Presence of Value | Source |
|-------------|----|--------------------------------|-------------------------------------------------------------|-------------------|--------|
| (0008,2142) | IS | Start Trim                     | 1                                                           | ANAP <sup>1</sup> | AUTO   |
| (0008,2143) | IS | Stop Trim                      | Last frame in Multi-frame IOD                               | ANAP <sup>1</sup> | AUTO   |
| (0008,2144) | IS | Recommended Display Frame Rate | frames per second [fps]                                     | ANAP <sup>1</sup> | AUTO   |
| (0009,0010) | LO | Private Identification Code    | ALOKA:1.2.392.200039.117.2                                  | ANAP              | AUTO   |
| (0009,1004) | US |                                | Private attribute without PHI                               | ANAP              | AUTO   |
| (0009,1006) | US |                                | Private attribute without PHI                               | ANAP              | AUTO   |
| (0018,0040) | IS | Cine Rate                      | frames per second [fps]                                     | ANAP <sup>1</sup> | AUTO   |
| (0018,0072) | DS | Effective Duration             | 0                                                           | ANAP <sup>1</sup> | AUTO   |
| (0018,1063) | DS | Frame Time                     | If Frame Increment Pointer (0028,0009) is Frame Time        | ANAP              | AUTO   |
| (0018,1065) | DS | Frame Time Vector              | If Frame Increment Pointer (0028,0009) is Frame Time Vector | ANAP              | AUTO   |
| (0018,1066) | DS | Frame Delay                    | 0                                                           | ANAP <sup>1</sup> | AUTO   |

|             |    |                             |           |                   |      |
|-------------|----|-----------------------------|-----------|-------------------|------|
| (0018,1242) | IS | Actual Frame Duration       |           | ANAP <sup>1</sup> | AUTO |
| (0018,1244) | US | Preferred Playback Sequence | 0=Looping | ANAP <sup>1</sup> | AUTO |
| (0028,6040) | US | R Wave Pointer              |           | ANAP              | AUTO |

Note: 1. Attribute Not Present in SC-mf Image.

**Table 8.1-13 FRAME POINTERS MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name                   | Value                            | Presence of Value | Source |
|-------------|----|----------------------------------|----------------------------------|-------------------|--------|
| (0028,6010) | US | Representative Frame Number      | May be used in multi-frame image | ANAP              | AUTO   |
| (0028,6020) | US | Frame Number of Interest (FOI)   |                                  | ANAP              | AUTO   |
| (0028,6022) | LO | Frame(s) of Interest Description |                                  | ANAP              | AUTO   |
| (0028,6023) | CS | Frame of Interest Type           |                                  | ANAP              | AUTO   |

**Table 8.1-14 MULTI-FRAME MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name          | Value                      | Presence of Value | Source |
|-------------|----|-------------------------|----------------------------|-------------------|--------|
| (0028,0008) | IS | Number of Frames        |                            | ALWAYS            | AUTO   |
| (0028,0009) | AT | Frame Increment Pointer | (0018,1063) or (0018,1065) | ALWAYS            | AUTO   |

**Table 8.1-15 IMAGE PIXEL MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name             | Value                                                                                                                                                               | Presence of Value | Source          |
|-------------|----|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|
| (0028,0002) | US | Samples per Pixel          | 1=PALETTE COLOR, MONOCHROME2,<br>3=RGB, YBR_FULL_422                                                                                                                | ALWAYS            | AUTO            |
| (0028,0004) | CS | Photometric Interpretation | "PALETTE COLOR", "RGB",<br>"YBR_FULL_422",<br>"MONOCHROME2"<br>(MONOCHROME2 is not applicable to media storage except for images acquired for 3D Reconstruction.)   | ALWAYS            | AUTO/<br>CONFIG |
| (0028,0006) | US | Planar Configuration       | 0=color-by-pixel for YBR_FULL_422, RGB<br>1=color-by-plane for RGB<br>(0=color-by-pixel for RGB is not applicable to compression transfer syntax or media storage.) | ANAP              | AUTO/<br>CONFIG |

|             |           |                      |                                                                                                                                                                                                        |        |      |
|-------------|-----------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|
| (0028,0010) | US        | Rows                 | 832, 768, 600, or 480 for US and US-mf image.<br>(may vary if image is acquired for 3D Reconstruction and image is stored on Analysis screen page)<br><br>971 for SC and SC-mf image.                  | ALWAYS | AUTO |
| (0028,0011) | US        | Columns              | 1152, 1024, 800 or 640 for US and US-mf image.<br>(may vary if image is acquired for 3D Reconstruction and image is stored on Analysis screen page)<br><br>1648 for SC image.<br>1650 for SC-mf image. | ALWAYS | AUTO |
| (0028,0034) | IS        | Pixel Aspect Ratio   | Only if pixel aspect ratio is not 1:1.                                                                                                                                                                 | ANAP   | AUTO |
| (0028,0100) | US        | Bits Allocated       | 8 for RGB,<br>YBR_FULL_422,<br>MONOCHROME2,<br>16 for PALETTE COLOR                                                                                                                                    | ALWAYS | AUTO |
| (0028,0101) | US        | Bits Stored          | 8 for RGB,<br>YBR_FULL_422,<br>MONOCHROME2,<br>16 for PALETTE COLOR                                                                                                                                    | ALWAYS | AUTO |
| (0028,0102) | US        | High Bit             | 7 for RGB,<br>YBR_FULL_422,<br>MONOCHROME2,<br>15 for PALETTE COLOR                                                                                                                                    | ALWAYS | AUTO |
| (0028,0103) | US        | Pixel Representation | 0                                                                                                                                                                                                      | ALWAYS | AUTO |
| (7FE0,0010) | OW<br>/OB | Pixel Data           | The Pixel Data contains burned-in annotation (Patient ID, Patient's Name, Scale Mark etc.)                                                                                                             | ALWAYS | AUTO |

**Table 8.1-16 VOI LUT MODULE OF CREATED SOP INSTANCES**

| Tag          | VR | Attribute Name   | Value     | Presence of Value | Source |
|--------------|----|------------------|-----------|-------------------|--------|
| (0028,3010)  | SQ | VOI LUT Sequence | One item  | ANAP              | AUTO   |
| >(0028,3002) | US | LUT Descriptor   | <256,0,8> | ALWAYS            | AUTO   |
| >(0028,3006) | US | LUT Data         | LUT       | ALWAYS            | AUTO   |
| (0028,1050)  | DS | Window Center    | 0-255     | ANAP              | USER   |

|             |    |              |       |      |      |
|-------------|----|--------------|-------|------|------|
| (0028,1051) | DS | Window Width | 1-256 | ANAP | USER |
|-------------|----|--------------|-------|------|------|

**Table 8.1-17 SOP COMMON MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name         | Value                                                                                                                                                                                   | Presence of Value | Source   |
|-------------|----|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|
| (0008,0005) | CS | Specific Character Set | See chapter 6                                                                                                                                                                           | ANAP              | MWL/AUTO |
| (0008,0012) | DA | Instance Creation Date | Instance Date                                                                                                                                                                           | ANAP <sup>1</sup> | AUTO     |
| (0008,0013) | TM | Instance Creation Time | Instance Time                                                                                                                                                                           | ANAP <sup>1</sup> | AUTO     |
| (0008,0014) | UI | Instance Creator UID   | Built-in                                                                                                                                                                                | ANAP <sup>1</sup> | AUTO     |
| (0008,0016) | UI | SOP Class UID          | 1.2.840.10008.5.1.4.1.1.6.1<br>1.2.840.10008.5.1.4.1.1.3.1<br>1.2.840.10008.5.1.4.1.1.88.3<br>1.2.840.10008.5.1.4.1.1.104.1<br>1.2.840.10008.5.1.4.1.1.7<br>1.2.840.10008.5.1.4.1.1.7.4 | ALWAYS            | AUTO     |
| (0008,0018) | UI | SOP Instance UID       | Generated by device                                                                                                                                                                     | ALWAYS            | AUTO     |

Note: 1. Attribute Not Present in Structured Report with Non-Advanced Cardiac feature, SC image, and SC-mf image.

**Table 8.1-18 SC EQUIPMENT OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name  | Value | Presence of Value | Source |
|-------------|----|-----------------|-------|-------------------|--------|
| (0008,0064) | CS | Conversion Type | WSD   | ALWAYS            | AUTO   |

#### 8.1.1.6 Ultrasound Modules

**Table 8.1-19 US REGION CALIBRATION MODULE OF CREATED SOP INSTANCES**

| Tag          | VR | Attribute Name                 | Value                                                                            | Presence of Value | Source |
|--------------|----|--------------------------------|----------------------------------------------------------------------------------|-------------------|--------|
| (0018,6011)  | SQ | Sequence of Ultrasound Regions | If Region Calibration is turned on                                               | ANAP              | CONFIG |
| >(0018,6012) | US | Region Spatial Format          | 0=none, 1=cross section, 2=M-mode, 3=spectral                                    | ALWAYS            | AUTO   |
| >(0018,6014) | US | Region Data Type               | 0=none, 1=tissue, 2=color flow velocity, 3=PW, 4=CW, D=Gray Scale, E=Color Scale | ALWAYS            | AUTO   |
| >(0018,6016) | UL | Region Flag                    | 1=transparent, 2=scale protected, 4=Doppler represented in frequency.            | ALWAYS            | AUTO   |
| >(0018,6018) | UL | Region Location Min. x0        | X and Y coordinates of upper                                                     | ALWAYS            | AUTO   |

|              |    |                                   |                                                                                   |        |      |
|--------------|----|-----------------------------------|-----------------------------------------------------------------------------------|--------|------|
| >(0018,601A) | UL | Region Location Min. y0           | left corner of the region                                                         | ALWAYS | AUTO |
| >(0018,601C) | UL | Region Location Max. x1           | X and Y coordinates of lower right corner of the region                           | ALWAYS | AUTO |
| >(0018,601E) | UL | Region Location Max. y1           |                                                                                   | ALWAYS | AUTO |
| >(0018,6020) | SL | Referenced Pixel X0               | B: Transducer surface center, M: Transducer surface left, and D: Baseline left    | ANAP   | AUTO |
| >(0018,6022) | SL | Referenced Pixel Y0               |                                                                                   | ANAP   | AUTO |
| >(0018,6024) | US | Physical Unit X Direction         | Physical units for X and Y directions                                             | ALWAYS | AUTO |
| >(0018,6026) | US | Physical Unit Y Direction         |                                                                                   | ALWAYS | AUTO |
| >(0018,6028) | FD | Referenced Pixel Physical Value X | Reference pixel physical values in X and Y direction physical units, respectively | ANAP   | AUTO |
| >(0018,602A) | FD | Referenced Pixel Physical Value Y |                                                                                   | ANAP   | AUTO |
| >(0018,602C) | FD | Physical Delta X                  | Physical values in X and Y direction physical units, respectively                 | ALWAYS | AUTO |
| >(0018,602E) | FD | Physical Delta Y                  |                                                                                   | ALWAYS | AUTO |
| >(0018,6030) | UL | Transducer Frequency              | In [kHz]                                                                          | ANAP   | AUTO |
| >(0018,6032) | UL | Pulse Repetition Frequency        | PRF in [kHz]                                                                      | ANAP   | AUTO |
| >(0018,6034) | FD | Doppler Correction Angle          | Used if Doppler image [deg]                                                       | ANAP   | AUTO |
| >(0018,6036) | FD | Steering Angle                    | Used if Color Flow image [deg]                                                    | ANAP   | AUTO |
| >(0019,0010) | LO | Private Identification Code       | ALOKA:1.2.392.200039.117.2                                                        | ANAP   | AUTO |
| >(0019,1008) | FD |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,100C) | CS |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,100E) | DS |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1018) | SL |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,101A) | SL |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1040) | SS |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1046) | US |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1050) | SL |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1052) | DS |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1054) | DS |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1056) | FD |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1060) | US |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |
| >(0019,1061) | UL |                                   | Private attribute without PHI                                                     | ANAP   | AUTO |

**Table 8.1-20 US IMAGE MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name              | Value                                                                                    | Presence of Value | Source |
|-------------|----|-----------------------------|------------------------------------------------------------------------------------------|-------------------|--------|
| (0008,0008) | CS | Image Type                  | Value 3 is picked by the user from the Pull Down List, and Value 4 is set automatically. | VNAP              | AUTO   |
| (0008,2120) | SH | Stage Name                  | If Stress Echo protocol used                                                             | ANAP              | AUTO   |
| (0008,2122) | IS | Stage Number                | If Stress Echo protocol used                                                             | ANAP              | AUTO   |
| (0008,2124) | IS | Number of Stages            | If Stress Echo protocol used                                                             | ANAP              | AUTO   |
| (0008,2127) | SH | View Name                   | If Stress Echo protocol used                                                             | ANAP              | AUTO   |
| (0008,2128) | IS | View Number                 | If Stress Echo protocol used                                                             | ANAP              | AUTO   |
| (0008,2129) | IS | Number of Event Timers      | If multi-frame and ECG Sync                                                              | ANAP              | AUTO   |
| (0008,212A) | IS | Number of Views in Stage    | If Stress Echo protocol used                                                             | ANAP              | AUTO   |
| (0008,2130) | DS | Event Elapsed Time(s)       |                                                                                          | ANAP              | AUTO   |
| (0008,2132) | LO | Event Timer Name(s)         |                                                                                          | ANAP              | AUTO   |
| (0009,0010) | LO | Private Identification Code | ALOKA:1.2.392.200039.117.2                                                               | ANAP              | AUTO   |
| (0009,1000) | SH |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1004) | US |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1006) | US |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,100A) | SH |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1012) | US |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1014) | FD |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1016) | DA |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1018) | TM |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,101A) | LO |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1020) | CS |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1022) | CS |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1024) | CS |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1026) | IS |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1028) | IS |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,102A) | DS |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,102C) | FD |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,102E) | FD |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |
| (0009,1030) | FD |                             | Private attribute without PHI                                                            | ANAP              | AUTO   |

|             |    |                            |                                                          |        |       |
|-------------|----|----------------------------|----------------------------------------------------------|--------|-------|
| (0009,1032) | DS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1034) | CS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1036) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1038) | CS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,103A) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,103C) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,103E) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1040) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1042) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1044) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1046) | US |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1048) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,104A) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,104C) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,104E) | FD |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1050) | US |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1052) | US |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1054) | LO |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1056) | IS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1058) | CS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,105A) | UL |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,105C) | CS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,105E) | DA |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1060) | TM |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0009,1062) | CS |                            | Private attribute without PHI                            | ANAP   | AUTO  |
| (0018,1060) | DS | Trigger Time               | If ECG is connected                                      | ANAP   | AUTO  |
| (0018,1062) | IS | Nominal Interval           | If ECG is connected                                      | ANAP   | AUTO  |
| (0018,1088) | IS | Heart Rate                 | If ECG signal is input                                   | ANAP   | AUTO  |
| (0018,5000) | SH | Output Power               |                                                          | ANAP   | AUTO  |
| (0018,5010) | LO | Transducer Data            |                                                          | ALWAYS | AUTO  |
| (0018,5022) | DS | Mechanical Index           |                                                          | ANAP   | AUTO  |
| (0018,5024) | DS | Bone Thermal Index         |                                                          | ANAP   | AUTO  |
| (0018,5026) | DS | Cranial Thermal Index      |                                                          | ANAP   | AUTO  |
| (0018,5027) | DS | Soft Tissue Thermal Index  |                                                          | ANAP   | AUTO  |
| (0018,5050) | IS | Depth of Scan Field        |                                                          | ANAP   | AUTO  |
| (0018,6031) | CS | Transducer Type            |                                                          | ALWAYS | AUTO  |
| (0028,0002) | US | Samples per Pixel          | 3= RGB, YBR_FULL_422<br>1= PALETTE COLOR,<br>MONOCHROME2 | ALWAYS | AUTO  |
| (0028,0004) | CS | Photometric Interpretation | PALETTE COLOR, RGB,                                      | ALWAYS | AUTO/ |

|              |    |                                    |                                                                                                                                             |             |             |
|--------------|----|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|
|              |    |                                    | YBR_FULL_422,<br>MONOCHROME2<br>(MONOCHROME2 is not<br>applicable to media storage<br>except for images acquired for<br>3D Reconstruction.) |             | CONFIG      |
| (0028,0014)  | US | Ultrasound Color Data<br>Present   | Only if color image acquired                                                                                                                | ANAP        | AUTO        |
| (0028,0100)  | US | Bits Allocated                     | 8= RGB, YBR_FULL_422,<br>MONOCHROME2,<br>16= PALETTE COLOR                                                                                  | ALWAYS      | AUTO        |
| (0028,0101)  | US | Bits Stored                        | 8= RGB, YBR_FULL_422,<br>MONOCHROME2,<br>16= PALETTE COLOR                                                                                  | ALWAYS      | AUTO        |
| (0028,0102)  | US | High Bit                           | 7= RGB, YBR_FULL_422,<br>MONOCHROME2,<br>15= PALETTE COLOR                                                                                  | ALWAYS      | AUTO        |
| (0028,0103)  | US | Pixel Representation               | 0000H                                                                                                                                       | ALWAYS      | AUTO        |
| (0028,2110)  | CS | Lossy Image<br>Compression         | If lossy image compression<br>applied                                                                                                       | ANAP        | AUTO        |
| (0028,6040)  | US | R Wave Pointer                     | Only if multi-frame                                                                                                                         | ANAP        | AUTO        |
| (0040,000A)  | SQ | Stage Code Sequence                | If Stress Echo protocol used                                                                                                                | ANAP        | AUTO        |
| (0054,0220)  | SQ | View Code Sequence                 | If Stress Echo protocol used                                                                                                                | ANAP        | AUTO        |
| (830F,0010)  | LO | <i>Private Identification Code</i> | <i>ALOKA:1.2.392.200039.117.2</i>                                                                                                           | <i>ANAP</i> | <i>AUTO</i> |
| (830F,1000)  | US |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (830F,10FF)  | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,0010)  | LO | <i>Private Identification Code</i> | <i>ALOKA:1.2.392.200039.117.2</i>                                                                                                           | <i>ANAP</i> | <i>AUTO</i> |
| (833D,0020)  | LO | <i>Private Identification Code</i> | <i>ALOKA:1.2.392.200039.117.2</i>                                                                                                           | <i>ANAP</i> | <i>AUTO</i> |
| (833D,1040)  | LO |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,1042)  | UL |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,104F)  | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,105F)  | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,106F)  | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,1070)  | SQ |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| >(833D,107F) | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,108F)  | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |
| (833D,109F)  | OB |                                    | <i>Private attribute without PHI</i>                                                                                                        | <i>ANAP</i> | <i>AUTO</i> |

|              |    |                             |                               |      |      |
|--------------|----|-----------------------------|-------------------------------|------|------|
| (833D,10AF)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2000)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2002)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2004)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2050)  | SQ |                             | Private attribute without PHI | ANAP | AUTO |
| >(833D,205E) | OB |                             | Private attribute without PHI | ANAP | AUTO |
| >(833D,205F) | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2070)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2072)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (833D,2074)  | OB |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,0010)  | LO | Private Identification Code | ALOKA:1.2.392.200039.117.2    | ANAP | AUTO |
| (83FF,0020)  | LO | Private Identification Code | ALOKA:1.2.392.200039.117.2    | ANAP | AUTO |
| (83FF,0021)  | LO | Private Identification Code | ALOKA:1.2.392.200039.117.2    | ANAP | AUTO |
| (83FF,1000)  | US |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,1002)  | UL |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,1004)  | US |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,1006)  | UL |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,1008)  | UL |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,100A)  | UL |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,1050)  | SH |                             | Private attribute without PHI | ANAP | AUTO |
| (83FF,1060)  | SQ |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,1061) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,1062) | OB |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2000) | DS |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2002) | DS |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2004) | UL |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2006) | UL |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2008) | OB |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,200A) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,200C) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,200E) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2010) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2012) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2014) | US |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2016) | DS |                             | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2018) | US |                             | Private attribute without PHI | ANAP | AUTO |

|              |    |  |                               |      |      |
|--------------|----|--|-------------------------------|------|------|
| >(83FF,201A) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,201C) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2020) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2022) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2024) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2026) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2028) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,202A) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,202C) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,202E) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2030) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2032) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2034) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2036) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2038) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,203A) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,203C) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,203E) | SS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2040) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2042) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2044) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2046) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2048) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,204A) | SS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,204C) | SS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,204E) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2050) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2052) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2054) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2056) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2058) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,205A) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,205C) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,205E) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2060) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2062) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2064) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2066) | US |  | Private attribute without PHI | ANAP | AUTO |

|              |    |  |                               |      |      |
|--------------|----|--|-------------------------------|------|------|
| >(83FF,2068) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,206A) | DS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,206C) | DS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,206E) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2070) | DS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2072) | DS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2074) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2076) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2078) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,207A) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,207C) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,207E) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2080) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2082) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2084) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2086) | SL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2088) | SL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,208A) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,208C) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,208E) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2090) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2092) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2094) | SS |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2096) | SL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2098) | FL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,209A) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,209C) | SL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,209E) | UL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20A0) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20A2) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20A4) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20A6) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20A8) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20AA) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20AC) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20AE) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20B0) | UL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20B2) | FL |  | Private attribute without PHI | ANAP | AUTO |

|              |    |  |                               |      |      |
|--------------|----|--|-------------------------------|------|------|
| >(83FF,20B4) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20B6) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20B8) | US |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20B9) | UL |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20BA) | FD |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20BC) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20BD) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20BE) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20BF) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20C0) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20C1) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20C2) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20C3) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,20C4) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2100) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2101) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2102) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2103) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2104) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2105) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2106) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2107) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2108) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2109) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,210A) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,210B) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,210C) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,210D) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,210E) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2110) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2112) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2114) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2116) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2118) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,211A) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,211C) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,211E) | OB |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,2120) | OB |  | Private attribute without PHI | ANAP | AUTO |



|              |    |  |                               |      |      |
|--------------|----|--|-------------------------------|------|------|
| >(83FF,216E) | OB |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,1070)  | OB |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,1072)  | UL |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,1074)  | FD |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,1076)  | US |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,1078)  | OB |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10A0)  | SH |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10B1)  | SQ |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10B2)  | SQ |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10B3)  | SQ |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10B4)  | SQ |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10C0)  | SQ |  | Private attribute without PHI | ANAP | AUTO |
| (83FF,10C1)  | SQ |  | Private attribute without PHI | ANAP | AUTO |
| >(83FF,10FF) | OB |  | Private attribute without PHI | ANAP | AUTO |

#### 8.1.1.7 SR Document Modules

**Table 8.1-21 SR DOCUMENT SERIES MODULE OF CREATED SOP INSTANCES**

| Tag          | VR | Attribute Name                               | Value                                                                  | Presence of Value | Source |
|--------------|----|----------------------------------------------|------------------------------------------------------------------------|-------------------|--------|
| (0008,0021)  | DA | Series Date                                  | "yyyymmdd"                                                             | ANAP <sup>1</sup> | AUTO   |
| (0008,0031)  | TM | Series Time                                  | "hhmmss"                                                               | ANAP <sup>1</sup> | AUTO   |
| (0008,0060)  | CS | Modality                                     | "SR"                                                                   | ALWAYS            | AUTO   |
| (0008,1111)  | SQ | Referenced Performed Procedure Step Sequence | Identifies the MPPS SOP Instance to which this SOP instance is related | VNAP              | MPPS   |
| >(0008,1150) | UI | Referenced SOP Class UID                     | MPPS SOP Class UID                                                     | ALWAYS            | MPPS   |
| >(0008,1155) | UI | Referenced SOP Instance UID                  | MPPS SOP Instance UID                                                  | ALWAYS            | MPPS   |
| (0020,000E)  | UI | Series Instance UID                          | Generated by device                                                    | ALWAYS            | AUTO   |
| (0020,0011)  | IS | Series Number                                | Generated by device                                                    | ALWAYS            | AUTO   |

Note: 1. Attribute presents only for Advanced Cardiac feature.

**Table 8.1-22 SR DOCUMENT GENERAL MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name              | Value                                                 | Presence of Value | Source |
|-------------|----|-----------------------------|-------------------------------------------------------|-------------------|--------|
| (0008,0023) | DA | Content Date                | "yyyymmdd"                                            | ALWAYS            | AUTO   |
| (0008,0033) | TM | Content Time                | "hhmmss"                                              | ALWAYS            | AUTO   |
| (0020,0013) | IS | Instance Number             | Generated by device                                   | ALWAYS            | AUTO   |
| (0040,A370) | SQ | Referenced Request Sequence | From Modality Worklist, or absent if unscheduled case | ANAP              | AUTO   |

|               |    |                                               |                                                                                   |                   |      |
|---------------|----|-----------------------------------------------|-----------------------------------------------------------------------------------|-------------------|------|
| >(0008,0050)  | SH | Accession Number                              | From Modality Worklist                                                            | VNAP              | MWL  |
| >(0008,1110)  | SQ | Referenced Study Sequence                     | From Modality Worklist                                                            | VNAP              | MWL  |
| >>(0008,1150) | UI | Referenced SOP Class UID                      | From Modality Worklist                                                            | ALWAYS            | MWL  |
| >>(0008,1155) | UI | Referenced SOP Instance UID                   | From Modality Worklist                                                            | ALWAYS            | MWL  |
| >(0020,000D)  | UI | Study Instance UID                            | From Modality Worklist                                                            | ALWAYS            | MWL  |
| >(0032,1060)  | LO | Requested Procedure Description               | From Modality Worklist                                                            | VNAP              | MWL  |
| >(0032,1064)  | SQ | Requested Procedure Code Sequence             | From Modality Worklist                                                            | VNAP <sup>1</sup> | MWL  |
| >(0040,1001)  | SH | Requested Procedure ID                        | From Modality Worklist                                                            | VNAP              | MWL  |
| >(0040,2016)  | LO | Placer Order Number / Imaging Service Request | Zero length                                                                       | EMPTY             | AUTO |
| >(0040,2017)  | LO | Filler Order Number / Imaging Service Request | Zero length                                                                       | EMPTY             | AUTO |
| (0040,A372)   | SQ | Performed Procedure Code Sequence             | From Modality Worklist, mapped from Requested Procedure Code Sequence (0032,1064) | VNAP              | MWL  |
| (0040,A491)   | CS | Completion Flag                               | PARTIAL                                                                           | ALWAYS            | AUTO |
| (0040,A493)   | CS | Verification Flag                             | UNVERIFIED                                                                        | ALWAYS            | AUTO |

Note: 1. Attribute Not Present for Advanced Cardiac feature.

**Table 8.1-23 SR DOCUMENT CONTENT MODULE OF CREATED SOP INSTANCES**

| Tag          | VR | Attribute Name             | Value                                                                                                                     | Presence of Value | Source |
|--------------|----|----------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------|--------|
| (0040,A040)  | CS | Value Type                 | CONTAINER                                                                                                                 | ALWAYS            | AUTO   |
| (0040,A043)  | SQ | Concept Name Code Sequence | Document Title                                                                                                            | ALWAYS            | AUTO   |
| >(0008,0100) | SH | Code Value                 | 125000, 125100 or 125200                                                                                                  | ALWAYS            | AUTO   |
| >(0008,0102) | SH | Coding Scheme Designator   | DCM                                                                                                                       | ALWAYS            | AUTO   |
| >(0008,0104) | LO | Code Meaning               | "OB-GYN Ultrasound Procedure Report", "Vascular Ultrasound Procedure Report" or "Adult Echocardiography Procedure Report" | ALWAYS            | AUTO   |
| (0040,A050)  | CS | Continuity of Content      | SEPARATE                                                                                                                  | ALWAYS            | AUTO   |
| (0040,A504)  | SQ | Content Template Sequence  |                                                                                                                           | ALWAYS            | AUTO   |
| >(0008,0105) | CS | Mapping Resource           | DCMR                                                                                                                      | ALWAYS            | AUTO   |
| >(0040,DB00) | CS | Template Identifier        | 5000, 5100 or 5200                                                                                                        | ALWAYS            | AUTO   |

|              |    |                                       |                                                                                                                                                    |        |      |
|--------------|----|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------|------|
| (0040,A032)  | DT | Observation Date Time                 | "yyyymmddhhmmss"<br>Same as Study Date,<br>Study Time                                                                                              | ALWAYS | AUTO |
| (0040,A730)  | SQ | Content Sequence                      |                                                                                                                                                    | ALWAYS | AUTO |
| >(0040,A010) | CS | Relationship Type                     | See TID 5000 OB-GYN<br>Ultrasound Procedure<br>Report, TID 5100 Vascular<br>Ultrasound Report and TID<br>5200 Echocardiography<br>Procedure Report | ALWAYS | AUTO |
| > ...        |    | Document Relationship<br>Macro        | See TID 5000 OB-GYN<br>Ultrasound Procedure<br>Report, TID 5100 Vascular<br>Ultrasound Report and TID<br>5200 Echocardiography<br>Procedure Report | ALWAYS | AUTO |
| > ...        |    | Document Content Macro                | See TID 5000 OB-GYN<br>Ultrasound Procedure<br>Report, TID 5100 Vascular<br>Ultrasound Report and TID<br>5200 Echocardiography<br>Procedure Report | ALWAYS | AUTO |
| >(0040,DB73) | UL | Referenced Content Item<br>Identifier | Not used                                                                                                                                           | -      | -    |

#### 8.1.1.8 Encapsulated Document Modules

**Table 8.1-24 ENCAPSULATED DOCUMENT SERIES OF CREATED SOP INSTANCES**

| Tag          | VR | Attribute Name                                  | Value                                                                    | Presence<br>of Value | Source       |
|--------------|----|-------------------------------------------------|--------------------------------------------------------------------------|----------------------|--------------|
| (0008,0060)  | CS | Modality                                        | "DOC"                                                                    | ALWAYS               | AUTO         |
| (0008,1111)  | SQ | Referenced Performed<br>Procedure Step Sequence | Identifies the MPPS SOP<br>Instance to which this<br>document is related | VNAP                 | MPPS         |
| >(0008,1150) | UI | Referenced SOP Class UID                        | MPPS SOP Class UID                                                       | ALWAYS               | MPPS         |
| >(0008,1155) | UI | Referenced SOP Instance<br>UID                  | MPPS SOP Instance UID                                                    | ALWAYS               | MPPS         |
| (0020,000E)  | UI | Series Instance UID                             | Generated by device                                                      | ALWAYS               | AUTO         |
| (0020,0011)  | IS | Series Number                                   | Generated by device                                                      | ALWAYS               | AUTO         |
| (0040,0275)  | SQ | Request Attributes<br>Sequence                  | Zero or 1 item will be<br>present                                        | VNAP                 | AUTO         |
| >(0040,0007) | LO | Scheduled Procedure Step<br>Description         | From Modality Worklist                                                   | VNAP                 | MWL          |
| >(0040,0009) | SH | Scheduled Procedure Step<br>ID                  | From Modality Worklist                                                   | VNAP                 | MWL          |
| >(0040,1001) | SH | Requested Procedure ID                          | From Modality Worklist or<br>Input by user                               | VNAP                 | MWL/<br>USER |

**Table 8.1-25 ENCAPSULATED DOCUMENT OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name                     | Value                                                                                   | Presence of Value | Source |
|-------------|----|------------------------------------|-----------------------------------------------------------------------------------------|-------------------|--------|
| (0008,0023) | DA | Content Date                       | "yyyymmdd"                                                                              | ALWAYS            | AUTO   |
| (0008,0033) | TM | Content Time                       | "hhmmss"                                                                                | ALWAYS            | AUTO   |
| (0008,002A) | DT | Acquisition DateTime               | Zero length                                                                             | EMPTY             | AUTO   |
| (0020,0013) | IS | Instance Number                    | Generated by device                                                                     | ALWAYS            | AUTO   |
| (0028,0301) | CS | Burned In Annotation               | "YES"                                                                                   | ALWAYS            | AUTO   |
| (0040,A043) | SQ | Concept Name Code Sequence         | Zero length                                                                             | EMPTY             | AUTO   |
| (0042,0010) | ST | Document Title                     | "Report"                                                                                | VNAP              | AUTO   |
| (0042,0011) | OB | Encapsulated Document              | Encapsulated document stream encoded by MIME Type of Encapsulated Document (0040,0012). | ALWAYS            | AUTO   |
| (0042,0012) | LO | MIME Type of Encapsulated Document | "application/pdf"                                                                       | ALWAYS            | AUTO   |

**8.1.1.9 Secondary Capture Modules****Table 8.1-26 SC EQUIPMENT MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name  | Value | Presence of Value | Source |
|-------------|----|-----------------|-------|-------------------|--------|
| (0008,0064) | CS | Conversion Type | "WSD" | ALWAYS            | AUTO   |
| (0008,0060) | CS | Modality        | "OT"  | ALWAYS            | AUTO   |

**Table 8.1-27 SC IMAGE MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name                     | Value                                | Presence of Value | Source |
|-------------|----|------------------------------------|--------------------------------------|-------------------|--------|
| (0009,0010) | LO | <i>Private Identification Code</i> | <i>ALOKA:1.2.392.200039.11 7.2</i>   | ANAP              | AUTO   |
| (0009,1000) | SH |                                    | <i>Private attribute without PHI</i> | ANAP              | AUTO   |
| (0009,1012) | US |                                    | <i>Private attribute without PHI</i> | ANAP              | AUTO   |
| (0018,1012) | DA | Date of Secondary Capture          | "yyyymmdd"                           | ALWAYS            | AUTO   |
| (0018,1014) | TM | Time of Secondary Capture          | "hhmmss"                             | ALWAYS            | AUTO   |
| (7FDF,0050) | LO | <i>Private Identification Code</i> | <i>"TomTec"</i>                      | ANAP              | AUTO   |
| (7FDF,5050) | OB |                                    | <i>Private attribute without PHI</i> | ANAP              | AUTO   |
| (7FDF,5051) | OB |                                    | <i>Private attribute without PHI</i> | ANAP              | AUTO   |

**Table 8.1-28 SC MULTI-FRAME IMAGE MODULE OF CREATED SOP INSTANCES**

| Tag         | VR | Attribute Name          | Value       | Presence of Value | Source |
|-------------|----|-------------------------|-------------|-------------------|--------|
| (0028,0301) | CS | Burned In Annotation    | "NO"        | ALWAYS            | AUTO   |
| (0028,0009) | AT | Frame Increment Pointer | (0018,1063) | ANAP              | AUTO   |

### 8.1.2 Used Fields in received IOD by application

The Query/Retrieve application of this product may receive SOP Instances described in section 4.2.4.1. To "Import" the received SOP Instance, value of Patient ID (0010, 0020), Study ID (0020,0010), Series Number (0020,0011), and Instance Number (0020,0013) are necessary in it. The patient identification in the local database is done by Patient ID (0010,0020).

The usage of attributes received via Modality Worklist is described in section 4.2.1.3.1.3.

### 8.1.3 Attribute mapping

The relationships between attributes received via Modality Worklist, stored in acquired images and communicated via MPPS are summarized in Table 8.1-29.

**Table 8.1-29 ATTRIBUTE MAPPING BETWEEN MODALITY WORKLIST, IMAGE AND MPPS**

| Modality Worklist                    | Image IOD                             | MPPS IOD                              |
|--------------------------------------|---------------------------------------|---------------------------------------|
| Patient Name                         | Patient Name                          | Patient Name                          |
| Patient ID                           | Patient ID                            | Patient ID                            |
| Patient's Birth Date                 | Patient's Birth Date                  | Patient's Birth Date                  |
| Patient's Sex                        | Patient's Sex                         | Patient's Sex                         |
| Patient's Size                       | Patient's Size                        | ----                                  |
| Patient's Weight                     | Patient's Weight                      | ----                                  |
| Referring Physician's Name           | Referring Physician's Name            |                                       |
| ----                                 | ----                                  | Scheduled Step Attributes Sequence    |
| Study Instance UID                   | Study Instance UID                    | >Study Instance UID                   |
| Referenced Study Sequence            | Referenced Study Sequence             | >Referenced Study Sequence            |
| Accession Number                     | Accession Number                      | >Accession Number                     |
| ----                                 | Request Attributes Sequence           | ----                                  |
| Requesting Physician                 | Requesting Physician                  | ----                                  |
| Requested Procedure ID               | >Requested Procedure ID               | >Requested Procedure ID               |
| Requested Procedure Description      | >Requested Procedure Description      | >Requested Procedure Description      |
| Scheduled Procedure Step ID          | >Scheduled Procedure Step ID          | >Scheduled Procedure Step ID          |
| Scheduled Procedure Step Description | >Scheduled Procedure Step Description | >Scheduled Procedure Step Description |
| Scheduled Protocol Code Sequence     | >Scheduled Protocol Code Sequence     | >Scheduled Protocol Code Sequence     |
| ----                                 | Performed Protocol Code Sequence      | Performed Protocol Code Sequence      |

| Modality Worklist                 | Image IOD                                    | MPPS IOD                             |
|-----------------------------------|----------------------------------------------|--------------------------------------|
| Requested Procedure ID            | Study ID                                     | Study ID                             |
| ----                              | Performed Procedure Step ID                  | Performed Procedure Step ID          |
| ----                              | Performed Procedure Step Start Date          | Performed Procedure Step Start Date  |
| ----                              | Performed Procedure Step Start Time          | Performed Procedure Step Start Time  |
| ----                              | Performed Procedure Step Description         | Performed Procedure Step Description |
| ----                              | ----                                         | Performed Series Sequence            |
| ----                              | Name of Physician's Reading Study            | >Performing Physician's Name         |
| Requested Procedure Code Sequence | Procedure Code Sequence                      | Procedure Code Sequence              |
| ----                              | Referenced Performed Procedure Step Sequence | ----                                 |
| ----                              | >Referenced SOP Class UID                    | SOP Class UID                        |
| ----                              | >Referenced SOP Instance UID                 | SOP Instance UID                     |
| ----                              | Protocol Name                                | Protocol Name                        |
| Medical Alerts                    | Medical Alerts                               | ----                                 |
| Contrast Allergies                | Contrast Allergies                           | ----                                 |
| Occupation                        | Occupation                                   | ----                                 |

#### 8.1.4 Coerced/Modified Fields

The Modality Worklist AE will truncate attribute values received in the response to a Modality Worklist Query if the value length is longer than the maximum length permitted by the attribute's VR.

## 8.2 DATA DICTIONARY OF PRIVATE ATTRIBUTES

The Private Attributes added to create SOP Instances are listed in the Table below. This product reserves blocks of private attributes in groups 0009, 0019, 830F, 833D and 83FF. Further details on usage of these private attributes are contained in Section 8.1. Groups 830F, 833D, 83FF are used in DICOM+Raw and 3D Reconstruction files.

This product does not support reading SOP instance that the group of Private Attributes has been relocated

**Table 8.2-1 DATA DICTIONARY OF PRIVATE ATTRIBUTES**

| Tag         | VR | VM  | Attribute Name |
|-------------|----|-----|----------------|
| (0009,0010) | LO | 1   |                |
| (0009,1000) | SH | 1   |                |
| (0009,1004) | US | 1-n |                |
| (0009,1006) | US | 1-n |                |
| (0009,100A) | SH | 1   |                |
| (0009,1012) | US | 1   |                |

| Tag         | VR | VM   | Attribute Name |
|-------------|----|------|----------------|
| (0009,1014) | FD | 1    |                |
| (0009,1016) | DA | 1    |                |
| (0009,1018) | TM | 1    |                |
| (0009,101A) | LO | 1    |                |
| (0009,1020) | CS | 1    |                |
| (0009,1022) | CS | 1    |                |
| (0009,1024) | CS | 1    |                |
| (0009,1026) | IS | 1    |                |
| (0009,1028) | IS | 1    |                |
| (0009,102A) | DS | 1    |                |
| (0009,102C) | FD | 6-6n |                |
| (0009,102E) | FD | 3-3n |                |
| (0009,1030) | FD | 1    |                |
| (0009,1032) | DS | 1    |                |
| (0009,1034) | CS | 1    |                |
| (0009,1036) | FD | 1    |                |
| (0009,1038) | CS | 1    |                |
| (0009,103A) | FD | 1    |                |
| (0009,103C) | FD | 1    |                |
| (0009,103E) | FD | 1    |                |
| (0009,1040) | FD | 1    |                |
| (0009,1042) | FD | 1    |                |
| (0009,1044) | FD | 1    |                |
| (0009,1046) | US | 1    |                |
| (0009,1048) | FD | 1    |                |
| (0009,104A) | FD | 1    |                |
| (0009,104C) | FD | 1    |                |
| (0009,104E) | FD | 1    |                |
| (0009,1050) | US | 1    |                |
| (0009,1052) | US | 1    |                |
| (0009,1054) | LO | 1    |                |
| (0009,1056) | IS | 1-n  |                |
| (0009,1058) | CS | 1    |                |
| (0009,105A) | UL | 1    |                |
| (0009,105C) | CS | 1    |                |
| (0009,105E) | DA | 1    |                |
| (0009,1060) | TM | 1    |                |
| (0009,1062) | US | 1    |                |

| Tag          | VR | VM | Attribute Name |
|--------------|----|----|----------------|
| (0019,0010)  | LO | 1  |                |
| (0019,1008)  | FD | 1  |                |
| (0019,100C)  | CS | 1  |                |
| (0019,100E)  | DS | 1  |                |
| (0019,1018)  | SL | 1  |                |
| (0019,101A)  | SL | 1  |                |
| (0019,1040)  | SS | 1  |                |
| (0019,1046)  | US | 1  |                |
| (0019,1050)  | SL | 1  |                |
| (0019,1052)  | DS | 1  |                |
| (0019,1054)  | DS | 1  |                |
| (0019,1056)  | FD | 1  |                |
| (0019,1060)  | US | 1  |                |
| (0019,1061)  | UL | 1  |                |
| (7FDF,0050)  | LO | 1  |                |
| (7FDF,5050)  | OB | 1  |                |
| (7FDF,5051)  | OB | 1  |                |
| (830F,0010)  | LO | 1  |                |
| (830F,1000)  | US | 1  |                |
| (830F,10FF)  | OB | 1  |                |
| (833D,0010)  | LO | 1  |                |
| (833D,0020)  | OB | 1  |                |
| (833D,1040)  | LO | 1  |                |
| (833D,1042)  | UL | 1  |                |
| (833D,104F)  | OB | 1  |                |
| (833D,105F)  | OB | 1  |                |
| (833D,106F)  | OB | 1  |                |
| (833D,1070)  | SQ | 1  |                |
| >(833D,107F) | OB | 1  |                |
| (833D,108F)  | OB | 1  |                |
| (833D,109F)  | OB | 1  |                |
| (833D,10AF)  | OB | 1  |                |
| (833D,2000)  | OB | 1  |                |
| (833D,2002)  | OB | 1  |                |
| (833D,2004)  | OB | 1  |                |
| (833D,2050)  | SQ | 1  |                |
| >(833D,205E) | OB | 1  |                |
| >(833D,205F) | OB | 1  |                |

| Tag         | VR | VM | Attribute Name |
|-------------|----|----|----------------|
| (833D,2070) | OB | 1  |                |
| (833D,2072) | OB | 1  |                |
| (833D,2074) | OB | 1  |                |
| (83FF,0010) | LO | 1  |                |
| (83FF,0020) | LO | 1  |                |
| (83FF,0021) | LO | 1  |                |
| (83FF,1000) | US | 1  |                |
| (83FF,1002) | UL | 1  |                |
| (83FF,1004) | US | 1  |                |
| (83FF,1006) | UL | 1  |                |
| (83FF,1008) | UL | 4  |                |
| (83FF,100A) | UL | 1  |                |
| (83FF,1050) | SH | 1  |                |
| (83FF,1060) | SQ | 1  |                |
| (83FF,1061) | US | 1  |                |
| (83FF,1062) | OB | 1  |                |
| (83FF,1070) | OB | 1  |                |
| (83FF,1072) | UL | 1  |                |
| (83FF,1074) | FD | 1  |                |
| (83FF,1076) | US | 1  |                |
| (83FF,1078) | OB | 1  |                |
| (83FF,10A0) | SH | 1  |                |
| (83FF,10B1) | SQ | 1  |                |
| (83FF,10B2) | SQ | 1  |                |
| (83FF,10B3) | SQ | 1  |                |
| (83FF,10B4) | SQ | 1  |                |
| (83FF,10C0) | SQ | 1  |                |
| (83FF,10C1) | SQ | 1  |                |
| (83FF,10FF) | OB | 1  |                |
| (83FF,2000) | DS | 1  |                |
| (83FF,2002) | DS | 1  |                |
| (83FF,2004) | UL | 1  |                |
| (83FF,2006) | UL | 1  |                |
| (83FF,2008) | OB | 1  |                |
| (83FF,200A) | US | 1  |                |
| (83FF,200C) | US | 1  |                |
| (83FF,200E) | US | 1  |                |
| (83FF,2010) | US | 1  |                |

| Tag         | VR | VM  | Attribute Name |
|-------------|----|-----|----------------|
| (83FF,2012) | US | 1   |                |
| (83FF,2014) | US | 1   |                |
| (83FF,2016) | DS | 1   |                |
| (83FF,2018) | US | 1   |                |
| (83FF,201A) | FD | 1   |                |
| (83FF,201C) | FD | 1   |                |
| (83FF,2020) | FD | 1   |                |
| (83FF,2022) | FD | 1   |                |
| (83FF,2024) | FD | 1   |                |
| (83FF,2026) | FD | 1   |                |
| (83FF,2028) | FD | 7   |                |
| (83FF,202A) | FD | 7   |                |
| (83FF,202C) | FD | 7   |                |
| (83FF,202E) | FD | 7   |                |
| (83FF,2030) | FD | 7   |                |
| (83FF,2032) | FD | 7   |                |
| (83FF,2034) | FD | 7   |                |
| (83FF,2036) | FD | 7   |                |
| (83FF,2038) | FL | 1   |                |
| (83FF,203A) | FL | 256 |                |
| (83FF,203C) | OB | 1   |                |
| (83FF,203E) | SS | 1   |                |
| (83FF,2040) | FL | 1   |                |
| (83FF,2042) | US | 1   |                |
| (83FF,2044) | US | 1   |                |
| (83FF,2046) | US | 1   |                |
| (83FF,2048) | US | 1   |                |
| (83FF,204A) | SS | 1   |                |
| (83FF,204C) | SS | 1   |                |
| (83FF,204E) | FD | 1   |                |
| (83FF,2050) | FD | 1   |                |
| (83FF,2052) | US | 4   |                |
| (83FF,2054) | US | 4   |                |
| (83FF,2056) | US | 4   |                |
| (83FF,2058) | US | 4   |                |
| (83FF,205A) | FL | 1   |                |
| (83FF,205C) | US | 1   |                |
| (83FF,205E) | FL | 1-n |                |

| Tag         | VR | VM  | Attribute Name |
|-------------|----|-----|----------------|
| (83FF,2060) | US | 1-n |                |
| (83FF,2062) | US | 1-n |                |
| (83FF,2064) | US | 1-n |                |
| (83FF,2066) | US | 1   |                |
| (83FF,2068) | US | 1-n |                |
| (83FF,206A) | DS | 1   |                |
| (83FF,206C) | DS | 1   |                |
| (83FF,206E) | US | 1   |                |
| (83FF,2070) | DS | 1   |                |
| (83FF,2072) | DS | 1   |                |
| (83FF,2074) | US | 1   |                |
| (83FF,2076) | OB | 1   |                |
| (83FF,2078) | FL | 16  |                |
| (83FF,207A) | FL | 16  |                |
| (83FF,207C) | OB | 1   |                |
| (83FF,207E) | OB | 1   |                |
| (83FF,2080) | OB | 1   |                |
| (83FF,2082) | OB | 1   |                |
| (83FF,2084) | OB | 1   |                |
| (83FF,2086) | SL | 1   |                |
| (83FF,2088) | SL | 1   |                |
| (83FF,208A) | FL | 1   |                |
| (83FF,208C) | FL | 1   |                |
| (83FF,208E) | FL | 7   |                |
| (83FF,2090) | FL | 7   |                |
| (83FF,2092) | US | 9   |                |
| (83FF,2094) | SS | 9   |                |
| (83FF,2096) | SL | 1   |                |
| (83FF,2098) | FL | 1   |                |
| (83FF,209A) | OB | 1   |                |
| (83FF,209C) | SL | 1   |                |
| (83FF,209E) | UL | 3   |                |
| (83FF,20A0) | OB | 1   |                |
| (83FF,20A2) | OB | 1   |                |
| (83FF,20A4) | US | 1   |                |
| (83FF,20A6) | FD | 1   |                |
| (83FF,20A8) | FD | 1   |                |
| (83FF,20AA) | FD | 1   |                |

| Tag         | VR | VM | Attribute Name |
|-------------|----|----|----------------|
| (83FF,20AC) | US | 1  |                |
| (83FF,20AE) | US | 2  |                |
| (83FF,20B0) | UL | 4  |                |
| (83FF,20B2) | FL | 1  |                |
| (83FF,20B4) | OB | 1  |                |
| (83FF,20B6) | OB | 1  |                |
| (83FF,20B8) | US | 1  |                |
| (83FF,20B9) | UL | 1  |                |
| (83FF,20BA) | FD | 16 |                |
| (83FF,20BC) | OB | 1  |                |
| (83FF,20BD) | OB | 3  |                |
| (83FF,20BE) | OB | 1  |                |
| (83FF,20BF) | OB | 1  |                |
| (83FF,20C0) | OB | 1  |                |
| (83FF,20C1) | OB | 1  |                |
| (83FF,20C2) | OB | 1  |                |
| (83FF,20C3) | OB | 1  |                |
| (83FF,20C4) | OB | 1  |                |
| (83FF,2100) | OB | 1  |                |
| (83FF,2101) | OB | 1  |                |
| (83FF,2102) | OB | 1  |                |
| (83FF,2103) | OB | 1  |                |
| (83FF,2104) | OB | 1  |                |
| (83FF,2105) | OB | 1  |                |
| (83FF,2106) | OB | 1  |                |
| (83FF,2107) | OB | 1  |                |
| (83FF,2108) | OB | 1  |                |
| (83FF,2109) | OB | 1  |                |
| (83FF,210A) | OB | 1  |                |
| (83FF,210B) | OB | 1  |                |
| (83FF,210C) | OB | 1  |                |
| (83FF,210D) | OB | 1  |                |
| (83FF,210E) | OB | 1  |                |
| (83FF,2110) | OB | 1  |                |
| (83FF,2112) | OB | 1  |                |
| (83FF,2114) | OB | 1  |                |
| (83FF,2116) | OB | 1  |                |
| (83FF,2118) | OB | 1  |                |

| Tag         | VR | VM | Attribute Name |
|-------------|----|----|----------------|
| (83FF,211A) | OB | 1  |                |
| (83FF,211C) | OB | 1  |                |
| (83FF,211E) | OB | 1  |                |
| (83FF,2120) | OB | 1  |                |
| (83FF,2122) | OB | 1  |                |
| (83FF,2124) | OB | 1  |                |
| (83FF,2126) | OB | 1  |                |
| (83FF,2128) | OB | 1  |                |
| (83FF,212A) | OB | 1  |                |
| (83FF,212C) | OB | 1  |                |
| (83FF,212E) | OB | 1  |                |
| (83FF,2130) | OB | 1  |                |
| (83FF,2132) | OB | 1  |                |
| (83FF,2134) | OB | 1  |                |
| (83FF,2136) | OB | 1  |                |
| (83FF,2138) | OB | 1  |                |
| (83FF,213A) | OB | 1  |                |
| (83FF,213C) | OB | 1  |                |
| (83FF,213E) | OB | 1  |                |
| (83FF,2140) | OB | 1  |                |
| (83FF,2142) | OB | 1  |                |
| (83FF,2144) | OB | 1  |                |
| (83FF,2146) | OB | 1  |                |
| (83FF,2148) | OB | 1  |                |
| (83FF,214A) | OB | 1  |                |
| (83FF,214C) | OB | 1  |                |
| (83FF,214E) | OB | 1  |                |
| (83FF,2150) | OB | 1  |                |
| (83FF,2152) | OB | 1  |                |
| (83FF,2154) | OB | 1  |                |
| (83FF,2156) | OB | 1  |                |
| (83FF,2158) | OB | 1  |                |
| (83FF,215A) | OB | 1  |                |
| (83FF,215C) | OB | 1  |                |
| (83FF,215E) | OB | 1  |                |
| (83FF,2160) | OB | 1  |                |
| (83FF,2162) | OB | 1  |                |
| (83FF,2164) | OB | 1  |                |

| Tag         | VR | VM | Attribute Name |
|-------------|----|----|----------------|
| (83FF,2166) | OB | 1  |                |
| (83FF,2168) | OB | 1  |                |
| (83FF,216A) | OB | 1  |                |
| (83FF,216C) | OB | 1  |                |
| (83FF,216E) | OB | 1  |                |
|             |    |    |                |

### 8.3 CODED TERMINOLOGY AND TEMPLATES

The contents of Performed Procedure Step Discontinuation Reason Code Sequence (0040,0281) for a discontinued MPPS will be filled with a code selected by the user from a fixed list corresponding to Context Group 9300.

The Structured Reports use the Standard Templates and Context Groups supplied by DCMR (DICOM Content Mapping Resource), LOINC, and SRT. As a private definition, "99IMPROOF" for Advanced Cardiac feature and "99ALOKA" for other features are used. See section 8.6 for details.

### 8.4 STANDARD EXTENDED / SPECIALIZED / PRIVATE SOP CLASSES

#### 8.4.1 Ultrasound and Ultrasound Multi-frame Image Storage SOP Class

The Ultrasound and Ultrasound Multi-frame Image Storage SOP Classes are extended to create a Standard Extended SOP Classes by addition of standard and private attributes to the created SOP Instances as documented in section 8.1.

#### 8.4.2 Comprehensive SR Storage SOP Class

The Comprehensive SR Storage SOP Class which is generated as "Advanced Cardiac Report" is extended to create a Standard Extended SOP Class by addition of standard and private attributes to the created SOP Instances as documented in section 8.1.

### 8.5 PRIVATE TRANSFER SYNTAXES

No Private Transfer Syntaxes are supported.

## 8.6 STRUCTURED REPORTS

The equipment supports Standard Templates TID 5000 OB-GYN, TID 5100 Vascular and TID 5200 Echocardiography. TIDs are described in DICOM Part 16.

There is no attempt to provide all tags that will be sent in the SR object. For those specifics, please refer to DICOM PS3.3, PS3.16 and PS3.17 for complete discussion on Enhanced and/or Comprehensive SR Storage SOP Classes support and the Templates described here.

DICOM PS 3.17 of the DICOM Standard includes tree diagrams showing graphic examples of the structure of each template.

### 8.6.1 Applications and Generated Templates

| Application        | Template ID          | Template Name                      |
|--------------------|----------------------|------------------------------------|
| OB                 | 5000                 | OB-GYN Ultrasound Procedure Report |
| GYN                | 5000                 | OB-GYN Ultrasound Procedure Report |
| Vascular           | 5100                 | Vascular Ultrasound Report         |
| Abdomen            | 5100                 | Vascular Ultrasound Report         |
| Cardio             | 5200                 | Echocardiography Procedure Report  |
| other applications | SR is not generated. | -                                  |

OB application generates an OB-GYN Ultrasound Procedure Report for OB measurements, GYN application generates an OB-GYN Ultrasound Procedure Report for GYN measurements. Vascular application generates a Vascular Ultrasound Report for peripheral vascular measurements, Abdomen application generates a Vascular Ultrasound Report for abdominal vascular measurements. Cardio application generates an Echocardiography Procedure Report. No SR is generated for any other applications.

Note that DICOM Standard provides TID 5200 for an "Adult" Echocardiography Procedure Report, however Cardio application will generate TID 5200 Adult Echocardiography Procedure Report regardless of patient's age or the Preset Application like "Pediatric Heart".

This product is able to generate two types of TID 5200 Structured Report below:

1. Non-Advanced Cardiac feature:  
Some user-defined measurement items or user-defined tables/equations are not included in SR. All private Codes Values use the Coding Scheme Designator "99ALOKA".
2. Advanced Cardiac feature:  
No user-defined measurement item is included in SR. All private Code Values use the Coding Scheme Designator "99IMPROOF".

Some user-defined measurement items or user-defined tables/equations are not included in SR.

#### 8.6.1.1 Image and Spatial Coordinates

It is configurable to output the referenced single images and spatial coordinates in distance-typed measurement results except for Advanced Cardiac feature. The referenced image and spatial coordinates are confirmed by pressing the "STORE" button on the image whose the measurements have been done. TID 320 row 3 and row 4 are used to store spatial coordinates and image respectively. The

Value Multiplicity for TID 320 is up to 10 on each result. The value of "POLYLINE" is used for Graphic Type (0070,0023).

## 8.6.2 Templates

### 8.6.2.1 TID 5000 OB-GYN Ultrasound Procedure Report

TID 5000 row 3 - TID 1001 Observation Context

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping                                                |
|--------------|--------------------------------------|------------------------|--------------------------|--------------------------------------------------------|
| Patient Name | DCM                                  | 121029                 | Subject Name             | TID 1001 row 3 -<br>TID 1006 row 2 -<br>TID 1007 row 2 |

TID 5000 row 4 - TID 5001 OB-GYN Patient Characteristics

| Label  | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping        |
|--------|--------------------------------------|------------------------|--------------------------|----------------|
| Height | LN                                   | 8302-2                 | Patient Height           | TID 5001 row 3 |
| Weight | LN                                   | 29463-7                | Patient Weight           | TID 5001 row 4 |
| GRAV   | LN                                   | 11996-6                | Gravida                  | TID 5001 row 5 |
| PARA   | LN                                   | 11977-6                | Para                     | TID 5001 row 6 |
| AB     | LN                                   | 11612-9                | Aborta                   | TID 5001 row 7 |
| ECTO   | LN                                   | 33065-4                | Ectopic Pregnancies      | TID 5001 row 8 |

TID 5000 row 7 - TID 5002 OB-GYN Procedure Summary Section

| Label                         | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)        | Mapping                            |
|-------------------------------|--------------------------------------|------------------------|---------------------------------|------------------------------------|
| LMP                           | LN                                   | 11955-2                | LMP                             | TID 5002 row 2                     |
| BBT                           | LN                                   | 11976-8                | Ovulation date                  | TID 5002 row 2                     |
| LMP-EDC                       | LN                                   | 11779-6                | EDD from LMP                    | TID 5002 row 2                     |
| BBT-EDC                       | LN                                   | 11780-4                | EDD from ovulation date         | TID 5002 row 2                     |
| Composite US-EDC <sup>1</sup> | LN                                   | 11781-2                | EDD from average ultrasound age | TID 5002 row 2                     |
| -                             | LN                                   | 11878-6                | Number of Fetuses               | TID 5002 row 3                     |
| Comments                      | DCM                                  | 121106                 | Comment                         | TID 5002 row 4                     |
| LMP-GA                        | LN                                   | 11885-1                | Gestational Age by LMP          | TID 5002 row 6 -<br>TID 5003 row 5 |

| <b>Label</b>    | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b>                     |
|-----------------|---------------------------------------------|-------------------------------|---------------------------------|------------------------------------|
| Composite US-GA | LN                                          | 11888-5                       | Composite Ultrasound Age        | TID 5002 row 6 -<br>TID 5003 row 5 |

Note: 1. The earliest Composite US-EDC is included when more than one fetus are observed.

OB measurements :

TID 5000 row 7 - TID 5002 row 6 - TID 5003 OB-GYN Fetus Summary  
 TID 5000 row 8 - TID 5004 Fetal Biometry Ratio Section  
 TID 5000 row 9 - TID 5005 Fetal Biometry Section  
 TID 5000 row 10 - TID 5006 Fetal Long Bones Section  
 TID 5000 row 11 - TID 5007 Fetal Cranium Section  
 TID 5000 row 12 - TID 5009 Fetal Biophysical Profile Section  
 TID 5000 row 13 - TID 5011 Early Gestation Section  
 TID 5000 row 14 - TID 5010 Amniotic Sac Section  
 TID 5000 row 15 - TID 5015 Pelvis and Uterus Section  
 TID 5000 row 21 - TID 5025 OB-GYN Fetal Vascular Ultrasound Measurement Group  
 TID 5000 row 24 - TID 5026 OB-GYN Pelvic Vascular Ultrasound Measurement Group

TID 5000 row 25(Extension) - TID ALOKA-5001 OB-GYN Original Measurement Section  
 TID 5000 row 26(Extension) - TID ALOKA-5000 OB Original Fetal Measurement Section  
 TID 5000 row 27(Extension) - TID ALOKA-5000 OB Original Fetal Measurement Section  
 TID 5000 row 28(Extension) - TID ALOKA-5002 OB-GYN User Defined Equation Section

| <b>Label</b>                 | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b> |
|------------------------------|---------------------------------------------|-------------------------------|---------------------------------|----------------|
| FHR                          | LN                                          | 11948-7                       | Fetal Heart Rate                | TID 5003 row 5 |
| PreHR(Amnio)                 | 99ALOKA                                     | A12019-001                    | Fetal Heart Rate before Biopsy  | TID 5003 row 5 |
| PstHR(Amnio)                 | 99ALOKA                                     | A12019-002                    | Fetal Heart Rate after Biopsy   | TID 5003 row 5 |
| FW<br>(up to 5 items)        | LN                                          | 11727-5                       | Estimated Weight                | TID 5003 row 5 |
| EFW Ratio<br>(up to 5 items) | 99ALOKA                                     | A12019-004                    | Estimated Fetal Weight Ratio    | TID 5003 row 5 |
| - (FW %ile rank by Doubilet) | LN                                          | 11767-1                       | EFW percentile rank             | TID 5003 row 5 |
| Auto FHR                     | 99ALOKA                                     | A12019-003                    | Auto Fetal Heart Rate           | TID 5003 row 5 |
|                              |                                             |                               |                                 |                |
| CI (BPD/OFD)                 | LN                                          | 11823-2                       | Cephalic Index                  | TID 5004 row 3 |

| Label                                    | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                            | Mapping        |
|------------------------------------------|--------------------------------------|------------------------|-----------------------------------------------------|----------------|
| CI (BPD <sub>o</sub> /OFD <sub>o</sub> ) | 99ALOKA                              | A12004-001             | Cephalic Index(BPD <sub>o</sub> /OFD <sub>o</sub> ) | TID 5004 row 3 |
| FL/AC                                    | LN                                   | 11871-1                | FL/AC                                               | TID 5004 row 3 |
| FL/BPD                                   | LN                                   | 11872-9                | FL/BPD                                              | TID 5004 row 3 |
| FL/HC                                    | LN                                   | 11873-7                | FL/HC                                               | TID 5004 row 3 |
| HC/AC                                    | LN                                   | 11947-9                | HC/AC                                               | TID 5004 row 3 |
| LVW/HW                                   | 99ALOKA                              | A12004-002             | LVW/HW                                              | TID 5004 row 3 |
|                                          |                                      |                        |                                                     |                |
| AC                                       | LN                                   | 11979-2                | Abdominal Circumference                             | TID 5005 row 3 |
| AC2                                      | 99ALOKA                              | A12005-011             | Abdominal Circumference for BMUS                    | TID 5005 row 3 |
| AD                                       | 99ALOKA                              | A12005-006             | Abdominal Diameter                                  | TID 5005 row 3 |
| AF Pocket                                | 99ALOKA                              | A12005-009             | Amniotic Fluid Volume                               | TID 5005 row 3 |
| AFV                                      | 99ALOKA                              | A12005-009             | Amniotic Fluid Volume                               | TID 5005 row 3 |
| MVP                                      | 99ALOKA                              | A12005-012             | Maximum Vertical Pocket                             | TID 5005 row 3 |
| APD                                      | LN                                   | 11818-2                | Anterior-Posterior Abdominal Diameter               | TID 5005 row 3 |
| APTD                                     | LN                                   | 11818-2                | Anterior-Posterior Abdominal Diameter               | TID 5005 row 3 |
| AXT                                      | LN                                   | 33191-8                | APAD * TAD                                          | TID 5005 row 3 |
| BD                                       | 99ALOKA                              | A12005-001             | Binocular Distance                                  | TID 5005 row 3 |
| BPD                                      | LN                                   | 11820-8                | Biparietal Diameter                                 | TID 5005 row 3 |
| BPD <sub>o</sub>                         | 99ALOKA                              | A12005-002             | Biparietal Diameter outer-to-outer                  | TID 5005 row 3 |
| CD                                       | LN                                   | 11863-8                | Trans Cerebellar Diameter                           | TID 5007 row 3 |
| CRL                                      | LN                                   | 11957-8                | Crown Rump Length                                   | TID 5011 row 3 |
| EES                                      | 99ALOKA                              | A12009-001             | Early Embryonic Size                                | TID 5011 row 3 |
| FIB                                      | LN                                   | 11964-4                | Fibula length                                       | TID 5006 row 3 |
| FL                                       | LN                                   | 11963-6                | Femur Length                                        | TID 5006 row 3 |
| FTA                                      | 99ALOKA                              | A12005-003             | Fetal Trunk Cross Sectional Area                    | TID 5005 row 3 |
| GS                                       | LN                                   | 11850-5                | Gestational Sac Diameter                            | TID 5011 row 3 |
| HC                                       | LN                                   | 11984-2                | Head Circumference                                  | TID 5005 row 3 |
| HC2                                      | 99ALOKA                              | A12005-008             | Head Circumference for Merz, Hansmann               | TID 5005 row 3 |
| HC3                                      | 99ALOKA                              | A12005-010             | Head Circumference for BMUS                         | TID 5005 row 3 |
| HL                                       | LN                                   | 11966-9                | Humerus length                                      | TID 5006 row 3 |

| Label                 | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                  | Mapping        |
|-----------------------|--------------------------------------|------------------------|-------------------------------------------|----------------|
| HW                    | LN                                   | 12170-7                | Width of Hemisphere                       | TID 5007 row 3 |
| IOD                   | LN                                   | 33070-4                | Inner Orbital Diameter                    | TID 5007 row 3 |
| LV                    | 99ALOKA                              | A12005-004             | Length of Vertebrae                       | TID 5005 row 3 |
| LVW                   | LN                                   | 12171-5                | Lateral Ventricular width                 | TID 5007 row 3 |
| mGS, D1               | 99ALOKA                              | A12009-002             | Gestational Sac Diameter 1                | TID 5011 row 3 |
| mGS, D2               | 99ALOKA                              | A12009-003             | Gestational Sac Diameter 2                | TID 5011 row 3 |
| mGS, D3               | 99ALOKA                              | A12009-004             | Gestational Sac Diameter 3                | TID 5011 row 3 |
| mGS, mGS              | 99ALOKA                              | A12009-005             | Mean Gestational Sac Diameter             | TID 5011 row 3 |
| NBL                   | 99ALOKA                              | A12006-001             | Nasal Bone Length                         | TID 5006 row 3 |
| NT                    | LN                                   | 33069-6                | Nuchal Translucency                       | TID 5011 row 3 |
| OFD                   | LN                                   | 11851-3                | Occipital-Frontal Diameter                | TID 5005 row 3 |
| OFDo                  | 99ALOKA                              | A12005-005             | Occipital-Frontal Diameter outer-to-outer | TID 5005 row 3 |
| OOD                   | LN                                   | 11629-3                | Outer Orbital Diameter                    | TID 5007 row 3 |
| RAD                   | LN                                   | 11967-7                | Radius length                             | TID 5006 row 3 |
| TAD                   | LN                                   | 11862-0                | Tranverse Abdominal Diameter              | TID 5005 row 3 |
| TC                    | LN                                   | 11988-3                | Thoracic Circumference                    | TID 5005 row 3 |
| TIB                   | LN                                   | 11968-5                | Tibia length                              | TID 5006 row 3 |
| TL                    | 99ALOKA                              | A12005-007             | Thoracic Length                           | TID 5005 row 3 |
| TTD                   | LN                                   | 11862-0                | Tranverse Abdominal Diameter              | TID 5005 row 3 |
| ULNA                  | LN                                   | 11969-3                | Ulna length                               | TID 5006 row 3 |
|                       |                                      |                        |                                           |                |
| BPP, Breathing        | LN                                   | 11632-7                | Fetal Breathing                           | TID 5009 row 4 |
| BPP, Movement         | LN                                   | 11631-9                | Gross Body Movement                       | TID 5009 row 3 |
| BPP, Tone             | LN                                   | 11635-0                | Fetal Tone                                | TID 5009 row 5 |
| BPP, Fluid            | LN                                   | 11630-1                | Amniotic Fluid Volume                     | TID 5009 row 7 |
| BPP, Non-Stress Test  | LN                                   | 11635-5                | Fetal Heart Reactivity                    | TID 5009 row 6 |
| BPP, Total Score      | LN                                   | 11634-3                | Biophysical Profile Sum Score             | TID 5009 row 8 |
|                       |                                      |                        |                                           |                |
| AFI, AFI <sup>1</sup> | LN                                   | 11627-7                | Amniotic Fluid Index                      | TID 5010 row 3 |
| AFI, Q1               | LN                                   | 11624-4                | First Quadrant Diameter                   | TID 5010 row 4 |

| Label            | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)             | Mapping                                                     |
|------------------|--------------------------------------|------------------------|--------------------------------------|-------------------------------------------------------------|
| AFI, Q2          | LN                                   | 11626-9                | Second Quadrant Diameter             | TID 5010 row 4                                              |
| AFI, Q3          | LN                                   | 11625-1                | Third Quadrant Diameter              | TID 5010 row 4                                              |
| AFI, Q4          | LN                                   | 11623-6                | Fourth Quadrant Diameter             | TID 5010 row 4                                              |
|                  |                                      |                        |                                      |                                                             |
| Cervix           | LN                                   | 11961-0                | Cervix Length                        | TID 5015 row 3                                              |
|                  |                                      |                        |                                      |                                                             |
| MCA              | SRT                                  | T-45600                | Middle Cerebral Artery               | TID 5025 row 1                                              |
| MCA, PI          | LN                                   | 12008-9                | Pulsatility Index                    | TID 5025 row 4                                              |
| MCA, RI          | LN                                   | 12023-8                | Resistivity Index                    | TID 5025 row 4                                              |
| MCA, S/D         | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID 5025 row 4                                              |
| MCA, PSV         | LN                                   | 11726-7                | Peak Systolic Velocity               | TID 5025 row 4                                              |
| MCA, EDV         | LN                                   | 11653-3                | End Diastolic Velocity               | TID 5025 row 4                                              |
| MCA, MnV         | LN                                   | 11692-1                | Time averaged peak velocity          | TID 5025 row 4                                              |
| UmA <sup>1</sup> | SRT                                  | T-F1810                | Umbilical Artery                     | TID 5026 row 1,<br>TID ALOKA-5000 row3 - TID ALOKA-300 row1 |
| UmA, PI          | LN                                   | 12008-9                | Pulsatility Index                    | TID 5026 row 4,<br>TID ALOKA-300 row3                       |
| UmA, RI          | LN                                   | 12023-8                | Resistivity Index                    | TID 5026 row 4,<br>TID ALOKA-300 row3                       |
| UmA, S/D         | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID 5026 row 4,<br>TID ALOKA-300 row3                       |
| UmA, PSV         | LN                                   | 11726-7                | Peak Systolic Velocity               | TID 5026 row 4,<br>TID ALOKA-300 row3                       |
| UmA, EDV         | LN                                   | 11653-3                | End Diastolic Velocity               | TID 5026 row 4,<br>TID ALOKA-300 row3                       |
| UmA, MnV         | LN                                   | 11692-1                | Time averaged peak velocity          | TID 5026 row 4,<br>TID ALOKA-300 row3                       |
| Rt.UtA           | SRT                                  | T-46820                | Uterine Artery                       | TID ALOKA-5001 row2 -TID ALOKA-300 row1                     |
| Rt.UtA, PI       | LN                                   | 12008-9                | Pulsatility Index                    | TID ALOKA-300 row3                                          |
| Rt.UtA, RI       | LN                                   | 12023-8                | Resistivity Index                    | TID ALOKA-300 row3                                          |
| Rt.UtA, S/D      | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID ALOKA-300 row3                                          |

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)             | Mapping                                 |
|--------------|--------------------------------------|------------------------|--------------------------------------|-----------------------------------------|
| Rt.UtA, PSV  | LN                                   | 11726-7                | Peak Systolic Velocity               | TID ALOKA-300 row3                      |
| Rt.UtA, EDV  | LN                                   | 11653-3                | End Diastolic Velocity               | TID ALOKA-300 row3                      |
| Rt.UtA, MnV  | LN                                   | 11692-1                | Time averaged peak velocity          | TID ALOKA-300 row3                      |
| Lt.UtA       | SRT                                  | T-46820                | Uterine Artery                       | TID ALOKA-5001 row2 -TID ALOKA-300 row1 |
| Lt.UtA, PI   | LN                                   | 12008-9                | Pulsatility Index                    | TID ALOKA-300 row3                      |
| Lt.UtA, RI   | LN                                   | 12023-8                | Resistivity Index                    | TID ALOKA-300 row3                      |
| Lt.UtA, S/D  | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID ALOKA-300 row3                      |
| Lt.UtA, PSV  | LN                                   | 11726-7                | Peak Systolic Velocity               | TID ALOKA-300 row3                      |
| Lt.UtA, EDV  | LN                                   | 11653-3                | End Diastolic Velocity               | TID ALOKA-300 row3                      |
| Lt.UtA, MnV  | LN                                   | 11692-1                | Time averaged peak velocity          | TID ALOKA-300 row3                      |
| D-Ao         | SRT                                  | T-D0765                | Descending Aorta                     | TID 5025 row 1                          |
| D-Ao, PI     | LN                                   | 12008-9                | Pulsatility Index                    | TID 5025 row 4                          |
| D-Ao, RI     | LN                                   | 12023-8                | Resistivity Index                    | TID 5025 row 4                          |
| D-Ao, S/D    | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID 5025 row 4                          |
| D-Ao, PSV    | LN                                   | 11726-7                | Peak Systolic Velocity               | TID 5025 row 4                          |
| D-Ao, EDV    | LN                                   | 11653-3                | End Diastolic Velocity               | TID 5025 row 4                          |
| D-Ao, MnV    | LN                                   | 11692-1                | Time averaged peak velocity          | TID 5025 row 4                          |
| OB Dop1      | 99ALOKA                              | ALOKA_001-001          | OB User Definition Doppler1          | TID ALOKA-5000 row3 -TID ALOKA-300 row1 |
| OB Dop1, PI  | LN                                   | 12008-9                | Pulsatility Index                    | TID ALOKA-300 row3                      |
| OB Dop1, RI  | LN                                   | 12023-8                | Resistivity Index                    | TID ALOKA-300 row3                      |
| OB Dop1, S/D | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID ALOKA-300 row3                      |
| OB Dop1, PSV | LN                                   | 11726-7                | Peak Systolic Velocity               | TID ALOKA-300 row3                      |
| OB Dop1, EDV | LN                                   | 11653-3                | End Diastolic Velocity               | TID ALOKA-300 row3                      |
| OB Dop1, MnV | LN                                   | 11692-1                | Time averaged peak velocity          | TID ALOKA-300 row3                      |
| OB Dop2      | 99ALOKA                              | ALOKA_001-002          | OB User Definition Doppler2          | TID ALOKA-5000 row3 -TID ALOKA-300 row1 |
| OB Dop2, PI  | LN                                   | 12008-9                | Pulsatility Index                    | TID ALOKA-300 row3                      |
| OB Dop2, RI  | LN                                   | 12023-8                | Resistivity Index                    | TID ALOKA-300 row3                      |

| Label                                  | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                           | Mapping                                                     |
|----------------------------------------|--------------------------------------|------------------------|----------------------------------------------------|-------------------------------------------------------------|
| OB Dop2, S/D                           | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio               | TID ALOKA-300 row3                                          |
| OB Dop2, PSV                           | LN                                   | 11726-7                | Peak Systolic Velocity                             | TID ALOKA-300 row3                                          |
| OB Dop2, EDV                           | LN                                   | 11653-3                | End Diastolic Velocity                             | TID ALOKA-300 row3                                          |
| OB Dop2, MnV                           | LN                                   | 11692-1                | Time averaged peak velocity                        | TID ALOKA-300 row3                                          |
| OB Dop3                                | 99ALOKA                              | ALOKA_001-003          | OB User Definition Doppler3                        | TID ALOKA-5000 row3 -TID ALOKA-300 row1                     |
| OB Dop3, PI                            | LN                                   | 12008-9                | Pulsatility Index                                  | TID ALOKA-300 row3                                          |
| OB Dop3, RI                            | LN                                   | 12023-8                | Resistivity Index                                  | TID ALOKA-300 row3                                          |
| OB Dop3, S/D                           | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio               | TID ALOKA-300 row3                                          |
| OB Dop3, PSV                           | LN                                   | 11726-7                | Peak Systolic Velocity                             | TID ALOKA-300 row3                                          |
| OB Dop3, EDV                           | LN                                   | 11653-3                | End Diastolic Velocity                             | TID ALOKA-300 row3                                          |
| OB Dop3, MnV                           | LN                                   | 11692-1                | Time averaged peak velocity                        | TID ALOKA-300 row3                                          |
| DV(Ductus Venosus)                     | 99ALOKA                              | A12141-001             | Ductus Venosus                                     | TID 5025 row 1                                              |
| DV(Ductus Venosus), PI                 | LN                                   | 12008-9                | Pulsatility Index                                  | TID 5025 row 4                                              |
| DV(Ductus Venosus), a/S                | 99ALOKA                              | A12121-002             | atrial contraction to Systolic peak Velocity Ratio | TID 5025 row 4                                              |
| DV(Ductus Venosus), S                  | LN                                   | 11726-7                | Peak Systolic Velocity                             | TID 5025 row 4                                              |
| DV(Ductus Venosus), a                  | 99ALOKA                              | A12120-001             | atrial contraction                                 | TID 5025 row 4                                              |
| DV(Ductus Venosus), MnV                | LN                                   | 11692-1                | Time averaged peak velocity                        | TID 5025 row 4                                              |
| DV(Ductus Venosus), D                  | 99ALOKA                              | A12120-002             | Peak Diastolic Velocity                            | TID 5025 row 4                                              |
| DV(Ductus Venosus), S/a                | 99ALOKA                              | A12121-003             | Systolic peak to atrial contraction Velocity Ratio | TID 5025 row 4                                              |
| DV(Ductus Venosus), PVIV               | 99ALOKA                              | A12121-004             | Peak velocity index for veins                      | TID 5025 row 4                                              |
| User-defined Equation Result Parameter | 99ALOKA                              | ALOKA_002-001          | Calculated result.                                 | TID ALOKA-5002 row2 -TID ALOKA-301 row4 -TID ALOKA-302 row1 |

| <b>Label</b>                    | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b>                                              |
|---------------------------------|---------------------------------------------|-------------------------------|---------------------------------|-------------------------------------------------------------|
| User-defined Equation Parameter | 99ALOKA                                     | ALOKA_002-002                 | Equation parameter              | TID ALOKA-5002 row2 -TID ALOKA-301 row4 -TID ALOKA-302 row1 |

Note: 1. UmA is included in both TID 5026(not TID 5025) and TID ALOKA-5000.

When UmA is measured on multiple fetuses, the precedence to be included in TID 5026 is Fetus a, b, then c. TID ALOKA-5000 includes UmA measured on each fetus.

#### TID 1008 Subject Context, Fetus

| <b>Label</b> | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b> |
|--------------|---------------------------------------------|-------------------------------|---------------------------------|----------------|
| Fetus a/b/c  | LN                                          | 11951-1                       | Fetus ID                        | TID 1008 row 4 |

Note: Fetus ID is included in Structured Report as "A", "B", "C". When singleton fetus, Fetus ID is always "A".

#### GYN measurements :

TID 5000 row 15 - TID 5015 Pelvis and Uterus Section

TID 5000 row 16 - TID 5012 Ovaries Section

TID 5000 row 17 - TID 5013 Follicles Section

TID 5000 row 18 - TID 5013 Follicles Section

TID 5000 row 29(Extension) - TID ALOKA-301 User Defined Equation Section

| <b>Label</b>   | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>  | <b>Mapping</b>                  |
|----------------|---------------------------------------------|-------------------------------|----------------------------------|---------------------------------|
| Uterus, Length | LN                                          | 11842-2                       | Uterus Length                    | TID 5015 row 2 - TID 5016 row 3 |
| Uterus, AP     | LN                                          | 11859-6                       | Uterus Height                    | TID 5015 row 2 - TID 5016 row 5 |
| Uterus, Width  | LN                                          | 11865-3                       | Uterus Width                     | TID 5015 row 2 - TID 5016 row 4 |
| Uterus, Volume | LN                                          | 33192-6                       | Uterus Volume                    | TID 5015 row 2 - TID 5016 row 2 |
| Cervix, Length | LN                                          | 11961-0                       | Cervix Length                    | TID 5015 row 3                  |
| Cervix, AP     | 99ALOKA                                     | A12011-002                    | Cervix Antero-Posterior Diameter | TID 5015 row 3                  |

| <b>Label</b>               | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>             | <b>Mapping</b>                     |
|----------------------------|---------------------------------------------|-------------------------------|---------------------------------------------|------------------------------------|
| Cervix, Width              | 99ALOKA                                     | A12011-001                    | Cervix Width                                | TID 5015 row 3                     |
| Endom-T                    | LN                                          | 12145-9                       | Endometrium Thickness                       | TID 5015 row 3                     |
| Pre Bldrvol, Length        | 99ALOKA                                     | A12011-003                    | Pre Void Bladder Length                     | TID 5015 row 3                     |
| Pre Bldrvol, AP            | 99ALOKA                                     | A12011-004                    | Pre Void Bladder Antero-Posterior Diameter  | TID 5015 row 3                     |
| Pre Bldrvol, Width         | 99ALOKA                                     | A12011-005                    | Pre Void Bladder Width                      | TID 5015 row 3                     |
| Pre Bldrvol, Volume        | 99ALOKA                                     | A12011-006                    | Pre Void Bladder Volume                     | TID 5015 row 3                     |
| Pst Bldrvol, Length        | 99ALOKA                                     | A12011-007                    | Post Void Bladder Length                    | TID 5015 row 3                     |
| Pst Bldrvol, AP            | 99ALOKA                                     | A12011-008                    | Post Void Bladder Antero-Posterior Diameter | TID 5015 row 3                     |
| Pst Bldrvol, Width         | 99ALOKA                                     | A12011-009                    | Post Void Bladder Width                     | TID 5015 row 3                     |
| Pst Bldrvol, Volume        | 99ALOKA                                     | A12011-010                    | Post Void Bladder Volume                    | TID 5015 row 3                     |
| Void Volume                | 99ALOKA                                     | A12011-011                    | Bladder Void Volume                         | TID 5015 row 3                     |
|                            |                                             |                               |                                             |                                    |
| Left Ovary, Length         | LN                                          | 11840-6                       | Left Ovary Length                           | TID 5012 row 3 -<br>TID 5016 row 3 |
| Left Ovary, AP             | LN                                          | 11857-0                       | Left Ovary Height                           | TID 5012 row 3 -<br>TID 5016 row 5 |
| Left Ovary, Width          | LN                                          | 11829-9                       | Left Ovary Width                            | TID 5012 row 3 -<br>TID 5016 row 4 |
| Left Ovary, Volume         | LN                                          | 12164-0                       | Left Ovary Volume                           | TID 5012 row 3 -<br>TID 5016 row 2 |
| Right Ovary, Length        | LN                                          | 11841-4                       | Right Ovary Length                          | TID 5012 row 4 -<br>TID 5016 row 3 |
| Right Ovary, AP            | LN                                          | 11858-8                       | Right Ovary Height                          | TID 5012 row 4 -<br>TID 5016 row 5 |
| Right Ovary, Width         | LN                                          | 11830-7                       | Right Ovary Width                           | TID 5012 row 4 -<br>TID 5016 row 4 |
| Right Ovary, Volume        | LN                                          | 12165-7                       | Right Ovary Volume                          | TID 5012 row 4 -<br>TID 5016 row 2 |
|                            |                                             |                               |                                             |                                    |
| Follicles (up to 10 items) | -                                           | -                             | -                                           | -                                  |
| Left Follicles, D1         | LN                                          | 11793-7                       | Follicle Diameter                           | TID 5013 row 5 -<br>TID 5014 row 4 |
| Left Follicles, D2         | LN                                          | 11793-7                       | Follicle Diameter                           | TID 5013 row 5 -<br>TID 5014 row 4 |
| Left Follicles, Average    | LN                                          | 11793-7                       | Follicle Diameter                           | TID 5013 row 5 -<br>TID 5014 row 4 |

| Label                             | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping                                           |
|-----------------------------------|--------------------------------------|------------------------|--------------------------|---------------------------------------------------|
| Left Follicles, Volume            | SRT                                  | G-D705                 | Volume                   | TID 5013 row 5 -<br>TID 5014 row 3                |
| Right Follicles, D1               | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, D2               | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, Average          | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, Volume           | SRT                                  | G-D705                 | Volume                   | TID 5013 row 5 -<br>TID 5014 row 3                |
|                                   |                                      |                        |                          |                                                   |
| Follicles Volume (up to 10 items) | -                                    | -                      | -                        | -                                                 |
| Left Follicles, D1                | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Left Follicles, D2                | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Left Follicles, D3                | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Left Follicles, Average           | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Left Follicles, Volume            | SRT                                  | G-D705                 | Volume                   | TID 5013 row 5 -<br>TID 5014 row 3                |
| Right Follicles, D1               | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, D2               | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, D3               | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, Average          | LN                                   | 11793-7                | Follicle Diameter        | TID 5013 row 5 -<br>TID 5014 row 4                |
| Right Follicles, Volume           | SRT                                  | G-D705                 | Volume                   | TID 5013 row 5 -<br>TID 5014 row 3                |
| Rt.Uterine Artery                 | SRT                                  | T-46820                | Uterine Artery           | TID ALOKA_5001<br>row2 -<br>TID ALOKA_300<br>row1 |
| Rt.Uterine Artery, PI             | LN                                   | 12008-9                | Pulsatility Index        | TID ALOKA_300<br>row3                             |
| Rt.Uterine Artery, RI             | LN                                   | 12023-8                | Resistivity Index        | TID ALOKA_300<br>row3                             |

| <b>Label</b>                           | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>      | <b>Mapping</b>                         |
|----------------------------------------|---------------------------------------------|-------------------------------|--------------------------------------|----------------------------------------|
| Rt.Uterine Artery, S/D                 | LN                                          | 12144-2                       | Systolic to Diastolic Velocity Ratio | TID ALOKA _300 row3                    |
| Rt.Uterine Artery, PSV                 | LN                                          | 11726-7                       | Peak Systolic Velocity               | TID ALOKA _300 row3                    |
| Rt.Uterine Artery, EDV                 | LN                                          | 11653-3                       | End Diastolic Velocity               | TID ALOKA _300 row3                    |
| Rt.Uterine Artery, MnV                 | LN                                          | 11692-1                       | Time averaged peak velocity          | TID ALOKA _300 row3                    |
| User-defined Equation Result Parameter | 99ALOKA                                     | ALOKA_002-001                 | Calculated result.                   | TID ALOKA-301 row4 -TID ALOKA-302 row1 |
| User-defined Equation Parameter        | 99ALOKA                                     | ALOKA_002-002                 | Equation parameter                   | TID ALOKA-301 row4 -TID ALOKA-302 row1 |

#### 8.6.2.2 TID 5100 Vascular Ultrasound Report

TID 5100 row 4 - TID 1001 Observation Context

| <b>Label</b> | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b>                                         |
|--------------|---------------------------------------------|-------------------------------|---------------------------------|--------------------------------------------------------|
| Patient Name | DCM                                         | 121029                        | Subject Name                    | TID 1001 row 3 -<br>TID 1006 row 2 -<br>TID 1007 row 2 |

TID 5100 row 5 - TID 5101 Vascular Patient Characteristics

| <b>Label</b>               | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b> |
|----------------------------|---------------------------------------------|-------------------------------|---------------------------------|----------------|
| Age                        | DCM                                         | 121033                        | Subject Age                     | TID 5101 row 2 |
| Sex                        | DCM                                         | 121032                        | Subject Sex                     | TID 5101 row 3 |
| Blood Pressure (Systolic)  | SRT                                         | F-008EC                       | Systolic Blood Pressure         | TID 5101 row 5 |
| Blood Pressure (Diastolic) | SRT                                         | F-008ED                       | Diastolic Blood Pressure        | TID 5101 row 6 |

TID 5100 row 8 - TID 5102 Vascular Procedure Summary Section

| Label    | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping        |
|----------|--------------------------------------|------------------------|--------------------------|----------------|
| Comments | DCM                                  | 121106                 | Comment                  | TID 5102 row 2 |

Vascular measurements :

TID 5100 row 9 - TID 5103 Vascular Ultrasound Section (Blood Vessel of Head, Left)  
 TID 5100 row 10 - TID 5103 Vascular Ultrasound Section (Blood Vessel of Head, Right)  
 TID 5100 row 11 - TID 5103 Vascular Ultrasound Section (Blood Vessel of Head, Unilateral)  
 TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)  
 TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)  
 TID 5100 row 14 - TID 5103 Vascular Ultrasound Section (Artery of Lower Extremity, Left)  
 TID 5100 row 15 - TID 5103 Vascular Ultrasound Section (Artery of Lower Extremity, Right)  
 TID 5100 row 16 - TID 5103 Vascular Ultrasound Section (Vein of Lower Extremity, Left)  
 TID 5100 row 17 - TID 5103 Vascular Ultrasound Section (Vein of Lower Extremity, Right)  
 TID 5100 row 18 - TID 5103 Vascular Ultrasound Section (Artery Of Upper Extremity, Left)  
 TID 5100 row 19 - TID 5103 Vascular Ultrasound Section (Artery Of Upper Extremity, Right)  
 TID 5100 row 20 - TID 5103 Vascular Ultrasound Section (Vein Of Upper Extremity, Left)  
 TID 5100 row 21 - TID 5103 Vascular Ultrasound Section (Vein Of Upper Extremity, Right)  
 TID 5100 row 31(Extension) - TID ALOKA-301 User Defined Equation Section

| Label                       | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)    | Mapping                            |
|-----------------------------|--------------------------------------|------------------------|-----------------------------|------------------------------------|
| (Modifier) <sup>1</sup>     |                                      |                        |                             |                                    |
| Left                        | SRT                                  | G-A101                 | Left                        | TID 5103 row 3                     |
| Right                       | SRT                                  | G-A100                 | Right                       | TID 5103 row 3                     |
| -                           | SRT                                  | G-A103                 | Unilateral                  | TID 5103 row 3                     |
| - (prox)                    | SRT                                  | G-A118                 | Proximal                    | TID 5103 row 4 -<br>TID 5104 row 2 |
| - (mid)                     | SRT                                  | G-A188                 | Mid-longitudinal            | TID 5103 row 4 -<br>TID 5104 row 2 |
| - (distal)                  | SRT                                  | G-A119                 | Distal                      | TID 5103 row 4 -<br>TID 5104 row 2 |
|                             |                                      |                        |                             |                                    |
| (Measurements) <sup>2</sup> |                                      |                        |                             |                                    |
| PSV<br>pV                   | LN                                   | 11726-7                | Peak Systolic Velocity      | TID 5103 row 4 -<br>TID 5104 row 4 |
| EDV                         | LN                                   | 11653-3                | End Diastolic Velocity      | TID 5103 row 4 -<br>TID 5104 row 4 |
| MnV                         | LN                                   | 11692-1                | Time averaged peak velocity | TID 5103 row 4 -<br>TID 5104 row 4 |

| Label                                    | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)             | Mapping                            |
|------------------------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------------------|
| PI                                       | LN                                   | 12008-9                | Pulsatility Index                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| RI                                       | LN                                   | 12023-8                | Resistivity Index                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| S/D                                      | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID 5103 row 4 -<br>TID 5104 row 4 |
|                                          |                                      |                        |                                      |                                    |
| (Vessels)                                |                                      |                        |                                      |                                    |
| (row 9, 10)                              |                                      |                        |                                      |                                    |
| ACA                                      | SRT                                  | T-45540                | Anterior Cerebral Artery             | TID 5103 row 4 -<br>TID 5104 row 1 |
| MCA                                      | SRT                                  | T-45600                | Middle Cerebral Artery               | TID 5103 row 4 -<br>TID 5104 row 1 |
| PCA                                      | SRT                                  | T-45900                | Posterior Cerebral Artery            | TID 5103 row 4 -<br>TID 5104 row 1 |
| PCoA                                     | SRT                                  | T-45320                | Posterior Communicating Artery       | TID 5103 row 4 -<br>TID 5104 row 1 |
| TICA                                     | SRT                                  | R-102BD                | Terminal internal carotid artery     | TID 5103 row 4 -<br>TID 5104 row 1 |
| (row 11)                                 |                                      |                        |                                      |                                    |
| ACoA <sup>3</sup>                        | SRT                                  | T-45530                | Anterior Communicating Artery        | TID 5103 row 4 -<br>TID 5104 row 1 |
| BA                                       | SRT                                  | T-45800                | Basilar Artery                       | TID 5103 row 4 -<br>TID 5104 row 1 |
| (row 12, 13)                             |                                      |                        |                                      |                                    |
| BIFUR                                    | SRT                                  | T-45160                | Carotid Bifurcation                  | TID 5103 row 4 -<br>TID 5104 row 1 |
| CCA prox<br>CCA mid<br>CCA distal        | SRT                                  | T-45100                | Common Carotid Artery                | TID 5103 row 4 -<br>TID 5104 row 1 |
| ECA                                      | SRT                                  | T-45200                | External Carotid Artery              | TID 5103 row 4 -<br>TID 5104 row 1 |
| ICA<br>ICA prox<br>ICA mid<br>ICA distal | SRT                                  | T-45300                | Internal Carotid Artery              | TID 5103 row 4 -<br>TID 5104 row 1 |
| VA <sup>4</sup><br>VERT                  | SRT                                  | T-45700                | Vertebral Artery                     | TID 5103 row 4 -<br>TID 5104 row 1 |
| (row 14, 15)                             |                                      |                        |                                      |                                    |

| <b>Label</b>              | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b>                     |
|---------------------------|---------------------------------------------|-------------------------------|---------------------------------|------------------------------------|
| ATA                       | SRT                                         | T-47700                       | Anterior Tibial Artery          | TID 5103 row 4 -<br>TID 5104 row 1 |
| CFA                       | SRT                                         | T-47400                       | Common Femoral Artery           | TID 5103 row 4 -<br>TID 5104 row 1 |
| CIA                       | SRT                                         | T-46710                       | Common Iliac Artery             | TID 5103 row 4 -<br>TID 5104 row 1 |
| DFA (Deep Femoral Artery) | SRT                                         | T-47440                       | Profunda Femoris Artery         | TID 5103 row 4 -<br>TID 5104 row 1 |
| DPA                       | SRT                                         | T-47741                       | Dorsalis Pedis Artery           | TID 5103 row 4 -<br>TID 5104 row 1 |
| EIA                       | SRT                                         | T-46910                       | External Iliac Artery           | TID 5103 row 4 -<br>TID 5104 row 1 |
| IIA                       | SRT                                         | T-46740                       | Internal Iliac Artery           | TID 5103 row 4 -<br>TID 5104 row 1 |
| PerA                      | SRT                                         | T-47630                       | Peroneal Artery                 | TID 5103 row 4 -<br>TID 5104 row 1 |
| PopA                      | SRT                                         | T-47500                       | Popliteal Artery                | TID 5103 row 4 -<br>TID 5104 row 1 |
| PTA                       | SRT                                         | T-47600                       | Posterior Tibial Artery         | TID 5103 row 4 -<br>TID 5104 row 1 |
| SFA                       | SRT                                         | T-47403                       | Superficial Femoral Artery      | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.1                 | 99ALOKA                                     | A12109-001                    | User Definition Artery1         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.2                 | 99ALOKA                                     | A12109-002                    | User Definition Artery2         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.3                 | 99ALOKA                                     | A12109-003                    | User Definition Artery3         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.4                 | 99ALOKA                                     | A12109-004                    | User Definition Artery4         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.5                 | 99ALOKA                                     | A12109-005                    | User Definition Artery5         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.6                 | 99ALOKA                                     | A12109-006                    | User Definition Artery6         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.7                 | 99ALOKA                                     | A12109-007                    | User Definition Artery7         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Art.8                 | 99ALOKA                                     | A12109-008                    | User Definition Artery8         | TID 5103 row 4 -<br>TID 5104 row 1 |
| (row 16, 17)              |                                             |                               |                                 |                                    |
| ATV                       | SRT                                         | T-49630                       | Anterior Tibial Vein            | TID 5103 row 4 -<br>TID 5104 row 1 |

| <b>Label</b>            | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b>                     |
|-------------------------|---------------------------------------------|-------------------------------|---------------------------------|------------------------------------|
| CFV                     | SRT                                         | G-035B                        | Common Femoral Vein             | TID 5103 row 4 -<br>TID 5104 row 1 |
| CIV                     | SRT                                         | T-48920                       | Common Iliac Vein               | TID 5103 row 4 -<br>TID 5104 row 1 |
| DFV (Deep Femoral Vein) | SRT                                         | T-49660                       | Profunda Femoris Vein           | TID 5103 row 4 -<br>TID 5104 row 1 |
| EIV                     | SRT                                         | T-48930                       | External Iliac Vein             | TID 5103 row 4 -<br>TID 5104 row 1 |
| GSV                     | SRT                                         | T-49530                       | Great Saphenous Vein            | TID 5103 row 4 -<br>TID 5104 row 1 |
| IIV                     | SRT                                         | T-48940                       | Internal iliac vein             | TID 5103 row 4 -<br>TID 5104 row 1 |
| LSV                     | SRT                                         | T-49550                       | Lesser Saphenous Vein           | TID 5103 row 4 -<br>TID 5104 row 1 |
| PerV                    | SRT                                         | T-49650                       | Peroneal Vein                   | TID 5103 row 4 -<br>TID 5104 row 1 |
| PopV                    | SRT                                         | T-49640                       | Popliteal Vein                  | TID 5103 row 4 -<br>TID 5104 row 1 |
| PTV                     | SRT                                         | T-49620                       | Posterior Tibial Vein           | TID 5103 row 4 -<br>TID 5104 row 1 |
| SFV                     | SRT                                         | G-035A                        | Superficial Femoral Vein        | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.1              | 99ALOKA                                     | A12110-001                    | User Definition Vein1           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.2              | 99ALOKA                                     | A12110-002                    | User Definition Vein2           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.3              | 99ALOKA                                     | A12110-003                    | User Definition Vein3           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.4              | 99ALOKA                                     | A12110-004                    | User Definition Vein4           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.5              | 99ALOKA                                     | A12110-005                    | User Definition Vein5           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.6              | 99ALOKA                                     | A12110-006                    | User Definition Vein6           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.7              | 99ALOKA                                     | A12110-007                    | User Definition Vein7           | TID 5103 row 4 -<br>TID 5104 row 1 |
| Lwr Vein.8              | 99ALOKA                                     | A12110-008                    | User Definition Vein8           | TID 5103 row 4 -<br>TID 5104 row 1 |
| (row 18, 19)            |                                             |                               |                                 |                                    |
| AA                      | SRT                                         | T-47100                       | Axillary Artery                 | TID 5103 row 4 -<br>TID 5104 row 1 |

| <b>Label</b> | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> | <b>Mapping</b>                     |
|--------------|---------------------------------------------|-------------------------------|---------------------------------|------------------------------------|
| BA           | SRT                                         | T-47160                       | Brachial Artery                 | TID 5103 row 4 -<br>TID 5104 row 1 |
| BasA         | 99ALOKA                                     | A12107-002                    | Basilic Artery                  | TID 5103 row 4 -<br>TID 5104 row 1 |
| DBA          | 99ALOKA                                     | A12107-001                    | Deep Brachial Artery            | TID 5103 row 4 -<br>TID 5104 row 1 |
| RA           | SRT                                         | T-47300                       | Radial Artery                   | TID 5103 row 4 -<br>TID 5104 row 1 |
| ScA          | SRT                                         | T-46100                       | Subclavian Artery               | TID 5103 row 4 -<br>TID 5104 row 1 |
| SPA          | SRT                                         | T-47240                       | Superficial Palmar Arch         | TID 5103 row 4 -<br>TID 5104 row 1 |
| UA           | SRT                                         | T-47200                       | Ulnar Artery                    | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.1    | 99ALOKA                                     | A12107-003                    | User Definition Artery1         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.2    | 99ALOKA                                     | A12107-004                    | User Definition Artery2         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.3    | 99ALOKA                                     | A12107-005                    | User Definition Artery3         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.4    | 99ALOKA                                     | A12107-006                    | User Definition Artery4         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.5    | 99ALOKA                                     | A12107-007                    | User Definition Artery5         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.6    | 99ALOKA                                     | A12107-008                    | User Definition Artery6         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.7    | 99ALOKA                                     | A12107-009                    | User Definition Artery7         | TID 5103 row 4 -<br>TID 5104 row 1 |
| Upr Art.8    | 99ALOKA                                     | A12107-010                    | User Definition Artery8         | TID 5103 row 4 -<br>TID 5104 row 1 |
| (row 20, 21) |                                             |                               |                                 |                                    |
| AV           | SRT                                         | T-49110                       | Axillary vein                   | TID 5103 row 4 -<br>TID 5104 row 1 |
| BasV         | SRT                                         | T-48052                       | Basilic vein                    | TID 5103 row 4 -<br>TID 5104 row 1 |
| BV           | SRT                                         | T-49350                       | Brachial vein                   | TID 5103 row 4 -<br>TID 5104 row 1 |
| CV           | SRT                                         | T-49240                       | Cephalic vein                   | TID 5103 row 4 -<br>TID 5104 row 1 |
| DBV          | 99ALOKA                                     | A12108-001                    | Deep Brachial vein              | TID 5103 row 4 -<br>TID 5104 row 1 |

| Label                                  | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping                                |
|----------------------------------------|--------------------------------------|------------------------|--------------------------|----------------------------------------|
| IJV                                    | SRT                                  | T-48170                | Internal Jugular vein    | TID 5103 row 4 - TID 5104 row 1        |
| RV                                     | SRT                                  | T-49340                | Radial vein              | TID 5103 row 4 - TID 5104 row 1        |
| ScV                                    | SRT                                  | T-48330                | Subclavian vein          | TID 5103 row 4 - TID 5104 row 1        |
| UV                                     | SRT                                  | T-49330                | Ulnar vein               | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.1                             | 99ALOKA                              | A12108-002             | User Definition Vein1    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.2                             | 99ALOKA                              | A12108-003             | User Definition Vein2    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.3                             | 99ALOKA                              | A12108-004             | User Definition Vein3    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.4                             | 99ALOKA                              | A12108-005             | User Definition Vein4    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.5                             | 99ALOKA                              | A12108-006             | User Definition Vein5    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.6                             | 99ALOKA                              | A12108-007             | User Definition Vein6    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.7                             | 99ALOKA                              | A12108-008             | User Definition Vein7    | TID 5103 row 4 - TID 5104 row 1        |
| Upr Vein.8                             | 99ALOKA                              | A12108-009             | User Definition Vein8    | TID 5103 row 4 - TID 5104 row 1        |
| User-defined Equation Result Parameter | 99ALOKA                              | ALOKA_002-001          | Calculated result.       | TID ALOKA-301 row4 -TID ALOKA-302 row1 |
| User-defined Equation Parameter        | 99ALOKA                              | ALOKA_002-002          | Equation parameter       | TID ALOKA-301 row4 -TID ALOKA-302 row1 |

- Note:
1. Prox / mid / distal is included in Structured Report only for the measurements of CCA prox, CCA mid, CCA distal, ICA prox, ICA mid and ICA distal. Otherwise not included.
  2. PSV, EDV, MnV, PI, RI and S/D are included in Structured Report for the measurements of artery, pV for the measurements of vein.
  3. Although DICOM Standard defines ACoA (Anterior Communicating Artery) in CID 12105, it has no laterality and is included in row 11 "Unilateral" section of TID 5100.
  4. When both VA and VERT are measured, only VERT is included in Structured Report, not VA.

Abdomen measurements :

TID 5100 row 22 - TID 5103 Vascular Ultrasound Section (Vascular Structure Of Kidney, Left)  
TID 5100 row 23 - TID 5103 Vascular Ultrasound Section (Vascular Structure Of Kidney, Right)  
TID 5100 row 24 - TID 5103 Vascular Ultrasound Section (Artery of Abdomen, Left)  
TID 5100 row 25 - TID 5103 Vascular Ultrasound Section (Artery of Abdomen, Right)

TID 5100 row 26 - TID 5103 Vascular Ultrasound Section (Artery of Abdomen, Unilateral)  
TID 5100 row 29 - TID 5103 Vascular Ultrasound Section (Vein of Abdomen, Unilateral)  
TID 5100 row 31(Extension) - TID ALOKA-301 User Defined Equation Section  
TID 5100 row 32(Extension) - TID ALOKA-5100 Vascular Original Measurements Section

| Label                       | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)             | Mapping                            |
|-----------------------------|--------------------------------------|------------------------|--------------------------------------|------------------------------------|
| (Modifier) <sup>1</sup>     |                                      |                        |                                      |                                    |
| Left                        | SRT                                  | G-A101                 | Left                                 | TID 5103 row 3                     |
| Right                       | SRT                                  | G-A100                 | Right                                | TID 5103 row 3                     |
| -                           | SRT                                  | G-A103                 | Unilateral                           | TID 5103 row 3                     |
| - (prox)                    | SRT                                  | G-A118                 | Proximal                             | TID 5103 row 4 -<br>TID 5104 row 2 |
| - (mid)                     | SRT                                  | G-A188                 | Mid-longitudinal                     | TID 5103 row 4 -<br>TID 5104 row 2 |
| - (distal)                  | SRT                                  | G-A119                 | Distal                               | TID 5103 row 4 -<br>TID 5104 row 2 |
| Pre Prandial                | 99ALOKA                              | A-001                  | Pre-prandial                         | TID 5103 row 4 -<br>TID 5104 row 6 |
| Post Prandial               | SRT                                  | G-A491                 | Post-prandial                        | TID 5103 row 4 -<br>TID 5104 row 6 |
| Upper                       | SRT                                  | G-A116                 | Superior                             | TID 5104 Row 3                     |
| Mid                         | SRT                                  | G-A109                 | Medial                               | TID 5104 Row 3                     |
| Lower                       | SRT                                  | G-A115                 | Inferior                             | TID 5104 Row 3                     |
|                             |                                      |                        |                                      |                                    |
| (Measurements) <sup>2</sup> |                                      |                        |                                      |                                    |
| PSV<br>pV                   | LN                                   | 11726-7                | Peak Systolic Velocity               | TID 5103 row 4 -<br>TID 5104 row 4 |
| EDV                         | LN                                   | 11653-3                | End Diastolic Velocity               | TID 5103 row 4 -<br>TID 5104 row 4 |
| MnV                         | LN                                   | 11692-1                | Time averaged peak velocity          | TID 5103 row 4 -<br>TID 5104 row 4 |
| PI                          | LN                                   | 12008-9                | Pulsatility Index                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| RI                          | LN                                   | 12023-8                | Resistivity Index                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| S/D                         | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio | TID 5103 row 4 -<br>TID 5104 row 4 |
| AccT                        | LN                                   | 20168-1                | Acceleration Time                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| ACC                         | LN                                   | 20167-3                | Acceleration Index                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| FlowT                       | 99ALOKA                              | A12122-001             | Flow Time                            | TID 5103 row 4 -<br>TID 5104 row 4 |

| Label               | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)             | Mapping                         |
|---------------------|--------------------------------------|------------------------|--------------------------------------|---------------------------------|
| AccT/FlowT          | 99ALOKA                              | A12121-001             | Acceleration Time to Flow Time Ratio | TID 5103 row 4 - TID 5104 row 4 |
| RAR                 | LN                                   | 33869-9                | Renal Artery/Aorta velocity ratio    | TID 5103 row 5                  |
|                     |                                      |                        |                                      |                                 |
| (Vessels)           |                                      |                        |                                      |                                 |
| (row 22, 23)        |                                      |                        |                                      |                                 |
| Renal-A             | SRT                                  | T-46600                | Renal Artery                         | TID 5103 row 4 - TID 5104 row 1 |
| Renal-A hilum       | SRT                                  | G-035C                 | Hilar Artery                         | TID 5103 row 4 - TID 5104 row 1 |
| Seg-A               | SRT                                  | T-46659                | Segmental Artery                     | TID 5103 row 4 - TID 5104 row 1 |
| (row 24, 25)        |                                      |                        |                                      |                                 |
| CIA <sup>3</sup>    | SRT                                  | T-46710                | Common Iliac Artery                  | TID 5103 row 4 - TID 5104 row 1 |
| (row 26)            |                                      |                        |                                      |                                 |
| A-Ao                | SRT                                  | T-42000                | Aorta                                | TID 5103 row 4 - TID 5104 row 1 |
| CA                  | SRT                                  | T-46400                | Celiac Axis                          | TID 5103 row 4 - TID 5104 row 1 |
| CHA                 | SRT                                  | T-46421                | Common Hepatic Artery                | TID 5103 row 4 - TID 5104 row 1 |
| SA                  | SRT                                  | T-46460                | Splenic Artery                       | TID 5103 row 4 - TID 5104 row 1 |
| SMA<br>Prandial SMA | SRT                                  | T-46510                | Superior Mesenteric Artery           | TID 5103 row 4 - TID 5104 row 1 |
| IMA                 | SRT                                  | T-46520                | Inferior Mesenteric Artery           | TID 5103 row 4 - TID 5104 row 1 |
| HA, Left            | SRT                                  | T-46427                | Left Branch of Hepatic Artery        | TID 5103 row 4 - TID 5104 row 1 |
| HA, Right           | SRT                                  | T-46423                | Right Branch of Hepatic Artery       | TID 5103 row 4 - TID 5104 row 1 |
| Artery1             | 99ALOKA                              | A12112-001             | User Definition Artery1              | TID 5103 row 4 - TID 5104 row 1 |
| Artery2             | 99ALOKA                              | A12112-002             | User Definition Artery2              | TID 5103 row 4 - TID 5104 row 1 |
| Artery3             | 99ALOKA                              | A12112-003             | User Definition Artery3              | TID 5103 row 4 - TID 5104 row 1 |
| (row 29)            |                                      |                        |                                      |                                 |

| Label                                   | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                      | Mapping                                       |
|-----------------------------------------|--------------------------------------|------------------------|-----------------------------------------------|-----------------------------------------------|
| Main PV                                 | SRT                                  | T-48810                | Portal Vein                                   | TID 5103 row 4 -<br>TID 5104 row 1            |
| Lt.PV                                   | SRT                                  | T-4881F                | Left Main Branch of Portal Vein               | TID 5103 row 4 -<br>TID 5104 row 1            |
| Rt.PV                                   | SRT                                  | T-4882A                | Right Main Branch of Portal Vein              | TID 5103 row 4 -<br>TID 5104 row 1            |
| Prox Shunt<br>Mid Shunt<br>Distal Shunt | SRT                                  | G-036C                 | Transjugular Intrahepatic Portosystemic Shunt | TID 5103 row 4 -<br>TID 5104 row 1            |
| (row 31)                                |                                      |                        |                                               |                                               |
| User-defined Equation Result Parameter  | 99ALOKA                              | ALOKA_002-001          | Calculated result.                            | TID ALOKA-301 row4<br>-TID ALOKA-302 row1     |
| User-defined Equation Parameter         | 99ALOKA                              | ALOKA_002-002          | Equation parameter                            | TID ALOKA-301 row4<br>-TID ALOKA-302 row1     |
| (row 32)                                |                                      |                        |                                               |                                               |
| %Stenosis Diam.                         | 99ALOKA                              | ALOKA_005-001          | Vessel Diameter Stenosis Ratio                | TID ALOKA-5100 row 2 -<br>TID ALOKA-300 row 3 |
| %Stenosis Area                          | 99ALOKA                              | ALOKA_005-002          | Vessel Area Stenosis Ratio                    | TID ALOKA-5100 row 2 -<br>TID ALOKA-300 row 3 |
| Gallbladder                             | SRT                                  | T-63000                | Gall Bladder                                  | TID ALOKA-5100 row 2 -<br>TID ALOKA-300 row 3 |
| GB Wall-T                               | 99ALOKA                              | ALOKA_005-003          | Gall Bladder Wall                             | TID ALOKA-5100 row 2 -<br>TID ALOKA-300 row 3 |
| Right Liver<br>Left Liver               | SRT                                  | T-62000                | Liver                                         | TID ALOKA-5100 row 2 -<br>TID ALOKA-300 row 3 |
| CDB                                     | 99ALOKA                              | ALOKA_005-004          | Common Bile Duct                              | TID ALOKA-5100 row 2 -<br>TID ALOKA-300 row 3 |

| Label                                   | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping                                             |
|-----------------------------------------|--------------------------------------|------------------------|--------------------------|-----------------------------------------------------|
| Pancreas                                | SRT                                  | T-65000                | Pancreas                 | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| P-Duct                                  | SRT                                  | T-65010                | Pancreatic duct          | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| Right Renal Volume<br>Left Renal Volume | 99ALOKA                              | ALOKA_005-005          | Renal Volume             | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| Spleen                                  | SRT                                  | T-C3000                | Spleen                   | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| SOL1                                    | 99ALOKA                              | ALOKA_005-006          | Space Occupying Lesion1  | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| SOL2                                    | 99ALOKA                              | ALOKA_005-007          | Space Occupying Lesion2  | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| Aorta Diam                              | 99ALOKA                              | ALOKA_005-008          | Aorta Diameter           | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |
| PV Diam                                 | 99ALOKA                              | ALOKA_005-009          | Portal Vein Diameter     | TID ALOKA-5100<br>row 2 -<br>TID ALOKA-300<br>row 3 |

- Note:
1. Prox / mid / distal is included in Structured Report only for the measurements of Prox Shunt, Mid Shunt and Distal Shunt. Otherwise not included.  
Pre Prandial / Post Prandial is included only for the measurement of Prandial SMA. Otherwise not included.
  2. PSV, EDV, MnV, PI, RI, S/D, AccT, ACC, FlowT and AccT/FlowT are included in Structured Report for the measurements of Renal-A, Renal-A hilum and Seg-A (TID 5100 row 22, 23).  
RAR is included for the measurements of Renal-A (TID 5100 row 22, 23).  
PSV, EDV, MnV, PI, RI, S/D, AccT and ACC are included for the measurements of Artery of Abdomen (TID 5100 row 24, 25, 26).  
pV is included for the measurements of Vein of Abdomen (TID 5100 row 29).
  3. Although DICOM Standard defines CIA (Common Iliac Artery) in CID 12112 (unilateral), it has laterality and is included in row 24 "Left" and row 25 "Right" sections of TID 5100.

max-IMT measurements :

TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)

TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)       | Mapping                            |
|----------------|--------------------------------------|------------------------|--------------------------------|------------------------------------|
| (Modifier)     |                                      |                        |                                |                                    |
| Left           | SRT                                  | G-A101                 | Left                           | TID 5103 row 3                     |
| Right          | SRT                                  | G-A100                 | Right                          | TID 5103 row 3                     |
|                |                                      |                        |                                |                                    |
| (Measurements) |                                      |                        |                                |                                    |
| 1 max-IMT      | 99ALOKA                              | A12122-002             | Intima-media thickness 1       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 2 max-IMT      | 99ALOKA                              | A12122-003             | Intima-media thickness 2       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 3 max-IMT      | 99ALOKA                              | A12122-004             | Intima-media thickness 3       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 4 max-IMT      | 99ALOKA                              | A12122-005             | Intima-media thickness 4       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 5 max-IMT      | 99ALOKA                              | A12122-006             | Intima-media thickness 5       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 6 max-IMT      | 99ALOKA                              | A12122-007             | Intima-media thickness 6       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 7 max-IMT      | 99ALOKA                              | A12122-008             | Intima-media thickness 7       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 8 max-IMT      | 99ALOKA                              | A12122-009             | Intima-media thickness 8       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 9 max-IMT      | 99ALOKA                              | A12122-010             | Intima-media thickness 9       | TID 5103 row 4 -<br>TID 5104 row 4 |
| 10 max-IMT     | 99ALOKA                              | A12122-011             | Intima-media thickness 10      | TID 5103 row 4 -<br>TID 5104 row 4 |
| max-IMT        | 99ALOKA                              | A12122-012             | Maximum Intima-media thickness | TID 5103 row 4 -<br>TID 5104 row 4 |
|                |                                      |                        |                                |                                    |
| (Vessels)      |                                      |                        |                                |                                    |

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)       | Mapping                         |
|--------------|--------------------------------------|------------------------|--------------------------------|---------------------------------|
| (row 12, 13) |                                      |                        |                                |                                 |
| max-IMT      | 99ALOKA                              | A12104-001             | Maximum Intima-media thickness | TID 5103 row 4 - TID 5104 row 1 |
| Cmax-IMT     | SRT                                  | T-45100                | Common Carotid Artery          | TID 5103 row 4 - TID 5104 row 1 |
| Bmax-IMT     | SRT                                  | T-45160                | Carotid Bifurcation            | TID 5103 row 4 - TID 5104 row 1 |
| Imax-IMT     | SRT                                  | T-45300                | Internal Carotid Artery        | TID 5103 row 4 - TID 5104 row 1 |

mean-IMT measurements :

TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)

TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)    | Mapping                         |
|----------------|--------------------------------------|------------------------|-----------------------------|---------------------------------|
| (Modifier)     |                                      |                        |                             |                                 |
| Left           | SRT                                  | G-A101                 | Left                        | TID 5103 row 3                  |
| Right          | SRT                                  | G-A100                 | Right                       | TID 5103 row 3                  |
|                |                                      |                        |                             |                                 |
| (Measurements) |                                      |                        |                             |                                 |
| 1 IMT          | 99ALOKA                              | A12122-002             | Intima-media thickness 1    | TID 5103 row 4 - TID 5104 row 4 |
| 2 IMT          | 99ALOKA                              | A12122-003             | Intima-media thickness 2    | TID 5103 row 4 - TID 5104 row 4 |
| 3 IMT          | 99ALOKA                              | A12122-004             | Intima-media thickness 3    | TID 5103 row 4 - TID 5104 row 4 |
| mean-IMT       | 99ALOKA                              | A12122-013             | Mean Intima-media thickness | TID 5103 row 4 - TID 5104 row 4 |
|                |                                      |                        |                             |                                 |
| (Vessels)      |                                      |                        |                             |                                 |

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)    | Mapping                            |
|--------------|--------------------------------------|------------------------|-----------------------------|------------------------------------|
| (row 12, 13) |                                      |                        |                             |                                    |
| mean-IMT     | 99ALOKA                              | A12104-002             | Mean Intima-media thickness | TID 5103 row 4 -<br>TID 5104 row 1 |

IMT measurements :

TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)

TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     | Mapping                            |
|----------------|--------------------------------------|------------------------|--------------------------------------------------------------|------------------------------------|
| (Modifier)     |                                      |                        |                                                              |                                    |
| Left           | SRT                                  | G-A101                 | Left                                                         | TID 5103 row 3                     |
| Right          | SRT                                  | G-A100                 | Right                                                        | TID 5103 row 3                     |
| - (Farwall)    | 99ALOKA                              | A12117-001             | far wall                                                     | TID 5103 row 4 -<br>TID 5104 row 3 |
| - (Nearwall)   | 99ALOKA                              | A12117-002             | near wall                                                    | TID 5103 row 4 -<br>TID 5104 row 3 |
|                |                                      |                        |                                                              |                                    |
| (Measurements) |                                      |                        |                                                              |                                    |
| D-max          | 99ALOKA                              | A12122-014             | Maximum Intima-media thickness at diastole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-min          | 99ALOKA                              | A12122-015             | Minimum Intima-media thickness at diastole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-average      | 99ALOKA                              | A12122-016             | Average Intima-media thickness at diastole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-SD           | 99ALOKA                              | A12122-018             | Standard Deviation of Intima-media thickness at diastole     | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-points       | 99ALOKA                              | A12122-019             | Measured number of Intima-media thickness points at diastole | TID 5103 row 4 -<br>TID 5104 row 4 |

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                    | Mapping                            |
|----------------|--------------------------------------|------------------------|-------------------------------------------------------------|------------------------------------|
| D-width        | 99ALOKA                              | A12122-020             | Width of ROI at diastole                                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-max          | 99ALOKA                              | A12122-021             | Maximum Intima-media thickness at systole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-min          | 99ALOKA                              | A12122-022             | Minimum Intima-media thickness at systole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-average      | 99ALOKA                              | A12122-023             | Average Intima-media thickness at systole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-SD           | 99ALOKA                              | A12122-025             | Standard Deviation of Intima-media thickness at systole     | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-points       | 99ALOKA                              | A12122-026             | Measured number of Intima-media thickness points at systole | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-width        | 99ALOKA                              | A12122-027             | Width of ROI at systole                                     | TID 5103 row 4 -<br>TID 5104 row 4 |
|                |                                      |                        |                                                             |                                    |
| (Vessels)      |                                      |                        |                                                             |                                    |
| (row 12, 13)   |                                      |                        |                                                             |                                    |
| CCA-IMT (Auto) | 99ALOKA                              | A12104-003             | Intima-media thickness of CCA by auto-detection             | TID 5103 row 4 -<br>TID 5104 row 1 |
| ICA-IMT (Auto) | 99ALOKA                              | A12104-004             | Intima-media thickness of ICA by auto-detection             | TID 5103 row 4 -<br>TID 5104 row 1 |
| ECA-IMT (Auto) | 99ALOKA                              | A12104-005             | Intima-media thickness of ECA by auto-detection             | TID 5103 row 4 -<br>TID 5104 row 1 |
| BIF-IMT (Auto) | 99ALOKA                              | A12104-006             | Intima-media thickness of BIFUR by auto-detection           | TID 5103 row 4 -<br>TID 5104 row 1 |

Cmean-IMT measurements :

TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)

TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     | Mapping                            |
|----------------|--------------------------------------|------------------------|--------------------------------------------------------------|------------------------------------|
| (Modifier)     |                                      |                        |                                                              |                                    |
| Left           | SRT                                  | G-A101                 | Left                                                         | TID 5103 row 3                     |
| Right          | SRT                                  | G-A100                 | Right                                                        | TID 5103 row 3                     |
| - (Farwall)    | 99ALOKA                              | A12117-001             | far wall                                                     | TID 5103 row 4 -<br>TID 5104 row 3 |
| - (Nearwall)   | 99ALOKA                              | A12117-002             | near wall                                                    | TID 5103 row 4 -<br>TID 5104 row 3 |
|                |                                      |                        |                                                              |                                    |
| (Measurements) |                                      |                        |                                                              |                                    |
| D-mean-IMT     | 99ALOKA                              | A12122-031             | Mean Intima-media thickness at diastole                      | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-1 IMT        | 99ALOKA                              | A12122-028             | Intima-media thickness 1 at diastole                         | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-2 IMT        | 99ALOKA                              | A12122-029             | Intima-media thickness 2 at diastole                         | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-3 IMT        | 99ALOKA                              | A12122-030             | Intima-media thickness 3 at diastole                         | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-points       | 99ALOKA                              | A12122-019             | Measured number of Intima-media thickness points at diastole | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-width        | 99ALOKA                              | A12122-020             | Width of ROI at diastole                                     | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-mean-IMT     | 99ALOKA                              | A12122-035             | Mean Intima-media thickness at systole                       | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-1 IMT        | 99ALOKA                              | A12122-032             | Intima-media thickness 1 at systole                          | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-2 IMT        | 99ALOKA                              | A12122-033             | Intima-media thickness 2 at systole                          | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-3 IMT        | 99ALOKA                              | A12122-034             | Intima-media thickness 3 at systole                          | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-points       | 99ALOKA                              | A12122-026             | Measured number of Intima-media thickness points at systole  | TID 5103 row 4 -<br>TID 5104 row 4 |

| Label           | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                              | Mapping                         |
|-----------------|--------------------------------------|------------------------|-------------------------------------------------------|---------------------------------|
| S-width         | 99ALOKA                              | A12122-027             | Width of ROI at systole                               | TID 5103 row 4 - TID 5104 row 4 |
|                 |                                      |                        |                                                       |                                 |
| (Vessels)       |                                      |                        |                                                       |                                 |
| (row 12, 13)    |                                      |                        |                                                       |                                 |
| CmeanIMT (Auto) | 99ALOKA                              | A12104-007             | Mean Carotid Intima-media thickness by auto-detection | TID 5103 row 4 - TID 5104 row 1 |

IMT-C10 measurements :

TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)

TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping                         |
|----------------|--------------------------------------|------------------------|--------------------------|---------------------------------|
| (Modifier)     |                                      |                        |                          |                                 |
| Left           | SRT                                  | G-A101                 | Left                     | TID 5103 row 3                  |
| Right          | SRT                                  | G-A100                 | Right                    | TID 5103 row 3                  |
|                |                                      |                        |                          |                                 |
| (Measurements) |                                      |                        |                          |                                 |
| C10            | 99ALOKA                              | A12122-036             | IMT-C10                  | TID 5103 row 4 - TID 5104 row 4 |
|                |                                      |                        |                          |                                 |
| (Vessels)      |                                      |                        |                          |                                 |
| (row 12, 13)   |                                      |                        |                          |                                 |
| IMT-C10        | 99ALOKA                              | A12104-008             | IMT-C10                  | TID 5103 row 4 - TID 5104 row 1 |

Auto IMT-C10 measurements :

TID 5100 row 12 - TID 5103 Vascular Ultrasound Section (Artery of neck, Left)

TID 5100 row 13 - TID 5103 Vascular Ultrasound Section (Artery of neck, Right)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     | Mapping                            |
|----------------|--------------------------------------|------------------------|--------------------------------------------------------------|------------------------------------|
| (Modifier)     |                                      |                        |                                                              |                                    |
| Left           | SRT                                  | G-A101                 | Left                                                         | TID 5103 row 3                     |
| Right          | SRT                                  | G-A100                 | Right                                                        | TID 5103 row 3                     |
|                |                                      |                        |                                                              |                                    |
| (Measurements) |                                      |                        |                                                              |                                    |
| D-C10          | 99ALOKA                              | A12122-017             | IMT-C10 at diastole                                          | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-max          | 99ALOKA                              | A12122-014             | Maximum Intima-media thickness at diastole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-min          | 99ALOKA                              | A12122-015             | Minimum Intima-media thickness at diastole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-avg          | 99ALOKA                              | A12122-016             | Average Intima-media thickness at diastole                   | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-SD           | 99ALOKA                              | A12122-018             | Standard Deviation of Intima-media thickness at diastole     | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-points       | 99ALOKA                              | A12122-019             | Measured number of Intima-media thickness points at diastole | TID 5103 row 4 -<br>TID 5104 row 4 |
| D-width        | 99ALOKA                              | A12122-020             | Width of ROI at diastole                                     | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-C10          | 99ALOKA                              | A12122-024             | IMT-C10 at systole                                           | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-max          | 99ALOKA                              | A12122-021             | Maximum Intima-media thickness at systole                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-min          | 99ALOKA                              | A12122-022             | Minimum Intima-media thickness at systole                    | TID 5103 row 4 -<br>TID 5104 row 4 |
| S-avg          | 99ALOKA                              | A12122-023             | Average Intima-media thickness at systole                    | TID 5103 row 4 -<br>TID 5104 row 4 |

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                    | Mapping                         |
|--------------|--------------------------------------|------------------------|-------------------------------------------------------------|---------------------------------|
| S-SD         | 99ALOKA                              | A12122-025             | Standard Deviation of Intima-media thickness at systole     | TID 5103 row 4 - TID 5104 row 4 |
| S-points     | 99ALOKA                              | A12122-026             | Measured number of Intima-media thickness points at systole | TID 5103 row 4 - TID 5104 row 4 |
| S-width      | 99ALOKA                              | A12122-027             | Width of ROI at systole                                     | TID 5103 row 4 - TID 5104 row 4 |
|              |                                      |                        |                                                             |                                 |
| (Vessels)    |                                      |                        |                                                             |                                 |
| (row 12, 13) |                                      |                        |                                                             |                                 |
| Auto IMT-C10 | 99ALOKA                              | A12104-009             | IMT-C10 by auto-detection                                   | TID 5103 row 4 - TID 5104 row 1 |

### 8.6.2.3 TID 5200 Echocardiography Procedure Report (Non-Advanced Cardiac)

TID 5200 row 3 - TID 1001 Observation Context

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping                                          |
|--------------|--------------------------------------|------------------------|--------------------------|--------------------------------------------------|
| Patient Name | DCM                                  | 121029                 | Subject Name             | TID 1001 row 3 - TID 1006 row 2 - TID 1007 row 2 |

TID 5200 row 4 - TID 5201 Echocardiography Patient Characteristics

| Label                      | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) | Mapping        |
|----------------------------|--------------------------------------|------------------------|--------------------------|----------------|
| Age                        | DCM                                  | 121033                 | Subject Age              | TID 5201 row 2 |
| Sex                        | DCM                                  | 121032                 | Subject Sex              | TID 5201 row 3 |
| Blood Pressure (Systolic)  | SRT                                  | F-008EC                | Systolic Blood Pressure  | TID 5201 row 5 |
| Blood Pressure (Diastolic) | SRT                                  | F-008ED                | Diastolic Blood Pressure | TID 5201 row 6 |

| Label                  | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                       | Mapping        |
|------------------------|--------------------------------------|------------------------|----------------------------------------------------------------|----------------|
| BSA                    | LN                                   | 8277-6                 | Body Surface Area                                              | TID 5201 row 7 |
| BSA Equation, DuBois   | DCM                                  | 122241                 | $BSA = 0.007184 * WT^{0.425} * HT^{0.725}$                     | TID 5201 row 8 |
| BSA Equation, Boyd     | 99ALOKA                              | A3663-001              | $BSA = 0.0003207 * WT^{(0.7285 - 0.0188 \log(WT))} * HT^{0.3}$ | TID 5201 row 8 |
| BSA Equation, Shintani | 99ALOKA                              | A3663-002              | $BSA = 0.007358 * HT^{0.725} * WT^{0.425}$                     | TID 5201 row 8 |

Cardio measurements :

TID 5200 row 9 - TID 5202 Echo Section (Echocardiography Left Ventricle)  
 TID 5200 row 10 - TID 5202 Echo Section (Echocardiography Right Ventricle)  
 TID 5200 row 11 - TID 5202 Echo Section (Echocardiography Left Atrium)  
 TID 5200 row 12 - TID 5202 Echo Section (Echocardiography Right Atrium)  
 TID 5200 row 13 - TID 5202 Echo Section (Echocardiography Aortic Valve)  
 TID 5200 row 14 - TID 5202 Echo Section (Echocardiography Mitral Valve)  
 TID 5200 row 15 - TID 5202 Echo Section (Echocardiography Pulmonic Valve)  
 TID 5200 row 16 - TID 5202 Echo Section (Echocardiography Tricuspid Valve)  
 TID 5200 row 17 - TID 5202 Echo Section (Echocardiography Aorta)  
 TID 5200 row 18 - TID 5202 Echo Section (Echocardiography Pulmonary Artery)  
 TID 5200 row 19 - TID 5202 Echo Section (Echocardiography Vena Cavae)  
 TID 5200 row 20 - TID 5202 Echo Section (Echocardiography Pulmonary Veins)  
 TID 5200 row 22 - TID 5202 Echo Section (Echocardiography Cardiac Shunt)  
 TID 5200 row 25(Extension) - TID ALOKA-301 User Defined Equation Section

The rightmost column "row" denotes the row number of TID 5200. In the "Modifier" column, "Image Mode(Group)" means TID 5202 row 4, "Image Mode" means TID 5203 row 5.

| Label                                      | Concept Name                                         | Modifier                                                                                                                            | row |
|--------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----|
| (Area-Length, BP-Ellipse, Bullet, Simpson) |                                                      |                                                                                                                                     |     |
| LVLd                                       | (18077-8, LN, "Left Ventricle diastolic major axis") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode") | 9   |
| LVLs                                       | (18076-0, LN, "Left Ventricle systolic major axis")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode")   | 9   |

| Label                                    | Concept Name                                                     | Modifier                                                                                                                                                                             | row |
|------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| (Simpson(Disc))                          |                                                                  |                                                                                                                                                                                      |     |
| LVL2d                                    | (18077-8, LN, "Left Ventricle diastolic major axis")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 9   |
| LVL2s                                    | (18076-0, LN, "Left Ventricle systolic major axis")              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")    | 9   |
| LVL4d                                    | (18077-8, LN, "Left Ventricle diastolic major axis")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |
| LVL4s                                    | (18076-0, LN, "Left Ventricle systolic major axis")              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber")   | 9   |
| (LV Volume (Pombo, Teichholz, Gibson))   |                                                                  |                                                                                                                                                                                      |     |
| LVIDd                                    | (29436-3, LN, "Left Ventricle Internal End Diastolic Dimension") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                  | 9   |
| LVIDs                                    | (29438-9, LN, "Left Ventricle Internal Systolic Dimension")      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode")                                                    | 9   |
| (LV Function (Pombo, Teichholz, Gibson)) |                                                                  |                                                                                                                                                                                      |     |
| LVIDd <sup>2</sup>                       | (29436-3, LN, "Left Ventricle Internal End Diastolic Dimension") | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-0394, SRT, "M mode")                                                    | 9   |
| LVIDs <sup>2</sup>                       | (29438-9, LN, "Left Ventricle Internal Systolic Dimension")      | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-0394, SRT, "M mode")                                                      | 9   |
| (BP-Ellipse)                             |                                                                  |                                                                                                                                                                                      |     |

| Label                     | Concept Name                                                                | Modifier                                                                                                                                                                                                                             | row |
|---------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| LVSLMVd                   | (A12201-001, 99ALOKA, "Left Ventricular Short Axis Length at Mitral Valve") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level")                    | 9   |
| LVSLMVd                   | (A12201-001, 99ALOKA, "Left Ventricular Short Axis Length at Mitral Valve") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level")                      | 9   |
| (Area-Length, BP-Ellipse) |                                                                             |                                                                                                                                                                                                                                      |     |
| LVLAd                     | (G-0375, SRT, "Left Ventricular Diastolic Area")                            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                  | 9   |
| LVLAs                     | (G-0374, SRT, "Left Ventricular Systolic Area")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode")                                                    | 9   |
| (Simpson(Disc))           |                                                                             |                                                                                                                                                                                                                                      |     |
| LVLA2d                    | (G-0375, SRT, "Left Ventricular Diastolic Area")                            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 9   |
| LVLA2s                    | (G-0374, SRT, "Left Ventricular Systolic Area")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")    | 9   |
| LVLA4d                    | (G-0375, SRT, "Left Ventricular Diastolic Area")                            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |

| Label                 | Concept Name                                                             | Modifier                                                                                                                                                                                                                                                              | row |
|-----------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| LVL4s                 | (G-0374, SRT, "Left Ventricular Systolic Area")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber")                                    | 9   |
| (BP-Ellipse, Simpson) |                                                                          |                                                                                                                                                                                                                                                                       |     |
| LVSAMVd               | (G-0375, SRT, "Left Ventricular Diastolic Area")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level")     | 9   |
| LVSAMVs               | (G-0374, SRT, "Left Ventricular Systolic Area")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level")       | 9   |
| (Bullet, Simpson)     |                                                                          |                                                                                                                                                                                                                                                                       |     |
| LVSAPMd               | (G-0375, SRT, "Left Ventricular Diastolic Area")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level") | 9   |
| LVSAPMs               | (G-0374, SRT, "Left Ventricular Systolic Area")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level")   | 9   |
| (LV Mass (AL))        |                                                                          |                                                                                                                                                                                                                                                                       |     |
| Aepi                  | (G-0379, SRT, "Left Ventricle Epicardial Diastolic Area, psax pap view") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level") | 9   |

| Label                           | Concept Name                                         | Modifier                                                                                                                                                                                                                                                              | row |
|---------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Aend                            | (G-0375, SRT, "Left Ventricular Diastolic Area")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level") | 9   |
| thick                           | (A12201-002, 99ALOKA, "Mean Wall Thickness")         | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                                                                                                                                            | 9   |
| LVM(AL)                         | (18087-7, LN, "Left Ventricle Mass")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12232-001, 99ALOKA, "Left Ventricle Mass by Area Length")                                                                                                                                            | 9   |
| LVM(AL)/BSA                     | (A12203-001, 99ALOKA, "Left Ventricular Mass Index") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12232-001, 99ALOKA, "Left Ventricle Mass by Area Length")                                                                                                                                            | 9   |
| (B - LV Mass (Devereux))        |                                                      |                                                                                                                                                                                                                                                                       |     |
| LVM(Devereux) <sup>3</sup>      | (18087-7, LN, "Left Ventricle Mass")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                                                   | 9   |
| LVM(Devereux)/B SA <sup>3</sup> | (A12203-001, 99ALOKA, "Left Ventricular Mass Index") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                                                   | 9   |
| (M - LV Mass (Devereux))        |                                                      |                                                                                                                                                                                                                                                                       |     |
| LVM(Devereux) <sup>3</sup>      | (18087-7, LN, "Left Ventricle Mass")                 | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                                                    | 9   |
| LVM(Devereux)/B SA <sup>3</sup> | (A12203-001, 99ALOKA, "Left Ventricular Mass Index") | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                                                    | 9   |
| (B - LV Mass (ASE))             |                                                      |                                                                                                                                                                                                                                                                       |     |
| LVM(ASE)                        | (18087-7, LN, "Left Ventricle Mass")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode")                                                                                                                                                         | 9   |
| LVM(ASE)/BSA <sup>3</sup>       | (A12203-001, 99ALOKA, "Left Ventricular Mass Index") | Image Mode(Group)=( G-03A2, SRT, "2D mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode")                                                                                                                                                        | 9   |
| (M - LV Mass (ASE))             |                                                      |                                                                                                                                                                                                                                                                       |     |

| Label                     | Concept Name                                           | Modifier                                                                                                                                                                                                           | row |
|---------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| LVM(ASE)                  | (18087-7, LN, "Left Ventricle Mass")                   | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode"), Image Mode=(G-0394, SRT, "M mode")                                                                   | 9   |
| LVM(ASE)/BSA <sup>3</sup> | (A12203-001, 99ALOKA, "Left Ventricular Mass Index")   | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode"), Image Mode=(G-0394, SRT, "M mode")                                                                   | 9   |
| (Simpson(Disc))           |                                                        |                                                                                                                                                                                                                    |     |
| EDV                       | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                       | 9   |
| ESV                       | (18148-7, LN, "Left Ventricular End Systolic Volume")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                         | 9   |
| SV                        | (F-32120, SRT, "Stroke Volume")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                           | 9   |
| SVI                       | (F-00078, SRT, "Stroke Index")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                           | 9   |
| CO                        | (F-32100, SRT, "Cardiac Output")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                           | 9   |
| COI                       | (F-32110, SRT, "Cardiac Index")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                           | 9   |
| EF                        | (18043-0, LN, "Left Ventricular Ejection Fraction")    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                           | 9   |
| GLS                       | (A12203-013, 99ALOKA, "Global Longitudinal Strain")    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                           | 9   |
| EDV(ap4C)                 | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |
| ESV(ap4C)                 | (18148-7, LN, "Left Ventricular End Systolic Volume")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image View=(G-A19C, SRT, "Apical four chamber")   | 9   |

| Label     | Concept Name                                             | Modifier                                                                                                                                                                                                                                          | row |
|-----------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| EDV(ap2C) | (18026-5, LN, "Left Ventricular End Diastolic Volume")   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| ESV(ap2C) | (18148-7, LN, "Left Ventricular End Systolic Volume")    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image View=(G-A19B, SRT, "Apical two chamber")   | 9   |
| SV(ap4C)  | (F-32120, SRT, "Stroke Volume")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                    | 9   |
| SVI(ap4C) | (F-00078, SRT, "Stroke Index")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                    | 9   |
| CO(ap4C)  | (F-32100, SRT, "Cardiac Output")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                    | 9   |
| COI(ap4C) | (F-32110, SRT, "Cardiac Index")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                    | 9   |
| EF(ap4C)  | (18043-0, LN, "Left Ventricular Ejection Fraction")      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                    | 9   |
| areaEF4   | (G-0376, SRT, "Left Ventricular Fractional Area Change") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                    | 9   |
| SV(ap2C)  | (F-32120, SRT, "Stroke Volume")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber")                                                     | 9   |

| Label                   | Concept Name                                                                           | Modifier                                                                                                                                                                                      | row |
|-------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| SVI(ap2C)               | (F-00078, SRT, "Stroke Index")                                                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| CO(ap2C)                | (F-32100, SRT, "Cardiac Output")                                                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| COI(ap2C)               | (F-32110, SRT, "Cardiac Index")                                                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| EF(ap2C)                | (18043-0, LN, "Left Ventricular Ejection Fraction")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| areaEF2                 | (G-0376, SRT, "Left Ventricular Fractional Area Change")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| %difD                   | (A12203-003, 99ALOKA, "Long Axis(at End Diastole or End Systole) Length % Difference") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                | 9   |
| %difS                   | (A12203-003, 99ALOKA, "Long Axis(at End Diastole or End Systole) Length % Difference") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                  | 9   |
| GLS(ap4C)               | (A12203-013, 99ALOKA, "Global Longitudinal Strain")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")                                | 9   |
| GLS(ap2C)               | (A12203-013, 99ALOKA, "Global Longitudinal Strain")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| (LV Volume (Teichholz)) |                                                                                        |                                                                                                                                                                                               |     |
| EDV <sup>2</sup>        | (18026-5, LN, "Left Ventricular End Diastolic Volume")                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                 | 9   |

| Label                                  | Concept Name                                            | Modifier                                                                                                                                     | row |
|----------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----|
| ESV <sup>2</sup>                       | (18148-7, LN, "Left Ventricular End Systolic Volume")   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz"), Cardiac Cycle Point=(109070, DCM, "End Systole")  | 9   |
| SV <sup>2</sup>                        | (F-32120, SRT, "Stroke Volume")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz")                                                    | 9   |
| SVI <sup>2</sup>                       | (F-00078, SRT, "Stroke Index")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz")                                                    | 9   |
| CO <sup>2</sup>                        | (F-32100, SRT, "Cardiac Output")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz")                                                    | 9   |
| COI <sup>2</sup>                       | (F-32110, SRT, "Cardiac Index")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz")                                                    | 9   |
| EF <sup>2</sup>                        | (18043-0, LN, "Left Ventricular Ejection Fraction")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125209, DCM, "Teichholz")                                                    | 9   |
| (LV Volume (Pombo, Teichholz, Gibson)) |                                                         |                                                                                                                                              |     |
| FS <sup>2</sup>                        | (18051-3, LN, "Left Ventricular Fractional Shortening") | Image Mode(Group)=(G-03A2, SRT, "2D mode"),                                                                                                  | 9   |
| mFS <sup>2</sup>                       | (A12203-004, 99ALOKA, "Midwall Fractional Shortening")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"),                                                                                                  | 9   |
| (LV Function (Teichholz))              |                                                         |                                                                                                                                              |     |
| EDV <sup>2</sup>                       | (18026-5, LN, "Left Ventricular End Diastolic Volume")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| ESV <sup>2</sup>                       | (18148-7, LN, "Left Ventricular End Systolic Volume")   | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| SV <sup>2</sup>                        | (F-32120, SRT, "Stroke Volume")                         | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz")                                                     | 9   |
| SVI <sup>2</sup>                       | (F-00078, SRT, "Stroke Index")                          | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz")                                                     | 9   |
| CO <sup>2</sup>                        | (F-32100, SRT, "Cardiac Output")                        | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz")                                                     | 9   |

| Label                                    | Concept Name                                            | Modifier                                                                                                                                        | row |
|------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| COI <sup>2</sup>                         | (F-32110, SRT, "Cardiac Index")                         | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz")                                                        | 9   |
| EF <sup>2</sup>                          | (18043-0, LN, "Left Ventricular Ejection Fraction")     | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125209, DCM, "Teichholz")                                                        | 9   |
| (LV Function (Pombo, Teichholz, Gibson)) |                                                         |                                                                                                                                                 |     |
| FS <sup>2</sup>                          | (18051-3, LN, "Left Ventricular Fractional Shortening") | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                       | 9   |
| mFS <sup>2</sup>                         | (A12203-004, 99ALOKA, "Midwall Fractional Shortening")  | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                       | 9   |
| (LV Volume (Pombo))                      |                                                         |                                                                                                                                                 |     |
| EDV <sup>2</sup>                         | (18026-5, LN, "Left Ventricular End Diastolic Volume")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| ESV <sup>2</sup>                         | (18148-7, LN, "Left Ventricular End Systolic Volume")   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| SV <sup>2</sup>                          | (F-32120, SRT, "Stroke Volume")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method")                                                     | 9   |
| SVI <sup>2</sup>                         | (F-00078, SRT, "Stroke Index")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method")                                                     | 9   |
| CO <sup>2</sup>                          | (F-32100, SRT, "Cardiac Output")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method")                                                     | 9   |
| COI <sup>2</sup>                         | (F-32110, SRT, "Cardiac Index")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method")                                                     | 9   |
| EF <sup>2</sup>                          | (18043-0, LN, "Left Ventricular Ejection Fraction")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125206, DCM, "Cube Method")                                                     | 9   |
| (LV Function (Pombo))                    |                                                         |                                                                                                                                                 |     |
| EDV <sup>2</sup>                         | (18026-5, LN, "Left Ventricular End Diastolic Volume")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")  | 9   |

| Label                  | Concept Name                                           | Modifier                                                                                                                                           | row |
|------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| ESV <sup>2</sup>       | (18148-7, LN, "Left Ventricular End Systolic Volume")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method"), Cardiac Cycle Point=(109070, DCM, "End Systole")       | 9   |
| SV <sup>2</sup>        | (F-32120, SRT, "Stroke Volume")                        | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method")                                                         | 9   |
| SVI <sup>2</sup>       | (F-00078, SRT, "Stroke Index")                         | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method")                                                         | 9   |
| CO <sup>2</sup>        | (F-32100, SRT, "Cardiac Output")                       | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method")                                                         | 9   |
| COI <sup>2</sup>       | (F-32110, SRT, "Cardiac Index")                        | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method")                                                         | 9   |
| EF <sup>2</sup>        | (18043-0, LN, "Left Ventricular Ejection Fraction")    | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125206, DCM, "Cube Method")                                                         | 9   |
| (LV Volume (Gibson))   |                                                        |                                                                                                                                                    |     |
| EDV <sup>2</sup>       | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| ESV <sup>2</sup>       | (18148-7, LN, "Left Ventricular End Systolic Volume")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| SV <sup>2</sup>        | (F-32120, SRT, "Stroke Volume")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                     | 9   |
| SVI <sup>2</sup>       | (F-00078, SRT, "Stroke Index")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                     | 9   |
| CO <sup>2</sup>        | (F-32100, SRT, "Cardiac Output")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                     | 9   |
| COI <sup>2</sup>       | (F-32110, SRT, "Cardiac Index")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                     | 9   |
| EF <sup>2</sup>        | (18043-0, LN, "Left Ventricular Ejection Fraction")    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                     | 9   |
| (LV Function (Gibson)) |                                                        |                                                                                                                                                    |     |

| Label            | Concept Name                                           | Modifier                                                                                                                                                     | row |
|------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| EDV <sup>2</sup> | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")            | 9   |
| ESV <sup>2</sup> | (18148-7, LN, "Left Ventricular End Systolic Volume")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson"), Cardiac Cycle Point=(109070, DCM, "End Systole")              | 9   |
| SV <sup>2</sup>  | (F-32120, SRT, "Stroke Volume")                        | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                                | 9   |
| SVI <sup>2</sup> | (F-00078, SRT, "Stroke Index")                         | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                                | 9   |
| CO <sup>2</sup>  | (F-32100, SRT, "Cardiac Output")                       | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                                | 9   |
| COI <sup>2</sup> | (F-32110, SRT, "Cardiac Index")                        | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                                | 9   |
| EF <sup>2</sup>  | (18043-0, LN, "Left Ventricular Ejection Fraction")    | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12228-002, 99ALOKA, "Gibson")                                                                | 9   |
| (Area-Length)    |                                                        |                                                                                                                                                              |     |
| EDV              | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| ESV              | (18148-7, LN, "Left Ventricular End Systolic Volume")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| SV               | (F-32120, SRT, "Stroke Volume")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane")                                                     | 9   |
| SVI              | (F-00078, SRT, "Stroke Index")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane")                                                     | 9   |
| CO               | (F-32100, SRT, "Cardiac Output")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane")                                                     | 9   |
| COI              | (F-32110, SRT, "Cardiac Index")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane")                                                     | 9   |
| EF               | (18043-0, LN, "Left Ventricular Ejection Fraction")    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane")                                                     | 9   |

| Label        | Concept Name                                                       | Modifier                                                                                                                                                       | row |
|--------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| areaEF       | (G-0376, SRT, "Left Ventricular Fractional Area Change")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125205, DCM, "Area-Length Single Plane")                                                       | 9   |
| (BP-Ellipse) |                                                                    |                                                                                                                                                                |     |
| EDV          | (18026-5, LN, "Left Ventricular End Diastolic Volume")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")        | 9   |
| ESV          | (18148-7, LN, "Left Ventricular End Systolic Volume")              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane"), Cardiac Cycle Point=(109070, DCM, "End Systole")          | 9   |
| SV           | (F-32120, SRT, "Stroke Volume")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| SVI          | (F-00078, SRT, "Stroke Index")                                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| CO           | (F-32100, SRT, "Cardiac Output")                                   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| COI          | (F-32110, SRT, "Cardiac Index")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| EF           | (18043-0, LN, "Left Ventricular Ejection Fraction")                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| areaEFIx     | (A12203-005, 99ALOKA, "Area Ejection Fraction at Long Axis View")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| areaEFsx     | (A12203-006, 99ALOKA, "Area Ejection Fraction at Short Axis View") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125204, DCM, "Area-Length Biplane")                                                            | 9   |
| (Simpson)    |                                                                    |                                                                                                                                                                |     |
| EDV          | (18026-5, LN, "Left Ventricular End Diastolic Volume")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| ESV          | (18148-7, LN, "Left Ventricular End Systolic Volume")              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| SV           | (F-32120, SRT, "Stroke Volume")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's")                                                     | 9   |

| Label    | Concept Name                                             | Modifier                                                                                                                                                                                     | row |
|----------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| SVI      | (F-00078, SRT, "Stroke Index")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's")                                                                                   | 9   |
| CO       | (F-32100, SRT, "Cardiac Output")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's")                                                                                   | 9   |
| COI      | (F-32110, SRT, "Cardiac Index")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's")                                                                                   | 9   |
| EF       | (18043-0, LN, "Left Ventricular Ejection Fraction")      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's")                                                                                   | 9   |
| areaEFmv | (G-0376, SRT, "Left Ventricular Fractional Area Change") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level")     | 9   |
| areaEFpm | (G-0376, SRT, "Left Ventricular Fractional Area Change") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-003, 99ALOKA, "Modified Simpson's"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level") | 9   |
| (Bullet) |                                                          |                                                                                                                                                                                              |     |
| EDV      | (18026-5, LN, "Left Ventricular End Diastolic Volume")   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                           | 9   |
| ESV      | (18148-7, LN, "Left Ventricular End Systolic Volume")    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                             | 9   |
| SV       | (F-32120, SRT, "Stroke Volume")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet")                                                                                               | 9   |
| SVI      | (F-00078, SRT, "Stroke Index")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet")                                                                                               | 9   |
| CO       | (F-32100, SRT, "Cardiac Output")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet")                                                                                               | 9   |
| COI      | (F-32110, SRT, "Cardiac Index")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet")                                                                                               | 9   |
| EF       | (18043-0, LN, "Left Ventricular Ejection Fraction")      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet")                                                                                               | 9   |

| Label                                       | Concept Name                                                               | Modifier                                                                                                                                                                                                                                                       | row |
|---------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| areaEF                                      | (G-0376, SRT, "Left Ventricular Fractional Area Change")                   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-004, 99ALOKA, "Bullet")                                                                                                                                                                 | 9   |
| (LV Volume, LV Function)                    |                                                                            |                                                                                                                                                                                                                                                                |     |
| HR (LV Volume (Simpson(Disc))) <sup>1</sup> | (8867-4, LN, "Heart rate")                                                 |                                                                                                                                                                                                                                                                | 9   |
| HR (LV Volume) <sup>1 2</sup>               | (8867-4, LN, "Heart rate")                                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                                                                                                                                     | 9   |
| HR (LV Function) <sup>1 2</sup>             | (8867-4, LN, "Heart rate")                                                 | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                                                                                                                                      | 9   |
| (LV Function (Pombo, Teichholz, Gibson))    |                                                                            |                                                                                                                                                                                                                                                                |     |
| ET                                          | (18041-4, LN, "Aortic Valve Ejection Time")                                | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                                                                                                                                      | 13  |
| MVCF                                        | (A12203-009, 99ALOKA, "Mean Velocity of Circumferential Fiber Shortening") | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                                                                                                                                      | 9   |
| (MVA)                                       |                                                                            |                                                                                                                                                                                                                                                                |     |
| MVA                                         | (G-038E, SRT, "Cardiovascular Orifice Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level") | 14  |
| (AVA)                                       |                                                                            |                                                                                                                                                                                                                                                                |     |
| AVA                                         | (G-038E, SRT, "Cardiovascular Orifice Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0398, SRT, "Parasternal short axis at the aortic valve level") | 13  |
| (RVD, LV Volume (Pombo, Teichholz, Gibson)) |                                                                            |                                                                                                                                                                                                                                                                |     |
| RVDd <sup>2</sup>                           | (20304-2, LN, "Right Ventricular Internal Diastolic Dimension")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                                                                                 | 10  |
| RVDs <sup>2</sup>                           | (20305-9, LN, "Right Ventricular Internal Systolic Dimension")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                                                                                   | 10  |

| Label                                                  | Concept Name                                                               | Modifier                                                                                       | row |
|--------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----|
| (LV Function<br>(Pombo,<br>Teichholz,<br>Gibson))      |                                                                            |                                                                                                |     |
| RVDd <sup>2</sup>                                      | (20304-2, LN, "Right Ventricular Internal Diastolic Dimension")            | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")  | 10  |
| RVDs <sup>2</sup>                                      | (20305-9, LN, "Right Ventricular Internal Systolic Dimension")             | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")    | 10  |
| (Ratio, LV Volume<br>(Pombo,<br>Teichholz,<br>Gibson)) |                                                                            |                                                                                                |     |
| IVSd <sup>2</sup>                                      | (18154-5, LN, "Interventricular Septum Diastolic Thickness")               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| IVSs <sup>2</sup>                                      | (18158-6, LN, "Interventricular Septum Systolic Thickness")                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| %IVSTF <sup>2</sup>                                    | (18054-7, LN, "Interventricular Septum % Thickening")                      | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                     | 9   |
| LVPWd <sup>2</sup>                                     | (18152-9, LN, "Left Ventricle Posterior Wall Diastolic Thickness")         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole") | 9   |
| LVPWs <sup>2</sup>                                     | (18156-0, LN, "Left Ventricle Posterior Wall Systolic Thickness")          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")   | 9   |
| %PWTF <sup>2</sup>                                     | (18053-9, LN, "Left Ventricle Posterior Wall % Thickening")                | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                     | 9   |
| IVS/LVPW <sup>2</sup>                                  | (18155-2, LN, "Interventricular Septum to Posterior Wall Thickness Ratio") | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                     | 9   |
| (LV Function<br>(Pombo,<br>Teichholz,<br>Gibson))      |                                                                            |                                                                                                |     |
| IVSd <sup>2</sup>                                      | (18154-5, LN, "Interventricular Septum Diastolic Thickness")               | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")  | 9   |
| IVSs <sup>2</sup>                                      | (18158-6, LN, "Interventricular Septum Systolic Thickness")                | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")    | 9   |
| %IVSTF <sup>2</sup>                                    | (18054-7, LN, "Interventricular Septum % Thickening")                      | Image Mode(Group)=(G-0394, SRT, "M mode")                                                      | 9   |

| Label                  | Concept Name                                                               | Modifier                                                                                                                                       | row |
|------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| LVPWd <sup>2</sup>     | (18152-9, LN, "Left Ventricle Posterior Wall Diastolic Thickness")         | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                  | 9   |
| LVPWs <sup>2</sup>     | (18156-0, LN, "Left Ventricle Posterior Wall Systolic Thickness")          | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                    | 9   |
| %PWTF <sup>2</sup>     | (18053-9, LN, "Left Ventricle Posterior Wall % Thickening")                | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                      | 9   |
| IVS/LVPW <sup>2</sup>  | (18155-2, LN, "Interventricular Septum to Posterior Wall Thickness Ratio") | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                      | 9   |
| (LVOT Flow)            |                                                                            |                                                                                                                                                |     |
| LVOT                   | (G-038F, SRT, "Cardiovascular Orifice Diameter")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                        | 9   |
| CSA(LVOT)              | (G-038E, SRT, "Cardiovascular Orifice Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                        | 9   |
| (RVOT Flow)            |                                                                            |                                                                                                                                                |     |
| RVOT                   | (G-038F, SRT, "Cardiovascular Orifice Diameter")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode") | 10  |
| CSA(RVOT)              | (G-038E, SRT, "Cardiovascular Orifice Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                      | 10  |
| (RVD)                  |                                                                            |                                                                                                                                                |     |
| RVAWd                  | (18153-7, LN, "Right Ventricular Anterior Wall Diastolic Thickness")       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                 | 10  |
| RVAWs                  | (18157-8, LN, "Right Ventricular Anterior Wall Systolic Thickness")        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                   | 10  |
| (B - IVC)              |                                                                            |                                                                                                                                                |     |
| Insp <sup>2</sup>      | (18006-7, LN, "Inferior Vena Cava Diameter")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Respiratory Cycle Point=(F-20010, SRT, "During Inspiration")                                       | 19  |
| Exp <sup>2</sup>       | (18006-7, LN, "Inferior Vena Cava Diameter")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Respiratory Cycle Point=(F-20020, SRT, "During Expiration")                                        | 19  |
| %Collapse <sup>2</sup> | (18050-5, LN, "Inferior Vena Cava % Collapse")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                     | 19  |
| (M - IVC)              |                                                                            |                                                                                                                                                |     |
| Insp <sup>2</sup>      | (18006-7, LN, "Inferior Vena Cava Diameter")                               | Image Mode(Group)=(G-0394, SRT, "M mode"), Respiratory Cycle Point=(F-20010, SRT, "During Inspiration")                                        | 19  |

| Label                  | Concept Name                                                                    | Modifier                                                                                                                                                                                    | row |
|------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Exp <sup>2</sup>       | (18006-7, LN, "Inferior Vena Cava Diameter")                                    | Image Mode(Group)=(G-0394, SRT, "M mode"), Respiratory Cycle Point=(F-20020, SRT, "During Expiration")                                                                                      | 19  |
| %Collapse <sup>2</sup> | (18050-5, LN, "Inferior Vena Cava % Collapse")                                  | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                                                                   | 19  |
| (B - LA/AO)            |                                                                                 |                                                                                                                                                                                             |     |
| LADd <sup>2</sup>      | (A12205-001, 99ALOKA, "Left Atrium Antero-posterior Diastolic Dimension")       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                              | 11  |
| LADs <sup>2</sup>      | (29469-4, LN, "Left Atrium Antero-posterior Systolic Dimension")                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                | 11  |
| AODd <sup>2</sup>      | (18015-8, LN, "Aortic Root Diameter")                                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                              | 17  |
| AODs <sup>2</sup>      | (18015-8, LN, "Aortic Root Diameter")                                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                | 17  |
| LADs/AODd <sup>2</sup> | (17985-3, LN, "Left Atrium to Aortic Root Ratio")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                                                                  | 11  |
| (M - LA/AO)            |                                                                                 |                                                                                                                                                                                             |     |
| LADd <sup>2</sup>      | (A12205-001, 99ALOKA, "Left Atrium Antero-posterior Diastolic Dimension")       | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                               | 11  |
| LADs <sup>2</sup>      | (29469-4, LN, "Left Atrium Antero-posterior Systolic Dimension")                | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                 | 11  |
| AODd <sup>2</sup>      | (18015-8, LN, "Aortic Root Diameter")                                           | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                               | 17  |
| AODs <sup>2</sup>      | (18015-8, LN, "Aortic Root Diameter")                                           | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                 | 17  |
| AVDs <sup>2</sup>      | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                | Image Mode(Group)=(G-0394, SRT, "M mode"), Finding Site=(T-35410, SRT, "Aortic Valve Ring"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Cardiac Cycle Point=(F-32020, SRT, "Systole") | 13  |
| LADs/AODd              | (17985-3, LN, "Left Atrium to Aortic Root Ratio")                               | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                                                                   | 11  |
| (Mitral V)             |                                                                                 |                                                                                                                                                                                             |     |
| C-Eamp                 | (A12207-001, 99ALOKA, "Mitral Valve Dimension of C point to E point by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                                                                               | 14  |

| Label         | Concept Name                                                                            | Modifier                                                                      | row |
|---------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----|
| C-Aamp        | (A12207-002, 99ALOKA, "Mitral Valve Dimension of C point to A point by M-Mode")         | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 14  |
| EPSS          | (18036-4, LN, "Mitral Valve EPSS, E wave")                                              | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 14  |
| E-Fslop       | (18040-6, LN, "Mitral Valve E-F Slope by M-Mode")                                       | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 14  |
| A/E           | (A12207-003, 99ALOKA, "Mitral Valve C-A Dimension to C-E Dimension Ratio by M-Mode")    | Image Mode(Group)=(G-0394, SRT, "M mode")                                     | 14  |
| E/A           | (A12207-004, 99ALOKA, "Mitral Valve C-E Dimension to C-A Dimension Ratio by M-Mode")    | Image Mode(Group)=(G-0394, SRT, "M mode")                                     | 14  |
| (Tricuspid V) |                                                                                         |                                                                               |     |
| C-Eamp        | (A12208-001, 99ALOKA, "Tricuspid Valve Dimension of C point to E point by M-Mode")      | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 16  |
| C-Aamp        | (A12208-002, 99ALOKA, "Tricuspid Valve Dimension of C point to A point by M-Mode")      | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 16  |
| D-Eamp        | (A12208-003, 99ALOKA, "Tricuspid Valve Dimension of D point to E point by M-Mode")      | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 16  |
| E-Fslop       | (A12208-004, 99ALOKA, "Tricuspid Valve Velocity from E point to F point by M-Mode")     | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 16  |
| D-Eslop       | (A12208-005, 99ALOKA, "Tricuspid Valve Velocity from D point to E point by M-Mode")     | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode") | 16  |
| A/E           | (A12208-006, 99ALOKA, "Tricuspid Valve C-A Dimension to C-E Dimension Ratio by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode")                                     | 16  |
| E/A           | (A12208-007, 99ALOKA, "Tricuspid Valve C-E Dimension to C-A Dimension Ratio by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode")                                     | 16  |
| (Pulmonary V) |                                                                                         |                                                                               |     |

| Label       | Concept Name                                                                       | Modifier                                                                                                              | row |
|-------------|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----|
| A wave amp  | (A12209-001, 99ALOKA, "Pulmonic Valve Dimension of F point to A point by M-Mode")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                         | 15  |
| B-Camp      | (A12209-002, 99ALOKA, "Pulmonic Valve Dimension of B point to C point by M-Mode")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                         | 15  |
| E-Fslop     | (A12209-003, 99ALOKA, "Pulmonic Valve Velocity from E point to F point by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                         | 15  |
| B-Cslop     | (A12209-004, 99ALOKA, "Pulmonic Valve Velocity from B point to C point by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                         | 15  |
| (LVOT Flow) |                                                                                    |                                                                                                                       |     |
| pV          | (11726-7, LN, "Peak Velocity")                                                     | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| MnV         | (20352-1, LN, "Mean Velocity")                                                     | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| MPG         | (20256-4, LN, "Mean Gradient")                                                     | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract") | 9   |
| VTI         | (20354-7, LN, "Velocity Time Integral")                                            | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| AccT        | (20168-1, LN, "Acceleration Time")                                                 | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| PEP         | (A12222-001, 99ALOKA, "Pre-Ejection Period")                                       | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| ET          | (18041-4, LN, "Aortic Valve Ejection Time")                                        | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 13  |
| HR          | (8867-4, LN, "Heart rate")                                                         | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| AccT/ET     | (G-0382, SRT, "Ratio of Aortic Valve Acceleration Time to Ejection Time")          | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 13  |
| PG          | (20247-3, LN, "Peak Gradient")                                                     | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract") | 9   |
| SV(LVOT)    | (F-32120, SRT, "Stroke Volume")                                                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| CO(LVOT)    | (F-32100, SRT, "Cardiac Output")                                                   | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |
| PEP/ET      | (A12222-002, 99ALOKA, "PEP/ET")                                                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                           | 9   |

| Label          | Concept Name                                                                | Modifier                                                                                                                | row |
|----------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----|
| SVI(LVOT)      | (F-00078, SRT, "Stroke Index")                                              | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                             | 9   |
| COI(LVOT)      | (F-32110, SRT, "Cardiac Index")                                             | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                             | 9   |
| (RVOT Flow)    |                                                                             |                                                                                                                         |     |
| pV             | (11726-7, LN, "Peak Velocity")                                              | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| MnV            | (20352-1, LN, "Mean Velocity")                                              | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| MPG            | (20256-4, LN, "Mean Gradient")                                              | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract") | 10  |
| VTI            | (20354-7, LN, "Velocity Time Integral")                                     | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| AccT           | (20168-1, LN, "Acceleration Time")                                          | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| PEP            | (A12222-001, 99ALOKA, "Pre-Ejection Period")                                | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| ET             | (18042-2, LN, "Pulmonic Valve Ejection Time")                               | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 15  |
| HR             | (8867-4, LN, "Heart rate")                                                  | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| AccT/ET        | (G-0388, SRT, "Ratio of Pulmonic Valve Acceleration Time to Ejection Time") | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 15  |
| PG             | (20247-3, LN, "Peak Gradient")                                              | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract") | 10  |
| SV(RVOT)       | (F-32120, SRT, "Stroke Volume")                                             | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| CO(RVOT)       | (F-32100, SRT, "Cardiac Output")                                            | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| PEP/ET         | (A12222-002, 99ALOKA, "PEP/ET")                                             | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| Qp/Qs          | (29462-9, LN, "Pulmonary-to-Systemic Shunt Flow Ratio")                     |                                                                                                                         | 22  |
| SVI(RVOT)      | (F-00078, SRT, "Stroke Index")                                              | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| COI(RVOT)      | (F-32110, SRT, "Cardiac Index")                                             | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                           | 10  |
| (Trans M Flow) |                                                                             |                                                                                                                         |     |
| eV             | (18037-2, LN, "Mitral Valve E-Wave Peak Velocity")                          |                                                                                                                         | 14  |

| Label      | Concept Name                                                        | Modifier                                                                                                                                                            | row |
|------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| aV         | (17978-8, LN, "Mitral Valve A-Wave Peak Velocity")                  |                                                                                                                                                                     | 14  |
| MnV        | (20352-1, LN, "Mean Velocity")                                      | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| MPG        | (20256-4, LN, "Mean Gradient")                                      | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")       | 14  |
| AccT       | (20168-1, LN, "Acceleration Time")                                  |                                                                                                                                                                     | 14  |
| P1/2T      | (20280-4, LN, "Pressure Half-Time")                                 | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| IRT        | (18071-1, LN, "Left Ventricular Isovolumic Relaxation Time")        |                                                                                                                                                                     | 9   |
| DecT       | (G-0384, SRT, "Mitral Valve E-Wave Deceleration Time")              |                                                                                                                                                                     | 14  |
| Edur       | (A12207-005, 99ALOKA, "Mitral Valve E-Wave Duration")               | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 14  |
| Adur       | (G-0385, SRT, "Mitral Valve A-Wave Duration")                       | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 14  |
| VTI        | (20354-7, LN, "Velocity Time Integral")                             | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 14  |
| LVDF       | (A12203-010, 99ALOKA, "Left Ventricle Diastole Filling Time")       |                                                                                                                                                                     | 9   |
| RR         | (122182, DCM, "R-R interval")                                       |                                                                                                                                                                     | 9   |
| MVA(P1/2T) | (G-038E, SRT, "Cardiovascular Orifice Area")                        | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Measurement Method=(125210, DCM, "Area by Pressure Half-Time"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 14  |
| E/A        | (18038-0, LN, "Mitral Valve E to A Ratio")                          |                                                                                                                                                                     | 14  |
| A/E        | (A12207-006, 99ALOKA, "Mitral Valve A to E Ratio")                  |                                                                                                                                                                     | 14  |
| EPG        | (A12207-007, 99ALOKA, "Mitral Valve E-wave Peak Pressure Gradient") | Measurement Method=(125218, DCM, "Simplified Bernoulli")                                                                                                            | 14  |
| APG        | (A12207-008, 99ALOKA, "Mitral Valve A-wave Peak Pressure Gradient") | Measurement Method=(125218, DCM, "Simplified Bernoulli")                                                                                                            | 14  |

| Label       | Concept Name                                                                             | Modifier                                                                                                                           | row |
|-------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----|
| E/Em        | (A12203-011, 99ALOKA, "Ratio of MV E-Wave Peak Vel. to Early Diastolic Myocardium Vel.") |                                                                                                                                    | 9   |
| PVAdur-Adur | (A12207-009, 99ALOKA, "Subtraction of A-wave Duration from PVA-wave Duration")           |                                                                                                                                    | 14  |
| LVDF/RR     | (A12203-012, 99ALOKA, "Ratio of Left Ventricle Diastole Filling Time to R-R interval")   |                                                                                                                                    | 9   |
| (AS Flow)   |                                                                                          |                                                                                                                                    |     |
| pV          | (11726-7, LN, "Peak Velocity")                                                           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| MnV         | (20352-1, LN, "Mean Velocity")                                                           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| MPG         | (20256-4, LN, "Mean Gradient")                                                           | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 13  |
| VTI         | (20354-7, LN, "Velocity Time Integral")                                                  | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| AVA         | (G-038E, SRT, "Cardiovascular Orifice Area")                                             | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 13  |
| PG          | (20247-3, LN, "Peak Gradient")                                                           | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 13  |
| AVA/BSA     | (79959-3, LN, "Aortic valve area (Continuity VTI) / BSA")                                | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| (PS Flow)   |                                                                                          |                                                                                                                                    |     |
| pV          | (11726-7, LN, "Peak Velocity")                                                           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 15  |
| MnV         | (20352-1, LN, "Mean Velocity")                                                           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 15  |
| MPG         | (20256-4, LN, "Mean Gradient")                                                           | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 15  |
| PG          | (20247-3, LN, "Peak Gradient")                                                           | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 15  |
| (MS Flow)   |                                                                                          |                                                                                                                                    |     |
| pV          | (11726-7, LN, "Peak Velocity")                                                           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 14  |

| Label      | Concept Name                                 | Modifier                                                                                                                                                                     | row |
|------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| MnV        | (20352-1, LN, "Mean Velocity")               | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| MPG        | (20256-4, LN, "Mean Gradient")               | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")       | 14  |
| FlowT      | (A12222-003, 99ALOKA, "Flow Time")           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                              | 14  |
| P1/2T      | (20280-4, LN, "Pressure Half-Time")          | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| PG         | (20247-3, LN, "Peak Gradient")               | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                    | 14  |
| MVA(P1/2T) | (G-038E, SRT, "Cardiovascular Orifice Area") | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Measurement Method=(125210, DCM, "Area by Pressure Half-Time"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 14  |
| MVA(VTI)   | (G-038E, SRT, "Cardiovascular Orifice Area") | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                           | 14  |
| VTI        | (20354-7, LN, "Velocity Time Integral")      | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| (TS Flow)  |                                              |                                                                                                                                                                              |     |
| pV         | (11726-7, LN, "Peak Velocity")               | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                              | 16  |
| MnV        | (20352-1, LN, "Mean Velocity")               | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                              | 16  |
| MPG        | (20256-4, LN, "Mean Gradient")               | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                    | 16  |
| FlowT      | (A12222-003, 99ALOKA, "Flow Time")           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                              | 16  |
| P1/2T      | (20280-4, LN, "Pressure Half-Time")          | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                              | 16  |
| PG         | (20247-3, LN, "Peak Gradient")               | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                    | 16  |
| (AR Flow)  |                                              |                                                                                                                                                                              |     |

| Label       | Concept Name                                                                  | Modifier                                                                                                   | row |
|-------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----|
| pV          | (11726-7, LN, "Peak Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 13  |
| MnV         | (20352-1, LN, "Mean Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 13  |
| MPG         | (20256-4, LN, "Mean Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 13  |
| P1/2T       | (20280-4, LN, "Pressure Half-Time")                                           | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 13  |
| PG          | (20247-3, LN, "Peak Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 13  |
| (MR Flow)   |                                                                               |                                                                                                            |     |
| pV          | (11726-7, LN, "Peak Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 14  |
| MnV         | (20352-1, LN, "Mean Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 14  |
| MPG         | (20256-4, LN, "Mean Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 14  |
| FlowT       | (A12222-003, 99ALOKA, "Flow Time")                                            | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 14  |
| PG          | (20247-3, LN, "Peak Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 14  |
| dP/dt       | (18035-6, LN, "Mitral Regurgitation dP/dt derived from Mitral Reg. velocity") |                                                                                                            | 14  |
| Reg. Volume | (A12207-014, 99ALOKA, "Mitral valve Regurgitant volume")                      | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 14  |
| Reg. Frac   | (G-0390, SRT, "Regurgitant Fraction")                                         | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 14  |
| EROA        | (G-038E, SRT, "Cardiovascular Orifice Area")                                  | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 14  |
| (PR Flow)   |                                                                               |                                                                                                            |     |
| pV          | (11726-7, LN, "Peak Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 15  |
| MnV         | (20352-1, LN, "Mean Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                           | 15  |
| MPG         | (20256-4, LN, "Mean Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 15  |

| Label           | Concept Name                                                               | Modifier                                                                                                                                                                  | row |
|-----------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| PG              | (20247-3, LN, "Peak Gradient")                                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                | 15  |
| (PV Flow)       |                                                                            |                                                                                                                                                                           |     |
| PVS             | (29450-4, LN, "Pulmonary Vein Systolic Peak Velocity")                     |                                                                                                                                                                           | 20  |
| PVD             | (29451-2, LN, "Pulmonary Vein Diastolic Peak Velocity")                    |                                                                                                                                                                           | 20  |
| PVA             | (29453-8, LN, "Pulmonary Vein Atrial Contraction Reversal Peak Velocity")  |                                                                                                                                                                           | 20  |
| S-VTI           | (G-038C, SRT, "Pulmonary Vein S-Wave Velocity Time Integral")              |                                                                                                                                                                           | 20  |
| D-VTI           | (G-038D, SRT, "Pulmonary Vein D-Wave Velocity Time Integral")              |                                                                                                                                                                           | 20  |
| PVAdur          | (G-038B, SRT, "Pulmonary Vein A-Wave Duration")                            |                                                                                                                                                                           | 20  |
| DecT            | (A12214-001, 99ALOKA, "Deceleration Time of D-Wave Flow")                  |                                                                                                                                                                           | 20  |
| S/D             | (29452-0, LN, "Pulmonary Vein Systolic to Diastolic Ratio")                |                                                                                                                                                                           | 20  |
| SF              | (A12214-002, 99ALOKA, "Systolic Fraction")                                 |                                                                                                                                                                           | 20  |
| (AR Vol. PISA)  |                                                                            |                                                                                                                                                                           |     |
| PISA Radius     | (A12222-004, 99ALOKA, "Radius of Flow Convergence")                        |                                                                                                                                                                           | 13  |
| AR Alias V (Vr) | (A12222-005, 99ALOKA, "Aliasing Velocity")                                 |                                                                                                                                                                           | 13  |
| Angle (PISA)    | (A12222-006, 99ALOKA, "Proximal Isovelocity Surface Area Angle")           |                                                                                                                                                                           | 13  |
| VTI(AR)         | (A12211-001, 99ALOKA, "Velocity Time Integral of Aortic Regurgitant Flow") | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                          | 13  |
| AR Vol          | (33878-0, LN, "Volume Flow")                                               | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Finding Site=(T-35410, SRT, "Aortic Valve Ring"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 13  |

| Label           | Concept Name                                                                  | Modifier                                                                                                                                                               | row |
|-----------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| AR EROA         | (G-038E, SRT, "Cardiovascular Orifice Area")                                  | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                | 13  |
| AR Flow Rt      | (34141-2, LN, "Peak Instantaneous Flow Rate")                                 | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                | 13  |
| AR PISA         | (A12211-003, 99ALOKA, "Aortic Regurgitant Proximal Isovelocity Surface Area") | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                | 13  |
| AR RF           | (G-0390, SRT, "Regurgitant Fraction")                                         | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                | 13  |
| (MR Vol. PISA)  |                                                                               |                                                                                                                                                                        |     |
| PISA Radius     | (A12222-004, 99ALOKA, "Radius of Flow Convergence")                           |                                                                                                                                                                        | 14  |
| MR Alias V (Vr) | (A12222-005, 99ALOKA, "Aliasing Velocity")                                    |                                                                                                                                                                        | 14  |
| Angle (PISA)    | (A12222-006, 99ALOKA, "Proximal Isovelocity Surface Area Angle")              |                                                                                                                                                                        | 14  |
| VTI(MR)         | (A12207-010, 99ALOKA, "Velocity Time Integral of Mitral Regurgitant Flow")    | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                       | 14  |
| MV Diam         | (G-038F, SRT, "Cardiovascular Orifice Diameter")                              | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                         | 14  |
| VTI(MVannu)     | (20354-7, LN, "Velocity Time Integral")                                       | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                         | 14  |
| MV DiamA4C      | (G-038F, SRT, "Cardiovascular Orifice Diameter")                              | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image View=(G-A19C, SRT, "Apical four chamber")                        | 14  |
| MV DiamA2C      | (G-038F, SRT, "Cardiovascular Orifice Diameter")                              | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image View=(G-A19B, SRT, "Apical two chamber")                         | 14  |
| MR Vol          | (33878-0, LN, "Volume Flow")                                                  | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 14  |

| Label           | Concept Name                                                                  | Modifier                                                                                                                                                                  | row |
|-----------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| MR EROA         | (G-038E, SRT, "Cardiovascular Orifice Area")                                  | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                   | 14  |
| MR Flow Rt      | (34141-2, LN, "Peak Instantaneous Flow Rate")                                 | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                   | 14  |
| MR PISA         | (A12207-012, 99ALOKA, "Mitral Regurgitant Proximal Isovelocity Surface Area") | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                   | 14  |
| MR RF           | (G-0390, SRT, "Regurgitant Fraction")                                         | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                   | 14  |
| SV(MV)          | (A12207-013, 99ALOKA, "Flow Volume of Mitral Valve Annulus in Flow")          | Measurement Method=(125219, DCM, "Doppler Volume Flow")                                                                                                                   | 14  |
| (TR Vol. PISA)  |                                                                               |                                                                                                                                                                           |     |
| PISA Radius     | (A12222-004, 99ALOKA, "Radius of Flow Convergence")                           |                                                                                                                                                                           | 16  |
| TR Alias V (Vr) | (A12222-005, 99ALOKA, "Aliasing Velocity")                                    |                                                                                                                                                                           | 16  |
| Angle (PISA)    | (A12222-006, 99ALOKA, "Proximal Isovelocity Surface Area Angle")              |                                                                                                                                                                           | 16  |
| VTI(TR)         | (A12208-008, 99ALOKA, "Velocity Time Integral of Tricuspid Regurgitant Flow") | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                          | 16  |
| TV Diam         | (G-038F, SRT, "Cardiovascular Orifice Diameter")                              | Finding Site=(T-35111, SRT, "Tricuspid Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                         | 16  |
| VTI(TVannu)     | (20354-7, LN, "Velocity Time Integral")                                       | Finding Site=(T-35111, SRT, "Tricuspid Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                         | 16  |
| TR Vol          | (33878-0, LN, "Volume Flow")                                                  | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Finding Site=(T-35111, SRT, "Tricuspid Annulus"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 16  |
| TR EROA         | (G-038E, SRT, "Cardiovascular Orifice Area")                                  | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                   | 16  |

| Label           | Concept Name                                                                     | Modifier                                                                                                                | row |
|-----------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----|
| TR Flow Rt      | (34141-2, LN, "Peak Instantaneous Flow Rate")                                    | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 16  |
| TR PISA         | (A12208-010, 99ALOKA, "Tricuspid Regurgitant Proximal Isovelocity Surface Area") | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 16  |
| TR RF           | (G-0390, SRT, "Regurgitant Fraction")                                            | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 16  |
| SV(TV)          | (A12208-011, 99ALOKA, "Flow Volume of Tricuspid Valve Annulus in Flow")          | Measurement Method=(125219, DCM, "Doppler Volume Flow")                                                                 | 16  |
| (PR Vol. PISA)  |                                                                                  |                                                                                                                         |     |
| PISA Radius     | (A12222-004, 99ALOKA, "Radius of Flow Convergence")                              |                                                                                                                         | 15  |
| PR Alias V (Vr) | (A12222-005, 99ALOKA, "Aliasing Velocity")                                       |                                                                                                                         | 15  |
| Angle (PISA)    | (A12222-006, 99ALOKA, "Proximal Isovelocity Surface Area Angle")                 |                                                                                                                         | 15  |
| VTI(PR)         | (A12209-005, 99ALOKA, "Velocity Time Integral of Pulmonic Regurgitant Flow")     | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                        | 15  |
| PR Vol          | (33878-0, LN, "Volume Flow")                                                     | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 15  |
| PR EROA         | (G-038E, SRT, "Cardiovascular Orifice Area")                                     | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 15  |
| PR Flow Rt      | (34141-2, LN, "Peak Instantaneous Flow Rate")                                    | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 15  |
| PR PISA         | (A12209-007, 99ALOKA, "Pulmonic Regurgitant Proximal Isovelocity Surface Area")  | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 15  |
| PR RF           | (G-0390, SRT, "Regurgitant Fraction")                                            | Measurement Method=(125216, DCM, "Proximal Isovelocity Surface Area"), Flow Direction=(R-42E61, SRT, "Retrograde Flow") | 15  |

| Label                     | Concept Name                                                             | Modifier                                                                                                                                                                                                                                                       | row |
|---------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| (LA Volume Simpson(Disc)) |                                                                          |                                                                                                                                                                                                                                                                |     |
| LAL4s                     | (A12205-002, 99ALOKA, "Left Atrium systolic major axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 11  |
| LALA4s                    | (17977-0, LN, "Left Atrium Systolic Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 11  |
| LAL2s                     | (A12205-002, 99ALOKA, "Left Atrium systolic major axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 11  |
| LALA2s                    | (A12205-003, 99ALOKA, "Left Atrium Systolic Area by Apical two chamber") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 11  |
| LAS4s                     | (A12205-007, 99ALOKA, "Left Atrium systolic minor axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 11  |
| LAS2s                     | (A12205-007, 99ALOKA, "Left Atrium systolic minor axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 11  |
| LA Volume(Bi-plane)       | (A12205-004, 99ALOKA, "Left Atrial Volume")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 11  |

| Label                     | Concept Name                                                                         | Modifier                                                                                                                                                                                                                                                       | row |
|---------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| LA Volume/BSA(Bi-plane)   | (A12205-005, 99ALOKA, "Left Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 11  |
| LA Volume(ap4C)           | (A12205-004, 99ALOKA, "Left Atrial Volume")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-006, 99ALOKA, "Method of Disks, Single Plane with Apical four chamber of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image View=(G-A19C, SRT, "Apical four chamber")        | 11  |
| LA Volume/BSA(ap4C)       | (A12205-005, 99ALOKA, "Left Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-006, 99ALOKA, "Method of Disks, Single Plane with Apical four chamber of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                         | 11  |
| LA Volume(ap2C)           | (A12205-004, 99ALOKA, "Left Atrial Volume")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-007, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image View=(G-A19B, SRT, "Apical two chamber")          | 11  |
| LA Volume/BSA(ap2C)       | (A12205-005, 99ALOKA, "Left Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-007, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                          | 11  |
| %difS                     | (A12205-006, 99ALOKA, "Long Axis at End Systole Length % Difference of Left Atrium") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-005, 99ALOKA, "Method of Disks, Biplane of LA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 11  |
| (RA Volume Simpson(Disc)) |                                                                                      |                                                                                                                                                                                                                                                                |     |
| RAL4s                     | (A12206-001, 99ALOKA, "Right Atrium systolic major axis")                            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 12  |

| Label                   | Concept Name                                                              | Modifier                                                                                                                                                                                                                                                       | row |
|-------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| RALA4s                  | (17988-7, LN, "Right Atrium Systolic Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 12  |
| RAL2s                   | (A12206-001, 99ALOKA, "Right Atrium systolic major axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 12  |
| RALA2s                  | (A12206-002, 99ALOKA, "Right Atrium Systolic Area by Apical two chamber") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 12  |
| RAS4s                   | (A12206-006, 99ALOKA, "Right Atrium systolic minor axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 12  |
| RAS2s                   | (A12206-006, 99ALOKA, "Right Atrium systolic minor axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 12  |
| RA Volume(Bi-plane)     | (A12206-003, 99ALOKA, "Right Atrial Volume")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 12  |
| RA Volume/BSA(Bi-plane) | (A12206-004, 99ALOKA, "Right Atrial Volume divided by Body Surface Area") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 12  |

| Label                   | Concept Name                                                                          | Modifier                                                                                                                                                                                                                                                           | row |
|-------------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| RA Volume(ap4C)         | (A12206-003, 99ALOKA, "Right Atrial Volume")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-009, 99ALOKA, "Method of Disks, Single Plane with Apical four chamber of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image View=(G-A19C, SRT, "Apical four chamber")            | 12  |
| RA Volume/BSA(ap4C)     | (A12206-004, 99ALOKA, "Right Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-009, 99ALOKA, "Method of Disks, Single Plane with Apical four chamber of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                             | 12  |
| RA Volume(ap2C)         | (A12206-003, 99ALOKA, "Right Atrial Volume")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-010, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image View=(G-A19B, SRT, "Apical two chamber")              | 12  |
| RA Volume/BSA(ap2C)     | (A12206-004, 99ALOKA, "Right Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-010, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                              | 12  |
| %difS                   | (A12206-005, 99ALOKA, "Long Axis at End Systole Length % Difference of Right Atrium") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-008, 99ALOKA, "Method of Disks, Biplane of RA"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                           | 12  |
| (LA Volume Area-Length) |                                                                                       |                                                                                                                                                                                                                                                                    |     |
| LAL4s                   | (A12205-002, 99ALOKA, "Left Atrium systolic major axis")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 11  |
| LALA4s                  | (17977-0, LN, "Left Atrium Systolic Area")                                            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 11  |

| Label                   | Concept Name                                                                         | Modifier                                                                                                                                                                                                                                                           | row |
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| LAL2s                   | (A12205-002, 99ALOKA, "Left Atrium systolic major axis")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 11  |
| LALA2s                  | (A12205-003, 99ALOKA, "Left Atrium Systolic Area by Apical two chamber")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 11  |
| LAS4s                   | (A12205-007, 99ALOKA, "Left Atrium systolic minor axis")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 11  |
| LAS2s                   | (A12205-007, 99ALOKA, "Left Atrium systolic minor axis")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 11  |
| LA Volume               | (A12205-004, 99ALOKA, "Left Atrial Volume")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 11  |
| LA Volume/BSA           | (A12205-005, 99ALOKA, "Left Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 11  |
| %difS                   | (A12205-006, 99ALOKA, "Long Axis at End Systole Length % Difference of Left Atrium") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-011, 99ALOKA, "Area-Length Biplane of Left Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 11  |
| (RA Volume Area-Length) |                                                                                      |                                                                                                                                                                                                                                                                    |     |

| Label     | Concept Name                                                              | Modifier                                                                                                                                                                                                                                                            | row |
|-----------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| RAL4s     | (A12206-001, 99ALOKA, "Right Atrium systolic major axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 12  |
| RALA4s    | (17988-7, LN, "Right Atrium Systolic Area")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 12  |
| RAL2s     | (A12206-001, 99ALOKA, "Right Atrium systolic major axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 12  |
| RALA2s    | (A12206-002, 99ALOKA, "Right Atrium Systolic Area by Apical two chamber") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 12  |
| RAS4s     | (A12206-006, 99ALOKA, "Right Atrium systolic minor axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber") | 12  |
| RAS2s     | (A12206-006, 99ALOKA, "Right Atrium systolic minor axis")                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")  | 12  |
| RA Volume | (A12206-003, 99ALOKA, "Right Atrial Volume")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                       | 12  |

| Label         | Concept Name                                                                          | Modifier                                                                                                                                                                      | row |
|---------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| RA Volume/BSA | (A12206-004, 99ALOKA, "Right Atrial Volume divided by Body Surface Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole") | 12  |
| %difS         | (A12206-005, 99ALOKA, "Long Axis at End Systole Length % Difference of Right Atrium") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-012, 99ALOKA, "Area-Length Biplane of Right Atrium"), Cardiac Cycle Point=(109070, DCM, "End Systole") | 12  |
| (TAPSE)       |                                                                                       |                                                                                                                                                                               |     |
| TAPSE         | (A12208-012, 99ALOKA, "Tricuspid Annular Plane Systolic Excursion")                   | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                                                                     | 16  |
| (FAC)         |                                                                                       |                                                                                                                                                                               |     |
| RV Area ED    | (A12204-001, 99ALOKA, "Right Ventricular Diastolic Area")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                | 10  |
| RV Area ES    | (A12204-002, 99ALOKA, "Right Ventricular Systolic Area")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(R-FAB5B, SRT, "End Systole")                                 | 10  |
| RV FAC        | (A12204-003, 99ALOKA, "Right Ventricular Fractional Area Change")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                                                    | 10  |
| (2DTT(LV))    |                                                                                       |                                                                                                                                                                               |     |
| Peak Global   | (ALOKA_004-001, 99ALOKA, "Peak GLS")                                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber")    | 9   |
| Peak Global   | (ALOKA_004-001, 99ALOKA, "Peak GLS")                                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19B, SRT, "Apical two chamber")     | 9   |
| Peak Global   | (ALOKA_004-001, 99ALOKA, "Peak GLS")                                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-0395, SRT, "Apical long axis")       | 9   |
| Peak Global   | (ALOKA_004-002, 99ALOKA, "Peak GLS of Overlay")                                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-014, 99ALOKA, "2D Speckle Tracking, Multi Plane")                                                      | 9   |

| Label            | Concept Name                                                         | Modifier                                                                                                                                                                   | row |
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| Time from R      | (ALOKA_004-006, 99ALOKA, "Time from R to Peak GLS phase")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |
| Time from R      | (ALOKA_004-006, 99ALOKA, "Time from R to Peak GLS phase")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19B, SRT, "Apical two chamber")  | 9   |
| Time from R      | (ALOKA_004-006, 99ALOKA, "Time from R to Peak GLS phase")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-0395, SRT, "Apical long axis")    | 9   |
| Time from R      | (ALOKA_004-007, 99ALOKA, "Time from R to Peak GLS phase of Overlay") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-014, 99ALOKA, "2D Speckle Tracking, Multi Plane")                                                   | 9   |
| -                | (ALOKA_004-003, 99ALOKA, "Averaged Peak GLS")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-014, 99ALOKA, "2D Speckle Tracking, Multi Plane")                                                   | 9   |
| L. Strain(EN)[%] | (ALOKA_004-004, 99ALOKA, "GLS-Sel.")                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |
| L. Strain(EN)[%] | (ALOKA_004-004, 99ALOKA, "GLS-Sel.")                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19B, SRT, "Apical two chamber")  | 9   |
| L. Strain(EN)[%] | (ALOKA_004-004, 99ALOKA, "GLS-Sel.")                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-0395, SRT, "Apical long axis")    | 9   |
| L. Strain(EN)[%] | (ALOKA_004-005, 99ALOKA, "GLS-Sel.of Overlay")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-014, 99ALOKA, "2D Speckle Tracking, Multi Plane")                                                   | 9   |
| Time from R      | (ALOKA_004-008, 99ALOKA, "Time from R to GLS-Sel. phase")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |

| Label         | Concept Name                                                                        | Modifier                                                                                                                                                                                                                                                                                            | row |
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| Time from R   | (ALOKA_004-008, 99ALOKA, "Time from R to GLS-Sel. phase")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-A19B, SRT, "Apical two chamber")                                                                                                                           | 9   |
| Time from R   | (ALOKA_004-008, 99ALOKA, "Time from R to GLS-Sel. phase")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-013, 99ALOKA, "2D Speckle Tracking, Single Plane"), Image View=(G-0395, SRT, "Apical long axis")                                                                                                                             | 9   |
| Time from R   | (ALOKA_004-009, 99ALOKA, "Time from R to GLS-Sel. phase of Overlay")                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-014, 99ALOKA, "2D Speckle Tracking, Multi Plane")                                                                                                                                                                            | 9   |
| (LV Mass T-E) |                                                                                     |                                                                                                                                                                                                                                                                                                     |     |
| LVM           | (18087-7, LN, "Left Ventricle Mass")                                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse")                                                                                                                                                                            | 9   |
| LVM/BSA       | (A12203-001, 99ALOKA, "Left Ventricular Mass Index")                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse")                                                                                                                                                                            | 9   |
| LVAd PM Epi   | (G-0379, SRT, "Left Ventricle Epicardial Diastolic Area, psax pap view")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level") | 9   |
| LVAd PM Endo  | (A12240-001, 99ALOKA, "Left Ventricular Endocardial Diastolic Area, psax pap view") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039B, SRT, "Parasternal short axis at the Papillary Muscle level") | 9   |
| a             | (399063007, SCT, "Left Ventricle Semi-major Axis Diastolic Dimension")              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                   | 9   |

| Label          | Concept Name                                                                      | Modifier                                                                                                                                                                                                                                                             | row |
|----------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| d              | (399309003, SCT, "Left Ventricle Truncated Semi-major Axis Diastolic Dimension")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                    | 9   |
| t              | (A12201-002, 99ALOKA, "Mean Wall Thickness")                                      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse")                                                                                                                                             | 9   |
| b              | (A12201-004, 99ALOKA, "Short Axis Radius Calculated from Short Axis Cavity Area") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125222, DCM, "Left Ventricle Mass by Truncated Ellipse")                                                                                                                                             | 9   |
| (LV Mass Pedi) |                                                                                   |                                                                                                                                                                                                                                                                      |     |
| LVM            | (18087-7, LN, "Left Ventricle Mass")                                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric")                                                                                                                                            | 9   |
| LVM/BSA        | (A12203-001, 99ALOKA, "Left Ventricular Mass Index")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric")                                                                                                                                            | 9   |
| EDL            | (A12201-003, 99ALOKA, "Left Ventricular End Diastolic Length")                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                   | 9   |
| EDA            | (G-0375, SRT, "Left Ventricular Diastolic Area")                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                   | 9   |
| EDLepi         | (A12201-003, 99ALOKA, "Left Ventricular End Diastolic Length")                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric"), Finding Site=(A12236-006, 99ALOKA, "Epicardium"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode") | 9   |
| EDAepi         | (G-0379, SRT, "Left Ventricle Epicardial Diastolic Area, psax pap view")          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric"), Finding Site=(A12236-006, 99ALOKA, "Epicardium"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode") | 9   |

| Label                  | Concept Name                                           | Modifier                                                                                                                                                                                                                                                                                             | row |
|------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| EDV                    | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                                                                                                                       | 9   |
| EDVepi                 | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-003, 99ALOKA, "Left Ventricle Mass for Pediatric"), Finding Site=(A12236-006, 99ALOKA, "Epicardium"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                      | 9   |
| (LV Mass Pedi Simpson) |                                                        |                                                                                                                                                                                                                                                                                                      |     |
| LVM                    | (18087-7, LN, "Left Ventricle Mass")                   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-004, 99ALOKA, "Left Ventricle Mass for Pediatric by Modified Simpson")                                                                                                                                                        | 9   |
| LVM/BSA                | (A12203-001, 99ALOKA, "Left Ventricular Mass Index")   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-004, 99ALOKA, "Left Ventricle Mass for Pediatric by Modified Simpson")                                                                                                                                                        | 9   |
| EDV(A4C)               | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image View=(G-A19C, SRT, "Apical four chamber")                                                                                   | 9   |
| EDV(A2C)               | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-001, 99ALOKA, "Method of Disks, Single Plane with Apical two chamber"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image View=(G-A19B, SRT, "Apical two chamber")                                                    | 9   |
| EDV                    | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125207, DCM, "Method of Disks, Biplane"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                                                         | 9   |
| EDVepi(A4C)            | (18026-5, LN, "Left Ventricular End Diastolic Volume") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-004, 99ALOKA, "Left Ventricle Mass for Pediatric by Modified Simpson"), Finding Site=(A12236-006, 99ALOKA, "Epicardium"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image View=(G-A19C, SRT, "Apical four chamber") | 9   |

| Label       | Concept Name                                                                           | Modifier                                                                                                                                                                                                                                                                                            | row |
|-------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| EDVepi(A2C) | (18026-5, LN, "Left Ventricular End Diastolic Volume")                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-004, 99ALOKA, "Left Ventricle Mass for Pediatric by Modified Simpson"), Finding Site=(A12236-006, 99ALOKA, "Epicardium"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image View=(G-A19B, SRT, "Apical two chamber") | 9   |
| EDVepi      | (18026-5, LN, "Left Ventricular End Diastolic Volume")                                 | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-004, 99ALOKA, "Left Ventricle Mass for Pediatric by Modified Simpson"), Finding Site=(A12236-006, 99ALOKA, "Epicardium"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                 | 9   |
| %difD       | (A12203-003, 99ALOKA, "Long Axis(at End Diastole or End Systole) Length % Difference") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                                                                                                                      | 9   |
| %difDepi    | (A12203-003, 99ALOKA, "Long Axis(at End Diastole or End Systole) Length % Difference") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12227-004, 99ALOKA, "Left Ventricle Mass for Pediatric by Modified Simpson"), Finding Site=(A12236-006, 99ALOKA, "Epicardium")                                                                                                     | 9   |
| (RV(2D))    |                                                                                        |                                                                                                                                                                                                                                                                                                     |     |
| RV WT       | (A12204-007, 99ALOKA, "Right Ventricular Wall Thickness")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                                                 | 10  |
| RVDd base   | (A12204-004, 99ALOKA, "End-diastolic Basal Diameter")                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                                                 | 10  |
| RVDd mid    | (A12204-005, 99ALOKA, "End-diastolic Mid-cavity Diameter")                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                                                 | 10  |
| RVLd        | (A12204-006, 99ALOKA, "Right Ventricular End-diastolic Length")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                                                 | 10  |
| RVOT        | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                                      | 10  |
| RVOT VTI    | (20354-7, LN, "Velocity Time Integral")                                                | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                                                                                                                                                                       | 10  |

| Label       | Concept Name                                                         | Modifier                                                                                                                                                                                                                                                                                         | row |
|-------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| RVAWd       | (18153-7, LN, "Right Ventricular Anterior Wall Diastolic Thickness") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                                                                                                                   | 10  |
| RVAWs       | (18157-8, LN, "Right Ventricular Anterior Wall Systolic Thickness")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                                                                                                                     | 10  |
| RVDd lax    | (G-038F, SRT, "Cardiovascular Orifice Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(443083000, SCT, "Parasternal long axis view of right ventricular outflow tract") | 10  |
| RVDd prox   | (G-038F, SRT, "Cardiovascular Orifice Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-001, 99ALOKA, "Proximal Right Ventricle Outflow Tract"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(399195005, SCT, "Right Ventricular Outflow Tract View")           | 10  |
| RVDd dist   | (G-038F, SRT, "Cardiovascular Orifice Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-002, 99ALOKA, "Distal Right Ventricle Outflow Tract"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(399195005, SCT, "Right Ventricular Outflow Tract View")             | 10  |
| RVDs        | (20305-9, LN, "Right Ventricular Internal Systolic Dimension")       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                                                                                                                                                     | 10  |
| RV EDA      | (A12204-001, 99ALOKA, "Right Ventricular Diastolic Area")            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                                                                                                   | 10  |
| RV ESA      | (A12204-002, 99ALOKA, "Right Ventricular Systolic Area")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(R-FAB5B, SRT, "End Systole")                                                                                                                                                    | 10  |
| (AV(2D))    |                                                                      |                                                                                                                                                                                                                                                                                                  |     |
| LVOT        | (G-038F, SRT, "Cardiovascular Orifice Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                                                          | 9   |
| AV Ann diam | (A12211-004, 99ALOKA, "Aortic Annulus Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                                                 | 13  |

| Label           | Concept Name                                                       | Modifier                                                                                                                                                                                                                                                       | row |
|-----------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| AVA(Trace)      | (G-038E, SRT, "Cardiovascular Orifice Area")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0398, SRT, "Parasternal short axis at the aortic valve level") | 13  |
| AR VCW          | (A12211-009, 99ALOKA, "Aortic Regurgitation Vena Contracta Width") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                              | 13  |
| Jet A           | (A12222-056, 99ALOKA, "Regurgitation Jet Area")                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                              | 13  |
| Jet H           | (A12222-057, 99ALOKA, "Regurgitation Jet Height")                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                              | 13  |
| Jet W           | (A12222-058, 99ALOKA, "Regurgitation Jet Width")                   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                              | 13  |
| Jet W/LVOT      | (A12211-008, 99ALOKA, "Aortic Regurgitant Jet Width/LVOT Width")   | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                                                                                                               | 13  |
| Jet A/LVOT(CSA) | (A12211-007, 99ALOKA, "Aortic Regurgitant Jet Area/LVOT Area")     | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                                                                                                               | 13  |
| (MV Annulus)    |                                                                    |                                                                                                                                                                                                                                                                |     |
| Ann diam comm   | (A12222-033, 99ALOKA, "Commissural Diameter")                      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(65197004, SCT, "Mitral Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                | 14  |
| Ann diam a-p    | (A12222-022, 99ALOKA, "Anterior-Posterior Annulus Diameter")       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(65197004, SCT, "Mitral Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                                                | 14  |
| Ann Area        | (A12207-019, 99ALOKA, "Mitral Annulus Area")                       | Measurement Method=(125220, DCM, "Planimetry"), Finding Site=(65197004, SCT, "Mitral Annulus")                                                                                                                                                                 | 14  |
| MVA(Trace)      | (G-038E, SRT, "Cardiovascular Orifice Area")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-039A, SRT, "Parasternal short axis at the Mitral Valve level") | 14  |

| Label         | Concept Name                                                                     | Modifier                                                                                                                                                                                                                           | row |
|---------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| MV Ann VTI    | (20354-7, LN, "Velocity Time Integral")                                          | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral"), Finding Site=(65197004, SCT, "Mitral Annulus"), Image Mode=(R-409E4, SRT, "Doppler Pulsed") | 14  |
| Ann Vmax e'   | (399133000, SCT, "Left Ventricular Peak Early Diastolic Tissue Velocity")        | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                                                                                    | 9   |
| Ann Vmax a'   | (399007006, SCT, "LV Peak Diastolic Tissue Velocity During Atrial Systole")      | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Cardiac Cycle Point=(R-FAB5B, SRT, "End Systole"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                                 | 9   |
| MV Ann E/e'   | (399140004, SCT, "Ratio of MV Peak Velocity to LV Peak Tissue Velocity E-Wave")  |                                                                                                                                                                                                                                    | 9   |
| Ann PLAX      | (A12207-020, 99ALOKA, "Mitral Annulus Diameter PLAX")                            | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(65197004, SCT, "Mitral Annulus"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0396, SRT, "Parasternal long axis")                                                 | 14  |
| (TV Annulus)  |                                                                                  |                                                                                                                                                                                                                                    |     |
| Ann diam comm | (A12222-033, 99ALOKA, "Commissural Diameter")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(113259005, SCT, "Tricuspid Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                | 16  |
| Ann diam a-p  | (A12222-022, 99ALOKA, "Anterior-Posterior Annulus Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(113259005, SCT, "Tricuspid Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                | 16  |
| Ann Area      | (A12208-022, 99ALOKA, "Tricuspid Annulus Area")                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Finding Site=(113259005, SCT, "Tricuspid Annulus")                                                                                     | 16  |
| Ann Vmax e'   | (A12208-017, 99ALOKA, "Right Ventricular Peak Early Diastolic Tissue Velocity")  | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Finding Site=(113259005, SCT, "Tricuspid Annulus"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                                | 16  |
| Ann Vmax a'   | (A12208-020, 99ALOKA, "RV Peak Diastolic Tissue Velocity During Atrial Systole") | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Finding Site=(113259005, SCT, "Tricuspid Annulus"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                                | 16  |
| TV Ann E/e'   | (59111-5, LN, "E Velocity to Annulus E Velocity Ratio")                          | Finding Site=(113259005, SCT, "Tricuspid Annulus")                                                                                                                                                                                 | 16  |

| Label          | Concept Name                                                 | Modifier                                                                                                                                                                                | row |
|----------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Ann PLAX       | (G-038F, SRT, "Cardiovascular Orifice Diameter")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(113259005, SCT, "Tricuspid Annulus"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0396, SRT, "Parasternal long axis")  | 16  |
| Ann PSAX       | (G-038F, SRT, "Cardiovascular Orifice Diameter")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(113259005, SCT, "Tricuspid Annulus"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0397, SRT, "Parasternal short axis") | 16  |
| (PV Annulus)   |                                                              |                                                                                                                                                                                         |     |
| Ann diam a-p   | (A12222-022, 99ALOKA, "Anterior-Posterior Annulus Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                         | 15  |
| Ann diam trans | (A12209-009, 99ALOKA, "Transverse Annulus Diameter")         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                         | 15  |
| Ann Area       | (A12209-016, 99ALOKA, "Purmonary Annulus Area")              | Measurement Method=(125220, DCM, "Planimetry")                                                                                                                                          | 15  |
| Ann PLAX       | (G-038F, SRT, "Cardiovascular Orifice Diameter")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0396, SRT, "Parasternal long axis")                                                      | 15  |
| Ann PSAX       | (G-038F, SRT, "Cardiovascular Orifice Diameter")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0397, SRT, "Parasternal short axis")                                                     | 15  |
| (TAVI/TAVR)    |                                                              |                                                                                                                                                                                         |     |
| Ann dmin       | (A12211-006, 99ALOKA, "Aortic Annulus Minimum Diameter")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-016, 99ALOKA, "Aortic Valve Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                             | 13  |
| Ann dmax       | (A12211-005, 99ALOKA, "Aortic Annulus Maximum Diameter")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-016, 99ALOKA, "Aortic Valve Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                             | 13  |
| Ann Area       | (A12211-010, 99ALOKA, "Aortic Valve Annulus Area")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-016, 99ALOKA, "Aortic Valve Annulus"), Image Mode=(G-03A2, SRT, "2D mode")                                             | 13  |
| Ao Ring        | (A12211-004, 99ALOKA, "Aortic Annulus Diameter")             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-35410, SRT, "Aortic Valve Ring"), Image Mode=(G-03A2, SRT, "2D mode")                                                       | 13  |
| Ao SV          | (A12212-009, 99ALOKA, "Aortic Sinuses of Valsalva Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                                         | 17  |

| Label       | Concept Name                                                                         | Modifier                                                                                                                      | row |
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| Ao STJ      | (A12212-008, 99ALOKA, "Aortic Sinotubular Junction Diameter")                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                               | 17  |
| Ann-Ost Lt. | (A12222-020, 99ALOKA, "Annulus-Ostium Left diameter")                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                               | 17  |
| Ann-Ost Rt. | (A12222-021, 99ALOKA, "Annulus-Ostium Right diameter")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                               | 17  |
| (MV(M))     |                                                                                      |                                                                                                                               |     |
| C-Eamp      | (A12207-001, 99ALOKA, "Mitral Valve Dimension of C point to E point by M-Mode")      | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 14  |
| C-Aamp      | (A12207-002, 99ALOKA, "Mitral Valve Dimension of C point to A point by M-Mode")      | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 14  |
| D-Eamp      | (A12207-017, 99ALOKA, "D-E amplitude")                                               | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 14  |
| D-Eslop (F) | (59127-1, LN, "D-E Slope")                                                           | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 14  |
| E-Fslop     | (18040-6, LN, "Mitral Valve E-F Slope by M-Mode")                                    | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 14  |
| EPSS        | (18036-4, LN, "Mitral Valve EPSS, E wave")                                           | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 14  |
| MAPSE       | (A12207-018, 99ALOKA, "Mitral Annular Plane Systolic Excursion")                     | Image Mode(Group)=(G-0394, SRT, "M mode"), Finding Site=(65197004, SCT, "Mitral Annulus"), Image Mode=(G-0394, SRT, "M mode") | 14  |
| A/E         | (A12207-003, 99ALOKA, "Mitral Valve C-A Dimension to C-E Dimension Ratio by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                     | 14  |
| E/A         | (A12207-004, 99ALOKA, "Mitral Valve C-E Dimension to C-A Dimension Ratio by M-Mode") | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                     | 14  |
| (RV(M))     |                                                                                      |                                                                                                                               |     |
| RV WT       | (A12204-007, 99ALOKA, "Right Ventricular Wall Thickness")                            | Image Mode(Group)=(G-0394, SRT, "M mode"), Image Mode=(G-0394, SRT, "M mode")                                                 | 10  |
| TAPSE       | (A12208-012, 99ALOKA, "Tricuspid Annular Plane Systolic Excursion")                  | Image Mode(Group)=(G-0394, SRT, "M mode")                                                                                     | 16  |

| Label        | Concept Name                                                                    | Modifier                                                                                                                                                     | row |
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| RVDd         | (20304-2, LN, "Right Ventricular Internal Diastolic Dimension")                 | Image Mode(Group)=(G-0394, SRT, "M mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                | 10  |
| RVOT         | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                | Image Mode(Group)=(G-0394, SRT, "M mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-0394, SRT, "M mode")                 | 10  |
| (LVOT)       |                                                                                 |                                                                                                                                                              |     |
| VTI          | (20354-7, LN, "Velocity Time Integral")                                         | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| pV           | (11726-7, LN, "Peak Velocity")                                                  | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| MnV          | (20352-1, LN, "Mean Velocity")                                                  | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| PG           | (20247-3, LN, "Peak Gradient")                                                  | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                        | 9   |
| MPG          | (20256-4, LN, "Mean Gradient")                                                  | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                        | 9   |
| LVOT         | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                      | 9   |
| IVRT         | (18071-1, LN, "Left Ventricular Isovolumic Relaxation Time")                    |                                                                                                                                                              | 9   |
| LVET         | (18041-4, LN, "Aortic Valve Ejection Time")                                     | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 13  |
| PEP          | (A12222-001, 99ALOKA, "Pre-Ejection Period")                                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| AccS         | (20167-3, LN, "Acceleration Slope")                                             | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| AccT         | (20168-1, LN, "Acceleration Time")                                              | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| PEP/ET       | (A12222-002, 99ALOKA, "PEP/ET")                                                 | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| AccT/ET      | (G-0382, SRT, "Ratio of Aortic Valve Acceleration Time to Ejection Time")       | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 13  |
| dPEP         | (A12222-038, 99ALOKA, "Interventricular Dyssynchrony - Interventricular Delay") | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract"), Image Mode=(R-409E4, SRT, "Doppler Pulsed") | 9   |
| LVOT/AV(pV)  | (A12203-014, 99ALOKA, "pV Ratio of LVOT to AV")                                 | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |
| LVOT/AV(VTI) | (A12203-015, 99ALOKA, "VTI Ratio of LVOT to AV")                                | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                  | 9   |

| Label      | Concept Name                                                                       | Modifier                                                                                                                           | row |
|------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----|
| SV         | (F-32120, SRT, "Stroke Volume")                                                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| CO         | (F-32100, SRT, "Cardiac Output")                                                   | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| SVi        | (F-00078, SRT, "Stroke Index")                                                     | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| COi        | (F-32110, SRT, "Cardiac Index")                                                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| AVA (VTI)  | (G-038E, SRT, "Cardiovascular Orifice Area")                                       | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 13  |
| AVAi (VTI) | (79959-3, LN, "Aortic valve area (Continuity VTI) / BSA")                          | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| AVA (pV)   | (G-038E, SRT, "Cardiovascular Orifice Area")                                       | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                           | 13  |
| AVAi (pV)  | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index")                         | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                           | 13  |
| HR         | (8867-4, LN, "Heart rate")                                                         | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| Qp/Qs      | (29462-9, LN, "Pulmonary-to-Systemic Shunt Flow Ratio")                            |                                                                                                                                    | 22  |
| Qp-Qs      | (A12217-001, 99ALOKA, "Pulmonary minus Systemic Shunt Flow - Doppler Volume Flow") |                                                                                                                                    | 22  |
| (AS Flow)  |                                                                                    |                                                                                                                                    |     |
| pV         | (11726-7, LN, "Peak Velocity")                                                     | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| PG         | (20247-3, LN, "Peak Gradient")                                                     | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 13  |
| MnV        | (20352-1, LN, "Mean Velocity")                                                     | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| MPG        | (20256-4, LN, "Mean Gradient")                                                     | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 13  |
| VTI        | (20354-7, LN, "Velocity Time Integral")                                            | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| LVOT       | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                   | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                            | 9   |
| CSA        | (G-038E, SRT, "Cardiovascular Orifice Area")                                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                            | 9   |

| Label      | Concept Name                                               | Modifier                                                                                                                           | row |
|------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----|
| VTI (LVOT) | (20354-7, LN, "Velocity Time Integral")                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| pV (LVOT)  | (11726-7, LN, "Peak Velocity")                             | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| PG (LVOT)  | (20247-3, LN, "Peak Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")              | 9   |
| MnV (LVOT) | (20352-1, LN, "Mean Velocity")                             | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 9   |
| MPG (LVOT) | (20256-4, LN, "Mean Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")              | 9   |
| AVA (VTI)  | (G-038E, SRT, "Cardiovascular Orifice Area")               | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 13  |
| AVAi (VTI) | (79959-3, LN, "Aortic valve area (Continuity VTI) / BSA")  | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| AVA (pV)   | (G-038E, SRT, "Cardiovascular Orifice Area")               | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                           | 13  |
| AVAi (pV)  | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index") | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                           | 13  |
| VR         | (A12211-011, 99ALOKA, "Velocity Ratio of LVOT to AV")      | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| (AV)       |                                                            |                                                                                                                                    |     |
| VTI        | (20354-7, LN, "Velocity Time Integral")                    | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| pV         | (11726-7, LN, "Peak Velocity")                             | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| MnV        | (20352-1, LN, "Mean Velocity")                             | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| PG         | (20247-3, LN, "Peak Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 13  |
| MPG        | (20256-4, LN, "Mean Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                          | 13  |
| AccSlope   | (20167-3, LN, "Acceleration Slope")                        | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| AccT       | (20168-1, LN, "Acceleration Time")                         | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                    | 13  |
| LVET       | (18041-4, LN, "Aortic Valve Ejection Time")                | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                        | 13  |

| Label      | Concept Name                                                              | Modifier                                                                                                                                                                                                                | row |
|------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| AccT/ET    | (G-0382, SRT, "Ratio of Aortic Valve Acceleration Time to Ejection Time") | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                                                                         | 13  |
| DecSlope   | (20216-8, LN, "Deceleration Slope")                                       | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                                                                         | 13  |
| DecT       | (20217-6, LN, "Deceleration Time")                                        | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                                                                         | 13  |
| LVOT       | (G-038F, SRT, "Cardiovascular Orifice Diameter")                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                 | 9   |
| LVOT VTI   | (20354-7, LN, "Velocity Time Integral")                                   | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                             | 9   |
| LVOT SV    | (F-32120, SRT, "Stroke Volume")                                           | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                             | 9   |
| LVOT SVi   | (F-00078, SRT, "Stroke Index")                                            | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                             | 9   |
| AVA(VTI)   | (G-038E, SRT, "Cardiovascular Orifice Area")                              | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                      | 13  |
| AVAi (VTI) | (79959-3, LN, "Aortic valve area (Continuity VTI) / BSA")                 | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                                                                         | 13  |
| AVA (pV)   | (G-038E, SRT, "Cardiovascular Orifice Area")                              | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                                                                                                                | 13  |
| AVAi (pV)  | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index")                | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                                                                                                                | 13  |
| HR         | (8867-4, LN, "Heart rate")                                                | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                                                                         | 13  |
| (AR)       |                                                                           |                                                                                                                                                                                                                         |     |
| pV         | (11726-7, LN, "Peak Velocity")                                            | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                                                                        | 13  |
| PG         | (20247-3, LN, "Peak Gradient")                                            | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                              | 13  |
| Ved        | (11653-3, LN, "End Diastolic Velocity")                                   | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 13  |

| Label    | Concept Name                                                               | Modifier                                                                                                                                                                                                                | row |
|----------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| PGed     | (A12222-034, 99ALOKA, "Diastolic Pressure Gradient")                       | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 13  |
| DecSlope | (20216-8, LN, "Deceleration Slope")                                        | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave")                                                     | 13  |
| DecT     | (20217-6, LN, "Deceleration Time")                                         | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave")                                                     | 13  |
| P1/2T    | (20280-4, LN, "Pressure Half-Time")                                        | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                                                                        | 13  |
| VTI(AR)  | (A12211-001, 99ALOKA, "Velocity Time Integral of Aortic Regurgitant Flow") | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                                                                        | 13  |
| MnV      | (20352-1, LN, "Mean Velocity")                                             | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                                                                        | 13  |
| MPG      | (20256-4, LN, "Mean Gradient")                                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                              | 13  |
| AccSlope | (20167-3, LN, "Acceleration Slope")                                        | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave")                                                     | 13  |
| AccT     | (20168-1, LN, "Acceleration Time")                                         | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave")                                                     | 13  |
| LVOT     | (G-038F, SRT, "Cardiovascular Orifice Diameter")                           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                 | 9   |
| LVOT VTI | (20354-7, LN, "Velocity Time Integral")                                    | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                             | 9   |
| LVOT SV  | (F-32120, SRT, "Stroke Volume")                                            | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                             | 9   |
| LVOT SVi | (F-00078, SRT, "Stroke Index")                                             | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                                                             | 9   |
| MV SV    | (A12207-013, 99ALOKA, "Flow Volume of Mitral Valve Annulus in Flow")       | Measurement Method=(125219, DCM, "Doppler Volume Flow")                                                                                                                                                                 | 14  |

| Label    | Concept Name                                                                             | Modifier                                                                                                                                                               | row |
|----------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Reg.Vol  | (33878-0, LN, "Volume Flow")                                                             | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                       | 13  |
| Reg.Frac | (G-0390, SRT, "Regurgitant Fraction")                                                    | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                       | 13  |
| Jet A    | (A12222-056, 99ALOKA, "Regurgitation Jet Area")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                      | 13  |
| JetH     | (A12222-057, 99ALOKA, "Regurgitation Jet Height")                                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                      | 13  |
| JetW     | (A12222-058, 99ALOKA, "Regurgitation Jet Width")                                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                      | 13  |
| (MV)     |                                                                                          |                                                                                                                                                                        |     |
| eV       | (18037-2, LN, "Mitral Valve E-Wave Peak Velocity")                                       |                                                                                                                                                                        | 14  |
| aV       | (17978-8, LN, "Mitral Valve A-Wave Peak Velocity")                                       |                                                                                                                                                                        | 14  |
| E/A      | (18038-0, LN, "Mitral Valve E to A Ratio")                                               |                                                                                                                                                                        | 14  |
| A/E      | (A12207-006, 99ALOKA, "Mitral Valve A to E Ratio")                                       |                                                                                                                                                                        | 14  |
| E/e'     | (A12203-011, 99ALOKA, "Ratio of MV E-Wave Peak Vel. to Early Diastolic Myocardium Vel.") |                                                                                                                                                                        | 9   |
| TE-e'    | (A12207-024, 99ALOKA, "Time E to e'")                                                    | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |
| DecS     | (20216-8, LN, "Deceleration Slope")                                                      | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                        | 14  |
| DecT     | (G-0384, SRT, "Mitral Valve E-Wave Deceleration Time")                                   |                                                                                                                                                                        | 14  |
| Edur     | (A12207-005, 99ALOKA, "Mitral Valve E-Wave Duration")                                    | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                        | 14  |
| Adur     | (G-0385, SRT, "Mitral Valve A-Wave Duration")                                            | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                        | 14  |
| IVRT     | (18071-1, LN, "Left Ventricular Isovolumic Relaxation Time")                             |                                                                                                                                                                        | 9   |

| Label       | Concept Name                                                             | Modifier                                                                                                                                                            | row |
|-------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| MV C-Odur   | (399104001, SCT, "Mitral Valve Closure to Opening Time")                 |                                                                                                                                                                     | 14  |
| LVET        | (18041-4, LN, "Aortic Valve Ejection Time")                              | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                         | 13  |
| VTI         | (20354-7, LN, "Velocity Time Integral")                                  | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 14  |
| pV          | (11726-7, LN, "Peak Velocity")                                           | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                    | 14  |
| MnV         | (20352-1, LN, "Mean Velocity")                                           | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| PG          | (20247-3, LN, "Peak Gradient")                                           | Measurement Method=(125218, DCM, "Simplified Bernoulli")                                                                                                            | 14  |
| MPG         | (20256-4, LN, "Mean Gradient")                                           | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")       | 14  |
| P1/2T       | (20280-4, LN, "Pressure Half-Time")                                      | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                 | 14  |
| MVA (P1/2T) | (G-038E, SRT, "Cardiovascular Orifice Area")                             | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Measurement Method=(125210, DCM, "Area by Pressure Half-Time"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 14  |
| MVA (VTI)   | (G-038E, SRT, "Cardiovascular Orifice Area")                             | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral")                               | 14  |
| Diam.A4C    | (G-038F, SRT, "Cardiovascular Orifice Diameter")                         | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image View=(G-A19C, SRT, "Apical four chamber")                     | 14  |
| Diam.A2C    | (G-038F, SRT, "Cardiovascular Orifice Diameter")                         | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image View=(G-A19B, SRT, "Apical two chamber")                      | 14  |
| SV (MV)     | (A12207-026, 99ALOKA, "Flow Volume of Mitral Valve Annulus in Flow (1)") | Measurement Method=(125219, DCM, "Doppler Volume Flow")                                                                                                             | 14  |
| CO (MV)     | (F-32100, SRT, "Cardiac Output")                                         | Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                        | 14  |
| SVi (MV)    | (F-00078, SRT, "Stroke Index")                                           | Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                        | 14  |

| Label          | Concept Name                                                                   | Modifier                                                                                                                                                            | row |
|----------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| COi (MV)       | (F-32110, SRT, "Cardiac Index")                                                | Measurement Method=(125207, DCM, "Method of Disks, Biplane")                                                                                                        | 14  |
| Acc Slope      | (20167-3, LN, "Acceleration Slope")                                            | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 14  |
| AccT           | (20168-1, LN, "Acceleration Time")                                             |                                                                                                                                                                     | 14  |
| PVAdur-Adur    | (A12207-009, 99ALOKA, "Subtraction of A-wave Duration from PVA-wave Duration") |                                                                                                                                                                     | 14  |
| HR             | (8867-4, LN, "Heart rate")                                                     | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                     | 14  |
| (MV(Valsalva)) |                                                                                |                                                                                                                                                                     |     |
| eV(Val)        | (18037-2, LN, "Mitral Valve E-Wave Peak Velocity")                             | Measurement Method=(A12227-001, 99ALOKA, "Valsalva")                                                                                                                | 14  |
| aV(Val)        | (17978-8, LN, "Mitral Valve A-Wave Peak Velocity")                             | Measurement Method=(A12227-001, 99ALOKA, "Valsalva")                                                                                                                | 14  |
| E/A(Val)       | (18038-0, LN, "Mitral Valve E to A Ratio")                                     | Measurement Method=(A12227-001, 99ALOKA, "Valsalva")                                                                                                                | 14  |
| (MR Flow)      |                                                                                |                                                                                                                                                                     |     |
| VTI(MR)        | (A12207-010, 99ALOKA, "Velocity Time Integral of Mitral Regurgitant Flow")     | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 14  |
| pV             | (11726-7, LN, "Peak Velocity")                                                 | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 14  |
| MnV            | (20352-1, LN, "Mean Velocity")                                                 | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 14  |
| PG             | (20247-3, LN, "Peak Gradient")                                                 | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 14  |
| MPG            | (20256-4, LN, "Mean Gradient")                                                 | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 14  |
| FlowT          | (A12222-003, 99ALOKA, "Flow Time")                                             | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 14  |
| dP/dt          | (18035-6, LN, "Mitral Regurgitation dP/dt derived from Mitral Reg. velocity")  |                                                                                                                                                                     | 14  |
| dt             | (A12222-059, 99ALOKA, "Time")                                                  | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 14  |

| Label        | Concept Name                                                         | Modifier                                                                                                                                                            | row |
|--------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| PG1          | (A12222-010, 99ALOKA, "Peak Gradient 1")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 14  |
| V1           | (A12222-024, 99ALOKA, "Blood Flow Velocity 1")                       | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 14  |
| PG2          | (A12222-011, 99ALOKA, "Peak Gradient 2")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 14  |
| V2           | (A12222-027, 99ALOKA, "Blood Flow Velocity 2")                       | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 14  |
| MR VCV       | (A12222-007, 99ALOKA, "Vena Contracta Diameter")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                                          | 14  |
| Jet A        | (A12222-056, 99ALOKA, "Regurgitation Jet Area")                      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 14  |
| Jet H        | (A12222-057, 99ALOKA, "Regurgitation Jet Height")                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 14  |
| Jet W        | (A12222-058, 99ALOKA, "Regurgitation Jet Width")                     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 14  |
| VTI(MV annu) | (20354-7, LN, "Velocity Time Integral")                              | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                      | 14  |
| Diam.A4C     | (G-038F, SRT, "Cardiovascular Orifice Diameter")                     | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image View=(G-A19C, SRT, "Apical four chamber")                     | 14  |
| Diam.A2C     | (G-038F, SRT, "Cardiovascular Orifice Diameter")                     | Finding Site=(T-35313, SRT, "Mitral Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow"), Image View=(G-A19B, SRT, "Apical two chamber")                      | 14  |
| MV SV        | (A12207-013, 99ALOKA, "Flow Volume of Mitral Valve Annulus in Flow") | Measurement Method=(125219, DCM, "Doppler Volume Flow")                                                                                                             | 14  |
| MV Leaf Sep  | (59109-9, LN, "Leaflet Separation")                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 14  |

| Label     | Concept Name                                               | Modifier                                                                                                                                       | row |
|-----------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Reg.Vol   | (A12207-014, 99ALOKA, "Mitral valve Regurgitant volume")   | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                               | 14  |
| Reg.Frac  | (G-0390, SRT, "Regurgitant Fraction")                      | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                               | 14  |
| EROA      | (G-038E, SRT, "Cardiovascular Orifice Area")               | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                               | 14  |
| (PVA)     |                                                            |                                                                                                                                                |     |
| VTI       | (20354-7, LN, "Velocity Time Integral")                    |                                                                                                                                                | 15  |
| pV        | (11726-7, LN, "Peak Velocity")                             | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 15  |
| PG        | (20247-3, LN, "Peak Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                      | 15  |
| MnV       | (20352-1, LN, "Mean Velocity")                             | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 15  |
| MPG       | (20256-4, LN, "Mean Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                      | 15  |
| RVOT VTI  | (20354-7, LN, "Velocity Time Integral")                    | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                  | 10  |
| RVOT pV   | (11726-7, LN, "Peak Velocity")                             | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                  | 10  |
| RVOT PG   | (20247-3, LN, "Peak Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                        | 10  |
| RVOT MnV  | (20352-1, LN, "Mean Velocity")                             | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                  | 10  |
| RVOT MPG  | (20256-4, LN, "Mean Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                        | 10  |
| RVOT      | (G-038F, SRT, "Cardiovascular Orifice Diameter")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode") | 10  |
| PVA(VTI)  | (G-038E, SRT, "Cardiovascular Orifice Area")               | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral")                                                              | 15  |
| PVAi(VTI) | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index") | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral")                                                              | 15  |
| PVA(pV)   | (G-038E, SRT, "Cardiovascular Orifice Area")               | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                                       | 15  |

| Label         | Concept Name                                                                        | Modifier                                                                                                  | row |
|---------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----|
| PVAi(pV)      | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index")                          | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                  | 15  |
| CSA           | (G-038E, SRT, "Cardiovascular Orifice Area")                                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract") | 10  |
| VR            | (A12209-017, 99ALOKA, "Velocity Ratio of RVOT velocity to Pulmonic Valve velocity") | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                           | 15  |
| (PV)          |                                                                                     |                                                                                                           |     |
| pV            | (11726-7, LN, "Peak Velocity")                                                      | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                           | 15  |
| VTI           | (20354-7, LN, "Velocity Time Integral")                                             |                                                                                                           | 15  |
| MnV           | (20352-1, LN, "Mean Velocity")                                                      | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                           | 15  |
| PG            | (20247-3, LN, "Peak Gradient")                                                      | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 15  |
| MPG           | (20256-4, LN, "Mean Gradient")                                                      | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 15  |
| ET            | (18042-2, LN, "Pulmonic Valve Ejection Time")                                       | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                             | 15  |
| PEP           | (A12222-001, 99ALOKA, "Pre-Ejection Period")                                        | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                             | 10  |
| PEP/ET        | (A12222-002, 99ALOKA, "PEP/ET")                                                     | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                             | 10  |
| RV AccSlope   | (20167-3, LN, "Acceleration Slope")                                                 | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                           | 15  |
| RV AccT       | (20168-1, LN, "Acceleration Time")                                                  |                                                                                                           | 15  |
| RV AccT/ET    | (G-0388, SRT, "Ratio of Pulmonic Valve Acceleration Time to Ejection Time")         |                                                                                                           | 15  |
| PA AccSlope   | (20167-3, LN, "Acceleration Slope")                                                 | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                           | 18  |
| PA AccT       | (20168-1, LN, "Acceleration Time")                                                  |                                                                                                           | 18  |
| PA P1/2T      | (20280-4, LN, "Pressure Half-Time")                                                 | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                           | 18  |
| Q to PV close | (20295-2, LN, "Time from Q wave to Pulmonic Valve Closes")                          |                                                                                                           | 15  |

| Label    | Concept Name                                                                    | Modifier                                                                                                                                                            | row |
|----------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| PV diam  | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Image Mode=(G-03A2, SRT, "2D mode")                                                                                     | 15  |
| RVOT     | (G-038F, SRT, "Cardiovascular Orifice Diameter")                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode")                      | 10  |
| dPEP     | (A12222-038, 99ALOKA, "Interventricular Dyssynchrony - Interventricular Delay") | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 15  |
| (PR)     |                                                                                 |                                                                                                                                                                     |     |
| pV       | (11726-7, LN, "Peak Velocity")                                                  | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| PG       | (20247-3, LN, "Peak Gradient")                                                  | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 15  |
| MnV      | (20352-1, LN, "Mean Velocity")                                                  | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| MPG      | (20256-4, LN, "Mean Gradient")                                                  | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 15  |
| VTI(PR)  | (A12209-005, 99ALOKA, "Velocity Time Integral of Pulmonic Regurgitant Flow")    | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| PRend pV | (11653-3, LN, "End Diastolic Velocity")                                         | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 15  |
| PRend PG | (A12222-034, 99ALOKA, "Diastolic Pressure Gradient")                            | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                       | 15  |
| RAP      | (18070-3, LN, "Right Atrium Systolic Pressure")                                 |                                                                                                                                                                     | 12  |
| PADP     | (A12209-013, 99ALOKA, "Pulmonary Artery Pressure")                              | Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                | 15  |
| sPAP     | (A12209-013, 99ALOKA, "Pulmonary Artery Pressure")                              | Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Cardiac Cycle Point=(R-FAB5B, SRT, "End Systole")                                                                 | 15  |
| mPAP     | (A12209-013, 99ALOKA, "Pulmonary Artery Pressure")                              | Measurement Method=(A12227-002, 99ALOKA, "Mean Pulmonary Arterial Pressure"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                      | 15  |

| Label           | Concept Name                                                                   | Modifier                                                                                                                                                            | row |
|-----------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| DecSlope        | (20216-8, LN, "Deceleration Slope")                                            | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 15  |
| DecT            | (20217-6, LN, "Deceleration Time")                                             | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 15  |
| P1/2T           | (20280-4, LN, "Pressure Half-Time")                                            | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 15  |
| PR dur          | (A12209-014, 99ALOKA, "Pulmonary Valve Regurgitation Duration")                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| dur diastole    | (A12209-010, 99ALOKA, "Duration of Diastole")                                  | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| PR index        | (A12209-011, 99ALOKA, "Ratio of PR dur to PR Index")                           | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| PR VCW          | (A12209-015, 99ALOKA, "Pulmonary Valve Regurgitation Vena Contracta Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 15  |
| Jet A           | (A12222-056, 99ALOKA, "Regurgitation Jet Area")                                | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 15  |
| Jet H           | (A12222-057, 99ALOKA, "Regurgitation Jet Height")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 15  |
| Jet W           | (A12222-058, 99ALOKA, "Regurgitation Jet Width")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 15  |
| PR VCW/Ann diam | (A12209-012, 99ALOKA, "Ratio of PR VCW to Ann diam a-p")                       | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 15  |
| RVOT            | (G-038F, SRT, "Cardiovascular Orifice Diameter")                               | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode")                      | 10  |
| RVOT VTI        | (20354-7, LN, "Velocity Time Integral")                                        | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                                       | 10  |
| RVOT SV         | (F-32120, SRT, "Stroke Volume")                                                | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                                       | 10  |

| Label    | Concept Name                                            | Modifier                                                                                                         | row |
|----------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----|
| LVOT     | (G-038F, SRT, "Cardiovascular Orifice Diameter")        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")          | 9   |
| LVOT VTI | (20354-7, LN, "Velocity Time Integral")                 | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                      | 9   |
| LVOT SV  | (F-32120, SRT, "Stroke Volume")                         | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                      | 9   |
| Reg.Vol  | (33878-0, LN, "Volume Flow")                            | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                 | 15  |
| Reg.Frac | (G-0390, SRT, "Regurgitant Fraction")                   | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                 | 15  |
| (TV)     |                                                         |                                                                                                                  |     |
| eV       | (59080-2, LN, "E-Wave Peak Velocity")                   | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| EPG      | (A12208-015, 99ALOKA, "E-Wave Peak Gradient")           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| aV       | (59081-0, LN, "A-Wave Peak Velocity")                   | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| APG      | (A12222-023, 99ALOKA, "A-Wave Peak Gradient")           | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| E/A      | (59104-0, LN, "Peak E wave/Peak A wave by US")          | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| A/E      | (A12208-013, 99ALOKA, "Peak A wave/Peak E wave by US")  | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| E/e'(l)  | (59111-5, LN, "E Velocity to Annulus E Velocity Ratio") | Finding Site=(A12236-005, 99ALOKA, "Lateral Tricuspid Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow") | 16  |
| DecSlope | (20216-8, LN, "Deceleration Slope")                     | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| DecT     | (20217-6, LN, "Deceleration Time")                      | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| Edur     | (A12208-014, 99ALOKA, "E-Wave Duration")                | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| Adur     | (59105-7, LN, "A-Wave Duration")                        | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| RVET     | (18042-2, LN, "Pulmonic Valve Ejection Time")           | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                    | 15  |
| VTI      | (20354-7, LN, "Velocity Time Integral")                 | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| pV       | (11726-7, LN, "Peak Velocity")                          | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |
| MnV      | (20352-1, LN, "Mean Velocity")                          | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                  | 16  |

| Label         | Concept Name                                               | Modifier                                                                                                                                       | row |
|---------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| PG            | (20247-3, LN, "Peak Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                      | 16  |
| MPG           | (20256-4, LN, "Mean Gradient")                             | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                      | 16  |
| P1/2T         | (20280-4, LN, "Pressure Half-Time")                        | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| TVA(P1/2T)    | (G-038E, SRT, "Cardiovascular Orifice Area")               | Measurement Method=(125210, DCM, "Area by Pressure Half-Time"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                | 16  |
| Q to TV open  | (20296-0, LN, "Time from Q wave to Tricuspid Valve Opens") | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| AccSlope      | (20167-3, LN, "Acceleration Slope")                        | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| AccT          | (20168-1, LN, "Acceleration Time")                         | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| IVRT          | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")        | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| FlowT         | (A12222-003, 99ALOKA, "Flow Time")                         | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| (TV Valsalva) |                                                            |                                                                                                                                                |     |
| eV(Val)       | (59080-2, LN, "E-Wave Peak Velocity")                      | Measurement Method=(A12227-001, 99ALOKA, "Valsalva")                                                                                           | 16  |
| aV(Val)       | (59081-0, LN, "A-Wave Peak Velocity")                      | Measurement Method=(A12227-001, 99ALOKA, "Valsalva")                                                                                           | 16  |
| E/A(Val)      | (59104-0, LN, "Peak E wave/Peak A wave by US")             | Measurement Method=(A12227-001, 99ALOKA, "Valsalva")                                                                                           | 16  |
| (TVA(VTI))    |                                                            |                                                                                                                                                |     |
| TV VTI        | (20354-7, LN, "Velocity Time Integral")                    | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                | 16  |
| RVOT VTI      | (20354-7, LN, "Velocity Time Integral")                    | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                  | 10  |
| RVOT diam     | (G-038F, SRT, "Cardiovascular Orifice Diameter")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode") | 10  |
| TVA(VTI)      | (G-038E, SRT, "Cardiovascular Orifice Area")               | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral")                                                              | 16  |
| TVAi(VTI)     | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index") | Measurement Method=(125215, DCM, "Continuity Equation by Velocity Time Integral")                                                              | 16  |
| (TVA(pV))     |                                                            |                                                                                                                                                |     |

| Label     | Concept Name                                                                  | Modifier                                                                                                                                                            | row |
|-----------|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| TV pV     | (11726-7, LN, "Peak Velocity")                                                | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                                                                     | 16  |
| RVOT pV   | (11726-7, LN, "Peak Velocity")                                                | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                                                                       | 10  |
| RVOT diam | (G-038F, SRT, "Cardiovascular Orifice Diameter")                              | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract"), Image Mode=(G-03A2, SRT, "2D mode")                      | 10  |
| TVA (pV)  | (G-038E, SRT, "Cardiovascular Orifice Area")                                  | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                                                            | 16  |
| TVAi(pV)  | (A12222-032, 99ALOKA, "Cardiovascular Orifice Area Index")                    | Measurement Method=(125214, DCM, "Continuity Equation by Peak Velocity")                                                                                            | 16  |
| (TR Flow) |                                                                               |                                                                                                                                                                     |     |
| pV        | (11726-7, LN, "Peak Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 16  |
| PG        | (20247-3, LN, "Peak Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 16  |
| MnV       | (20352-1, LN, "Mean Velocity")                                                | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 16  |
| MPG       | (20256-4, LN, "Mean Gradient")                                                | Measurement Method=(125218, DCM, "Simplified Bernoulli"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                          | 16  |
| VTI       | (A12208-008, 99ALOKA, "Velocity Time Integral of Tricuspid Regurgitant Flow") | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 16  |
| dP/dt     | (18034-9, LN, "Tricuspid Regurgitation dP/dt")                                |                                                                                                                                                                     | 16  |
| PG1       | (A12222-012, 99ALOKA, "Peak Pressure Gradient 1")                             | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                       | 16  |
| V1        | (A12222-030, 99ALOKA, "Blood Flow Velocity at Peak Pressure Gradient 1")      | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 16  |
| PG2       | (A12222-013, 99ALOKA, "Peak Pressure Gradient 2")                             | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                       | 16  |
| V2        | (A12222-031, 99ALOKA, "Blood Flow Velocity at Peak Pressure Gradient 2")      | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 16  |

| Label          | Concept Name                                                                             | Modifier                                                                                                                                                            | row |
|----------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| dt             | (A12208-021, 99ALOKA, "Time Difference between v1 and v2")                               | Image Mode(Group)=(R-409E3, SRT, "Doppler Continuous Wave"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(R-409E3, SRT, "Doppler Continuous Wave") | 16  |
| FlowT          | (A12222-003, 99ALOKA, "Flow Time")                                                       | Flow Direction=(R-42E61, SRT, "Retrograde Flow")                                                                                                                    | 16  |
| RVSP           | (G-0380, SRT, "Right Ventricular Peak Systolic Pressure")                                | Cardiac Cycle Point=(F-32020, SRT, "Systole")                                                                                                                       | 10  |
| RAP            | (18070-3, LN, "Right Atrium Systolic Pressure")                                          |                                                                                                                                                                     | 12  |
| TR VCW         | (A12222-007, 99ALOKA, "Vena Contracta Diameter")                                         | Image Mode(Group)=(G-03A2, SRT, "2D mode")                                                                                                                          | 16  |
| Jet A          | (A12222-056, 99ALOKA, "Regurgitation Jet Area")                                          | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 16  |
| Jet H          | (A12222-057, 99ALOKA, "Regurgitation Jet Height")                                        | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 16  |
| Jet W          | (A12222-058, 99ALOKA, "Regurgitation Jet Width")                                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Flow Direction=(R-42E61, SRT, "Retrograde Flow"), Image Mode=(G-03A2, SRT, "2D mode")                                   | 16  |
| (M Annulus(m)) |                                                                                          |                                                                                                                                                                     |     |
| e'(m)          | (78185-6, LN, "MV med ann Peak e' wave US.TDI")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                         | 14  |
| a'(m)          | (A12222-045, 99ALOKA, "Peak Diastolic Tissue Velocity During Atrial Systole")            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                   | 14  |
| e'/a'(m)       | (A12222-035, 99ALOKA, "Ea to Aa Ratio")                                                  | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                         | 14  |
| E/e'(m)        | (A12203-011, 99ALOKA, "Ratio of MV E-Wave Peak Vel. to Early Diastolic Myocardium Vel.") |                                                                                                                                                                     | 9   |
| s'(m)          | (A12222-048, 99ALOKA, "Peak Systolic Tissue Velocity 1")                                 | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                   | 14  |
| ACC            | (20167-3, LN, "Acceleration Slope")                                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                         | 14  |

| Label          | Concept Name                                                                | Modifier                                                                                                                                                                | row |
|----------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| AccT           | (20168-1, LN, "Acceleration Time")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                       | 14  |
| DEC            | (20216-8, LN, "Deceleration Slope")                                         | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 14  |
| DecT           | (20217-6, LN, "Deceleration Time")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 14  |
| IVRT           | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")                         | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                       | 14  |
| IVCT           | (A12222-039, 99ALOKA, "Isovolumic Contraction Time")                        | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                       | 14  |
| TE-e'(m)       | (A12207-024, 99ALOKA, "Time E to e'")                                       | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 14  |
| IVC Vel(m)     | (A12207-022, 99ALOKA, "Peak MV Annular Velocity in Isovolumic Contraction") | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 14  |
| IVC TPV(m)     | (A12207-025, 99ALOKA, "Time to peak velocity in isovolumic contractuion")   | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 14  |
| IVA(m)         | (A12207-015, 99ALOKA, "Isovolumic Acceleration")                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0391, SRT, "Medial Mitral Annulus")                                                        | 14  |
| (M Annulus(l)) |                                                                             |                                                                                                                                                                         |     |
| e'(l)          | (G-037A, SRT, "Left Ventricular Peak Early Diastolic Tissue Velocity")      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |

| Label    | Concept Name                                                                 | Modifier                                                                                                                                                                | row |
|----------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| a'(l)    | (G-037C, SRT, "LV Peak Diastolic Tissue Velocity During Atrial Systole")     | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |
| e'/a'(l) | (A12207-021, 99ALOKA, "Mitral Valve Ea to Aa Ratio")                         | Finding Site=(G-0392, SRT, "Lateral Mitral Annulus")                                                                                                                    | 14  |
| E/e'(l)  | (G-037B, SRT, "Ratio of MV Peak Velocity to LV Peak Tissue Velocity E-Wave") | Finding Site=(G-0392, SRT, "Lateral Mitral Annulus")                                                                                                                    | 9   |
| av e'    | (A12207-016, 99ALOKA, "Average of e'(l) and e'(s)")                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                             | 14  |
| E/av e'  | (A12207-023, 99ALOKA, "Ratio of MV Peak Velocity to LV av e'")               |                                                                                                                                                                         | 14  |
| s'(l)    | (G-037D, SRT, "Left Ventricular Peak Systolic Tissue Velocity")              | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |
| ACC      | (20167-3, LN, "Acceleration Slope")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus")                                                       | 14  |
| AccT     | (20168-1, LN, "Acceleration Time")                                           | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |
| DEC      | (20216-8, LN, "Deceleration Slope")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |
| DecT     | (20217-6, LN, "Deceleration Time")                                           | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |
| IVRT     | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |
| IVCT     | (A12222-039, 99ALOKA, "Isovolumic Contraction Time")                         | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |

| Label          | Concept Name                                                                 | Modifier                                                                                                                                                                       | row |
|----------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| TE-e'(l)       | (A12207-024, 99ALOKA, "Time E to e'")                                        | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")        | 14  |
| IVC Vel(l)     | (A12207-022, 99ALOKA, "Peak MV Annular Velocity in Isovolumic Contraction")  | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")        | 14  |
| IVC TPV(l)     | (A12207-025, 99ALOKA, "Time to peak velocity in isovolumic contractuion")    | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")        | 14  |
| IVA(l)         | (A12207-015, 99ALOKA, "Isovolumic Acceleration")                             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(G-0392, SRT, "Lateral Mitral Annulus")                                                              | 14  |
| (M Annulus(s)) |                                                                              |                                                                                                                                                                                |     |
| e'(s)          | (G-037A, SRT, "Left Ventricular Peak Early Diastolic Tissue Velocity")       | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |
| a'(s)          | (G-037C, SRT, "LV Peak Diastolic Tissue Velocity During Atrial Systole")     | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |
| e'/a'(s)       | (A12207-021, 99ALOKA, "Mitral Valve Ea to Aa Ratio")                         | Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus")                                                                                                                    | 14  |
| E/e'(s)        | (G-037B, SRT, "Ratio of MV Peak Velocity to LV Peak Tissue Velocity E-Wave") | Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus")                                                                                                                    | 9   |
| av e'          | (A12207-016, 99ALOKA, "Average of e'(l) and e'(s)")                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                                    | 14  |
| E/av e'        | (A12207-023, 99ALOKA, "Ratio of MV Peak Velocity to LV av e'")               |                                                                                                                                                                                | 14  |
| s'(s)          | (G-037D, SRT, "Left Ventricular Peak Systolic Tissue Velocity")              | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |
| ACC            | (20167-3, LN, "Acceleration Slope")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus")                                                       | 14  |

| Label          | Concept Name                                                                    | Modifier                                                                                                                                                                          | row |
|----------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| AccT           | (20168-1, LN, "Acceleration Time")                                              | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| DEC            | (20216-8, LN, "Deceleration Slope")                                             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| DecT           | (20217-6, LN, "Deceleration Time")                                              | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| IVRT           | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")                             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| IVCT           | (A12222-039, 99ALOKA, "Isovolumic Contraction Time")                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| TE-e'(s)       | (A12207-024, 99ALOKA, "Time E to e'")                                           | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| IVC Vel(s)     | (A12207-022, 99ALOKA, "Peak MV Annular Velocity in Isovolumic Contraction")     | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| IVC TPV(s)     | (A12207-025, 99ALOKA, "Time to peak velocity in isovolumic contractuion")       | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")    | 14  |
| IVA(s)         | (A12207-015, 99ALOKA, "Isovolumic Acceleration")                                | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-003, 99ALOKA, "Septal Mitral Annulus")                                                          | 14  |
| (T Annulus(s)) |                                                                                 |                                                                                                                                                                                   |     |
| TV e'(s)       | (A12208-017, 99ALOKA, "Right Ventricular Peak Early Diastolic Tissue Velocity") | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-004, 99ALOKA, "Septal Tricuspid Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 16  |

| Label          | Concept Name                                                                         | Modifier                                                                                                                                                                           | row |
|----------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| TV a'(s)       | (A12208-020, 99ALOKA, "RV Peak Diastolic Tissue Velocity During Atrial Systole")     | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-004, 99ALOKA, "Septal Tricuspid Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 16  |
| TV s'(s)       | (A12208-018, 99ALOKA, "Right Ventricular Peak Systolic Tissue Velocity")             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-004, 99ALOKA, "Septal Tricuspid Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")  | 16  |
| TV E/e'(s)     | (A12208-016, 99ALOKA, "Ratio of TV Peak Velocity to RV Peak Tissue Velocity E-Wave") | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-004, 99ALOKA, "Septal Tricuspid Annulus")                                                        | 16  |
| (T Annulus(l)) |                                                                                      |                                                                                                                                                                                    |     |
| TV e'(l)       | (A12208-017, 99ALOKA, "Right Ventricular Peak Early Diastolic Tissue Velocity")      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-005, 99ALOKA, "Lateral Tricuspid Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 16  |
| TV a'(l)       | (A12208-020, 99ALOKA, "RV Peak Diastolic Tissue Velocity During Atrial Systole")     | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-005, 99ALOKA, "Lateral Tricuspid Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 16  |
| TV s'(l)       | (A12208-018, 99ALOKA, "Right Ventricular Peak Systolic Tissue Velocity")             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Finding Site=(A12236-005, 99ALOKA, "Lateral Tricuspid Annulus"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 16  |
| TV E/e'(l)     | (59111-5, LN, "E Velocity to Annulus E Velocity Ratio")                              | Finding Site=(A12236-005, 99ALOKA, "Lateral Tricuspid Annulus"), Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                   | 16  |
| (LV MPI)       |                                                                                      |                                                                                                                                                                                    |     |
| ET             | (18041-4, LN, "Aortic Valve Ejection Time")                                          | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                        | 13  |
| MV C-Odur      | (399104001, SCT, "Mitral Valve Closure to Opening Time")                             |                                                                                                                                                                                    | 14  |
| IVCT           | (399051002, SCT, "Left Ventricular Isovolumic Contraction Time")                     | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                                                                                    | 9   |
| IVRT           | (18071-1, LN, "Left Ventricular Isovolumic Relaxation Time")                         |                                                                                                                                                                                    | 9   |
| LV MPI         | (399266005, SCT, "Left Ventricular Index of Myocardial Performance")                 | Finding Site=(T-32650, SRT, "Left Ventricle Outflow Tract")                                                                                                                        | 9   |

| Label                  | Concept Name                                                          | Modifier                                                                                                          | row |
|------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----|
| (RV MPI)               |                                                                       |                                                                                                                   |     |
| RVET                   | (18042-2, LN, "Pulmonic Valve Ejection Time")                         | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                     | 15  |
| TV C-Odur              | (A12208-023, 99ALOKA, "Tricuspid Valve Closure to Opening Time")      | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                   | 16  |
| IVCT                   | (A12222-039, 99ALOKA, "Isovolumic Contraction Time")                  | Image Mode(Group)=(R-409E4, SRT, "Doppler Pulsed"), Image Mode=(R-409E4, SRT, "Doppler Pulsed")                   | 10  |
| IVRT                   | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")                   | Flow Direction=(R-42047, SRT, "Antegrade Flow")                                                                   | 16  |
| RV MPI <sup>4</sup>    | (399154007, SCT, "Right Ventricular Index of Myocardial Performance") | Finding Site=(T-32550, SNM3, "Right Ventricle Outflow Tract")                                                     | 10  |
| (RV MPI(Tissue))       |                                                                       |                                                                                                                   |     |
| ET                     | (18042-2, LN, "Pulmonic Valve Ejection Time")                         | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 10  |
| TV C-Odur              | (A12208-023, 99ALOKA, "Tricuspid Valve Closure to Opening Time")      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 10  |
| IVCT                   | (A12222-039, 99ALOKA, "Isovolumic Contraction Time")                  | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 10  |
| IVRT                   | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")                   | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 10  |
| RV MPI <sup>4</sup>    | (399154007, SCT, "Right Ventricular Index of Myocardial Performance") |                                                                                                                   | 10  |
| (Ascending Ao Doppler) |                                                                       |                                                                                                                   |     |
| pV                     | (11726-7, LN, "Peak Velocity")                                        | Finding Site=(A12236-007, 99ALOKA, "Ascending Aorta")                                                             | 17  |
| VTI                    | (20354-7, LN, "Velocity Time Integral")                               | Finding Site=(A12236-007, 99ALOKA, "Ascending Aorta")                                                             | 17  |
| MnV                    | (20352-1, LN, "Mean Velocity")                                        | Finding Site=(A12236-007, 99ALOKA, "Ascending Aorta")                                                             | 17  |
| PG                     | (20247-3, LN, "Peak Gradient")                                        | Finding Site=(A12236-007, 99ALOKA, "Ascending Aorta")                                                             | 17  |
| MPG                    | (20256-4, LN, "Mean Gradient")                                        | Finding Site=(A12236-007, 99ALOKA, "Ascending Aorta")                                                             | 17  |

| Label                   | Concept Name                            | Modifier                                               | row |
|-------------------------|-----------------------------------------|--------------------------------------------------------|-----|
| (Descending Ao Doppler) |                                         |                                                        |     |
| pV                      | (11726-7, LN, "Peak Velocity")          | Finding Site=(A12236-008, 99ALOKA, "Descending Aorta") | 17  |
| VTI                     | (20354-7, LN, "Velocity Time Integral") | Finding Site=(A12236-008, 99ALOKA, "Descending Aorta") | 17  |
| MnV                     | (20352-1, LN, "Mean Velocity")          | Finding Site=(A12236-008, 99ALOKA, "Descending Aorta") | 17  |
| PG                      | (20247-3, LN, "Peak Gradient")          | Finding Site=(A12236-008, 99ALOKA, "Descending Aorta") | 17  |
| MPG                     | (20256-4, LN, "Mean Gradient")          | Finding Site=(A12236-008, 99ALOKA, "Descending Aorta") | 17  |
| (Transverse Ao Doppler) |                                         |                                                        |     |
| pV                      | (11726-7, LN, "Peak Velocity")          | Finding Site=(A12236-009, 99ALOKA, "Transverse Aorta") | 17  |
| VTI                     | (20354-7, LN, "Velocity Time Integral") | Finding Site=(A12236-009, 99ALOKA, "Transverse Aorta") | 17  |
| MnV                     | (20352-1, LN, "Mean Velocity")          | Finding Site=(A12236-009, 99ALOKA, "Transverse Aorta") | 17  |
| PG                      | (20247-3, LN, "Peak Gradient")          | Finding Site=(A12236-009, 99ALOKA, "Transverse Aorta") | 17  |
| MPG                     | (20256-4, LN, "Mean Gradient")          | Finding Site=(A12236-009, 99ALOKA, "Transverse Aorta") | 17  |
| (Abdominal Ao Doppler)  |                                         |                                                        |     |
| pV                      | (11726-7, LN, "Peak Velocity")          | Finding Site=(A12236-010, 99ALOKA, "Abdominal Aorta")  | 17  |
| VTI                     | (20354-7, LN, "Velocity Time Integral") | Finding Site=(A12236-010, 99ALOKA, "Abdominal Aorta")  | 17  |
| MnV                     | (20352-1, LN, "Mean Velocity")          | Finding Site=(A12236-010, 99ALOKA, "Abdominal Aorta")  | 17  |
| PG                      | (20247-3, LN, "Peak Gradient")          | Finding Site=(A12236-010, 99ALOKA, "Abdominal Aorta")  | 17  |
| MPG                     | (20256-4, LN, "Mean Gradient")          | Finding Site=(A12236-010, 99ALOKA, "Abdominal Aorta")  | 17  |
| (ASD)                   |                                         |                                                        |     |
| pV                      | (11726-7, LN, "Peak Velocity")          | Finding Site=(D4-31220, SRT, "Atrial Septal Defect")   | 23  |
| PG                      | (20247-3, LN, "Peak Gradient")          | Finding Site=(D4-31220, SRT, "Atrial Septal Defect")   | 23  |
| MnV                     | (20352-1, LN, "Mean Velocity")          | Finding Site=(D4-31220, SRT, "Atrial Septal Defect")   | 23  |
| MPG                     | (20256-4, LN, "Mean Gradient")          | Finding Site=(D4-31220, SRT, "Atrial Septal Defect")   | 23  |

| Label       | Concept Name                                                             | Modifier                                                                                                                                                                                  | row |
|-------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| VTI         | (20354-7, LN, "Velocity Time Integral")                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                     | 23  |
| ASD         | (G-038F, SRT, "Cardiovascular Orifice Diameter")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                     | 23  |
| ASD lax     | (G-038F, SRT, "Cardiovascular Orifice Diameter")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0396, SRT, "Parasternal long axis")  | 23  |
| ASD sax     | (G-038F, SRT, "Cardiovascular Orifice Diameter")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0397, SRT, "Parasternal short axis") | 23  |
| ASD Ao Rim  | (A12218-001, 99ALOKA, "Atrial Septal Defect Rim diameter(Ao Position)")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                     | 23  |
| ASD SVC Rim | (A12218-002, 99ALOKA, "Atrial Septal Defect Rim diameter(SVC Position)") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                     | 23  |
| ASD IVC Rim | (A12218-003, 99ALOKA, "Atrial Septal Defect Rim diameter(IVC Position)") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31220, SRT, "Atrial Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                     | 23  |
| (VSD)       |                                                                          |                                                                                                                                                                                           |     |
| pV          | (11726-7, LN, "Peak Velocity")                                           | Finding Site=(D4-31150, SRT, "Ventricular Septal Defect")                                                                                                                                 | 23  |
| PG          | (20247-3, LN, "Peak Gradient")                                           | Finding Site=(D4-31150, SRT, "Ventricular Septal Defect")                                                                                                                                 | 23  |
| MnV         | (20352-1, LN, "Mean Velocity")                                           | Finding Site=(D4-31150, SRT, "Ventricular Septal Defect")                                                                                                                                 | 23  |
| MPG         | (20256-4, LN, "Mean Gradient")                                           | Finding Site=(D4-31150, SRT, "Ventricular Septal Defect")                                                                                                                                 | 23  |
| VTI         | (20354-7, LN, "Velocity Time Integral")                                  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31150, SRT, "Ventricular Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                | 23  |
| VSD         | (G-038F, SRT, "Cardiovascular Orifice Diameter")                         | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31150, SRT, "Ventricular Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                | 23  |

| Label    | Concept Name                                     | Modifier                                                                                                                                                                                       | row |
|----------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| VSD lax  | (G-038F, SRT, "Cardiovascular Orifice Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31150, SRT, "Ventricular Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0396, SRT, "Parasternal long axis")  | 23  |
| VSD sax  | (G-038F, SRT, "Cardiovascular Orifice Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31150, SRT, "Ventricular Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-0397, SRT, "Parasternal short axis") | 23  |
| VSD EROA | (G-038E, SRT, "Cardiovascular Orifice Area")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(D4-31150, SRT, "Ventricular Septal Defect"), Image Mode=(G-03A2, SRT, "2D mode")                                                     | 23  |
| (PFO)    |                                                  |                                                                                                                                                                                                |     |
| PFO      | (G-038F, SRT, "Cardiovascular Orifice Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-011, 99ALOKA, "Patent Foramen Ovale"), Image Mode=(G-03A2, SRT, "2D mode")                                                    | 23  |
| PFO pV   | (11726-7, LN, "Peak Velocity")                   | Finding Site=(A12236-011, 99ALOKA, "Patent Foramen Ovale")                                                                                                                                     | 23  |
| (PDA)    |                                                  |                                                                                                                                                                                                |     |
| PDA      | (81827009, SCT, "Diameter")                      | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Image Mode=(G-03A2, SRT, "2D mode")                                                | 23  |
| dias pV  | (11726-7, LN, "Peak Velocity")                   | Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                             | 23  |
| dias MnV | (20352-1, LN, "Mean Velocity")                   | Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                             | 23  |
| dias VTI | (20354-7, LN, "Velocity Time Integral")          | Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole")                                                                             | 23  |
| sys pV   | (11726-7, LN, "Peak Velocity")                   | Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                               | 23  |
| sys MnV  | (20352-1, LN, "Mean Velocity")                   | Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                               | 23  |
| sys VTI  | (20354-7, LN, "Velocity Time Integral")          | Finding Site=(A12236-012, 99ALOKA, "Patent Ductus Arteriosus"), Cardiac Cycle Point=(109070, DCM, "End Systole")                                                                               | 23  |
| (PA)     |                                                  |                                                                                                                                                                                                |     |

| Label       | Concept Name                                     | Modifier                                                                                                                                      | row |
|-------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----|
| MPA         | (18020-8, LN, "Main Pulmonary Artery Diameter")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-013, 99ALOKA, "Main Pulmonary Artery"), Image Mode=(G-03A2, SRT, "2D mode")  | 18  |
| LPA         | (18019-0, LN, "Left Pulmonary Artery Diameter")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-014, 99ALOKA, "Left Pulmonary Artery"), Image Mode=(G-03A2, SRT, "2D mode")  | 18  |
| RPA         | (18021-6, LN, "Right Pulmonary Artery Diameter") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Finding Site=(A12236-015, 99ALOKA, "Right Pulmonary Artery"), Image Mode=(G-03A2, SRT, "2D mode") | 18  |
| RAP         | (18070-3, LN, "Right Atrium Systolic Pressure")  |                                                                                                                                               | 12  |
| MPA pV      | (11726-7, LN, "Peak Velocity")                   | Finding Site=(A12236-013, 99ALOKA, "Main Pulmonary Artery")                                                                                   | 18  |
| MPA PG      | (20247-3, LN, "Peak Gradient")                   | Finding Site=(A12236-013, 99ALOKA, "Main Pulmonary Artery")                                                                                   | 18  |
| MPA MnV     | (20352-1, LN, "Mean Velocity")                   | Finding Site=(A12236-013, 99ALOKA, "Main Pulmonary Artery")                                                                                   | 18  |
| MPA MPG     | (20256-4, LN, "Mean Gradient")                   | Finding Site=(A12236-013, 99ALOKA, "Main Pulmonary Artery")                                                                                   | 18  |
| MPA VTI     | (20354-7, LN, "Velocity Time Integral")          | Finding Site=(A12236-013, 99ALOKA, "Main Pulmonary Artery")                                                                                   | 18  |
| LPA pV      | (11726-7, LN, "Peak Velocity")                   | Finding Site=(A12236-014, 99ALOKA, "Left Pulmonary Artery")                                                                                   | 18  |
| LPA PG      | (20247-3, LN, "Peak Gradient")                   | Finding Site=(A12236-014, 99ALOKA, "Left Pulmonary Artery")                                                                                   | 18  |
| LPA MnV     | (20352-1, LN, "Mean Velocity")                   | Finding Site=(A12236-014, 99ALOKA, "Left Pulmonary Artery")                                                                                   | 18  |
| LPA MPG     | (20256-4, LN, "Mean Gradient")                   | Finding Site=(A12236-014, 99ALOKA, "Left Pulmonary Artery")                                                                                   | 18  |
| LPA VTI     | (20354-7, LN, "Velocity Time Integral")          | Finding Site=(A12236-014, 99ALOKA, "Left Pulmonary Artery")                                                                                   | 18  |
| RPA pV      | (11726-7, LN, "Peak Velocity")                   | Finding Site=(A12236-015, 99ALOKA, "Right Pulmonary Artery")                                                                                  | 18  |
| RPA PG      | (20247-3, LN, "Peak Gradient")                   | Finding Site=(A12236-015, 99ALOKA, "Right Pulmonary Artery")                                                                                  | 18  |
| RPA MnV     | (20352-1, LN, "Mean Velocity")                   | Finding Site=(A12236-015, 99ALOKA, "Right Pulmonary Artery")                                                                                  | 18  |
| RPA MPG     | (20256-4, LN, "Mean Gradient")                   | Finding Site=(A12236-015, 99ALOKA, "Right Pulmonary Artery")                                                                                  | 18  |
| RPA VTI     | (20354-7, LN, "Velocity Time Integral")          | Finding Site=(A12236-015, 99ALOKA, "Right Pulmonary Artery")                                                                                  | 18  |
| (TDI PW MA) |                                                  |                                                                                                                                               |     |

| Label | Concept Name                                                                  | Modifier                                                                                                                                                              | row |
|-------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Sm1   | (A12222-048, 99ALOKA, "Peak Systolic Tissue Velocity 1")                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| Sm2   | (A12222-051, 99ALOKA, "Peak Systolic Tissue Velocity 2")                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| sMnV  | (20352-1, LN, "Mean Velocity")                                                | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")   | 14  |
| Em    | (78185-6, LN, "MV med ann Peak e' wave US.TDI")                               | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                           | 14  |
| Am    | (A12222-045, 99ALOKA, "Peak Diastolic Tissue Velocity During Atrial Systole") | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| dMnV  | (20352-1, LN, "Mean Velocity")                                                | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 14  |
| RIVRT | (A12222-042, 99ALOKA, "Isovolumic Relaxation Time")                           | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| RIVCT | (A12222-039, 99ALOKA, "Isovolumic Contraction Time")                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| time  | (A12222-059, 99ALOKA, "Time")                                                 | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| v1    | (A12222-024, 99ALOKA, "Blood Flow Velocity 1")                                | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| v2    | (A12222-027, 99ALOKA, "Blood Flow Velocity 2")                                | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |
| AccT  | (20168-1, LN, "Acceleration Time")                                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 14  |

| Label      | Concept Name                                                                             | Modifier                                                                                                                                                              | row |
|------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Em/Am      | (A12222-035, 99ALOKA, "Ea to Aa Ratio")                                                  | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                           | 14  |
| E/Em       | (A12203-011, 99ALOKA, "Ratio of MV E-Wave Peak Vel. to Early Diastolic Myocardium Vel.") |                                                                                                                                                                       | 9   |
| ACC        | (20167-3, LN, "Acceleration Slope")                                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                           | 14  |
| (TDI PW 1) |                                                                                          |                                                                                                                                                                       |     |
| Sm1        | (A12222-049, 99ALOKA, "Peak Systolic Tissue Velocity 1(1)")                              | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| Sm2        | (A12222-052, 99ALOKA, "Peak Systolic Tissue Velocity 2(1)")                              | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| sMnV       | (A12222-008, 99ALOKA, "Mean Velocity (1)")                                               | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")   | 9   |
| Em         | (A12222-018, 99ALOKA, "Ann Peak e' wave (1)")                                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| Am         | (A12222-046, 99ALOKA, "Peak Diastolic Tissue Velocity During Atrial Systole (1)")        | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| dMnV       | (A12222-008, 99ALOKA, "Mean Velocity (1)")                                               | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |
| RIVRT      | (A12222-043, 99ALOKA, "Isovolumic Relaxation Time (1)")                                  | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| RIVCT      | (A12222-040, 99ALOKA, "Isovolumic Contraction Time (1)")                                 | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| time       | (A12222-060, 99ALOKA, "Time (1)")                                                        | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |

| Label      | Concept Name                                                                           | Modifier                                                                                                                                                              | row |
|------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| v1         | (A12222-025, 99ALOKA, "Blood Flow Velocity 1(1)")                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| v2         | (A12222-028, 99ALOKA, "Blood Flow Velocity 2(1)")                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| AccT       | (A12222-016, 99ALOKA, "Acceleration Time (1)")                                         | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| Em/Am      | (A12222-036, 99ALOKA, "Ea to Aa Ratio (1)")                                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                           | 9   |
| E/Em       | (A12222-054, 99ALOKA, "Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (1)") | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                           | 9   |
| ACC        | (A12222-014, 99ALOKA, "Acceleration Slope (1)")                                        | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                           | 9   |
| (TDI PW 2) |                                                                                        |                                                                                                                                                                       |     |
| Sm1        | (A12222-050, 99ALOKA, "Peak Systolic Tissue Velocity 1(2)")                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| Sm2        | (A12222-053, 99ALOKA, "Peak Systolic Tissue Velocity 2(2)")                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| sMnV       | (A12222-009, 99ALOKA, "Mean Velocity (2)")                                             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")   | 9   |
| Em         | (A12222-019, 99ALOKA, "Ann Peak e' wave (2)")                                          | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| Am         | (A12222-047, 99ALOKA, "Peak Diastolic Tissue Velocity During Atrial Systole (2)")      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                     | 9   |
| dMnV       | (A12222-009, 99ALOKA, "Mean Velocity (2)")                                             | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging") | 9   |

| Label   | Concept Name                                                                           | Modifier                                                                                                                                                                                      | row |
|---------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| RIVRT   | (A12222-044, 99ALOKA, "Isovolumic Relaxation Time (2)")                                | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                             | 9   |
| RIVCT   | (A12222-041, 99ALOKA, "Isovolumic Contraction Time (2)")                               | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                             | 9   |
| time    | (A12222-061, 99ALOKA, "Time (2)")                                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                             | 9   |
| v1      | (A12222-026, 99ALOKA, "Blood Flow Velocity 1(2)")                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                             | 9   |
| v2      | (A12222-029, 99ALOKA, "Blood Flow Velocity 2(2)")                                      | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                             | 9   |
| AccT    | (A12222-017, 99ALOKA, "Acceleration Time (2)")                                         | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging"), Image Mode=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                             | 9   |
| Em/Am   | (A12222-037, 99ALOKA, "Ea to Aa Ratio (2)")                                            | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                                                   | 9   |
| E/Em    | (A12222-055, 99ALOKA, "Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (2)") | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                                                   | 9   |
| ACC     | (A12222-015, 99ALOKA, "Acceleration Slope (2)")                                        | Image Mode(Group)=(P5-B0128, SRT, "Tissue Doppler Imaging")                                                                                                                                   | 9   |
| (GLS3P) |                                                                                        |                                                                                                                                                                                               |     |
| GLS3    | (A12203-013, 99ALOKA, "Global Longitudinal Strain")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125208, DCM, "Method of Disks, Single Plane"), Image View=(A12226-001, 99ALOKA, "Apical three chamber")                       | 9   |
| GLS(3P) | (A12203-013, 99ALOKA, "Global Longitudinal Strain")                                    | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(A12228-015, 99ALOKA, "Method of Disks, 3 planes")                                                                             | 9   |
| ML3d    | (A12203-019, 99ALOKA, "Myocardial Length")                                             | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(A12226-001, 99ALOKA, "Apical three chamber") | 9   |

| Label | Concept Name                                         | Modifier                                                                                                                                                                                                                                      | row |
|-------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| ML3s  | (A12203-019, 99ALOKA, "Myocardial Length")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(A12226-001, 99ALOKA, "Apical three chamber")                                                   | 9   |
| ML4d  | (A12203-019, 99ALOKA, "Myocardial Length")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber")                                                          | 9   |
| ML4s  | (A12203-019, 99ALOKA, "Myocardial Length")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19C, SRT, "Apical four chamber")                                                            | 9   |
| ML2d  | (A12203-019, 99ALOKA, "Myocardial Length")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")                                                           | 9   |
| ML2s  | (A12203-019, 99ALOKA, "Myocardial Length")           | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(G-A19B, SRT, "Apical two chamber")                                                             | 9   |
| LVL3d | (18077-8, LN, "Left Ventricle diastolic major axis") | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(A12226-001, 99ALOKA, "Apical three chamber")                                                 | 9   |
| LVL3d | (G-0375, SRT, "Left Ventricular Diastolic Area")     | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(F-32011, SRT, "End Diastole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(A12226-001, 99ALOKA, "Apical three chamber") | 9   |
| LVL3s | (18076-0, LN, "Left Ventricle systolic major axis")  | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(A12226-001, 99ALOKA, "Apical three chamber")                                                   | 9   |

| Label                                    | Concept Name                                                          | Modifier                                                                                                                                                                                                                                    | row |
|------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| LVL3s                                    | (G-0374, SRT, "Left Ventricular Systolic Area")                       | Image Mode(Group)=(G-03A2, SRT, "2D mode"), Measurement Method=(125220, DCM, "Planimetry"), Cardiac Cycle Point=(109070, DCM, "End Systole"), Image Mode=(G-03A2, SRT, "2D mode"), Image View=(A12226-001, 99ALOKA, "Apical three chamber") | 9   |
| (LV Function (Pombo, Teichholz, Gibson)) |                                                                       |                                                                                                                                                                                                                                             |     |
| LVMi2.7(Devereux )                       | (A12203-018, 99ALOKA, "Left Ventricle Mass adjusted by Height(2.7)")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                          | 9   |
| LVMi2.16(Devereux )                      | (A12203-017, 99ALOKA, "Left Ventricle Mass adjusted by Height(2.16)") | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                          | 9   |
| LVMi1.7(Devereux )                       | (A12203-016, 99ALOKA, "Left Ventricle Mass adjusted by Height(1.7)")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(A12232-002, 99ALOKA, "Left Ventricle Mass by Penn")                                                                                                                          | 9   |
| LVMi2.7(ASE)                             | (A12203-018, 99ALOKA, "Left Ventricle Mass adjusted by Height(2.7)")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode")                                                                                                                                | 9   |
| LVMi2.16(ASE)                            | (A12203-017, 99ALOKA, "Left Ventricle Mass adjusted by Height(2.16)") | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode")                                                                                                                                | 9   |
| LVMi1.7(ASE)                             | (A12203-016, 99ALOKA, "Left Ventricle Mass adjusted by Height(1.7)")  | Image Mode(Group)=(G-0394, SRT, "M mode"), Measurement Method=(125221, DCM, "Left Ventricle Mass by M-mode")                                                                                                                                | 9   |

- Note:
1. When these HRs are measured at a time, only one HR is included in Structured Report. The precedence is LV Volume(Simpson(Disc)), LV Volume, then LV Function.
  2. It is configurable not to include Image Mode(Group) and/or Image Mode modifiers. In this case, only a value of either B mode or M mode is included by priority.
  3. It is configurable to include a value of either B mode or M mode by priority.
  4. If RV MPI of RV MPI measurement and RV MPI of RV MPI(Tissue) measurement are measured, two (399154007, SCT, "Right Ventricular Index of Myocardial Performance") with the same modifiers are included in Structured Report. The former one is for RV MPI measurement and the latter one is for RV MPI(Tissue) measurement.

#### 8.6.2.4 TID 5200 Echocardiography Procedure Report (Advanced Cardiac)

The following tables present information used in Structured Reports for this template. The tables are sorted by the label value, which corresponds to the cardiac measurement label displayed on the Worksheet window.

The tables include the actual Coding Scheme Designator, Code Value and Code Meaning used for that label.

## Body Surface Area Equations

Mosteller is used as Body Surface Area to calculate indexed value.

[Mosteller, R.D. 'Simplified Calculation of Body SurfaceArea.' N Engl J Med 1987 Oct 22;317(17):1098].

## Left Ventricle

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                     | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |        |                      |
|------------------------------|-----------------------------|---------|-----------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|--------|----------------------|
| Teichholz (2D)               | CSD                         | CV      | CM                                                  | CSD                                  | CV      | CM              | CSD                                     | CV     | CM                   |
| RVAWd                        | LN                          | 18153-7 | Right Ventricular Anterior Wall Diastolic Thickness | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| RVIDd                        | LN                          | 20304-2 | Right Ventricular Internal Diastolic Dimension      | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| IVSd                         | LN                          | 18154-5 | Interventricular Septum Diastolic Thickness         | SRT                                  | T-32600 | Left Ventricle  | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| LVIDd                        | LN                          | 29436-3 | Left Ventricle Internal End Diastolic Dimension     | SRT                                  | T-32600 | Left Ventricle  | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| LVPWd                        | LN                          | 18152-9 | Left Ventricle Posterior Wall Diastolic Thickness   | SRT                                  | T-32600 | Left Ventricle  | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| IVSs                         | LN                          | 18158-6 | Interventricular Septum Systolic Thickness          | SRT                                  | T-32600 | Left Ventricle  | SRT                                     | G-03A2 | 2D mode (Image Mode) |

|         |    |         |                                                  |     |         |                |     |        |                                |
|---------|----|---------|--------------------------------------------------|-----|---------|----------------|-----|--------|--------------------------------|
| LVIDs   | LN | 29438-9 | Left Ventricle Internal Systolic Dimension       | SRT | T-32600 | Left Ventricle | SRT | G-03A2 | 2D mode (Image Mode)           |
| LVPWs   | LN | 18156-0 | Left Ventricle Posterior Wall Systolic Thickness | SRT | T-32600 | Left Ventricle | SRT | G-03A2 | 2D mode (Image Mode)           |
| HR      | LN | 8867-4  | Heart rate                                       | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|         |    |         |                                                  |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
| EDV     | LN | 18026-5 | Left Ventricular End Diastolic Volume            | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|         |    |         |                                                  |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
| ESV     | LN | 18148-7 | Left Ventricular End Systolic Volume             | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|         |    |         |                                                  |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
| LV EDVI | LN | 18026-5 | Left Ventricular End Diastolic Volume            | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|         |    |         |                                                  |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
|         |    |         |                                                  |     |         |                | LN  | 8277-6 | Body Surface Area (Index)      |
| LV ESVI | LN | 18148-7 | Left Ventricular End Systolic Volume             | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|         |    |         |                                                  |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
|         |    |         |                                                  |     |         |                | LN  | 8277-6 | Body Surface Area (Index)      |

|              |     |         |                                        |     |         |                |     |        |                                |
|--------------|-----|---------|----------------------------------------|-----|---------|----------------|-----|--------|--------------------------------|
| LV EDVI (ht) | LN  | 18026-5 | Left Ventricular End Diastolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|              |     |         |                                        |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
|              |     |         |                                        |     |         |                | LN  | 8302-2 | Patient Height (Index)         |
| LV ESVI (ht) | LN  | 18148-7 | Left Ventricular End Systolic Volume   | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|              |     |         |                                        |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
|              |     |         |                                        |     |         |                | LN  | 8302-2 | Patient Height (Index)         |
| SV           | SRT | F-32120 | Stroke Volume                          | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|              |     |         |                                        |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
| CO           | SRT | F-32100 | Cardiac Output                         | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|              |     |         |                                        |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
| EF           | LN  | 18043-0 | Left Ventricular Ejection Fraction     | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|              |     |         |                                        |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |
| FS           | LN  | 18051-3 | Left Ventricular Fractional Shortening | SRT | T-32600 | Left Ventricle | SRT | G-03A2 | 2D mode (Image Mode)           |
| SI           | SRT | F-00078 | Stroke Index                           | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|              |     |         |                                        |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)           |

|                       |             |         |                                                 |     |         |                |             |          |                                                                   |
|-----------------------|-------------|---------|-------------------------------------------------|-----|---------|----------------|-------------|----------|-------------------------------------------------------------------|
| CI                    | SRT         | F-32110 | Cardiac Index                                   | SRT | T-32600 | Left Ventricle | DCM         | 125209   | Teichholz (Measurement Method)                                    |
|                       |             |         |                                                 |     |         |                | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
| LV MASS-c             | LN          | 18087-7 | Left Ventricle Mass                             | SRT | T-32600 | Left Ventricle | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
|                       |             |         |                                                 |     |         |                | DCM         | 125221   | Left Ventricle Mass by M-mode (Measurement Method)                |
| LV MASSI              | LN          | 18087-7 | Left Ventricle Mass                             | SRT | T-32600 | Left Ventricle | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
|                       |             |         |                                                 |     |         |                | LN          | 8277-6   | Body Surface Area (Index)                                         |
| LV MASS Penn          | LN          | 18087-7 | Left Ventricle Mass                             | SRT | T-32600 | Left Ventricle | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
|                       |             |         |                                                 |     |         |                | 99IM PRO OF | MASSPENN | Left Ventricle Mass by Penn (Measurement Method)                  |
| LV RWT                | 99IM PRO OF | RWT     | Relative Wall Thickness                         | SRT | T-32600 | Left Ventricle | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
| LVIDd sax PM ant-post | LN          | 29436-3 | Left Ventricle Internal End Diastolic Dimension | SRT | T-32600 | Left Ventricle | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
|                       |             |         |                                                 |     |         |                | DCM         | 122675   | Anterior-Posterior (Finding Site)                                 |
|                       |             |         |                                                 |     |         |                | SRT         | G-039B   | Parasternal short axis at the Papillary Muscle level (Image View) |
| LVIDd sax PM sep-lat  | LN          | 29436-3 | Left Ventricle Internal End Diastolic Dimension | SRT | T-32600 | Left Ventricle | SRT         | G-03A2   | 2D mode (Image Mode)                                              |
|                       |             |         |                                                 |     |         |                | 99IM PRO OF | SEPLAT   | Septal-Lateral                                                    |

|                       |             |         |                                            |     |         |                |             |         |                                                                   |
|-----------------------|-------------|---------|--------------------------------------------|-----|---------|----------------|-------------|---------|-------------------------------------------------------------------|
|                       |             |         |                                            |     |         |                | SRT         | G-039B  | Parasternal short axis at the Papillary Muscle level (Image View) |
| LVEId                 | 99IM PRO OF | LVEI    | LV Eccentricity Index                      | SRT | T-32600 | Left Ventricle | SRT         | F-32011 | End Diastole (Cardiac Cycle Point)                                |
| LVIDs sax PM ant-post | LN          | 29438-9 | Left Ventricle Internal Systolic Dimension | SRT | T-32600 | Left Ventricle | SRT         | G-03A2  | 2D mode (Image Mode)                                              |
|                       |             |         |                                            |     |         |                | DCM         | 122675  | Anterior-Posterior (Finding Site)                                 |
|                       |             |         |                                            |     |         |                | SRT         | G-039B  | Parasternal short axis at the Papillary Muscle level (Image View) |
| LVIDs sax PM sep-lat  | LN          | 29438-9 | Left Ventricle Internal Systolic Dimension | SRT | T-32600 | Left Ventricle | SRT         | G-03A2  | 2D mode (Image Mode)                                              |
|                       |             |         |                                            |     |         |                | 99IM PRO OF | SEPLAT  | Septal-Lateral                                                    |
|                       |             |         |                                            |     |         |                | SRT         | G-039B  | Parasternal short axis at the Papillary Muscle level (Image View) |
| LVEIs                 | 99IM PRO OF | LVEI    | LV Eccentricity Index                      | SRT | T-32600 | Left Ventricle | SRT         | R-FAB5B | End Systole (Cardiac Cycle Point)                                 |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                     | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |        |                    |
|------------------------------|-----------------------------|---------|-----------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|--------|--------------------|
|                              | CSD                         | CV      | CM                                                  | CSD                                  | CV      | CM              | CSD                                     | CV     | CM                 |
| RVAWd                        | LN                          | 18153-7 | Right Ventricular Anterior Wall Diastolic Thickness | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-0394 | MMode (Image Mode) |

|       |           |         |                                                   |     |         |                 |     |        |                                |
|-------|-----------|---------|---------------------------------------------------|-----|---------|-----------------|-----|--------|--------------------------------|
| RVIDd | LN        | 20304-2 | Right Ventricular Internal Diastolic Dimension    | SRT | T-32500 | Right Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|       |           |         |                                                   |     |         |                 | SRT | G-0394 | MMode (Image Mode)             |
| IVSd  | LN        | 18154-5 | Interventricular Septum Diastolic Thickness       | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| LVIDd | LN        | 29436-3 | Left Ventricle Internal End Diastolic Dimension   | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| LVPWd | LN        | 18152-9 | Left Ventricle Posterior Wall Diastolic Thickness | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| IVSs  | LN        | 18158-6 | Interventricular Septum Systolic Thickness        | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| LVIDs | LN        | 29438-9 | Left Ventricle Internal Systolic Dimension        | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| LVPWs | LN        | 18156-0 | Left Ventricle Posterior Wall Systolic Thickness  | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| SPWMD | 99IMPROOF | SPWMD   | Septal-to-Posterior-Wall Motion Delay             | SRT | T-32600 | Left Ventricle  | SRT | G-0394 | MMode (Image Mode)             |
| HR    | LN        | 8867-4  | Heart rate                                        | SRT | T-32600 | Left Ventricle  | DCM | 125209 | Teichholz (Measurement Method) |
|       |           |         |                                                   |     |         |                 | SRT | G-0394 | MMode (Image Mode)             |

|           |    |         |                                       |     |         |                |     |        |                                |
|-----------|----|---------|---------------------------------------|-----|---------|----------------|-----|--------|--------------------------------|
| EDV       | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|           |    |         |                                       |     |         |                | SRT | G-0394 | MMode (Image Mode)             |
| ESV       | LN | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|           |    |         |                                       |     |         |                | SRT | G-0394 | MMode (Image Mode)             |
| EDVI      | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|           |    |         |                                       |     |         |                | SRT | G-0394 | MMode (Image Mode)             |
|           |    |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)      |
| ESVI      | LN | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|           |    |         |                                       |     |         |                | SRT | G-0394 | MMode (Image Mode)             |
|           |    |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)      |
| EDVI (ht) | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|           |    |         |                                       |     |         |                | SRT | G-0394 | MMode (Image Mode)             |
|           |    |         |                                       |     |         |                | LN  | 8302-2 | Patient Height (Index)         |
| ESVI (ht) | LN | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method) |
|           |    |         |                                       |     |         |                | SRT | G-0394 | MMode (Image Mode)             |

|           |             |            |                                              |     |         |                |     |        |                                                    |
|-----------|-------------|------------|----------------------------------------------|-----|---------|----------------|-----|--------|----------------------------------------------------|
|           |             |            |                                              |     |         |                | LN  | 8302-2 | Patient Height (Index)                             |
| SV        | SRT         | F-32120    | Stroke Volume                                | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method)                     |
|           |             |            |                                              |     |         |                | SRT | G-0394 | MMode (Image Mode)                                 |
| CO        | SRT         | F-32100    | Cardiac Output                               | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method)                     |
|           |             |            |                                              |     |         |                | SRT | G-0394 | MMode (Image Mode)                                 |
| EF        | LN          | 18043-0    | Left Ventricular Ejection Fraction           | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method)                     |
|           |             |            |                                              |     |         |                | SRT | G-0394 | MMode (Image Mode)                                 |
| FS        | LN          | 18051-3    | Left Ventricular Fractional Shortening       | SRT | T-32600 | Left Ventricle | SRT | G-0394 | MMode (Image Mode)                                 |
| SI        | SRT         | F-00078    | Stroke Index                                 | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method)                     |
|           |             |            |                                              |     |         |                | SRT | G-0394 | MMode (Image Mode)                                 |
| CI        | SRT         | F-32110    | Cardiac Index                                | SRT | T-32600 | Left Ventricle | DCM | 125209 | Teichholz (Measurement Method)                     |
|           |             |            |                                              |     |         |                | SRT | G-0394 | MMode (Image Mode)                                 |
| mVcf      | 99IM PRO OF | CA_LV_V CF | Velocity of Circumferential Fiber Shortening | SRT | T-32600 | Left Ventricle | SRT | G-0394 | MMode (Image Mode)                                 |
| LV MASS-c | LN          | 18087-7    | Left Ventricle Mass                          | SRT | T-32600 | Left Ventricle | DCM | 125221 | Left Ventricle Mass by M-mode (Measurement Method) |

|              |             |         |                         |     |         |                |             |          |                                                  |
|--------------|-------------|---------|-------------------------|-----|---------|----------------|-------------|----------|--------------------------------------------------|
| LV MASSI     | LN          | 18087-7 | Left Ventricle Mass     | SRT | T-32600 | Left Ventricle | SRT         | G-0394   | MMode (Image Mode)                               |
|              |             |         |                         |     |         |                | LN          | 8277-6   | Body Surface Area (Index)                        |
| LV MASS Penn | LN          | 18087-7 | Left Ventricle Mass     | SRT | T-32600 | Left Ventricle | SRT         | G-0394   | MMode (Image Mode)                               |
|              |             |         |                         |     |         |                | 99IM PRO OF | MASSPENN | Left Ventricle Mass by Penn (Measurement Method) |
| LV RWT       | 99IM PRO OF | RWT     | Relative Wall Thickness | SRT | T-32600 | Left Ventricle | SRT         | G-0394   | MMode (Image Mode)                               |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                       | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |        |                                               |
|------------------------------|-----------------------------|---------|---------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|--------|-----------------------------------------------|
| Simpson                      | CSD                         | CV      | CM                                    | CSD                                  | CV      | CM             | CSD                                     | CV     | CM                                            |
| EDV                          | LN                          | 18026-5 | Left Ventricular End Diastolic Volume | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125207 | Method of Disks, Biplane (Measurement Method) |
|                              |                             |         |                                       |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |
| ESV                          | LN                          | 18148-7 | Left Ventricular End Systolic Volume  | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125207 | Method of Disks, Biplane (Measurement Method) |
|                              |                             |         |                                       |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |
| EDVI                         | LN                          | 18026-5 | Left Ventricular End Diastolic Volume | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125207 | Method of Disks, Biplane (Measurement Method) |
|                              |                             |         |                                       |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |

|           |     |         |                                       |     |         |                |     |        |                                               |
|-----------|-----|---------|---------------------------------------|-----|---------|----------------|-----|--------|-----------------------------------------------|
|           |     |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                     |
| ESVI      | LN  | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                     |
| EDVI (ht) | LN  | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | LN  | 8302-2 | Patient Height (Index)                        |
| ESVI (ht) | LN  | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | LN  | 8302-2 | Patient Height (Index)                        |
| SV        | SRT | F-32120 | Stroke Volume                         | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |

|           |     |         |                                       |     |         |                |     |        |                                                    |
|-----------|-----|---------|---------------------------------------|-----|---------|----------------|-----|--------|----------------------------------------------------|
| CO        | SRT | F-32100 | Cardiac Output                        | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method)      |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
| EF        | LN  | 18043-0 | Left Ventricular Ejection Fraction    | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method)      |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
| SI        | SRT | F-00078 | Stroke Index                          | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method)      |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
| CI        | SRT | F-32110 | Cardiac Index                         | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method)      |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
| HR        | LN  | 8867-4  | Heart rate                            | SRT | T-32600 | Left Ventricle | DCM | 125207 | Method of Disks, Biplane (Measurement Method)      |
| EDV (A4C) | LN  | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |

|                 |    |         |                                       |     |         |                |     |        |                                                    |
|-----------------|----|---------|---------------------------------------|-----|---------|----------------|-----|--------|----------------------------------------------------|
| ESV (A4C)       | LN | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |    |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
| EDVI (A4C)      | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |    |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
|                 |    |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                          |
| ESVI (A4C)      | LN | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |    |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
|                 |    |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                          |
| EDVI (ht) (A4C) | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |

|                 |     |         |                                      |     |         |                |     |        |                                                    |
|-----------------|-----|---------|--------------------------------------|-----|---------|----------------|-----|--------|----------------------------------------------------|
|                 |     |         |                                      |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
|                 |     |         |                                      |     |         |                | LN  | 8302-2 | Patient Height (Index)                             |
| ESVI (ht) (A4C) | LN  | 18148-7 | Left Ventricular End Systolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |     |         |                                      |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |     |         |                                      |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
|                 |     |         |                                      |     |         |                | LN  | 8302-2 | Patient Height (Index)                             |
| SV (A4C)        | SRT | F-32120 | Stroke Volume                        | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |     |         |                                      |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |     |         |                                      |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
| CO (A4C)        | SRT | F-32100 | Cardiac Output                       | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |     |         |                                      |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |     |         |                                      |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
| EF (A4C)        | LN  | 18043-0 | Left Ventricular Ejection Fraction   | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |

|           |     |         |                                       |     |         |                |     |        |                                                    |
|-----------|-----|---------|---------------------------------------|-----|---------|----------------|-----|--------|----------------------------------------------------|
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
| SI (A4C)  | SRT | F-00078 | Stroke Index                          | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
| CI (A4C)  | SRT | F-32110 | Cardiac Index                         | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)                   |
| EDV (A2C) | LN  | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|           |     |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)                    |
| ESV (A2C) | LN  | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |

|                 |    |         |                                       |     |         |                |     |        |                                                    |
|-----------------|----|---------|---------------------------------------|-----|---------|----------------|-----|--------|----------------------------------------------------|
|                 |    |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)                    |
| EDVI (A2C)      | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |    |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)                    |
|                 |    |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                          |
| ESVI (A2C)      | LN | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |    |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)                    |
|                 |    |         |                                       |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                          |
| EDVI (ht) (A2C) | LN | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                 |    |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                               |
|                 |    |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)                    |
|                 |    |         |                                       |     |         |                | LN  | 8302-2 | Patient Height (Index)                             |

|                    |     |         |                                                  |     |         |                   |     |        |                                                                 |
|--------------------|-----|---------|--------------------------------------------------|-----|---------|-------------------|-----|--------|-----------------------------------------------------------------|
| ESVI (ht)<br>(A2C) | LN  | 18148-7 | Left<br>Ventricular<br>End<br>Systolic<br>Volume | SRT | T-32600 | Left<br>Ventricle | DCM | 125208 | Method of<br>Disks, Single<br>Plane<br>(Measureme<br>nt Method) |
|                    |     |         |                                                  |     |         |                   | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                                      |
|                    |     |         |                                                  |     |         |                   | SRT | G-A19B | Apical two<br>chamber<br>(Image View)                           |
|                    |     |         |                                                  |     |         |                   | LN  | 8302-2 | Patient<br>Height<br>(Index)                                    |
| SV (A2C)           | SRT | F-32120 | Stroke<br>Volume                                 | SRT | T-32600 | Left<br>Ventricle | DCM | 125208 | Method of<br>Disks, Single<br>Plane<br>(Measureme<br>nt Method) |
|                    |     |         |                                                  |     |         |                   | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                                      |
|                    |     |         |                                                  |     |         |                   | SRT | G-A19B | Apical two<br>chamber<br>(Image View)                           |
| CO (A2C)           | SRT | F-32100 | Cardiac<br>Output                                | SRT | T-32600 | Left<br>Ventricle | DCM | 125208 | Method of<br>Disks, Single<br>Plane<br>(Measureme<br>nt Method) |
|                    |     |         |                                                  |     |         |                   | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                                      |
|                    |     |         |                                                  |     |         |                   | SRT | G-A19B | Apical two<br>chamber<br>(Image View)                           |
| EF (A2C)           | LN  | 18043-0 | Left<br>Ventricular<br>Ejection<br>Fraction      | SRT | T-32600 | Left<br>Ventricle | DCM | 125208 | Method of<br>Disks, Single<br>Plane<br>(Measureme<br>nt Method) |
|                    |     |         |                                                  |     |         |                   | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                                      |
|                    |     |         |                                                  |     |         |                   | SRT | G-A19B | Apical two<br>chamber<br>(Image View)                           |

|          |             |            |                              |     |         |                |     |         |                                                    |
|----------|-------------|------------|------------------------------|-----|---------|----------------|-----|---------|----------------------------------------------------|
| SI (A2C) | SRT         | F-00078    | Stroke Index                 | SRT | T-32600 | Left Ventricle | DCM | 125208  | Method of Disks, Single Plane (Measurement Method) |
|          |             |            |                              |     |         |                | SRT | G-03A2  | 2D mode (Image Mode)                               |
|          |             |            |                              |     |         |                | SRT | G-A19B  | Apical two chamber (Image View)                    |
| CI (A2C) | SRT         | F-32110    | Cardiac Index                | SRT | T-32600 | Left Ventricle | DCM | 125208  | Method of Disks, Single Plane (Measurement Method) |
|          |             |            |                              |     |         |                | SRT | G-03A2  | 2D mode (Image Mode)                               |
|          |             |            |                              |     |         |                | SRT | G-A19B  | Apical two chamber (Image View)                    |
| difD     | 99IM PRO OF | CA_LV_D IF | Major axis length difference | SRT | T-32600 | Left Ventricle | DCM | 125207  | Method of Disks, Biplane (Measurement Method)      |
|          |             |            |                              |     |         |                | SRT | F-32011 | End Diastole (Cardiac Cycle Point)                 |
|          |             |            |                              |     |         |                | SRT | G-03A2  | 2D mode (Image Mode)                               |
| difS     | 99IM PRO OF | CA_LV_D IF | Major axis length difference | SRT | T-32600 | Left Ventricle | DCM | 125207  | Method of Disks, Biplane (Measurement Method)      |
|          |             |            |                              |     |         |                | SRT | R-FAB5B | End Systole (Cardiac Cycle Point)                  |
|          |             |            |                              |     |         |                | SRT | G-03A2  | 2D mode (Image Mode)                               |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                     | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |        |                                               |
|------------------------------|-----------------------------|---------|-------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|--------|-----------------------------------------------|
| Area Length                  | CSD                         | CV      | CM                                  | CSD                                  | CV      | CM             | CSD                                     | CV     | CM                                            |
| LVLd (A4C)                   | LN                          | 18077-8 | Left Ventricle Diastolic Major axis | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125205 | Area-Length Single Plane (Measurement Method) |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-A19C | Apical four chamber (Image View)              |
| LVAd (A4C)                   | SRT                         | G-0375  | Left Ventricular Diastolic Area     | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125205 | Area-Length Single Plane (Measurement Method) |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-A19C | Apical four chamber (Image View)              |
| LVLs (A4C)                   | LN                          | 18076-0 | Left Ventricle Systolic Major Axis  | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125205 | Area-Length Single Plane (Measurement Method) |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-A19C | Apical four chamber (Image View)              |
| LVAs (A4C)                   | SRT                         | G-0374  | Left Ventricular Systolic Area      | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125205 | Area-Length Single Plane (Measurement Method) |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                          |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-A19C | Apical four chamber (Image View)              |

|           |     |         |                                       |     |         |                |     |        |                                               |
|-----------|-----|---------|---------------------------------------|-----|---------|----------------|-----|--------|-----------------------------------------------|
| EDV (A4C) | LN  | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| ESV (A4C) | LN  | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| SV (A4C)  | SRT | F-32120 | Stroke Volume                         | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| CO (A4C)  | SRT | F-32100 | Cardiac Output                        | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|           |     |         |                                       |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| EF (A4C)  | LN  | 18043-0 | Left Ventricular Ejection Fraction    | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|           |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |

|            |     |         |                                     |     |         |                |     |        |                                               |
|------------|-----|---------|-------------------------------------|-----|---------|----------------|-----|--------|-----------------------------------------------|
|            |     |         |                                     |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| SI (A4C)   | SRT | F-00078 | Stroke Index                        | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                     |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                     |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| CI (A4C)   | SRT | F-32110 | Cardiac Index                       | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                     |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                     |     |         |                | SRT | G-A19C | Apical four chamber (Image View)              |
| LVLd (A2C) | LN  | 18077-8 | Left Ventricle Diastolic Major axis | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                     |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                     |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| LVAd (A2C) | SRT | G-0375  | Left Ventricular Diastolic Area     | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                     |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                     |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| LVLs (A2C) | LN  | 18076-0 | Left Ventricle Systolic Major Axis  | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |

|            |     |         |                                       |     |         |                |     |        |                                               |
|------------|-----|---------|---------------------------------------|-----|---------|----------------|-----|--------|-----------------------------------------------|
|            |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| LVAs (A2C) | SRT | G-0374  | Left Ventricular Systolic Area        | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| EDV (A2C)  | LN  | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| ESV (A2C)  | LN  | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| SV (A2C)   | SRT | F-32120 | Stroke Volume                         | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|            |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|            |     |         |                                       |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |

|          |     |         |                                    |     |         |                |     |        |                                               |
|----------|-----|---------|------------------------------------|-----|---------|----------------|-----|--------|-----------------------------------------------|
| CO (A2C) | SRT | F-32100 | Cardiac Output                     | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|          |     |         |                                    |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|          |     |         |                                    |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| EF (A2C) | LN  | 18043-0 | Left Ventricular Ejection Fraction | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|          |     |         |                                    |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|          |     |         |                                    |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| SI (A2C) | SRT | F-00078 | Stroke Index                       | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|          |     |         |                                    |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|          |     |         |                                    |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| CI (A2C) | SRT | F-32110 | Cardiac Index                      | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |
|          |     |         |                                    |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                          |
|          |     |         |                                    |     |         |                | SRT | G-A19B | Apical two chamber (Image View)               |
| HR       | LN  | 8867-4  | Heart rate                         | SRT | T-32600 | Left Ventricle | DCM | 125205 | Area-Length Single Plane (Measurement Method) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                     | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |        |                                                                       |
|------------------------------|-----------------------------|---------|-------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|--------|-----------------------------------------------------------------------|
| Bullet                       | CSD                         | CV      | CM                                  | CSD                                  | CV      | CM             | CSD                                     | CV     | CM                                                                    |
| LVLd                         | LN                          | 18077-8 | Left Ventricle Diastolic Major Axis | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125228 | Bullet Method (Measurement Method)                                    |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                                  |
| LVLs                         | LN                          | 18076-0 | Left Ventricle Systolic Major Axis  | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125228 | Bullet Method (Measurement Method)                                    |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                                  |
| LVAd sax MV                  | SRT                         | G-0375  | Left Ventricular Diastolic Area     | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125228 | Bullet Method (Measurement Method)                                    |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                                  |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-0399 | Parasternal short axis at the level of the mitral chords (Image View) |
| LVAs sax MV                  | SRT                         | G-0374  | Left Ventricular Systolic Area      | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125228 | Bullet Method (Measurement Method)                                    |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                                  |
|                              |                             |         |                                     |                                      |         |                | SRT                                     | G-0399 | Parasternal short axis at the level of the mitral chords (Image View) |

|     |     |         |                                       |     |         |                |     |        |                                    |
|-----|-----|---------|---------------------------------------|-----|---------|----------------|-----|--------|------------------------------------|
| EDV | LN  | 18026-5 | Left Ventricular End Diastolic Volume | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |
|     |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)               |
| ESV | LN  | 18148-7 | Left Ventricular End Systolic Volume  | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |
|     |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)               |
| SV  | SRT | F-32120 | Stroke Volume                         | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |
|     |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)               |
| CO  | SRT | F-32100 | Cardiac Output                        | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |
|     |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)               |
| EF  | LN  | 18043-0 | Left Ventricular Ejection Fraction    | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |
|     |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)               |
| SI  | SRT | F-00078 | Stroke Index                          | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |
|     |     |         |                                       |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)               |
| CI  | SRT | F-32110 | Cardiac Index                         | SRT | T-32600 | Left Ventricle | DCM | 125228 | Bullet Method (Measurement Method) |

|    |    |        |            |     |         |                   |     |        |                                              |
|----|----|--------|------------|-----|---------|-------------------|-----|--------|----------------------------------------------|
|    |    |        |            |     |         |                   | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                   |
| HR | LN | 8867-4 | Heart rate | SRT | T-32600 | Left<br>Ventricle | DCM | 125228 | Bullet<br>Method<br>(Measureme<br>nt Method) |

| Label<br>displayed<br>in<br>Worksheet | TID (5203) Echo<br>Measurement |        |                                                                        | TID (5202) Echo Section<br>Finding Site |         |                   | Concept or Acquisition<br>Context Modifier |        |                                                                               |
|---------------------------------------|--------------------------------|--------|------------------------------------------------------------------------|-----------------------------------------|---------|-------------------|--------------------------------------------|--------|-------------------------------------------------------------------------------|
|                                       | CSD                            | CV     | CM                                                                     | CSD                                     | CV      | CM                | CSD                                        | CV     | CM                                                                            |
| LVAd sax<br>PM Epi                    | SRT                            | G-0379 | Left<br>Ventricle<br>Epicardial<br>Diastolic<br>Area, psax<br>pap view | SRT                                     | T-32600 | Left<br>Ventricle | DCM                                        | 125222 | Left Ventricle<br>Mass by<br>Truncated<br>Ellipse<br>(Measureme<br>nt Method) |
|                                       |                                |        |                                                                        |                                         |         |                   | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode)                                                    |
| LVAd sax<br>PM Endo                   | SRT                            | G-0375 | Left<br>Ventricular<br>Diastolic<br>Area                               | SRT                                     | T-32600 | Left<br>Ventricle | DCM                                        | 125222 | Left Ventricle<br>Mass by<br>Truncated<br>Ellipse<br>(Measureme<br>nt Method) |
|                                       |                                |        |                                                                        |                                         |         |                   | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode)                                                    |
|                                       |                                |        |                                                                        |                                         |         |                   | SRT                                        | G-039B | Parasternal<br>short axis at<br>the Papillary<br>Muscle level<br>(Image View) |
| a                                     | SRT                            | G-0377 | Left<br>Ventricle<br>Semi-major<br>Axis<br>Diastolic<br>Dimension      | SRT                                     | T-32600 | Left<br>Ventricle | DCM                                        | 125222 | Left Ventricle<br>Mass by<br>Truncated<br>Ellipse<br>(Measureme<br>nt Method) |
|                                       |                                |        |                                                                        |                                         |         |                   | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode)                                                    |

|          |             |         |                                                              |     |         |                |     |        |                                                               |
|----------|-------------|---------|--------------------------------------------------------------|-----|---------|----------------|-----|--------|---------------------------------------------------------------|
| d        | SRT         | G-0378  | Left Ventricle Truncated Semi-major Axis Diastolic Dimension | SRT | T-32600 | Left Ventricle | DCM | 125222 | Left Ventricle Mass by Truncated Ellipse (Measurement Method) |
|          |             |         |                                                              |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                          |
| t        | 99IM PRO OF | THI_Myo | Myocardial Thickness                                         | SRT | T-32600 | Left Ventricle | DCM | 125222 | Left Ventricle Mass by Truncated Ellipse (Measurement Method) |
|          |             |         |                                                              |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                          |
| b        | 99IM PRO OF | RADsax  | Short axis radius calculated from short axis cavity area     | SRT | T-32600 | Left Ventricle | DCM | 125222 | Left Ventricle Mass by Truncated Ellipse (Measurement Method) |
|          |             |         |                                                              |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                          |
| LV MASS  | LN          | 18087-7 | Left Ventricle Mass                                          | SRT | T-32600 | Left Ventricle | DCM | 125222 | Left Ventricle Mass by Truncated Ellipse (Measurement Method) |
|          |             |         |                                                              |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                          |
| LV MASSI | LN          | 18087-7 | Left Ventricle Mass                                          | SRT | T-32600 | Left Ventricle | DCM | 125222 | Left Ventricle Mass by Truncated Ellipse (Measurement Method) |
|          |             |         |                                                              |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                          |
|          |             |         |                                                              |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                                     |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                         | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |        |                                                                   |
|------------------------------|-----------------------------|---------|---------------------------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|--------|-------------------------------------------------------------------|
| LV Mass A-L                  | CSD                         | CV      | CM                                                      | CSD                                  | CV      | CM             | CSD                                     | CV     | CM                                                                |
| LVAd sax PM Epi              | SRT                         | G-0379  | Left Ventricle Epicardial Diastolic Area, psax pap view | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125270 | Left Ventricle Mass by Area Length (Measurement Method)           |
|                              |                             |         |                                                         |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                              |
| LVAd sax PM Endo             | SRT                         | G-0375  | Left Ventricular Diastolic Area                         | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125270 | Left Ventricle Mass by Area Length (Measurement Method)           |
|                              |                             |         |                                                         |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                              |
|                              |                             |         |                                                         |                                      |         |                | SRT                                     | G-039B | Parasternal short axis at the Papillary Muscle level (Image View) |
| LVLD                         | LN                          | 18077-8 | Left Ventricle Diastolic Major axis                     | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125270 | Left Ventricle Mass by Area Length (Measurement Method)           |
|                              |                             |         |                                                         |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                              |
| t                            | 99IM PRO OF                 | THI_Myo | Myocardial Thickness                                    | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125270 | Left Ventricle Mass by Area Length (Measurement Method)           |
|                              |                             |         |                                                         |                                      |         |                | SRT                                     | G-03A2 | 2D mode (Image Mode)                                              |
| LV MASS                      | LN                          | 18087-7 | Left Ventricle Mass                                     | SRT                                  | T-32600 | Left Ventricle | DCM                                     | 125270 | Left Ventricle Mass by Area Length (Measurement Method)           |

|          |    |         |                     |     |         |                |     |        |                                                         |
|----------|----|---------|---------------------|-----|---------|----------------|-----|--------|---------------------------------------------------------|
|          |    |         |                     |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                    |
| LV MASSI | LN | 18087-7 | Left Ventricle Mass | SRT | T-32600 | Left Ventricle | DCM | 125270 | Left Ventricle Mass by Area Length (Measurement Method) |
|          |    |         |                     |     |         |                | SRT | G-03A2 | 2D mode (Image Mode)                                    |
|          |    |         |                     |     |         |                | LN  | 8277-6 | Body Surface Area (Index)                               |

#### AV - LA

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                |
|------------------------------|-----------------------------|---------|------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|--------------------------------|
| 2D                           | CSD                         | CV      | CM                                             | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                             |
| RV diam                      | LN                          | 20304-2 | Right Ventricular Internal Diastolic Dimension | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-03A2  | 2D mode (Image Mode)           |
|                              |                             |         |                                                |                                      |         |                 | 99IM PRO OF                             | AV_LA   | AV/LA level                    |
| Ao diam systole              | LN                          | 18015-8 | Aortic Root Diameter                           | SRT                                  | T-42000 | Aorta           | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)  |
|                              |                             |         |                                                |                                      |         |                 | SRT                                     | G-03A2  | 2D mode (Image Mode)           |
| Ao diam diastole             | LN                          | 18015-8 | Aortic Root Diameter                           | SRT                                  | T-42000 | Aorta           | SRT                                     | F-32010 | Diastole (Cardiac Cycle Point) |
|                              |                             |         |                                                |                                      |         |                 | SRT                                     | G-03A2  | 2D mode (Image Mode)           |
| LA diam systole              | SRT                         | M-02550 | Diameter                                       | SRT                                  | T-32300 | Left Atrium     | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)  |
|                              |                             |         |                                                |                                      |         |                 | SRT                                     | G-03A2  | 2D mode (Image Mode)           |

|                       |             |               |                                                            |     |         |              |     |         |                                |
|-----------------------|-------------|---------------|------------------------------------------------------------|-----|---------|--------------|-----|---------|--------------------------------|
| LA diam diastole      | SRT         | M-02550       | Diameter                                                   | SRT | T-32300 | Left Atrium  | SRT | F-32010 | Diastole (Cardiac Cycle Point) |
|                       |             |               |                                                            |     |         |              | SRT | G-03A2  | 2D mode (Image Mode)           |
| AO/LA systole         | 99IM PRO OF | AOs2LAs       | Aortic Root to Left Atrium Ratio                           | SRT | T-32300 | Left Atrium  | SRT | G-03A2  | 2D mode (Image Mode)           |
| LA/AO systole         | LN          | 17985-3       | Left Atrium to Aortic Root Ratio                           | SRT | T-32300 | Left Atrium  | SRT | G-03A2  | 2D mode (Image Mode)           |
| LAs/AOd               | 99IM Proof  | LAs2AOd       | Left Atrium Systole to Aortic Root Diastole Diameter Ratio | SRT | T-32300 | Left Atrium  | SRT | G-03A2  | 2D mode (Image Mode)           |
| LA diam systole Index | SRT         | M-02550       | Diameter                                                   | SRT | T-32300 | Left Atrium  | SRT | F-32020 | Systole (Cardiac Cycle Point)  |
|                       |             |               |                                                            |     |         |              | SRT | G-03A2  | 2D mode (Image Mode)           |
|                       |             |               |                                                            |     |         |              | LN  | 8277-6  | Body Surface Area (Index)      |
| ACS                   | LN          | 17996-0       | Aortic Valve Cusp Separation                               | SRT | T-35400 | Aortic Valve | SRT | G-03A2  | 2D mode (Image Mode)           |
| LA VMax App.          | LN          | 29486-8       | Left Atrial Appendage Peak Velocity                        | SRT | T-32300 | Left Atrium  |     |         |                                |
| Ao STJ diam           | 99IM PRO OF | CA_DIAM_SINO  | Aortic Sinotubular Junction Diameter                       | SRT | T-42000 | Aorta        | SRT | G-03A2  | 2D mode (Image Mode)           |
| Ao Arch diam          | LN          | 18011-7       | Aortic Arch Diameter                                       | SRT | T-42000 | Aorta        | SRT | G-03A2  | 2D mode (Image Mode)           |
| Ao SV diam            | 99IM PRO OF | CA_DIAM_SINUS | Aortic Sinuses of Valsalva Diameter                        | SRT | T-42000 | Aorta        | SRT | G-03A2  | 2D mode (Image Mode)           |

|              |             |              |                            |     |         |                 |     |        |                      |
|--------------|-------------|--------------|----------------------------|-----|---------|-----------------|-----|--------|----------------------|
| Ao Ring diam | 99IM PRO OF | CA_DIAM _ANN | Aortic Annulus Diameter    | SRT | T-42000 | Aorta           | SRT | G-03A2 | 2D mode (Image Mode) |
| Ao Asc diam  | LN          | 18012-5      | Ascending Aortic Diameter  | SRT | T-42000 | Aorta           | SRT | G-03A2 | 2D mode (Image Mode) |
| Ao Desc diam | LN          | 18013-3      | Descending Aortic Diameter | SRT | T-42000 | Aorta           | SRT | G-03A2 | 2D mode (Image Mode) |
| Ao Abd diam  | SRT         | M-02550      | Diameter                   | SRT | T-42500 | Abdominal Aorta | SRT | G-03A2 | 2D mode (Image Mode) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                |
|------------------------------|-----------------------------|---------|------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|--------------------------------|
| MMode                        | CSD                         | CV      | CM                                             | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                             |
| RV diam                      | LN                          | 20304-2 | Right Ventricular Internal Diastolic Dimension | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-0394  | MMode (Image Mode)             |
|                              |                             |         |                                                |                                      |         |                 | 99IM PRO OF                             | AV_LA   | AV/LA level                    |
| Ao diam systole              | LN                          | 18015-8 | Aortic Root Diameter                           | SRT                                  | T-42000 | Aorta           | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)  |
|                              |                             |         |                                                |                                      |         |                 | SRT                                     | G-0394  | MMode (Image Mode)             |
| Ao diam diastole             | LN                          | 18015-8 | Aortic Root Diameter                           | SRT                                  | T-42000 | Aorta           | SRT                                     | F-32010 | Diastole (Cardiac Cycle Point) |
|                              |                             |         |                                                |                                      |         |                 | SRT                                     | G-0394  | MMode (Image Mode)             |
| LA diam systole              | SRT                         | M-02550 | Diameter                                       | SRT                                  | T-32300 | Left Atrium     | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)  |
|                              |                             |         |                                                |                                      |         |                 | SRT                                     | G-0394  | MMode (Image Mode)             |
| LA diam diastole             | SRT                         | M-02550 | Diameter                                       | SRT                                  | T-32300 | Left Atrium     | SRT                                     | F-32010 | Diastole (Cardiac Cycle Point) |

|                       |             |         |                                                            |     |         |              |     |         |                               |
|-----------------------|-------------|---------|------------------------------------------------------------|-----|---------|--------------|-----|---------|-------------------------------|
|                       |             |         |                                                            |     |         |              | SRT | G-0394  | MMode (Image Mode)            |
| AO/LA systole         | 99IM PRO OF | AOs2LAs | Aortic Root to Left Atrium Ratio                           | SRT | T-32300 | Left Atrium  | SRT | G-0394  | MMode (Image Mode)            |
| LA/AO systole         | LN          | 17985-3 | Left Atrium to Aortic Root Ratio                           | SRT | T-32300 | Left Atrium  | SRT | G-0394  | MMode (Image Mode)            |
| LAs/AOd               | 99IM Proof  | LAs2AOd | Left Atrium Systole to Aortic Root Diastole Diameter Ratio | SRT | T-32300 | Left Atrium  | SRT | G-0394  | MMode (Image Mode)            |
| LA diam systole Index | SRT         | M-02550 | Diameter                                                   | SRT | T-32300 | Left Atrium  | SRT | F-32020 | Systole (Cardiac Cycle Point) |
|                       |             |         |                                                            |     |         |              | SRT | G-0394  | MMode (Image Mode)            |
|                       |             |         |                                                            |     |         |              | LN  | 8277-6  | Body Surface Area (Index)     |
| ACS                   | LN          | 17996-0 | Aortic Valve Cusp Separation                               | SRT | T-35400 | Aortic Valve | SRT | G-0394  | MMode (Image Mode)            |
| LVET                  | LN          | 18041-4 | Aortic Valve Ejection Time                                 | SRT | T-35400 | Aortic Valve | SRT | G-0394  | MMode (Image Mode)            |
| LVPEP                 | LN          | 59085-1 | Pre-Ejection Period                                        | SRT | T-35400 | Aortic Valve | SRT | G-0394  | MMode (Image Mode)            |
| LVPEP / LVET          | LN          | 59088-5 | Pre-Ejection Period/Ejection Time Ratio                    | SRT | T-35400 | Aortic Valve | SRT | G-0394  | MMode (Image Mode)            |

#### Mitral Valve

| Label displayed in Worksheet | TID (5203) Echo Measurement |    |    | TID (5202) Echo Section Finding Site |    |    | Concept or Acquisition Context Modifier |    |    |
|------------------------------|-----------------------------|----|----|--------------------------------------|----|----|-----------------------------------------|----|----|
| MV                           | CSD                         | CV | CM | CSD                                  | CV | CM | CSD                                     | CV | CM |

|            |             |             |                                             |     |         |                |     |         |                                 |
|------------|-------------|-------------|---------------------------------------------|-----|---------|----------------|-----|---------|---------------------------------|
| E pt       | LN          | 18037-2     | Mitral Valve E-Wave Peak Velocity           | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| A pt       | LN          | 17978-8     | Mitral Valve A-Wave Peak Velocity           | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| Dec. Slope | LN          | 20216-8     | Deceleration Slope                          | SRT | T-35300 | Mitral Valve   |     |         |                                 |
| E/A        | LN          | 18038-0     | Mitral Valve E to A Ratio                   | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| A/E        | 99IM PRO OF | CA_MV_A 2E  | Mitral Valve A to E Ratio                   | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| Dec. Time  | SRT         | G-0384      | Mitral Valve E-Wave Deceleration Time       | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| E duration | 99IM PRO OF | CA_MV_D URe | Mitral Valve E-Wave Duration                | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| A duration | SRT         | G-0385      | Mitral Valve A-Wave Duration                | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| IVRT       | LN          | 18071-1     | Left Ventricular Isovolumic Relaxation Time | SRT | T-32600 | Left Ventricle |     |         |                                 |
| MV C-O dur | SRT         | G-0387      | Mitral Valve Closure to Opening Time        | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| LVET       | LN          | 18041-4     | Aortic Valve Ejection Time                  | SRT | T-35400 | Aortic Valve   |     |         |                                 |
| MV VTI     | LN          | 20354-7     | Velocity Time Integral                      | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| Vmax       | LN          | 11726-7     | Peak Velocity                               | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| Vmean      | LN          | 20352-1     | Time averaged mean velocity                 | SRT | T-35300 | Mitral Valve   | SRT | R-42047 | Antegrade Flow (Flow Direction) |

|           |     |         |                                 |     |         |                              |     |         |                                                                    |
|-----------|-----|---------|---------------------------------|-----|---------|------------------------------|-----|---------|--------------------------------------------------------------------|
| PGmax     | LN  | 20247-3 | Peak Gradient                   | SRT | T-35300 | Mitral Valve                 | SRT | R-42047 | Antegrade Flow (Flow Direction)                                    |
| PGmean    | LN  | 20256-4 | Mean Gradient                   | SRT | T-35300 | Mitral Valve                 | SRT | R-42047 | Antegrade Flow (Flow Direction)                                    |
| PHT       | LN  | 20280-4 | Pressure Half-Time              | SRT | T-35300 | Mitral Valve                 | SRT | R-42047 | Antegrade Flow (Flow Direction)                                    |
| MVA (PHT) | SRT | G-038E  | Cardiovascular Orifice Area     | SRT | T-35300 | Mitral Valve                 | DCM | 125210  | Area by Pressure Half-Time (Measurement Method)                    |
|           |     |         |                                 |     |         |                              | SRT | R-42047 | Antegrade Flow (Flow Direction)                                    |
| MVA (VTI) | SRT | G-038E  | Cardiovascular Orifice Area     | SRT | T-35300 | Mitral Valve                 | DCM | 125215  | Continuity Equation by Velocity Time Integral (Measurement Method) |
|           |     |         |                                 |     |         |                              | SRT | R-42047 | Antegrade Flow (Flow Direction)                                    |
| MV diam   | SRT | G-038F  | Cardiovascular Orifice Diameter | SRT | T-35300 | Mitral Valve                 |     |         |                                                                    |
| LVOT VTI  | LN  | 20354-7 | Velocity Time Integral          | SRT | T-32650 | Left Ventricle Outflow Tract | SRT | R-42047 | Antegrade Flow (Flow Direction)                                    |
| LVOT diam | SRT | G-038F  | Cardiovascular Orifice Diameter | SRT | T-32650 | Left Ventricle Outflow Tract |     |         |                                                                    |
| HR        | LN  | 8867-4  | Heart rate                      | SRT | T-35300 | Mitral Valve                 |     |         |                                                                    |
| SV        | SRT | F-32120 | Stroke Volume                   | SRT | T-35300 | Mitral Valve                 | DCM | 125219  | Doppler Volume Flow (Measurement Method)                           |
| CO        | SRT | F-32100 | Cardiac Output                  | SRT | T-35300 | Mitral Valve                 | DCM | 125219  | Doppler Volume Flow (Measurement Method)                           |

|    |     |         |               |     |         |              |     |        |                                          |
|----|-----|---------|---------------|-----|---------|--------------|-----|--------|------------------------------------------|
| SI | SRT | F-00078 | Stroke Index  | SRT | T-35300 | Mitral Valve | DCM | 125219 | Doppler Volume Flow (Measurement Method) |
| CI | SRT | F-32110 | Cardiac Index | SRT | T-35300 | Mitral Valve | DCM | 125219 | Doppler Volume Flow (Measurement Method) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                  | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|--------------------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|---------|---------------------------------|
| LV MPI                       | CSD                         | CV      | CM                                               | CSD                                  | CV      | CM             | CSD                                     | CV      | CM                              |
| LVET                         | LN                          | 18041-4 | Aortic Valve Ejection Time                       | SRT                                  | T-35400 | Aortic Valve   |                                         |         |                                 |
| MV C-O dur                   | SRT                         | G-0387  | Mitral Valve Closure to Opening Time             | SRT                                  | T-35300 | Mitral Valve   | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| LV MPI                       | SRT                         | G-037F  | Left Ventricular Index of Myocardial Performance | SRT                                  | T-32600 | Left Ventricle |                                         |         |                                 |

| Label displayed in Worksheet | TID (5203) Echo Measurement |              |                                                  | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |         |                               |
|------------------------------|-----------------------------|--------------|--------------------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|---------|-------------------------------|
| Annulus                      | CSD                         | CV           | CM                                               | CSD                                  | CV      | CM             | CSD                                     | CV      | CM                            |
| Ann diam comm                | 99IM PRO OF                 | CA_MV_Dia_CC | Mitral Valve Commissural Diameter                | SRT                                  | T-35313 | Mitral Annulus | SRT                                     | F-32020 | Systole (Cardiac Cycle Point) |
|                              |                             |              |                                                  |                                      |         |                | SRT                                     | G-03A2  | 2D mode (Image Mode)          |
| Ann diam ant-post            | 99IM PRO OF                 | CA_MV_Dia_AP | Mitral Valve Anterior-Posterior Annulus Diameter | SRT                                  | T-35313 | Mitral Annulus | SRT                                     | F-32020 | Systole (Cardiac Cycle Point) |
|                              |                             |              |                                                  |                                      |         |                | SRT                                     | G-03A2  | 2D mode (Image Mode)          |
| Ann. Area                    | SRT                         | G-A166       | Area                                             | SRT                                  | T-35313 | Mitral Annulus | SRT                                     | F-32020 | Systole (Cardiac Cycle Point) |

|             |             |             |                                                             |     |         |                |     |          |                                             |
|-------------|-------------|-------------|-------------------------------------------------------------|-----|---------|----------------|-----|----------|---------------------------------------------|
|             |             |             |                                                             |     |         |                | SRT | G-03A2   | 2D mode (Image Mode)                        |
| MVA (Trace) | SRT         | G-038E      | Cardiovascular Orifice Area                                 | SRT | T-35300 | Mitral Valve   | DCM | 125220   | Planimetry (Measurement Method)             |
|             |             |             |                                                             |     |         |                | SRT | G-03A2   | 2D mode (Image Mode)                        |
| E'(m)       | SRT         | G-037A      | Left Ventricular Peak Early Diastolic Tissue Velocity       | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|             |             |             |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| A'(m)       | SRT         | G-037C      | LV Peak Diastolic Tissue Velocity During Atrial Systole     | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|             |             |             |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| E'/A'(m)    | 99IM PRO OF | CA_MV_Ea2Aa | Mitral Valve Ea to Aa Ratio                                 | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|             |             |             |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| E/E'(m)     | SRT         | G-037B      | Ratio of MV Peak Velocity to LV Peak Tissue Velocity E-Wave | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|             |             |             |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| MV Ann VTI  | LN          | 20354-7     | Velocity Time Integral                                      | SRT | T-35313 | Mitral Annulus | SRT | R-42047  | Antegrade Flow (Flow Direction)             |

|             |     |        |                                                             |     |         |                |  |  |  |
|-------------|-----|--------|-------------------------------------------------------------|-----|---------|----------------|--|--|--|
| Ann Vmax E' | SRT | G-037A | Left Ventricular Peak Early Diastolic Tissue Velocity       | SRT | T-35313 | Mitral Annulus |  |  |  |
| Ann Vmax A' | SRT | G-037C | LV Peak Diastolic Tissue Velocity During Atrial Systole     | SRT | T-35313 | Mitral Annulus |  |  |  |
| MV Ann E/E' | SRT | G-037B | Ratio of MV Peak Velocity to LV Peak Tissue Velocity E-Wave | SRT | T-35313 | Mitral Annulus |  |  |  |

| Label displayed in Worksheet | TID (5203) Echo Measurement |                   |                                      | TID (5202) Echo Section Finding Site |         |              | Concept or Acquisition Context Modifier |        |                    |
|------------------------------|-----------------------------|-------------------|--------------------------------------|--------------------------------------|---------|--------------|-----------------------------------------|--------|--------------------|
| MMode                        | CSD                         | CV                | CM                                   | CSD                                  | CV      | CM           | CSD                                     | CV     | CM                 |
| CE amp                       | 99IM PRO OF                 | CA_MV_E WaveAmpl  | Amplitude E- Wave                    | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |
| CA amp                       | 99IM PRO OF                 | CA_MV_A WaveAmpl  | Amplitude A-Wave                     | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |
| DE slope (Flow Propagation)  | LN                          | 59127-1           | D-E Slope                            | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |
| DE amp                       | 99IM PRO OF                 | CA_MV_D EWaveAmpl | Amplitude D-E Wave                   | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |
| EPSS                         | LN                          | 18036-4           | Mitral Valve EPSS, E wave            | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |
| EF slope                     | LN                          | 18040-6           | Mitral Valve E-F Slope by M-Mode     | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |
| CA/CE                        | 99IM PRO OF                 | MV_AMPL_A2AMPL_E  | A-Wave Amplitude to E-Wave Amplitude | SRT                                  | T-35300 | Mitral Valve | SRT                                     | G-0394 | MMode (Image Mode) |

|       |                   |                          |                                                     |     |         |                   |     |        |                          |
|-------|-------------------|--------------------------|-----------------------------------------------------|-----|---------|-------------------|-----|--------|--------------------------|
| CE/CA | 99IM<br>PRO<br>OF | MV_AMPL<br>_E2AMPL<br>_A | E-Wave<br>Amplitude<br>to A-Wave<br>Amplitude       | SRT | T-35300 | Mitral<br>Valve   | SRT | G-0394 | MMode<br>(Image<br>Mode) |
| MAPSE | 99IM<br>PRO<br>OF | MAPSE                    | Mitral<br>Annular<br>Plane<br>Systolic<br>Excursion | SRT | T-32600 | Left<br>Ventricle | SRT | G-0394 | MMode<br>(Image<br>Mode) |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                                      | TID (5202) Echo<br>Section Finding Site |         |                 | Concept or Acquisition<br>Context Modifier |        |                                                                     |
|------------------------------------|--------------------------------|---------|--------------------------------------|-----------------------------------------|---------|-----------------|--------------------------------------------|--------|---------------------------------------------------------------------|
| MR                                 | CSD                            | CV      | CM                                   | CSD                                     | CV      | CM              | CSD                                        | CV     | CM                                                                  |
| MR VTI                             | LN                             | 20354-7 | Velocity<br>Time<br>Integral         | SRT                                     | T-35300 | Mitral<br>Valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| MR Vmax                            | LN                             | 11726-7 | Peak<br>Velocity                     | SRT                                     | T-35300 | Mitral<br>Valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| PISA Radius                        | LN                             | 59102-4 | Flow<br>Radius                       | SRT                                     | T-35300 | Mitral<br>Valve | DCM                                        | 125216 | Proximal<br>Isovelocity<br>Surface Area<br>(Measureme<br>nt Method) |
|                                    |                                |         |                                      |                                         |         |                 | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| Aliasing Vel                       | LN                             | 59130-5 | Alias<br>Velocity                    | SRT                                     | T-35300 | Mitral<br>Valve | DCM                                        | 125216 | Proximal<br>Isovelocity<br>Surface Area<br>(Measureme<br>nt Method) |
|                                    |                                |         |                                      |                                         |         |                 | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| MR Vmean                           | LN                             | 20352-1 | Time<br>averaged<br>mean<br>velocity | SRT                                     | T-35300 | Mitral<br>Valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| MR PGmax                           | LN                             | 20247-3 | Peak<br>Gradient                     | SRT                                     | T-35300 | Mitral<br>Valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| MR PGmean                          | LN                             | 20256-4 | Mean<br>Gradient                     | SRT                                     | T-35300 | Mitral<br>Valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |

|                |             |            |                                                              |     |         |                              |     |         |                                          |
|----------------|-------------|------------|--------------------------------------------------------------|-----|---------|------------------------------|-----|---------|------------------------------------------|
| MR dP/dt       | LN          | 18035-6    | Mitral Regurgitation dP/dt derived from Mitral Reg. velocity | SRT | T-35300 | Mitral Valve                 | SRT | G-0367  | Regurgitant Flow (Flow Direction)        |
| MR dt          | LN          | 20217-6    | Deceleration Time                                            | SRT | T-35300 | Mitral Valve                 | SRT | G-0367  | Regurgitant Flow (Flow Direction)        |
| MR VC diam     | 99IM PRO OF | CA_DIAM_VC | Vena Contracta Diameter                                      | SRT | T-35300 | Mitral Valve                 | SRT | G-03A2  | 2D mode (Image Mode)                     |
| Jet Area       | LN          | 59123-0    | Jet Area                                                     | SRT | T-35300 | Mitral Valve                 | DCM | 125220  | Planimetry (Measurement Method)          |
|                |             |            |                                                              |     |         |                              | SRT | G-03A2  | 2D mode (Image Mode)                     |
| Jet Height     | 99IM PRO OF | HEIGHT_JET | Jet Height                                                   | SRT | T-35300 | Mitral Valve                 | SRT | G-03A2  | 2D mode (Image Mode)                     |
| MV VTI         | LN          | 20354-7    | Velocity Time Integral                                       | SRT | T-35300 | Mitral Valve                 | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| MV diam        | SRT         | G-038F     | Cardiovascular Orifice Diameter                              | SRT | T-35300 | Mitral Valve                 |     |         |                                          |
| LVOT VTI       | LN          | 20354-7    | Velocity Time Integral                                       | SRT | T-32650 | Left Ventricle Outflow Tract | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| LVOT diam      | SRT         | G-038F     | Cardiovascular Orifice Diameter                              | SRT | T-32650 | Left Ventricle Outflow Tract |     |         |                                          |
| SV             | SRT         | F-32120    | Stroke Volume                                                | SRT | T-35300 | Mitral Valve                 | DCM | 125219  | Doppler Volume Flow (Measurement Method) |
| LVOT SV        | SRT         | F-32120    | Stroke Volume                                                | SRT | T-32650 | Left Ventricle Outflow Tract | DCM | 125219  | Doppler Volume Flow (Measurement Method) |
| MR. Reg Volume | 99IM PRO OF | CA_REG_VOL | Regurgitation Volume                                         | SRT | T-35300 | Mitral Valve                 | SRT | G-0367  | Regurgitant Flow (Flow Direction)        |

|                    |     |         |                              |     |         |              |     |        |                                                        |
|--------------------|-----|---------|------------------------------|-----|---------|--------------|-----|--------|--------------------------------------------------------|
| MR. Reg Fraction   | SRT | G-0390  | Regurgitant Fraction         | SRT | T-35300 | Mitral Valve | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Flow Rate     | LN  | 34141-2 | Peak Instantaneous Flow Rate | SRT | T-35300 | Mitral Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA ERO Area      | SRT | G-038E  | Cardiovascular Orifice Area  | SRT | T-35300 | Mitral Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA. Reg Volume   | LN  | 33878-0 | Volume Flow                  | SRT | T-35300 | Mitral Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA. Reg Fraction | SRT | G-0390  | Regurgitant Fraction         | SRT | T-35300 | Mitral Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |

#### Aortic Valve

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                        | TID (5202) Echo Section Finding Site |         |              | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|------------------------|--------------------------------------|---------|--------------|-----------------------------------------|---------|---------------------------------|
|                              | CSD                         | CV      | CM                     | CSD                                  | CV      | CM           | CSD                                     | CV      | CM                              |
| AV VTI                       | LN                          | 20354-7 | Velocity Time Integral | SRT                                  | T-35400 | Aortic Valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| HR                           | LN                          | 8867-4  | Heart rate             | SRT                                  | T-35400 | Aortic Valve |                                         |         |                                 |

|               |             |         |                             |     |         |              |     |         |                                                 |
|---------------|-------------|---------|-----------------------------|-----|---------|--------------|-----|---------|-------------------------------------------------|
| AV Vmax       | LN          | 11726-7 | Peak Velocity               | SRT | T-35400 | Aortic Valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| AV Vmean      | LN          | 20352-1 | Time averaged mean velocity | SRT | T-35400 | Aortic Valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| AV PGmax      | LN          | 20247-3 | Peak Gradient               | SRT | T-35400 | Aortic Valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| AV PGmean     | LN          | 20256-4 | Mean Gradient               | SRT | T-35400 | Aortic Valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| AR Vmax       | LN          | 11726-7 | Peak Velocity               | SRT | T-35400 | Aortic Valve | SRT | G-0367  | Regurgitant Flow (Flow Direction)               |
| AR PGmax      | LN          | 20247-3 | Peak Gradient               | SRT | T-35400 | Aortic Valve | SRT | G-0367  | Regurgitant Flow (Flow Direction)               |
| AR Ved        | LN          | 11653-3 | End Diastolic Velocity      | SRT | T-35400 | Aortic Valve | SRT | G-0367  | Regurgitant Flow (Flow Direction)               |
| AR PGed       | 99IM PRO OF | CA_AV_P | Aortic Valve Pressure       | SRT | T-35400 | Aortic Valve | SRT | F-32011 | End Diastole (Cardiac Cycle Point)              |
|               |             |         |                             |     |         |              | SRT | G-0367  | Regurgitant Flow (Flow Direction)               |
| AR Dec. Time  | LN          | 20217-6 | Deceleration Time           | SRT | T-35400 | Aortic Valve | DCM | 125210  | Area by Pressure Half-Time (Measurement Method) |
|               |             |         |                             |     |         |              | SRT | G-0367  | Regurgitant Flow (Flow Direction)               |
| AR Dec. Slope | LN          | 20216-8 | Deceleration Slope          | SRT | T-35400 | Aortic Valve | DCM | 125210  | Area by Pressure Half-Time (Measurement Method) |
|               |             |         |                             |     |         |              | SRT | G-0367  | Regurgitant Flow (Flow Direction)               |

|                   |     |         |                              |     |         |              |     |        |                                                        |
|-------------------|-----|---------|------------------------------|-----|---------|--------------|-----|--------|--------------------------------------------------------|
| AR PHT            | LN  | 20280-4 | Pressure Half-Time           | SRT | T-35400 | Aortic Valve | DCM | 125210 | Area by Pressure Half-Time (Measurement Method)        |
|                   |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| AR VTI            | LN  | 20354-7 | Velocity Time Integral       | SRT | T-35400 | Aortic Valve | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| AR Vmean          | LN  | 20352-1 | Time averaged mean velocity  | SRT | T-35400 | Aortic Valve | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| AR PGmean         | LN  | 20256-4 | Mean Gradient                | SRT | T-35400 | Aortic Valve | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Radius       | LN  | 59102-4 | Flow Radius                  | SRT | T-35400 | Aortic Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                   |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Aliasing Vel | LN  | 59130-5 | Alias Velocity               | SRT | T-35400 | Aortic Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                   |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Flow Rate    | LN  | 34141-2 | Peak Instantaneous Flow Rate | SRT | T-35400 | Aortic Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                   |     |         |                              |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA ERO Area     | SRT | G-038E  | Cardiovascular Orifice Area  | SRT | T-35400 | Aortic Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |

|                    |     |         |                      |     |         |              |     |        |                                                        |
|--------------------|-----|---------|----------------------|-----|---------|--------------|-----|--------|--------------------------------------------------------|
|                    |     |         |                      |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Reg. Volume   | LN  | 33878-0 | Volume Flow          | SRT | T-35400 | Aortic Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |         |                      |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Reg. Fraction | SRT | G-0390  | Regurgitant Fraction | SRT | T-35400 | Aortic Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |         |                      |     |         |              | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                             | TID (5202) Echo Section Finding Site |         |                              | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|-----------------------------|--------------------------------------|---------|------------------------------|-----------------------------------------|---------|---------------------------------|
|                              | CSD                         | CV      | CM                          | CSD                                  | CV      | CM                           | CSD                                     | CV      | CM                              |
| LVOT VTI                     | LN                          | 20354-7 | Velocity Time Integral      | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| LVOT Vmax                    | LN                          | 11726-7 | Peak Velocity               | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| LVOT Vmean                   | LN                          | 20352-1 | Time averaged mean velocity | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| LVOT PGmax                   | LN                          | 20247-3 | Peak Gradient               | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| LVOT PGmean                  | LN                          | 20256-4 | Mean Gradient               | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |

|                   |             |               |                                                          |             |         |                               |     |         |                                          |
|-------------------|-------------|---------------|----------------------------------------------------------|-------------|---------|-------------------------------|-----|---------|------------------------------------------|
| LVOT diam         | SRT         | G-038F        | Cardiovascular Orifice Diameter                          | SRT         | T-32650 | Left Ventricle Outflow Tract  |     |         |                                          |
| IVRT              | LN          | 18071-1       | Left Ventricular Isovolumic Relaxation Time              | SRT         | T-32600 | Left Ventricle                |     |         |                                          |
| LVET              | LN          | 18041-4       | Aortic Valve Ejection Time                               | SRT         | T-35400 | Aortic Valve                  |     |         |                                          |
| LVPEP             | LN          | 59085-1       | Pre-Ejection Period                                      | SRT         | T-35400 | Aortic Valve                  |     |         |                                          |
| LV Acc Time       | LN          | 20168-1       | Acceleration Time                                        | SRT         | T-35400 | Aortic Valve                  | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| LVPEP/LVET        | LN          | 59088-5       | Pre-Ejection Period/Ejection Time Ratio                  | SRT         | T-35400 | Aortic Valve                  |     |         |                                          |
| dPEP              | 99IM PRO OF | dPEP          | Interventricular Delay                                   | 99IM PRO OF | IVD     | Interventricular Dyssynchrony |     |         |                                          |
| LVOT Vmax/AV Vmax | 99IM PRO OF | LVOTTOAoV_VP  | Maximum velocity in the LVOT to Maximum velocity in AV   | SRT         | T-35400 | Aortic Valve                  | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| LVOT VTI/AV VTI   | 99IM PRO OF | LVOTTOAoV_VTI | VTI in the LVOT to VTI in AV                             | SRT         | T-35400 | Aortic Valve                  | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| LV Acc T/LVET     | SRT         | G-0382        | Ratio of Aortic Valve Acceleration Time to Ejection Time | SRT         | T-35400 | Aortic Valve                  | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| LVOT SV           | SRT         | F-32120       | Stroke Volume                                            | SRT         | T-32650 | Left Ventricle Outflow Tract  | DCM | 125219  | Doppler Volume Flow (Measurement Method) |

|         |     |         |                |     |         |                              |     |        |                                          |
|---------|-----|---------|----------------|-----|---------|------------------------------|-----|--------|------------------------------------------|
| LVOT CO | SRT | F-32100 | Cardiac Output | SRT | T-32650 | Left Ventricle Outflow Tract | DCM | 125219 | Doppler Volume Flow (Measurement Method) |
| LVOT SI | SRT | F-00078 | Stroke Index   | SRT | T-32650 | Left Ventricle Outflow Tract | DCM | 125219 | Doppler Volume Flow (Measurement Method) |
| LVOT CI | SRT | F-32110 | Cardiac Index  | SRT | T-32650 | Left Ventricle Outflow Tract | DCM | 125219 | Doppler Volume Flow (Measurement Method) |
| HR      | LN  | 8867-4  | Heart rate     | SRT | T-35400 | Aortic Valve                 |     |        |                                          |

| Label displayed in Worksheet | TID (5203) Echo Measurement |                 |                                 | TID (5202) Echo Section Finding Site |         |                              | Concept or Acquisition Context Modifier |        |                                 |
|------------------------------|-----------------------------|-----------------|---------------------------------|--------------------------------------|---------|------------------------------|-----------------------------------------|--------|---------------------------------|
| 2D                           | CSD                         | CV              | CM                              | CSD                                  | CV      | CM                           | CSD                                     | CV     | CM                              |
| LVOT diam                    | SRT                         | G-038F          | Cardiovascular Orifice Diameter | SRT                                  | T-32650 | Left Ventricle Outflow Tract |                                         |        |                                 |
| AVA (Trace)                  | SRT                         | G-038E          | Cardiovascular Orifice Area     | SRT                                  | T-35400 | Aortic Valve                 | DCM                                     | 125220 | Planimetry (Measurement Method) |
|                              |                             |                 |                                 |                                      |         |                              | SRT                                     | G-03A2 | 2D mode (Image Mode)            |
| AR VC diam                   | 99IM PRO OF                 | CA_DIAM_VC      | Vena Contracta Diameter         | SRT                                  | T-35400 | Aortic Valve                 | SRT                                     | G-03A2 | 2D mode (Image Mode)            |
| Jet Area                     | LN                          | 59123-0         | Jet Area                        | SRT                                  | T-35400 | Aortic Valve                 | DCM                                     | 125220 | Planimetry (Measurement Method) |
|                              |                             |                 |                                 |                                      |         |                              | SRT                                     | G-03A2 | 2D mode (Image Mode)            |
| Jet Height                   | 99IM PRO OF                 | HEIGHT_JET      | Jet Height                      | SRT                                  | T-35400 | Aortic Valve                 | SRT                                     | G-03A2 | 2D mode (Image Mode)            |
| Jet Width                    | 99IM PRO OF                 | CA_AR_WIDTH_JET | Jet Width                       | SRT                                  | T-35400 | Aortic Valve                 | SRT                                     | G-03A2 | 2D mode (Image Mode)            |

|                       |             |                   |                        |     |         |              |     |        |                      |
|-----------------------|-------------|-------------------|------------------------|-----|---------|--------------|-----|--------|----------------------|
| Jet Width / LVOT diam | 99IM PRO OF | CA_AR_WJET2LV OTD | Jet Width to LVOT Diam | SRT | T-35400 | Aortic Valve | SRT | G-03A2 | 2D mode (Image Mode) |
|-----------------------|-------------|-------------------|------------------------|-----|---------|--------------|-----|--------|----------------------|

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                 | TID (5202) Echo Section Finding Site |         |                              | Concept or Acquisition Context Modifier |         |                                                                    |
|------------------------------|-----------------------------|---------|---------------------------------|--------------------------------------|---------|------------------------------|-----------------------------------------|---------|--------------------------------------------------------------------|
| AVA (VTI)                    | CSD                         | CV      | CM                              | CSD                                  | CV      | CM                           | CSD                                     | CV      | CM                                                                 |
| AV VTI                       | LN                          | 20354-7 | Velocity Time Integral          | SRT                                  | T-35400 | Aortic Valve                 | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
| LVOT VTI                     | LN                          | 20354-7 | Velocity Time Integral          | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
| LVOT diam                    | SRT                         | G-038F  | Cardiovascular Orifice Diameter | SRT                                  | T-32650 | Left Ventricle Outflow Tract |                                         |         |                                                                    |
| AVA (VTI)                    | SRT                         | G-038E  | Cardiovascular Orifice Area     | SRT                                  | T-35400 | Aortic Valve                 | DCM                                     | 125215  | Continuity Equation by Velocity Time Integral (Measurement Method) |
|                              |                             |         |                                 |                                      |         |                              | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
| AVAI (VTI)                   | SRT                         | G-038E  | Cardiovascular Orifice Area     | SRT                                  | T-35400 | Aortic Valve                 | DCM                                     | 125215  | Continuity Equation by Velocity Time Integral (Measurement Method) |
|                              |                             |         |                                 |                                      |         |                              | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
|                              |                             |         |                                 |                                      |         |                              | LN                                      | 8277-6  | Body Surface Area (Index)                                          |

| Label displayed in Worksheet | TID (5203) Echo Measurement |  |  | TID (5202) Echo Section Finding Site |  |  | Concept or Acquisition Context Modifier |  |  |
|------------------------------|-----------------------------|--|--|--------------------------------------|--|--|-----------------------------------------|--|--|
|------------------------------|-----------------------------|--|--|--------------------------------------|--|--|-----------------------------------------|--|--|

| AVA (Vmax)  | CSD | CV      | CM                              | CSD | CV      | CM                           | CSD | CV      | CM                                                        |
|-------------|-----|---------|---------------------------------|-----|---------|------------------------------|-----|---------|-----------------------------------------------------------|
| AV Vmax     | LN  | 11726-7 | Peak Velocity                   | SRT | T-35400 | Aortic Valve                 | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
| LVOT Vmax   | LN  | 11726-7 | Peak Velocity                   | SRT | T-32650 | Left Ventricle Outflow Tract | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
| LVOT diam   | SRT | G-038F  | Cardiovascular Orifice Diameter | SRT | T-32650 | Left Ventricle Outflow Tract |     |         |                                                           |
| AVA (Vmax)  | SRT | G-038E  | Cardiovascular Orifice Area     | SRT | T-35400 | Aortic Valve                 | DCM | 125214  | Continuity Equation by Peak Velocity (Measurement Method) |
|             |     |         |                                 |     |         |                              | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
| AVAI (Vmax) | SRT | G-038E  | Cardiovascular Orifice Area     | SRT | T-35400 | Aortic Valve                 | DCM | 125214  | Continuity Equation by Peak Velocity (Measurement Method) |
|             |     |         |                                 |     |         |                              | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
|             |     |         |                                 |     |         |                              | LN  | 8277-6  | Body Surface Area (Index)                                 |

### Tricuspid Valve

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                      | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|--------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|---------------------------------|
| TV                           | CSD                         | CV      | CM                                   | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                              |
| E pt                         | LN                          | 18031-5 | Tricuspid Valve E-Wave Peak Velocity | SRT                                  | T-35100 | Tricuspid valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |

|             |             |            |                                           |     |         |                 |     |         |                                                 |
|-------------|-------------|------------|-------------------------------------------|-----|---------|-----------------|-----|---------|-------------------------------------------------|
| A pt        | LN          | 18030-7    | Tricuspid Valve A-Wave Peak Velocity      | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| Dec. Slope  | LN          | 20216-8    | Deceleration Slope                        | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| Dec. Time   | LN          | 20217-6    | Deceleration Time                         | SRT | T-35100 | Tricuspid valve | SRT | F-32010 | Diastole (Cardiac Cycle Point)                  |
| PHT         | LN          | 20280-4    | Pressure Half-Time                        | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| TVA (PHT)   | SRT         | G-038E     | Cardiovascular Orifice Area               | SRT | T-35100 | Tricuspid valve | DCM | 125210  | Area by Pressure Half-Time (Measurement Method) |
|             |             |            |                                           |     |         |                 | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| E/A         | LN          | 18039-8    | Tricuspid Valve E to A Ratio              | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| A/E         | 99IM PRO OF | CA_TV_A 2E | Tricuspid Valve A to E Ratio              | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| TV VTI      | LN          | 20354-7    | Velocity Time Integral                    | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| Vmax        | LN          | 11726-7    | Peak Velocity                             | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| Vmean       | LN          | 20352-1    | Time averaged mean velocity               | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| PGmax       | LN          | 20247-3    | Peak Gradient                             | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| PGmean      | LN          | 20256-4    | Mean Gradient                             | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |
| Q_to_TVopen | LN          | 20296-0    | Time from Q wave to Tricuspid Valve Opens | SRT | T-35100 | Tricuspid valve | SRT | R-42047 | Antegrade Flow (Flow Direction)                 |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                   | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|---------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|---------------------------------|
| RV MPI                       | CSD                         | CV      | CM                                                | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                              |
| RVET                         | LN                          | 18042-2 | Pulmonic Valve Ejection Time                      | SRT                                  | T-35200 | Pulmonary Valve |                                         |         |                                 |
| TV C-O dur                   | SRT                         | G-0389  | Tricuspid Valve Closure to Opening Time           | SRT                                  | T-35100 | Tricuspid valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| RV MPI                       | SRT                         | G-0381  | Right Ventricular Index of Myocardial Performance | SRT                                  | T-32500 | Right Ventricle |                                         |         |                                 |

| Label displayed in Worksheet | TID (5203) Echo Measurement |            |                                                     | TID (5202) Echo Section Finding Site |         |                   | Concept or Acquisition Context Modifier |          |                                             |
|------------------------------|-----------------------------|------------|-----------------------------------------------------|--------------------------------------|---------|-------------------|-----------------------------------------|----------|---------------------------------------------|
| Annulus                      | CSD                         | CV         | CM                                                  | CSD                                  | CV      | CM                | CSD                                     | CV       | CM                                          |
| Ann diam comm                | 99IM PRO OF                 | TV_Dia_C C | Tricuspid Valve Commissural Diameter                | SRT                                  | T-35111 | Tricuspid Annulus | SRT                                     | F-32020  | Systole (Cardiac Cycle Point)               |
|                              |                             |            |                                                     |                                      |         |                   | SRT                                     | G-03A2   | 2D mode (Image Mode)                        |
| Ann diam ant-post            | 99IM PRO OF                 | TV_Dia_A P | Tricuspid Valve Anterior-Posterior Annulus Diameter | SRT                                  | T-35111 | Tricuspid Annulus | SRT                                     | F-32020  | Systole (Cardiac Cycle Point)               |
|                              |                             |            |                                                     |                                      |         |                   | SRT                                     | G-03A2   | 2D mode (Image Mode)                        |
| E' (m)                       | 99IM PRO OF                 | RV_Ea      | Right Ventricular Peak Early Diastolic Tissue       | SRT                                  | T-32500 | Right Ventricle   | SRT                                     | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |

|        |                   |       |                                                                           |     |         |                    |                   |               |                                                          |
|--------|-------------------|-------|---------------------------------------------------------------------------|-----|---------|--------------------|-------------------|---------------|----------------------------------------------------------|
|        |                   |       | Velocity                                                                  |     |         |                    | 99IM<br>PRO<br>OF | MedTriAn<br>n | Medial<br>Tricuspid<br>Annulus<br>(Finding<br>Site)      |
| A' (m) | 99IM<br>PRO<br>OF | RV_Aa | RV Peak<br>Diastolic<br>Tissue<br>Velocity<br>During<br>Atrial<br>Systole | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|        |                   |       |                                                                           |     |         |                    | 99IM<br>PRO<br>OF | MedTriAn<br>n | Medial<br>Tricuspid<br>Annulus<br>(Finding<br>Site)      |
| S' (m) | 99IM<br>PRO<br>OF | RV_Sa | Right<br>Ventricular<br>Peak<br>Systolic<br>Tissue<br>Velocity            | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|        |                   |       |                                                                           |     |         |                    | 99IM<br>PRO<br>OF | MedTriAn<br>n | Medial<br>Tricuspid<br>Annulus<br>(Finding<br>Site)      |
| E' (l) | 99IM<br>PRO<br>OF | RV_Ea | Right<br>Ventricular<br>Peak Early<br>Diastolic<br>Tissue<br>Velocity     | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|        |                   |       |                                                                           |     |         |                    | 99IM<br>PRO<br>OF | LatTriAnn     | Lateral<br>Tricuspid<br>Annulus<br>(Finding<br>Site)     |
| A' (l) | 99IM<br>PRO<br>OF | RV_Aa | RV Peak<br>Diastolic<br>Tissue<br>Velocity<br>During<br>Atrial<br>Systole | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|        |                   |       |                                                                           |     |         |                    | 99IM<br>PRO<br>OF | LatTriAnn     | Lateral<br>Tricuspid<br>Annulus<br>(Finding<br>Site)     |
| S' (l) | 99IM<br>PRO<br>OF | RV_Sa | Right<br>Ventricular<br>Peak<br>Systolic<br>Tissue                        | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |

|  |  |  |          |  |  |  |                   |           |                                                      |
|--|--|--|----------|--|--|--|-------------------|-----------|------------------------------------------------------|
|  |  |  | Velocity |  |  |  | 99IM<br>PRO<br>OF | LatTriAnn | Lateral<br>Tricuspid<br>Annulus<br>(Finding<br>Site) |
|--|--|--|----------|--|--|--|-------------------|-----------|------------------------------------------------------|

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                                      | TID (5202) Echo<br>Section Finding Site |         |                    | Concept or Acquisition<br>Context Modifier |        |                                                                     |
|------------------------------------|--------------------------------|---------|--------------------------------------|-----------------------------------------|---------|--------------------|--------------------------------------------|--------|---------------------------------------------------------------------|
| TR                                 | CSD                            | CV      | CM                                   | CSD                                     | CV      | CM                 | CSD                                        | CV     | CM                                                                  |
| TR VTI                             | LN                             | 20354-7 | Velocity<br>Time<br>Integral         | SRT                                     | T-35100 | Tricuspid<br>valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| TR Vmax                            | LN                             | 11726-7 | Peak<br>Velocity                     | SRT                                     | T-35100 | Tricuspid<br>valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| PISA Radius                        | LN                             | 59102-4 | Flow<br>Radius                       | SRT                                     | T-35100 | Tricuspid<br>valve | DCM                                        | 125216 | Proximal<br>Isovelocity<br>Surface Area<br>(Measureme<br>nt Method) |
|                                    |                                |         |                                      |                                         |         |                    | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| Aliasing Vel                       | LN                             | 59130-5 | Alias<br>Velocity                    | SRT                                     | T-35100 | Tricuspid<br>valve | DCM                                        | 125216 | Proximal<br>Isovelocity<br>Surface Area<br>(Measureme<br>nt Method) |
|                                    |                                |         |                                      |                                         |         |                    | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| TR Vmean                           | LN                             | 20352-1 | Time<br>averaged<br>mean<br>velocity | SRT                                     | T-35100 | Tricuspid<br>valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| TR PGmax                           | LN                             | 20247-3 | Peak<br>Gradient                     | SRT                                     | T-35100 | Tricuspid<br>valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| TR PGmean                          | LN                             | 20256-4 | Mean<br>Gradient                     | SRT                                     | T-35100 | Tricuspid<br>valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |
| dP/dt                              | LN                             | 18034-9 | Tricuspid<br>Regurgitati<br>on dP/dt | SRT                                     | T-35100 | Tricuspid<br>valve | SRT                                        | G-0367 | Regurgitant<br>Flow (Flow<br>Direction)                             |

|                  |             |            |                                          |     |         |                 |     |        |                                                        |
|------------------|-------------|------------|------------------------------------------|-----|---------|-----------------|-----|--------|--------------------------------------------------------|
| dt               | LN          | 20217-6    | Deceleration Time                        | SRT | T-35100 | Tricuspid valve | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| RAP              | LN          | 18070-3    | Right Atrium Systolic Pressure           | SRT | T-32200 | Right Atrium    |     |        |                                                        |
| RVSP             | SRT         | G-0380     | Right Ventricular Peak Systolic Pressure | SRT | T-32500 | Right Ventricle |     |        |                                                        |
| TR VC diam       | 99IM PRO OF | CA_DIAM_VC | Vena Contracta Diameter                  | SRT | T-35100 | Tricuspid valve | SRT | G-03A2 | 2D mode (Image Mode)                                   |
| Jet Area         | LN          | 59123-0    | Jet Area                                 | SRT | T-35100 | Tricuspid valve | DCM | 125220 | Planimetry (Measurement Method)                        |
|                  |             |            |                                          |     |         |                 | SRT | G-03A2 | 2D mode (Image Mode)                                   |
| Jet Height       | 99IM PRO OF | HEIGHT_JET | Jet Height                               | SRT | T-35100 | Tricuspid valve | SRT | G-03A2 | 2D mode (Image Mode)                                   |
| PISA Flow Rate   | LN          | 34141-2    | Peak Instantaneous Flow Rate             | SRT | T-35100 | Tricuspid valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |             |            |                                          |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA ERO Area    | SRT         | G-038E     | Cardiovascular Orifice Area              | SRT | T-35100 | Tricuspid valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |             |            |                                          |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Reg. Volume | LN          | 33878-0    | Volume Flow                              | SRT | T-35100 | Tricuspid valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |             |            |                                          |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                 | TID (5202) Echo Section Finding Site |         |                               | Concept or Acquisition Context Modifier |         |                                                                    |
|------------------------------|-----------------------------|---------|---------------------------------|--------------------------------------|---------|-------------------------------|-----------------------------------------|---------|--------------------------------------------------------------------|
| TVA (VTI)                    | CSD                         | CV      | CM                              | CSD                                  | CV      | CM                            | CSD                                     | CV      | CM                                                                 |
| TV VTI                       | LN                          | 20354-7 | Velocity Time Integral          | SRT                                  | T-35100 | Tricuspid valve               | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
| RVOT VTI                     | LN                          | 20354-7 | Velocity Time Integral          | SRT                                  | T-32550 | Right Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
| RVOT diam                    | SRT                         | G-038F  | Cardiovascular Orifice Diameter | SRT                                  | T-32550 | Right Ventricle Outflow Tract |                                         |         |                                                                    |
| TVA (VTI)                    | SRT                         | G-038E  | Cardiovascular Orifice Area     | SRT                                  | T-35100 | Tricuspid valve               | DCM                                     | 125215  | Continuity Equation by Velocity Time Integral (Measurement Method) |
|                              |                             |         |                                 |                                      |         |                               | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
| TVAI (VTI)                   | SRT                         | G-038E  | Cardiovascular Orifice Area     | SRT                                  | T-35100 | Tricuspid valve               | DCM                                     | 125214  | Continuity Equation by Peak Velocity (Measurement Method)          |
|                              |                             |         |                                 |                                      |         |                               | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                                    |
|                              |                             |         |                                 |                                      |         |                               | LN                                      | 8277-6  | Body Surface Area (Index)                                          |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |               | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|---------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|---------------------------------|
| TVA (Vmax)                   | CSD                         | CV      | CM            | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                              |
| Vmax                         | LN                          | 11726-7 | Peak Velocity | SRT                                  | T-35100 | Tricuspid valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |

|             |     |         |                                 |     |         |                               |     |         |                                                           |
|-------------|-----|---------|---------------------------------|-----|---------|-------------------------------|-----|---------|-----------------------------------------------------------|
| RVOT Vmax   | LN  | 11726-7 | Peak Velocity                   | SRT | T-32550 | Right Ventricle Outflow Tract | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
| RVOT diam   | SRT | G-038F  | Cardiovascular Orifice Diameter | SRT | T-32550 | Right Ventricle Outflow Tract |     |         |                                                           |
| TVA (Vmax)  | SRT | G-038E  | Cardiovascular Orifice Area     | SRT | T-35100 | Tricuspid valve               | DCM | 125214  | Continuity Equation by Peak Velocity (Measurement Method) |
|             |     |         |                                 |     |         |                               | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
| TVAI (Vmax) | SRT | G-038E  | Cardiovascular Orifice Area     | SRT | T-35100 | Tricuspid valve               | DCM | 125214  | Continuity Equation by Peak Velocity (Measurement Method) |
|             |     |         |                                 |     |         |                               | SRT | R-42047 | Antegrade Flow (Flow Direction)                           |
|             |     |         |                                 |     |         |                               | LN  | 8277-6  | Body Surface Area (Index)                                 |

#### Pulmonic Valve

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                        | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|---------------------------------|
| PV                           | CSD                         | CV      | CM                     | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                              |
| PV VTI                       | LN                          | 20354-7 | Velocity Time Integral | SRT                                  | T-35200 | Pulmonary Valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| PV Vmax                      | LN                          | 11726-7 | Peak Velocity          | SRT                                  | T-35200 | Pulmonary Valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| PV PGmax                     | LN                          | 20247-3 | Peak Gradient          | SRT                                  | T-35200 | Pulmonary Valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |

|              |     |         |                                                            |     |         |                               |     |         |                                 |
|--------------|-----|---------|------------------------------------------------------------|-----|---------|-------------------------------|-----|---------|---------------------------------|
| PV Vmean     | LN  | 20352-1 | Time averaged mean velocity                                | SRT | T-35200 | Pulmonary Valve               | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| PV PGmean    | LN  | 20256-4 | Mean Gradient                                              | SRT | T-35200 | Pulmonary Valve               | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| RVET         | LN  | 18042-2 | Pulmonic Valve Ejection Time                               | SRT | T-35200 | Pulmonary Valve               |     |         |                                 |
| RVPEP        | LN  | 59085-1 | Pre-Ejection Period                                        | SRT | T-32500 | Right Ventricle               |     |         |                                 |
| RV Acc Time  | LN  | 20168-1 | Acceleration Time                                          | SRT | T-35200 | Pulmonary Valve               | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| PA Acc Time  | LN  | 20168-1 | Acceleration Time                                          | SRT | T-44000 | Pulmonary Artery              | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| PA PHT       | LN  | 20280-4 | Pressure Half-Time                                         | SRT | T-44000 | Pulmonary Artery              | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| PA Acc Slope | LN  | 20167-3 | Acceleration Slope                                         | SRT | T-44000 | Pulmonary Artery              | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| Q_to_PVclose | LN  | 20295-2 | Time from Q wave to Pulmonic Valve Closes                  | SRT | T-35200 | Pulmonary Valve               | SRT | R-42047 | Antegrade Flow (Flow Direction) |
| RVOT diam    | SRT | G-038F  | Cardiovascular Orifice Diameter                            | SRT | T-32550 | Right Ventricle Outflow Tract |     |         |                                 |
| RVPEP/RVET   | LN  | 59088-5 | Pre-Ejection Period/Ejection Time Ratio                    | SRT | T-35200 | Pulmonary Valve               |     |         |                                 |
| RV Acc T/ET  | SRT | G-0388  | Ratio of Pulmonic Valve Acceleration Time to Ejection Time | SRT | T-35200 | Pulmonary Valve               | SRT | R-42047 | Antegrade Flow (Flow Direction) |

|      |                   |        |                            |                   |         |                                          |  |  |  |
|------|-------------------|--------|----------------------------|-------------------|---------|------------------------------------------|--|--|--|
| dPEP | 99IM<br>PRO<br>OF | dPEP   | Interventric<br>ular Delay | 99IM<br>PRO<br>OF | IVD     | Interventric<br>ular<br>Dyssynchr<br>ony |  |  |  |
| HR   | LN                | 8867-4 | Heart rate                 | SRT               | T-35200 | Pulmonary<br>Valve                       |  |  |  |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                                        | TID (5202) Echo<br>Section Finding Site |         |                                        | Concept or Acquisition<br>Context Modifier |         |                                                    |
|------------------------------------|--------------------------------|---------|----------------------------------------|-----------------------------------------|---------|----------------------------------------|--------------------------------------------|---------|----------------------------------------------------|
| RVOT                               | CSD                            | CV      | CM                                     | CSD                                     | CV      | CM                                     | CSD                                        | CV      | CM                                                 |
| RVOT VTI                           | LN                             | 20354-7 | Velocity<br>Time<br>Integral           | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)              |
| RVOT Vmax                          | LN                             | 11726-7 | Peak<br>Velocity                       | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)              |
| RVOT<br>PGmax                      | LN                             | 20247-3 | Peak<br>Gradient                       | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)              |
| RVOT<br>Vmean                      | LN                             | 20352-1 | Time<br>averaged<br>mean<br>velocity   | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)              |
| RVOT<br>PGmean                     | LN                             | 20256-4 | Mean<br>Gradient                       | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)              |
| RVOT diam                          | SRT                            | G-038F  | Cardiovasc<br>ular Orifice<br>Diameter | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract |                                            |         |                                                    |
| HR                                 | LN                             | 8867-4  | Heart rate                             | SRT                                     | T-35200 | Pulmonary<br>Valve                     |                                            |         |                                                    |
| RVOT SV                            | SRT                            | F-32120 | Stroke<br>Volume                       | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | DCM                                        | 125219  | Doppler<br>Volume Flow<br>(Measureme<br>nt Method) |
| RVOT CO                            | SRT                            | F-32100 | Cardiac<br>Output                      | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | DCM                                        | 125219  | Doppler<br>Volume Flow<br>(Measureme<br>nt Method) |

|         |     |         |               |     |         |                               |     |        |                                          |
|---------|-----|---------|---------------|-----|---------|-------------------------------|-----|--------|------------------------------------------|
| RVOT SI | SRT | F-00078 | Stroke Index  | SRT | T-32550 | Right Ventricle Outflow Tract | DCM | 125219 | Doppler Volume Flow (Measurement Method) |
| RVOT CI | SRT | F-32110 | Cardiac Index | SRT | T-32550 | Right Ventricle Outflow Tract | DCM | 125219 | Doppler Volume Flow (Measurement Method) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                 | TID (5202) Echo Section Finding Site |         |                               | Concept or Acquisition Context Modifier |         |                                                           |
|------------------------------|-----------------------------|---------|---------------------------------|--------------------------------------|---------|-------------------------------|-----------------------------------------|---------|-----------------------------------------------------------|
|                              | CSD                         | CV      | CM                              | CSD                                  | CV      | CM                            | CSD                                     | CV      | CM                                                        |
| PV Vmax                      | LN                          | 11726-7 | Peak Velocity                   | SRT                                  | T-35200 | Pulmonary Valve               | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                           |
| RVOT Vmax                    | LN                          | 11726-7 | Peak Velocity                   | SRT                                  | T-32550 | Right Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                           |
| RVOT diam                    | SRT                         | G-038F  | Cardiovascular Orifice Diameter | SRT                                  | T-32550 | Right Ventricle Outflow Tract |                                         |         |                                                           |
| PVA (Vmax)                   | SRT                         | G-038E  | Cardiovascular Orifice Area     | SRT                                  | T-35200 | Pulmonary Valve               | DCM                                     | 125214  | Continuity Equation by Peak Velocity (Measurement Method) |
|                              |                             |         |                                 |                                      |         |                               | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)                           |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                        | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |        |                                   |
|------------------------------|-----------------------------|---------|------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|--------|-----------------------------------|
|                              | CSD                         | CV      | CM                     | CSD                                  | CV      | CM              | CSD                                     | CV     | CM                                |
| PR VTI                       | LN                          | 20354-7 | Velocity Time Integral | SRT                                  | T-35200 | Pulmonary Valve | SRT                                     | G-0367 | Regurgitant Flow (Flow Direction) |
| PR Vmax                      | LN                          | 11726-7 | Peak Velocity          | SRT                                  | T-35200 | Pulmonary Valve | SRT                                     | G-0367 | Regurgitant Flow (Flow Direction) |

|            |             |            |                                |     |         |                  |     |         |                                    |
|------------|-------------|------------|--------------------------------|-----|---------|------------------|-----|---------|------------------------------------|
| PR Vmean   | LN          | 20352-1    | Time averaged mean velocity    | SRT | T-35200 | Pulmonary Valve  | SRT | G-0367  | Regurgitant Flow (Flow Direction)  |
| PR PGmax   | LN          | 20247-3    | Peak Gradient                  | SRT | T-35200 | Pulmonary Valve  | SRT | G-0367  | Regurgitant Flow (Flow Direction)  |
| PR PGmean  | LN          | 20256-4    | Mean Gradient                  | SRT | T-35200 | Pulmonary Valve  | SRT | G-0367  | Regurgitant Flow (Flow Direction)  |
| PR Ved     | LN          | 11653-3    | End Diastolic Velocity         | SRT | T-35200 | Pulmonary Valve  | SRT | G-0367  | Regurgitant Flow (Flow Direction)  |
| RAP        | LN          | 18070-3    | Right Atrium Systolic Pressure | SRT | T-32200 | Right Atrium     |     |         |                                    |
| dPAP       | SRT         | F-0212C    | Pulmonary Artery Pressure      | SRT | T-44000 | Pulmonary Artery | SRT | F-32011 | End Diastole (Cardiac Cycle Point) |
| PR VC diam | 99IM PRO OF | CA_DIAM_VC | Vena Contracta Diameter        | SRT | T-35200 | Pulmonary Valve  | SRT | G-03A2  | 2D mode (Image Mode)               |
| Jet Area   | LN          | 59123-0    | Jet Area                       | SRT | T-35200 | Pulmonary Valve  | DCM | 125220  | Planimetry (Measurement Method)    |
|            |             |            |                                |     |         |                  | SRT | G-03A2  | 2D mode (Image Mode)               |
| Jet Height | 99IM PRO OF | HEIGHT_JET | Jet Height                     | SRT | T-35200 | Pulmonary Valve  | SRT | G-03A2  | 2D mode (Image Mode)               |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |             | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |        |                                                        |
|------------------------------|-----------------------------|---------|-------------|--------------------------------------|---------|-----------------|-----------------------------------------|--------|--------------------------------------------------------|
| PISA (PR)                    | CSD                         | CV      | CM          | CSD                                  | CV      | CM              | CSD                                     | CV     | CM                                                     |
| Radius                       | LN                          | 59102-4 | Flow Radius | SRT                                  | T-35200 | Pulmonary Valve | DCM                                     | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                              |                             |         |             |                                      |         |                 | SRT                                     | G-0367 | Regurgitant Flow (Flow Direction)                      |

|                  |     |         |                              |     |         |                 |     |        |                                                        |
|------------------|-----|---------|------------------------------|-----|---------|-----------------|-----|--------|--------------------------------------------------------|
| PR VTI           | LN  | 20354-7 | Velocity Time Integral       | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |     |         |                              |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PR Vmax          | LN  | 11726-7 | Peak Velocity                | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |     |         |                              |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| Aliasing Vel     | LN  | 59130-5 | Alias Velocity               | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |     |         |                              |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Flow Rate   | LN  | 34141-2 | Peak Instantaneous Flow Rate | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |     |         |                              |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA ERO Area    | SRT | G-038E  | Cardiovascular Orifice Area  | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |     |         |                              |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |
| PISA Reg. Volume | LN  | 33878-0 | Volume Flow                  | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                  |     |         |                              |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |

|                    |     |        |                      |     |         |                 |     |        |                                                        |
|--------------------|-----|--------|----------------------|-----|---------|-----------------|-----|--------|--------------------------------------------------------|
| PISA Reg. Fraction | SRT | G-0390 | Regurgitant Fraction | SRT | T-35200 | Pulmonary Valve | DCM | 125216 | Proximal Isovelocity Surface Area (Measurement Method) |
|                    |     |        |                      |     |         |                 | SRT | G-0367 | Regurgitant Flow (Flow Direction)                      |

### Pulmonary Artery

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                 | TID (5202) Echo Section Finding Site |         |                  | Concept or Acquisition Context Modifier |         |                                   |
|------------------------------|-----------------------------|---------|---------------------------------|--------------------------------------|---------|------------------|-----------------------------------------|---------|-----------------------------------|
| PA                           | CSD                         | CV      | CM                              | CSD                                  | CV      | CM               | CSD                                     | CV      | CM                                |
| PA diam                      | LN                          | 18020-8 | Main Pulmonary Artery Diameter  | SRT                                  | T-44000 | Pulmonary Artery | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)     |
|                              |                             |         |                                 |                                      |         |                  | SRT                                     | G-03A2  | 2D mode (Image Mode)              |
| PA Left diam                 | LN                          | 18019-0 | Left Pulmonary Artery Diameter  | SRT                                  | T-44000 | Pulmonary Artery | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)     |
|                              |                             |         |                                 |                                      |         |                  | SRT                                     | G-03A2  | 2D mode (Image Mode)              |
| PA Right diam                | LN                          | 18021-6 | Right Pulmonary Artery Diameter | SRT                                  | T-44000 | Pulmonary Artery | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)     |
|                              |                             |         |                                 |                                      |         |                  | SRT                                     | G-03A2  | 2D mode (Image Mode)              |
| RAP                          | LN                          | 18070-3 | Right Atrium Systolic Pressure  | SRT                                  | T-32200 | Right Atrium     |                                         |         |                                   |
| TR Vmax                      | LN                          | 11726-7 | Peak Velocity                   | SRT                                  | T-35100 | Tricuspid valve  | SRT                                     | G-0367  | Regurgitant Flow (Flow Direction) |
| PR Ved                       | LN                          | 11653-3 | End Diastolic Velocity          | SRT                                  | T-35200 | Pulmonary Valve  | SRT                                     | G-0367  | Regurgitant Flow (Flow Direction) |

|      |             |         |                                          |     |         |                  |     |         |                                    |
|------|-------------|---------|------------------------------------------|-----|---------|------------------|-----|---------|------------------------------------|
| RVSP | SRT         | G-0380  | Right Ventricular Peak Systolic Pressure | SRT | T-32500 | Right Ventricle  |     |         |                                    |
| sPAP | SRT         | F-0212C | Pulmonary Artery Pressure                | SRT | T-44000 | Pulmonary Artery | SRT | F-32020 | Systole (Cardiac Cycle Point)      |
| dPAP | SRT         | F-0212C | Pulmonary Artery Pressure                | SRT | T-44000 | Pulmonary Artery | SRT | F-32011 | End Diastole (Cardiac Cycle Point) |
| mPAP | 99IM PRO OF | MPAP    | Mean Pulmonary Artery Pressure           | SRT | T-44000 | Pulmonary Artery |     |         |                                    |

### Pulmonary Vein

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                                                                          | TID (5202) Echo<br>Section Finding Site |         |                   | Concept or Acquisition<br>Context Modifier |         |                                             |
|------------------------------------|--------------------------------|---------|--------------------------------------------------------------------------|-----------------------------------------|---------|-------------------|--------------------------------------------|---------|---------------------------------------------|
| PVE                                | CS<br>D                        | CV      | CM                                                                       | CSD                                     | CV      | CM                | CSD                                        | CV      | CM                                          |
| S1 Vel                             | LN                             | 29450-4 | Pulmonary<br>Vein<br>Systolic<br>Peak<br>Velocity                        | SRT                                     | T-48500 | Pulmonary<br>Vein | 99IM<br>PRO<br>OF                          | Peak1   | early systolic<br>Peak S1<br>(Finding Site) |
|                                    |                                |         |                                                                          |                                         |         |                   | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)       |
| D Vel                              | LN                             | 29451-2 | Pulmonary<br>Vein<br>Diastolic<br>Peak<br>Velocity                       | SRT                                     | T-48500 | Pulmonary<br>Vein | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)       |
| A Vel                              | LN                             | 29453-8 | Pulmonary<br>Vein Atrial<br>Contractio<br>n Reversal<br>Peak<br>Velocity | SRT                                     | T-48500 | Pulmonary<br>Vein | SRT                                        | F-32010 | Diastole<br>(Cardiac<br>Cycle Point)        |
|                                    |                                |         |                                                                          |                                         |         |                   | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)       |
| A Dur                              | SRT                            | G-038B  | Pulmonary<br>Vein A-<br>Wave<br>Duration                                 | SRT                                     | T-48500 | Pulmonary<br>Vein | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)       |

|               |             |                   |                                              |     |         |                |             |         |                                      |
|---------------|-------------|-------------------|----------------------------------------------|-----|---------|----------------|-------------|---------|--------------------------------------|
| S VTI         | SRT         | G-038C            | Pulmonary Vein S-Wave Velocity Time Integral | SRT | T-48500 | Pulmonary Vein | SRT         | R-42047 | Antegrade Flow (Flow Direction)      |
| D VTI         | SRT         | G-038D            | Pulmonary Vein D-Wave Velocity Time Integral | SRT | T-48500 | Pulmonary Vein | SRT         | R-42047 | Antegrade Flow (Flow Direction)      |
| A VTI         | 99IM PRO OF | CA_VTI_A Wave_PVE | Pulmonary Vein A-Wave Velocity Time Integral | SRT | T-48500 | Pulmonary Vein | SRT         | R-42047 | Antegrade Flow (Flow Direction)      |
| S2 Vel        | LN          | 29450-4           | Pulmonary Vein Systolic Peak Velocity        | SRT | T-48500 | Pulmonary Vein | 99IM PRO OF | Peak2   | late systolic Peak S2 (Finding Site) |
|               |             |                   |                                              |     |         |                | SRT         | R-42047 | Antegrade Flow (Flow Direction)      |
| S2/D          | LN          | 29452-0           | Pulmonary Vein Systolic to Diastolic Ratio   | SRT | T-48500 | Pulmonary Vein | SRT         | R-42047 | Antegrade Flow (Flow Direction)      |
| D Dec. Time   | LN          | 20217-6           | Deceleration Time                            | SRT | T-48500 | Pulmonary Vein | SRT         | F-32010 | Diastole (Cardiac Cycle Point)       |
|               |             |                   |                                              |     |         |                | SRT         | R-42047 | Antegrade Flow (Flow Direction)      |
| Sys Fraction  | 99IM PRO OF | CA_PVE_SF         | Systolic Fraction                            | SRT | T-48500 | Pulmonary Vein |             |         |                                      |
| Diam Diastole | SRT         | M-02550           | Diameter                                     | SRT | T-48500 | Pulmonary Vein | SRT         | F-32010 | Diastole (Cardiac Cycle Point)       |
|               |             |                   |                                              |     |         |                | SRT         | G-03A2  | 2D mode (Image Mode)                 |
| Diam Systole  | SRT         | M-02550           | Diameter                                     | SRT | T-48500 | Pulmonary Vein | SRT         | F-32020 | Systole (Cardiac Cycle Point)        |

|  |  |  |  |  |  |  |     |        |                            |
|--|--|--|--|--|--|--|-----|--------|----------------------------|
|  |  |  |  |  |  |  | SRT | G-03A2 | 2D mode<br>(Image<br>Mode) |
|--|--|--|--|--|--|--|-----|--------|----------------------------|

## Right Ventricle

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |                      |                                                            | TID (5202) Echo Section<br>Finding Site |         |                                        | Concept or Acquisition<br>Context Modifier |         |                                          |
|------------------------------------|--------------------------------|----------------------|------------------------------------------------------------|-----------------------------------------|---------|----------------------------------------|--------------------------------------------|---------|------------------------------------------|
| RV                                 | CSD                            | CV                   | CM                                                         | CSD                                     | CV      | CM                                     | CSD                                        | CV      | CM                                       |
| RV WT                              | 99IM<br>PRO<br>OF              | RVWT                 | Right<br>Ventricular<br>Wall<br>Thickness                  | SRT                                     | T-32500 | Right<br>Ventricle                     | SRT                                        | F-32011 | End Diastole<br>(Cardiac<br>Cycle Point) |
|                                    |                                |                      |                                                            |                                         |         |                                        | SRT                                        | G-03A2  | 2D mode<br>(Image<br>Mode)               |
| RVDd base<br>(RVD1)                | LN                             | 20304-2              | Right<br>Ventricular<br>Internal<br>Diastolic<br>Dimension | SRT                                     | T-32500 | Right<br>Ventricle                     | SRT                                        | G-03A2  | 2D mode<br>(Image<br>Mode)               |
|                                    |                                |                      |                                                            |                                         |         |                                        | SRT                                        | G-A123  | Basal<br>(Finding<br>Site)               |
| RVDd mid<br>(RVD2)                 | LN                             | 20304-2              | Right<br>Ventricular<br>Internal<br>Diastolic<br>Dimension | SRT                                     | T-32500 | Right<br>Ventricle                     | SRT                                        | G-03A2  | 2D mode<br>(Image<br>Mode)               |
|                                    |                                |                      |                                                            |                                         |         |                                        | SRT                                        | G-A109  | Medial<br>(Finding<br>Site)              |
| RVLd<br>(RVD3)                     | 99IM<br>PRO<br>OF              | CA_RV_L_<br>BaseApex | Right<br>Ventricular<br>base-apex<br>Length                | SRT                                     | T-32500 | Right<br>Ventricle                     | SRT                                        | F-32011 | End Diastole<br>(Cardiac<br>Cycle Point) |
|                                    |                                |                      |                                                            |                                         |         |                                        | SRT                                        | G-03A2  | 2D mode<br>(Image<br>Mode)               |
| RVOT diam                          | SRT                            | G-038F               | Cardiovas<br>cular<br>Orifice<br>Diameter                  | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | F-32011 | End Diastole<br>(Cardiac<br>Cycle Point) |
|                                    |                                |                      |                                                            |                                         |         |                                        | SRT                                        | G-03A2  | 2D mode<br>(Image<br>Mode)               |
| RVOT VTI                           | LN                             | 20354-7              | Velocity<br>Time<br>Integral                               | SRT                                     | T-32550 | Right<br>Ventricle<br>Outflow<br>Tract | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction)    |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                | TID (5202) Echo Section Finding Site |         |                               | Concept or Acquisition Context Modifier |         |                                    |
|------------------------------|-----------------------------|---------|------------------------------------------------|--------------------------------------|---------|-------------------------------|-----------------------------------------|---------|------------------------------------|
| MMode                        | CS D                        | CV      | CM                                             | CSD                                  | CV      | CM                            | CSD                                     | CV      | CM                                 |
| RV WT                        | 99IM PRO OF                 | RVWT    | Right Ventricular Wall Thickness               | SRT                                  | T-32500 | Right Ventricle               | SRT                                     | F-32011 | End Diastole (Cardiac Cycle Point) |
|                              |                             |         |                                                |                                      |         |                               | SRT                                     | G-0394  | MMode (Image Mode)                 |
| TAPSE                        | 99IM PRO OF                 | TAPSE   | Tricuspid Annular Plane Systolic Excursion     | SRT                                  | T-32500 | Right Ventricle               | SRT                                     | G-0394  | MMode (Image Mode)                 |
| RVIDd                        | LN                          | 20304-2 | Right Ventricular Internal Diastolic Dimension | SRT                                  | T-32500 | Right Ventricle               | SRT                                     | G-0394  | MMode (Image Mode)                 |
| RVOT diam                    | SRT                         | G-038F  | Cardiovascular Orifice Diameter                | SRT                                  | T-32550 | Right Ventricle Outflow Tract | SRT                                     | F-32011 | End Diastole (Cardiac Cycle Point) |
|                              |                             |         |                                                |                                      |         |                               | SRT                                     | G-0394  | MMode (Image Mode)                 |

| Label displayed in Worksheet | TID (5203) Echo Measurement |              |                                          | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |        |                      |
|------------------------------|-----------------------------|--------------|------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|--------|----------------------|
| FAC                          | CS D                        | CV           | CM                                       | CSD                                  | CV      | CM              | CSD                                     | CV     | CM                   |
| RV Area ED                   | 99IM PRO OF                 | AREA_DIA_RV  | Right Ventricular Diastolic Area         | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| RV Area ES                   | 99IM PRO OF                 | AREA_SY S_RV | Right Ventricular Systolic Area          | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| RV FAC                       | 99IM PRO OF                 | RVFAC        | Right Ventricular Fractional Area Change | SRT                                  | T-32500 | Right Ventricle | SRT                                     | G-03A2 | 2D mode (Image Mode) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                                   | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |         |                                 |
|------------------------------|-----------------------------|---------|---------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|---------|---------------------------------|
| RV MPI                       | CS D                        | CV      | CM                                                | CSD                                  | CV      | CM              | CSD                                     | CV      | CM                              |
| RVET                         | LN                          | 18042-2 | Pulmonic Valve Ejection Time                      | SRT                                  | T-35200 | Pulmonary Valve |                                         |         |                                 |
| TV C-O dur                   | SRT                         | G-0389  | Tricuspid Valve Closure to Opening Time           | SRT                                  | T-35100 | Tricuspid valve | SRT                                     | R-42047 | Antegrade Flow (Flow Direction) |
| RV MPI                       | SRT                         | G-0381  | Right Ventricular Index of Myocardial Performance | SRT                                  | T-32500 | Right Ventricle |                                         |         |                                 |

#### Venous Return

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                             | TID (5202) Echo Section Finding Site |         |                    | Concept or Acquisition Context Modifier |         |                                              |
|------------------------------|-----------------------------|---------|-----------------------------|--------------------------------------|---------|--------------------|-----------------------------------------|---------|----------------------------------------------|
| Vena Cava 2D                 | CS D                        | CV      | CM                          | CSD                                  | CV      | CM                 | CSD                                     | CV      | CM                                           |
| VC Inf diam                  | LN                          | 18006-7 | Inferior Vena Cava Diameter | SRT                                  | T-48710 | Inferior Vena Cava | SRT                                     | G-03A2  | 2D mode (Image Mode)                         |
| VC Inf inspir diam           | LN                          | 18006-7 | Inferior Vena Cava Diameter | SRT                                  | T-48710 | Inferior Vena Cava | SRT                                     | F-20010 | During Inspiration (Respiratory Cycle Point) |
|                              |                             |         |                             |                                      |         |                    | SRT                                     | G-03A2  | 2D mode (Image Mode)                         |
| VC Inf expir diam            | LN                          | 18006-7 | Inferior Vena Cava Diameter | SRT                                  | T-48710 | Inferior Vena Cava | SRT                                     | F-20020 | During Expiration (Respiratory Cycle Point)  |
|                              |                             |         |                             |                                      |         |                    | SRT                                     | G-03A2  | 2D mode (Image Mode)                         |

|                       |                   |                 |                                   |     |         |                          |     |         |                                                       |
|-----------------------|-------------------|-----------------|-----------------------------------|-----|---------|--------------------------|-----|---------|-------------------------------------------------------|
| VC Sup diam           | 99IM<br>PRO<br>OF | DIAM_VC_<br>Sup | Superior<br>Vena Cava<br>Diameter | SRT | T-48610 | Superior<br>Vena<br>Cava | SRT | G-03A2  | 2D mode<br>(Image<br>Mode)                            |
| VC Sup<br>inspir diam | 99IM<br>PRO<br>OF | DIAM_VC_<br>Sup | Superior<br>Vena Cava<br>Diameter | SRT | T-48610 | Superior<br>Vena<br>Cava | SRT | F-20010 | During<br>Inspiration(R<br>espiratory<br>Cycle Point) |
|                       |                   |                 |                                   |     |         |                          | SRT | G-03A2  | 2D mode<br>(Image<br>Mode)                            |
| VC Sup expir<br>diam  | 99IM<br>PRO<br>OF | DIAM_VC_<br>Sup | Superior<br>Vena Cava<br>Diameter | SRT | T-48610 | Superior<br>Vena<br>Cava | SRT | F-20020 | During<br>Expiration(R<br>espiratory<br>Cycle Point)  |
|                       |                   |                 |                                   |     |         |                          | SRT | G-03A2  | 2D mode<br>(Image<br>Mode)                            |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                                      | TID (5202) Echo Section<br>Finding Site |         |                          | Concept or Acquisition<br>Context Modifier |         |                                                       |
|------------------------------------|--------------------------------|---------|--------------------------------------|-----------------------------------------|---------|--------------------------|--------------------------------------------|---------|-------------------------------------------------------|
|                                    | CS<br>D                        | CV      | CM                                   | CSD                                     | CV      | CM                       | CSD                                        | CV      | CM                                                    |
| VC Inf inspir<br>diam              | LN                             | 18006-7 | Inferior<br>Vena<br>Cava<br>Diameter | SRT                                     | T-48710 | Inferior<br>Vena<br>Cava | SRT                                        | F-20010 | During<br>Inspiration(R<br>espiratory<br>Cycle Point) |
|                                    |                                |         |                                      |                                         |         |                          | SRT                                        | G-0394  | MMode<br>(Image<br>Mode)                              |
| VC Inf expir<br>diam               | LN                             | 18006-7 | Inferior<br>Vena<br>Cava<br>Diameter | SRT                                     | T-48710 | Inferior<br>Vena<br>Cava | SRT                                        | F-20020 | During<br>Expiration(R<br>espiratory<br>Cycle Point)  |
|                                    |                                |         |                                      |                                         |         |                          | SRT                                        | G-0394  | MMode<br>(Image<br>Mode)                              |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |          | TID (5202) Echo Section<br>Finding Site |         |                 | Concept or Acquisition<br>Context Modifier |        |                            |
|------------------------------------|--------------------------------|---------|----------|-----------------------------------------|---------|-----------------|--------------------------------------------|--------|----------------------------|
|                                    | CS<br>D                        | CV      | CM       | CSD                                     | CV      | CM              | CSD                                        | CV     | CM                         |
| Hepatic Vein<br>diam               | SRT                            | M-02550 | Diameter | SRT                                     | T-48720 | Hepatic<br>Vein | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode) |

|                    |    |         |               |     |         |              |  |  |  |
|--------------------|----|---------|---------------|-----|---------|--------------|--|--|--|
| Hepatic Vein Vmax  | LN | 11726-7 | Peak Velocity | SRT | T-48720 | Hepatic Vein |  |  |  |
| Hepatic Vein PGmax | LN | 20247-3 | Peak Gradient | SRT | T-48720 | Hepatic Vein |  |  |  |

### Left Atrium

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                 | TID (5202) Echo Section Finding Site |         |             | Concept or Acquisition Context Modifier |         |                                          |
|------------------------------|-----------------------------|---------|---------------------------------|--------------------------------------|---------|-------------|-----------------------------------------|---------|------------------------------------------|
| LA Vol (A-L)                 | CSD                         | CV      | CM                              | CSD                                  | CV      | CM          | CSD                                     | CV      | CM                                       |
| LAA (A4C)                    | LN                          | 17977-0 | Left Atrium Systolic Area       | SRT                                  | T-32300 | Left Atrium | SRT                                     | G-03A2  | 2D mode (Image Mode)                     |
|                              |                             |         |                                 |                                      |         |             | SRT                                     | G-A19C  | Apical four chamber (Image View)         |
| LAA (A2C)                    | LN                          | 17977-0 | Left Atrium Systolic Area       | SRT                                  | T-32300 | Left Atrium | SRT                                     | G-03A2  | 2D mode (Image Mode)                     |
|                              |                             |         |                                 |                                      |         |             | SRT                                     | G-A19B  | Apical two chamber (Image View)          |
| LA L                         | SRT                         | G-A22A  | Length                          | SRT                                  | T-32300 | Left Atrium | SRT                                     | F-32020 | Systole (Cardiac Cycle Point)            |
|                              |                             |         |                                 |                                      |         |             | SRT                                     | G-03A2  | 2D mode (Image Mode)                     |
| LA Vol (A-L)                 | DCM                         | 122408  | Left Atrial End Systolic Volume | SRT                                  | T-32300 | Left Atrium | DCM                                     | 125204  | Area-Length Biplane (Measurement Method) |
|                              |                             |         |                                 |                                      |         |             | SRT                                     | G-03A2  | 2D mode (Image Mode)                     |
| LA Voll (A-L)                | DCM                         | 122408  | Left Atrial End Systolic Volume | SRT                                  | T-32300 | Left Atrium | DCM                                     | 125204  | Area-Length Biplane (Measurement Method) |
|                              |                             |         |                                 |                                      |         |             | SRT                                     | G-03A2  | 2D mode (Image Mode)                     |

|  |  |  |  |  |  |  |    |        |                           |
|--|--|--|--|--|--|--|----|--------|---------------------------|
|  |  |  |  |  |  |  | LN | 8277-6 | Body Surface Area (Index) |
|--|--|--|--|--|--|--|----|--------|---------------------------|

| Label displayed in Worksheet | TID (5203) Echo Measurement |        |                                 | TID (5202) Echo Section Finding Site |         |             | Concept or Acquisition Context Modifier |        |                                                    |
|------------------------------|-----------------------------|--------|---------------------------------|--------------------------------------|---------|-------------|-----------------------------------------|--------|----------------------------------------------------|
| LA Vol (Simpson)             | CS D                        | CV     | CM                              | CSD                                  | CV      | CM          | CSD                                     | CV     | CM                                                 |
| LA Vol (A4C)                 | DCM                         | 122408 | Left Atrial End Systolic Volume | SRT                                  | T-32300 | Left Atrium | DCM                                     | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                              |                             |        |                                 |                                      |         |             | SRT                                     | G-03A2 | 2D mode (Image Mode)                               |
|                              |                             |        |                                 |                                      |         |             | SRT                                     | G-A19C | Apical four chamber (Image View)                   |
| LA Vol (A2C)                 | DCM                         | 122408 | Left Atrial End Systolic Volume | SRT                                  | T-32300 | Left Atrium | DCM                                     | 125208 | Method of Disks, Single Plane (Measurement Method) |
|                              |                             |        |                                 |                                      |         |             | SRT                                     | G-03A2 | 2D mode (Image Mode)                               |
|                              |                             |        |                                 |                                      |         |             | SRT                                     | G-A19B | Apical two chamber (Image View)                    |
| LA Vol (BP)                  | DCM                         | 122408 | Left Atrial End Systolic Volume | SRT                                  | T-32300 | Left Atrium | DCM                                     | 125207 | Method of Disks, Biplane (Measurement Method)      |
|                              |                             |        |                                 |                                      |         |             | SRT                                     | G-03A2 | 2D mode (Image Mode)                               |
| LA Vol (BP)                  | DCM                         | 122408 | Left Atrial End Systolic Volume | SRT                                  | T-32300 | Left Atrium | DCM                                     | 125207 | Method of Disks, Biplane (Measurement Method)      |
|                              |                             |        |                                 |                                      |         |             | SRT                                     | G-03A2 | 2D mode (Image Mode)                               |

|           |    |         |                           |     |         |             |             |             |                                                       |
|-----------|----|---------|---------------------------|-----|---------|-------------|-------------|-------------|-------------------------------------------------------|
|           |    |         |                           |     |         |             | LN          | 8277-6      | Body Surface Area (Index)                             |
| LAA (A4C) | LN | 17977-0 | Left Atrium Systolic Area | SRT | T-32300 | Left Atrium | SRT         | G-03A2      | 2D mode (Image Mode)                                  |
|           |    |         |                           |     |         |             | SRT         | G-A19C      | Apical four chamber (Image View)                      |
|           |    |         |                           |     |         |             | 99IM PRO OF | LA_Vol_SIMP | Measurement Package LA Vol(SIMP) (Measurement Method) |
| LAA (A2C) | LN | 17977-0 | Left Atrium Systolic Area | SRT | T-32300 | Left Atrium | SRT         | G-03A2      | 2D mode (Image Mode)                                  |
|           |    |         |                           |     |         |             | SRT         | G-A19B      | Apical two chamber (Image View)                       |
|           |    |         |                           |     |         |             | 99IM PRO OF | LA_Vol_SIMP | Measurement Package LA Vol(SIMP) (Measurement Method) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |              |                                                  | TID (5202) Echo Section Finding Site |         |             | Concept or Acquisition Context Modifier |        |                      |
|------------------------------|-----------------------------|--------------|--------------------------------------------------|--------------------------------------|---------|-------------|-----------------------------------------|--------|----------------------|
| LA Vol (3 Axis)              | CS D                        | CV           | CM                                               | CSD                                  | CV      | CM          | CSD                                     | CV     | CM                   |
| LA diam ant-post             | LN                          | 29469-4      | Left Atrium Antero-posterior Systolic Dimension  | SRT                                  | T-32300 | Left Atrium | SRT                                     | G-03A2 | 2D mode (Image Mode) |
| LA diam sup-inf              | 99IM PRO OF                 | DIAM_SUP INF | Left Atrium Superior-inferior Systolic Dimension | SRT                                  | T-32300 | Left Atrium | SRT                                     | G-03A2 | 2D mode (Image Mode) |

|                 |                   |                 |                                                                   |     |         |             |     |        |                                                |
|-----------------|-------------------|-----------------|-------------------------------------------------------------------|-----|---------|-------------|-----|--------|------------------------------------------------|
| LA diam mid-lat | 99IM<br>PRO<br>OF | DIAM_MID<br>LAT | Left<br>Atrium<br>Medial-<br>lateral<br>Systolic<br>Dimensio<br>n | SRT | T-32300 | Left Atrium | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                     |
| LA Vol          | SRT               | G-0383          | Left<br>Atrium<br>Systolic<br>Volume                              | SRT | T-32300 | Left Atrium | DCM | 125211 | Biplane<br>Ellipse<br>(Measureme<br>nt Method) |
|                 |                   |                 |                                                                   |     |         |             | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                     |

### Right Atrium

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |                   |                                           | TID (5202) Echo Section<br>Finding Site |             |                 | Concept or Acquisition<br>Context Modifier |            |                                                         |
|------------------------------------|--------------------------------|-------------------|-------------------------------------------|-----------------------------------------|-------------|-----------------|--------------------------------------------|------------|---------------------------------------------------------|
|                                    | CS<br>D                        | CV                | CM                                        | CSD                                     | CV          | CM              | CSD                                        | CV         | CM                                                      |
| RAA (A4C)                          | L<br>N                         | 17988<br>-7       | Right<br>Atrium<br>Systoli<br>c Area      | S<br>RT                                 | T-<br>32200 | Right<br>Atrium | S<br>RT                                    | G-<br>03A2 | 2D<br>mode<br>(Image<br>Mode)                           |
|                                    |                                |                   |                                           |                                         |             |                 | SRT                                        | G-A19C     | Apical four<br>chamber<br>(Image View)                  |
| RA diam lax<br>sys                 | 99IM<br>PRO<br>OF              | CA_RA_M<br>AJAXES | Right<br>Atrium<br>Systolic<br>Major Axis | SRT                                     | T-32200     | Right<br>Atrium | SRT                                        | G-03A2     | 2D mode<br>(Image<br>Mode)                              |
|                                    |                                |                   |                                           |                                         |             |                 | SRT                                        | G-A19C     | Apical four<br>chamber<br>(Image View)                  |
| RA diam sax<br>sys                 | 99IM<br>PRO<br>OF              | CA_RA_MI<br>NAXES | Right<br>Atrium<br>Systolic<br>Minor Axis | SRT                                     | T-32200     | Right<br>Atrium | SRT                                        | G-03A2     | 2D mode<br>(Image<br>Mode)                              |
|                                    |                                |                   |                                           |                                         |             |                 | SRT                                        | G-A19C     | Apical four<br>chamber<br>(Image View)                  |
| RA Vol (A-L)                       | 99IM<br>PRO<br>OF              | CA_RA_V<br>OLes   | Right<br>Atrial End<br>Systolic<br>Volume | SRT                                     | T-32200     | Right<br>Atrium | DCM                                        | 125205     | Area-Length<br>Single Plane<br>(Measureme<br>nt Method) |
|                                    |                                |                   |                                           |                                         |             |                 | SRT                                        | G-03A2     | 2D mode<br>(Image<br>Mode)                              |

|               |                   |                 |                                           |     |         |                 |     |        |                                                         |
|---------------|-------------------|-----------------|-------------------------------------------|-----|---------|-----------------|-----|--------|---------------------------------------------------------|
| RA VolI (A-L) | 99IM<br>PRO<br>OF | CA_RA_VO<br>LEs | Right<br>Atrial End<br>Systolic<br>Volume | SRT | T-32200 | Right<br>Atrium | DCM | 125205 | Area-Length<br>Single Plane<br>(Measureme<br>nt Method) |
|               |                   |                 |                                           |     |         |                 | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                              |
|               |                   |                 |                                           |     |         |                 | LN  | 8277-6 | Body<br>Surface Area<br>(Index)                         |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                                     | TID (5202) Echo Section<br>Finding Site |         |                 | Concept or Acquisition<br>Context Modifier |        |                            |
|------------------------------------|--------------------------------|---------|-------------------------------------|-----------------------------------------|---------|-----------------|--------------------------------------------|--------|----------------------------|
| RA<br>dimension                    | CS<br>D                        | CV      | CM                                  | CSD                                     | CV      | CM              | CSD                                        | CV     | CM                         |
| RA diam lax                        | SRT                            | G-A193  | Major Axis                          | SRT                                     | T-32200 | Right<br>Atrium | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode) |
| RA diam sax                        | SRT                            | G-A194  | Minor Axis                          | SRT                                     | T-32200 | Right<br>Atrium | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode) |
| RA Area ES                         | LN                             | 17988-7 | Right<br>Atrium<br>Systolic<br>Area | SRT                                     | T-32200 | Right<br>Atrium | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode) |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |                 |                                           | TID (5202) Echo Section<br>Finding Site |         |                 | Concept or Acquisition<br>Context Modifier |        |                                                                 |
|------------------------------------|--------------------------------|-----------------|-------------------------------------------|-----------------------------------------|---------|-----------------|--------------------------------------------|--------|-----------------------------------------------------------------|
| RA Vol<br>(Simpson)                | CS<br>D                        | CV              | CM                                        | CSD                                     | CV      | CM              | CSD                                        | CV     | CM                                                              |
| RA Vol<br>(A4C)                    | 99IM<br>PRO<br>OF              | CA_RA_VO<br>LEs | Right<br>Atrial End<br>Systolic<br>Volume | SRT                                     | T-32200 | Right<br>Atrium | DCM                                        | 125208 | Method of<br>Disks, Single<br>Plane<br>(Measureme<br>nt Method) |
|                                    |                                |                 |                                           |                                         |         |                 | SRT                                        | G-03A2 | 2D mode<br>(Image<br>Mode)                                      |
|                                    |                                |                 |                                           |                                         |         |                 | SRT                                        | G-A19C | Apical four<br>chamber<br>(Image View)                          |

|                  |                   |                 |                                           |     |         |                 |     |        |                                                                 |
|------------------|-------------------|-----------------|-------------------------------------------|-----|---------|-----------------|-----|--------|-----------------------------------------------------------------|
| RA Voll<br>(A4C) | 99IM<br>PRO<br>OF | CA_RA_VO<br>Les | Right<br>Atrial End<br>Systolic<br>Volume | SRT | T-32200 | Right<br>Atrium | DCM | 125208 | Method of<br>Disks, Single<br>Plane<br>(Measureme<br>nt Method) |
|                  |                   |                 |                                           |     |         |                 | SRT | G-03A2 | 2D mode<br>(Image<br>Mode)                                      |
|                  |                   |                 |                                           |     |         |                 | SRT | G-A19C | Apical four<br>chamber<br>(Image View)                          |
|                  |                   |                 |                                           |     |         |                 | LN  | 8277-6 | Body<br>Surface Area<br>(Index)                                 |

### Tissue Doppler

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |                 |                                                                           | TID (5202) Echo Section<br>Finding Site |         |                   | Concept or Acquisition<br>Context Modifier |          |                                                          |
|------------------------------------|--------------------------------|-----------------|---------------------------------------------------------------------------|-----------------------------------------|---------|-------------------|--------------------------------------------|----------|----------------------------------------------------------|
| MV Annulus<br>(m)                  | CS<br>D                        | CV              | CM                                                                        | CSD                                     | CV      | CM                | CSD                                        | CV       | CM                                                       |
| E'(m)                              | SRT                            | G-037A          | Left<br>Ventricula<br>r Peak<br>Early<br>Diastolic<br>Tissue<br>Velocity  | SRT                                     | T-32600 | Left<br>Ventricle | SRT                                        | P5-B0128 | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|                                    |                                |                 |                                                                           |                                         |         |                   | SRT                                        | G-0391   | Medial Mitral<br>Annulus<br>(Finding<br>Site)            |
| A'(m)                              | SRT                            | G-037C          | LV Peak<br>Diastolic<br>Tissue<br>Velocity<br>During<br>Atrial<br>Systole | SRT                                     | T-32600 | Left<br>Ventricle | SRT                                        | P5-B0128 | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|                                    |                                |                 |                                                                           |                                         |         |                   | SRT                                        | G-0391   | Medial Mitral<br>Annulus<br>(Finding<br>Site)            |
| E'/A'(m)                           | 99IM<br>PRO<br>OF              | CA_MV_Ea<br>2Aa | Mitral<br>Valve Ea<br>to Aa<br>Ratio                                      | SRT                                     | T-32600 | Left<br>Ventricle | SRT                                        | P5-B0128 | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |

|          |             |            |                                                             |     |         |                |     |          |                                             |
|----------|-------------|------------|-------------------------------------------------------------|-----|---------|----------------|-----|----------|---------------------------------------------|
|          |             |            |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| E/E'(m)  | SRT         | G-037B     | Ratio of MV Peak Velocity to LV Peak Tissue Velocity E-Wave | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| AT E'(m) | 99IM PRO OF | CA_MV_ATa  | Mitral Valve Acceleration time of Ea                        | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| AR E'(m) | 99IM PRO OF | CA_MV_A Ra | Mitral Valve Acceleration rate of Ea                        | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| DT E'(m) | 99IM PRO OF | CA_MV_D Ta | Mitral Valve Deceleration time of Ea                        | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |
| DR E'(m) | 99IM PRO OF | CA_MV_D Ra | Mitral Valve Deceleration rate of Ea                        | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                             |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |

|       |     |        |                                                |     |         |                |     |          |                                             |
|-------|-----|--------|------------------------------------------------|-----|---------|----------------|-----|----------|---------------------------------------------|
| S'(m) | SRT | G-037D | Left Ventricular Peak Systolic Tissue Velocity | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|       |     |        |                                                |     |         |                | SRT | G-0391   | Medial Mitral Annulus (Finding Site)        |

| Label displayed in Worksheet | TID (5203) Echo Measurement |             |                                                         | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |          |                                             |
|------------------------------|-----------------------------|-------------|---------------------------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|----------|---------------------------------------------|
| MV Annulus (I)               | CSD                         | CV          | CM                                                      | CSD                                  | CV      | CM             | CSD                                     | CV       | CM                                          |
| E'(I)                        | SRT                         | G-037A      | Left Ventricular Peak Early Diastolic Tissue Velocity   | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |             |                                                         |                                      |         |                | SRT                                     | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| A'(I)                        | SRT                         | G-037C      | LV Peak Diastolic Tissue Velocity During Atrial Systole | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |             |                                                         |                                      |         |                | SRT                                     | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| E'/A'(I)                     | 99IM PROOF                  | CA_MV_Ea2Aa | Mitral Valve Ea to Aa Ratio                             | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |             |                                                         |                                      |         |                | SRT                                     | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| E/E'(I)                      | SRT                         | G-037B      | Ratio of MV Peak Velocity to LV Peak Tissue             | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |

|          |             |            |                                                |     |         |                |     |          |                                             |
|----------|-------------|------------|------------------------------------------------|-----|---------|----------------|-----|----------|---------------------------------------------|
|          |             |            | Velocity E-Wave                                |     |         |                | SRT | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| AT E'(I) | 99IM PRO OF | CA_MV_A Ta | Mitral Valve Acceleration time of Ea           | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                |     |         |                | SRT | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| AR E'(I) | 99IM PRO OF | CA_MV_A Ra | Mitral Valve Acceleration rate of Ea           | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                |     |         |                | SRT | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| DT E'(I) | 99IM PRO OF | CA_MV_D Ta | Mitral Valve Deceleration time of Ea           | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                |     |         |                | SRT | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| DR E'(I) | 99IM PRO OF | CA_MV_D Ra | Mitral Valve Deceleration rate of Ea           | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                |     |         |                | SRT | G-0392   | Lateral Mitral Annulus (Finding Site)       |
| S'(I)    | SRT         | G-037D     | Left Ventricular Peak Systolic Tissue Velocity | SRT | T-32600 | Left Ventricle | SRT | P5-B0128 | Tissue Doppler Imaging (Measurement Method) |
|          |             |            |                                                |     |         |                | SRT | G-0392   | Lateral Mitral Annulus (Finding Site)       |

| Label displayed in Worksheet | TID (5203) Echo Measurement |        |                                                         | TID (5202) Echo Section Finding Site |         |                | Concept or Acquisition Context Modifier |           |                                             |
|------------------------------|-----------------------------|--------|---------------------------------------------------------|--------------------------------------|---------|----------------|-----------------------------------------|-----------|---------------------------------------------|
| MV Annulus (s)               | CSD                         | CV     | CM                                                      | CSD                                  | CV      | CM             | CSD                                     | CV        | CM                                          |
| E'(s)                        | SRT                         | G-037A | Left Ventricular Peak Early Diastolic Tissue Velocity   | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128  | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |        |                                                         |                                      |         |                | 99IM Proof                              | SepMitAnn | Septal Mitral Annulus (Finding Site)        |
| A'(s)                        | SRT                         | G-037C | LV Peak Diastolic Tissue Velocity During Atrial Systole | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128  | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |        |                                                         |                                      |         |                | 99IM Proof                              | SepMitAnn | Septal Mitral Annulus (Finding Site)        |
| S'(s)                        | SRT                         | G-037D | Left Ventricular Peak Systolic Tissue Velocity          | SRT                                  | T-32600 | Left Ventricle | SRT                                     | P5-B0128  | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |        |                                                         |                                      |         |                | 99IM Proof                              | SepMitAnn | Septal Mitral Annulus (Finding Site)        |

| Label displayed in Worksheet | TID (5203) Echo Measurement |       |                                                        | TID (5202) Echo Section Finding Site |         |                 | Concept or Acquisition Context Modifier |           |                                             |
|------------------------------|-----------------------------|-------|--------------------------------------------------------|--------------------------------------|---------|-----------------|-----------------------------------------|-----------|---------------------------------------------|
| TV Annulus (m)               | CSD                         | CV    | CM                                                     | CSD                                  | CV      | CM              | CSD                                     | CV        | CM                                          |
| E'(m)                        | 99IM PROOF                  | RV_Ea | Right Ventricular Peak Early Diastolic Tissue Velocity | SRT                                  | T-32500 | Right Ventricle | SRT                                     | P5-B0128  | Tissue Doppler Imaging (Measurement Method) |
|                              |                             |       |                                                        |                                      |         |                 | 99IM PROOF                              | MedTriAnn | Medial Tricuspid Annulus (Finding Site)     |

|       |                   |       |                                                                           |     |         |                    |                   |               |                                                          |
|-------|-------------------|-------|---------------------------------------------------------------------------|-----|---------|--------------------|-------------------|---------------|----------------------------------------------------------|
| A'(m) | 99IM<br>PRO<br>OF | RV_Aa | RV Peak<br>Diastolic<br>Tissue<br>Velocity<br>During<br>Atrial<br>Systole | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|       |                   |       |                                                                           |     |         |                    | 99IM<br>PRO<br>OF | MedTriA<br>nn | Medial<br>Tricuspid<br>Annulus<br>(Finding Site)         |
| S'(m) | 99IM<br>PRO<br>OF | RV_Sa | Right<br>Ventricular<br>Peak<br>Systolic<br>Tissue<br>Velocity            | SRT | T-32500 | Right<br>Ventricle | SRT               | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|       |                   |       |                                                                           |     |         |                    | 99IM<br>PRO<br>OF | MedTriA<br>nn | Medial<br>Tricuspid<br>Annulus<br>(Finding Site)         |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |       |                                                                           | TID (5202) Echo Section<br>Finding Site |         |                    | Concept or Acquisition<br>Context Modifier |               |                                                          |
|------------------------------------|--------------------------------|-------|---------------------------------------------------------------------------|-----------------------------------------|---------|--------------------|--------------------------------------------|---------------|----------------------------------------------------------|
| TV Annulus<br>(I)                  | CS<br>D                        | CV    | CM                                                                        | CSD                                     | CV      | CM                 | CSD                                        | CV            | CM                                                       |
| E'(I)                              | 99IM<br>PRO<br>OF              | RV_Ea | Right<br>Ventricular<br>Peak Early<br>Diastolic<br>Tissue<br>Velocity     | SRT                                     | T-32500 | Right<br>Ventricle | SRT                                        | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|                                    |                                |       |                                                                           |                                         |         |                    | 99IM<br>PRO<br>OF                          | LatTriAn<br>n | Lateral<br>Tricuspid<br>Annulus<br>(Finding Site)        |
| A'(I)                              | 99IM<br>PRO<br>OF              | RV_Aa | RV Peak<br>Diastolic<br>Tissue<br>Velocity<br>During<br>Atrial<br>Systole | SRT                                     | T-32500 | Right<br>Ventricle | SRT                                        | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |
|                                    |                                |       |                                                                           |                                         |         |                    | 99IM<br>PRO<br>OF                          | LatTriAn<br>n | Lateral<br>Tricuspid<br>Annulus<br>(Finding Site)        |
| S'(I)                              | 99IM<br>PRO<br>OF              | RV_Sa | Right<br>Ventricular<br>Peak<br>Systolic<br>Tissue                        | SRT                                     | T-32500 | Right<br>Ventricle | SRT                                        | P5-<br>B0128  | Tissue<br>Doppler<br>Imaging<br>(Measureme<br>nt Method) |

|  |  |  |          |  |  |  |                   |               |                                                   |
|--|--|--|----------|--|--|--|-------------------|---------------|---------------------------------------------------|
|  |  |  | Velocity |  |  |  | 99IM<br>PRO<br>OF | LatTriAn<br>n | Lateral<br>Tricuspid<br>Annulus<br>(Finding Site) |
|--|--|--|----------|--|--|--|-------------------|---------------|---------------------------------------------------|

### Congenital

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                  | TID (5202) Echo Section<br>Finding Site |              |                            | Concept or Acquisition<br>Context Modifier |    |    |
|------------------------------------|--------------------------------|---------|------------------|-----------------------------------------|--------------|----------------------------|--------------------------------------------|----|----|
| ASD                                | CSD                            | CV      | CM               | CSD                                     | CV           | CM                         | CSD                                        | CV | CM |
| ASD Vmax                           | LN                             | 11726-7 | Peak<br>Velocity | SRT                                     | D4-<br>31220 | Atrial<br>Septal<br>Defect |                                            |    |    |

| Label<br>displayed in<br>Worksheet | TID (5203) Echo<br>Measurement |         |                  | TID (5202) Echo Section<br>Finding Site |              |                                 | Concept or Acquisition<br>Context Modifier |         |                                       |
|------------------------------------|--------------------------------|---------|------------------|-----------------------------------------|--------------|---------------------------------|--------------------------------------------|---------|---------------------------------------|
| VSD                                | CSD                            | CV      | CM               | CSD                                     | CV           | CM                              | CSD                                        | CV      | CM                                    |
| VSD Vmax                           | LN                             | 11726-7 | Peak<br>Velocity | SRT                                     | D4-<br>31150 | Ventricular<br>Septal<br>Defect | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction) |
| VSD PGmax                          | LN                             | 20247-3 | Peak<br>Gradient | SRT                                     | D4-<br>31150 | Ventricular<br>Septal<br>Defect | SRT                                        | R-42047 | Antegrade<br>Flow (Flow<br>Direction) |

| Label displayed in Worksheet | TID (5203) Echo Measurement |         |                                 | TID (5202) Echo Section Finding Site |         |                              | Concept or Acquisition Context Modifier |         |                                          |
|------------------------------|-----------------------------|---------|---------------------------------|--------------------------------------|---------|------------------------------|-----------------------------------------|---------|------------------------------------------|
| Qp/Qs                        | CSD                         | CV      | CM                              | CSD                                  | CV      | CM                           | CSD                                     | CV      | CM                                       |
| LVOT VTI                     | LN                          | 20354-7 | Velocity Time Integral          | SRT                                  | T-32650 | Left Ventricle Outflow Tract | SRT                                     | R-42047 | Antegrade Flow (Flow Direction)          |
| LVOT diam                    | SRT                         | G-038F  | Cardiovascular Orifice Diameter | SRT                                  | T-32650 | Left Ventricle Outflow Tract |                                         |         |                                          |
| HR                           | LN                          | 8867-4  | Heart rate                      | SRT                                  | T-35400 | Aortic Valve                 |                                         |         |                                          |
| LVOT SV                      | SRT                         | F-32120 | Stroke Volume                   | SRT                                  | T-32650 | Left Ventricle Outflow Tract | DCM                                     | 125219  | Doppler Volume Flow (Measurement Method) |

|           |             |              |                                        |     |          |                               |     |         |                                          |
|-----------|-------------|--------------|----------------------------------------|-----|----------|-------------------------------|-----|---------|------------------------------------------|
| LVOT CO   | SRT         | F-32100      | Cardiac Output                         | SRT | T-32650  | Left Ventricle Outflow Tract  | DCM | 125219  | Doppler Volume Flow (Measurement Method) |
| RVOT VTI  | LN          | 20354-7      | Velocity Time Integral                 | SRT | T-32550  | Right Ventricle Outflow Tract | SRT | R-42047 | Antegrade Flow (Flow Direction)          |
| RVOT diam | SRT         | G-038F       | Cardiovascular Orifice Diameter        | SRT | T-32550  | Right Ventricle Outflow Tract |     |         |                                          |
| HR        | LN          | 8867-4       | Heart rate                             | SRT | T-35200  | Pulmonary Valve               |     |         |                                          |
| RVOT SV   | SRT         | F-32120      | Stroke Volume                          | SRT | T-32550  | Right Ventricle Outflow Tract | DCM | 125219  | Doppler Volume Flow (Measurement Method) |
| RVOT CO   | SRT         | F-32100      | Cardiac Output                         | SRT | T-32550  | Right Ventricle Outflow Tract | DCM | 125219  | Doppler Volume Flow (Measurement Method) |
| Qp/Qs     | LN          | 29462-9      | Pulmonary-to-Systemic Shunt Flow Ratio | SRT | P5-30031 | Cardiac Shunt Study           | DCM | 125219  | Doppler Volume Flow (Measurement Method) |
| Qp-Qs     | 99IM PRO OF | CA_CS_P F-SF | Pulmonary minus Systemic Shunt Flow    | SRT | P5-30031 | Cardiac Shunt Study           | DCM | 125219  | Doppler Volume Flow (Measurement Method) |

### 8.6.3 Context Groups (Non-Advanced Cardiac)

The Context Groups used in Structured Reports are shown below.

Terms in *Italic* are extensions to the Standard Context Groups. In the Context Group extension, the next attributes are always included besides CV/CSD/CM. (Attributes are not included for a term which is not an extension.)

**Attributes used in Context Group Extension**

| Tag         | VR | Attribute Name               | Value                                                   |
|-------------|----|------------------------------|---------------------------------------------------------|
| (0008,0105) | CS | Mapping Resource             | "DCMR"                                                  |
| (0008,0106) | DT | Context Group Version        | Described in PS 3.16                                    |
| (0008,0107) | DT | Context Group Local Version  | "YYYYMMDD"<br>Described in each of Context Groups below |
| (0008,010B) | CS | Context Group Extension Flag | "Y"                                                     |

| Tag         | VR | Attribute Name                      | Value                                             |
|-------------|----|-------------------------------------|---------------------------------------------------|
| (0008,010D) | UI | Context Group Extension Creator UID | 1.2.392.200039.106                                |
| (0008,010F) | CS | Context Identifier                  | Identifies Context Group to which a term is added |

#### CID 42 Numeric Value Qualifier

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)  |
|-------|--------------------------------------|------------------------|---------------------------|
| -     | DCM                                  | 114007                 | Measurement not attempted |
| -     | DCM                                  | 114009                 | Value out of range        |

#### CID 223 Normal Range Values

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | SRT                                  | R-0038B                | Normal Range Upper Limit |
| -     | SRT                                  | R-10041                | Normal Range Lower Limit |

#### CID 227 Sample Statistical Descriptors

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | DCM                                  | 121416                 | Z-Score of measurement   |

#### CID 228 Equation or Table

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | DCM                                  | 121421                 | Equation Citation        |
| -     | DCM                                  | 121422                 | Table of Values Citation |

#### CID 244 Laterality

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| Right | SRT                                  | G-A100                 | Right                    |

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| Left  | SRT                                  | G-A101                 | Left                     |

CID 271 Observation Subject Class

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | DCM                                  | 121025                 | Patient                  |

CID 3627 Measurement Type

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | SRT                                  | R-00317                | Mean                     |
| -     | SRT                                  | R-41D2D                | Calculated               |
| -     | SRT                                  | G-A437                 | Maximum                  |

CID 3663 Body Surface Area Equations

(Local Version: 20060807)

| Label                         | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                       |
|-------------------------------|--------------------------------------|------------------------|----------------------------------------------------------------|
| BSA Equation, DuBois          | DCM                                  | 122241                 | $BSA = 0.007184 * WT^{0.425} * HT^{0.725}$                     |
| <i>BSA Equation, Boyd</i>     | 99ALOKA                              | A3663-001              | $BSA = 0.0003207 * WT^{(0.7285 - 0.0188 \log(WT))} * HT^{0.3}$ |
| <i>BSA Equation, Shintani</i> | 99ALOKA                              | A3663-002              | $BSA = 0.007358 * HT^{0.725} * WT^{0.425}$                     |

CID 7455 Sex

| Label  | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|--------|--------------------------------------|------------------------|--------------------------|
| Male   | DCM                                  | M                      | Male                     |
| Female | DCM                                  | F                      | Female                   |
| Other  | DCM                                  | 121103                 | Undetermined sex         |

CID 7456 Units of Measure for Age

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| - (Y) | UCUM                                 | a                      | year                     |
| - (M) | UCUM                                 | mo                     | month                    |
| - (W) | UCUM                                 | wk                     | week                     |
| - (D) | UCUM                                 | d                      | day                      |

CID 12003 OB-GYN Dates

| Label            | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)        |
|------------------|--------------------------------------|------------------------|---------------------------------|
| LMP-EDC          | LN                                   | 11779-6                | EDD from LMP                    |
| Composite US-EDC | LN                                   | 11781-2                | EDD from average ultrasound age |
| BBT-EDC          | LN                                   | 11780-4                | EDD from ovulation date         |
| LMP              | LN                                   | 11955-2                | LMP                             |
| BBT              | LN                                   | 11976-8                | Ovulation date                  |

CID 12004 Fetal Biometry Ratios

(Local Version: 20051202)

| Label                                    | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                            |
|------------------------------------------|--------------------------------------|------------------------|-----------------------------------------------------|
| HC/AC                                    | LN                                   | 11947-9                | HC/AC                                               |
| FL/AC                                    | LN                                   | 11871-1                | FL/AC                                               |
| FL/BPD                                   | LN                                   | 11872-9                | FL/BPD                                              |
| CI (BPD/OFD)                             | LN                                   | 11823-2                | Cephalic Index                                      |
| FL/HC                                    | LN                                   | 11873-7                | FL/HC                                               |
| CI (BPD <sub>o</sub> /OFD <sub>o</sub> ) | 99ALOKA                              | A12004-001             | Cephalic Index(BPD <sub>o</sub> /OFD <sub>o</sub> ) |
| LVW/HW                                   | 99ALOKA                              | A12004-002             | LVW/HW                                              |

CID 12005 Fetal Biometry Measurements

(Local Version: 20171130 , 20051202 , 20150515)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)              |
|-------|--------------------------------------|------------------------|---------------------------------------|
| AC    | LN                                   | 11979-2                | Abdominal Circumference               |
| APD   | LN                                   | 11818-2                | Anterior-Posterior Abdominal Diameter |

| Label                  | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                         |
|------------------------|--------------------------------------|------------------------|--------------------------------------------------|
| APTD                   | LN                                   | 11818-2                | Anterior-Posterior Abdominal Diameter            |
| BPD                    | LN                                   | 11820-8                | Biparietal Diameter                              |
| HC                     | LN                                   | 11984-2                | Head Circumference                               |
| OFD                    | LN                                   | 11851-3                | Occipital-Frontal Diameter                       |
| TC                     | LN                                   | 11988-3                | Thoracic Circumference                           |
| TAD                    | LN                                   | 11862-0                | Tranverse Abdominal Diameter                     |
| TTD                    | LN                                   | 11862-0                | Tranverse Abdominal Diameter                     |
| AXT                    | LN                                   | 33191-8                | APAD * TAD                                       |
| <i>BD</i>              | <i>99ALOKA</i>                       | <i>A12005-001</i>      | <i>Binocular Distance</i>                        |
| <i>BPD<sub>o</sub></i> | <i>99ALOKA</i>                       | <i>A12005-002</i>      | <i>Biparietal Diameter outer-to-outer</i>        |
| <i>FTA</i>             | <i>99ALOKA</i>                       | <i>A12005-003</i>      | <i>Fetal Trunk Cross Sectional Area</i>          |
| <i>LV</i>              | <i>99ALOKA</i>                       | <i>A12005-004</i>      | <i>Length of Vertebrae</i>                       |
| <i>OFD<sub>o</sub></i> | <i>99ALOKA</i>                       | <i>A12005-005</i>      | <i>Occipital-Frontal Diameter outer-to-outer</i> |
| <i>AD</i>              | <i>99ALOKA</i>                       | <i>A12005-006</i>      | <i>Abdominal Diameter</i>                        |
| <i>TL</i>              | <i>99ALOKA</i>                       | <i>A12005-007</i>      | <i>Thoracic Length</i>                           |
| <i>HC2</i>             | <i>99ALOKA</i>                       | <i>A12005-008</i>      | <i>Head Circumference for Merz, Hansmann</i>     |
| <i>AF Pocket</i>       | <i>99ALOKA</i>                       | <i>A12005-009</i>      | <i>Amniotic Fluid Volume</i>                     |
| <i>AFV</i>             | <i>99ALOKA</i>                       | <i>A12005-009</i>      | <i>Amniotic Fluid Volume</i>                     |
| <i>HC3</i>             | <i>99ALOKA</i>                       | <i>A12005-010</i>      | <i>Head Circumference for BMUS</i>               |
| <i>AC2</i>             | <i>99ALOKA</i>                       | <i>A12005-011</i>      | <i>Abdominal Circumference for BMUS</i>          |
| <i>MVP</i>             | <i>99ALOKA</i>                       | <i>A12005-012</i>      | <i>Maximum Vertical Pocket</i>                   |

CID 12006 Fetal Long Bones Biometry Measurements

(Local Version: 20051202)

| Label      | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|------------|--------------------------------------|------------------------|--------------------------|
| HL         | LN                                   | 11966-9                | Humerus length           |
| RAD        | LN                                   | 11967-7                | Radius length            |
| ULNA       | LN                                   | 11969-3                | Ulna length              |
| TIB        | LN                                   | 11968-5                | Tibia length             |
| FIB        | LN                                   | 11964-4                | Fibula length            |
| FL         | LN                                   | 11963-6                | Femur Length             |
| <i>NBL</i> | <i>99ALOKA</i>                       | <i>A12006-001</i>      | <i>Nasal Bone Length</i> |

CID 12007 Fetal Cranium

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)  |
|-------|--------------------------------------|------------------------|---------------------------|
| LVW   | LN                                   | 12171-5                | Lateral Ventricular width |
| IOD   | LN                                   | 33070-4                | Inner Orbital Diameter    |
| OOD   | LN                                   | 11629-3                | Outer Orbital Diameter    |
| CD    | LN                                   | 11863-8                | Trans Cerebellar Diameter |
| HW    | LN                                   | 12170-7                | Width of Hemisphere       |

CID 12008 OB-GYN Amniotic Sac

| Label   | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|---------|--------------------------------------|------------------------|--------------------------|
| AFI, Q1 | LN                                   | 11624-4                | First Quadrant Diameter  |
| AFI, Q2 | LN                                   | 11626-9                | Second Quadrant Diameter |
| AFI, Q3 | LN                                   | 11625-1                | Third Quadrant Diameter  |
| AFI, Q4 | LN                                   | 11623-6                | Fourth Quadrant Diameter |

CID 12009 Early Gestation Biometry Measurements

(Local Version: 20051202)

| Label    | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)      |
|----------|--------------------------------------|------------------------|-------------------------------|
| CRL      | LN                                   | 11957-8                | Crown Rump Length             |
| GS       | LN                                   | 11850-5                | Gestational Sac Diameter      |
| NT       | LN                                   | 33069-6                | Nuchal Translucency           |
| EES      | 99ALOKA                              | A12009-001             | Early Embryonic Size          |
| mGS, D1  | 99ALOKA                              | A12009-002             | Gestational Sac Diameter 1    |
| mGS, D2  | 99ALOKA                              | A12009-003             | Gestational Sac Diameter 2    |
| mGS, D3  | 99ALOKA                              | A12009-004             | Gestational Sac Diameter 3    |
| mGS, mGS | 99ALOKA                              | A12009-005             | Mean Gestational Sac Diameter |

CID 12011 Ultrasound Pelvis and Uterus

(Local Version: 20051202)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|----------------|--------------------------------------|------------------------|--------------------------|
| Cervix         | LN                                   | 11961-0                | Cervix Length            |
| Cervix, Length | LN                                   | 11961-0                | Cervix Length            |
| Endom-T        | LN                                   | 12145-9                | Endometrium Thickness    |

| <b>Label</b>               | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>                |
|----------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------|
| <i>Cervix, Width</i>       | 99ALOKA                                         | A12011-001                        | <i>Cervix Width</i>                                |
| <i>Cervix, AP</i>          | 99ALOKA                                         | A12011-002                        | <i>Cervix Antero-Posterior Diameter</i>            |
| <i>Pre Bldrvol, Length</i> | 99ALOKA                                         | A12011-003                        | <i>Pre Void Bladder Length</i>                     |
| <i>Pre Bldrvol, AP</i>     | 99ALOKA                                         | A12011-004                        | <i>Pre Void Bladder Antero-Posterior Diameter</i>  |
| <i>Pre Bldrvol, Width</i>  | 99ALOKA                                         | A12011-005                        | <i>Pre Void Bladder Width</i>                      |
| <i>Pre Bldrvol, Volume</i> | 99ALOKA                                         | A12011-006                        | <i>Pre Void Bladder Volume</i>                     |
| <i>Pst Bldrvol, Length</i> | 99ALOKA                                         | A12011-007                        | <i>Post Void Bladder Length</i>                    |
| <i>Pst Bldrvol, AP</i>     | 99ALOKA                                         | A12011-008                        | <i>Post Void Bladder Antero-Posterior Diameter</i> |
| <i>Pst Bldrvol, Width</i>  | 99ALOKA                                         | A12011-009                        | <i>Post Void Bladder Width</i>                     |
| <i>Pst Bldrvol, Volume</i> | 99ALOKA                                         | A12011-010                        | <i>Post Void Bladder Volume</i>                    |
| <i>Void Volume</i>         | 99ALOKA                                         | A12011-011                        | <i>Bladder Void Volume</i>                         |

CID 12013 Gestational Age Equations and Tables

(Local Version: 20051202, 20200302)

| <b>Label</b>    | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|-----------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| AC (Had-90%)    | LN                                              | 11892-7                           | AC, Hadlock 1984                    |
| AC (Hadlock84)  | LN                                              | 11892-7                           | AC, Hadlock 1984                    |
| AC (Hansmann)   | LN                                              | 33073-8                           | AC, Hansmann1985                    |
| AC (Shinozuka)  | LN                                              | 33076-1                           | AC, Shinozuka 1996                  |
| AXT (Shinozuka) | LN                                              | 33078-7                           | AxT, Shinozuka 1996                 |
| BPD (Hadlock84) | LN                                              | 11902-4                           | BPD, Hadlock 1984                   |
| BPD (Hansmann)  | LN                                              | 11903-2                           | BPD, Hansmann 1985                  |
| BPD (Kurtz)     | LN                                              | 11906-5                           | BPD, Kurtz 1980                     |
| BPD (Rempen)    | LN                                              | 33083-7                           | BPD, Rempen 1991                    |
| BPD (Shinozuka) | LN                                              | 33084-5                           | BPD, Shinozuka 1996                 |
| BPD (Tokyo U)   | LN                                              | 33085-2                           | BPD, Tokyo 1986                     |
| CRL (Daya)      | LN                                              | 33091-0                           | CRL, Daya 1993                      |
| CRL (Hadlock)   | LN                                              | 11910-7                           | CRL, Hadlock 1992                   |
| CRL (Hansmann)  | LN                                              | 11911-5                           | CRL, Hansmann 1985                  |

| <b>Label</b>    | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|-----------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| CRL (Nelson)    | LN                                              | 11913-1                           | CRL, Nelson 1981                    |
| CRL (Rempen)    | LN                                              | 33094-4                           | CRL, Rempen 1991                    |
| CRL (Robinson)  | LN                                              | 11914-9                           | CRL, Robinson 1975                  |
| FL (Had-90%)    | LN                                              | 11920-6                           | FL, Hadlock 1984                    |
| FL (Hadlock84)  | LN                                              | 11920-6                           | FL, Hadlock 1984                    |
| FL (Hansmann)   | LN                                              | 11921-4                           | FL, Hansmann 1985                   |
| FL (Hohler)     | LN                                              | 11922-2                           | FL, Hohler 1982                     |
| FL (Jeanty)     | LN                                              | 11923-0                           | FL, Jeanty 1984                     |
| FL (Shinozuka)  | LN                                              | 33102-5                           | FL, Shinozuka 1996                  |
| FL (Tokyo U)    | LN                                              | 33103-3                           | FL, Tokyo 1986                      |
| mGS (Hellman)   | LN                                              | 11928-9                           | GS, Hellman 1969                    |
| mGS (Rempen)    | LN                                              | 11929-7                           | GS, Rempen 1991                     |
| HC (Had-90%)    | LN                                              | 11932-1                           | HC, Hadlock 1984                    |
| HC (Hadlock84)  | LN                                              | 11932-1                           | HC, Hadlock 1984                    |
| HC2 (Hansmann)  | LN                                              | 33112-4                           | HC, Hansmann 1985                   |
| HL (Jeanty)     | LN                                              | 11936-2                           | Humerus, Jeanty 1984                |
| LV (Tokyo U)    | LN                                              | 33118-1                           | Length of Vertebra, Tokyo 1986      |
| OFD (Hansmann)  | LN                                              | 33544-8                           | OFD, Hansmann 1985                  |
| RAD (Jea-95%)   | LN                                              | 33126-4                           | Radius, Jeanty 1983                 |
| TIB (Jeanty)    | LN                                              | 11941-2                           | Tibia, Jeanty 1984                  |
| TC (Chitkara U) | LN                                              | 33131-4                           | ThC, Chitkara 1987                  |
| CD (Goldstein)  | LN                                              | 33133-0                           | TCD, Goldstein 1987                 |
| CD (Hill)       | LN                                              | 33134-8                           | TCD, Hill 1990                      |
| ULNA (Jeanty)   | LN                                              | 11944-6                           | Ulna, Jeanty 1984                   |
| AC (Campbell)   | 99ALOKA                                         | A12013-001                        | AC, Campbell                        |
| AC (Chitty)     | 99ALOKA                                         | A12013-002                        | AC, Chitty 1994                     |
| AC (Hadlock)    | 99ALOKA                                         | A12013-003                        | AC, Hadlock 1982                    |
| AC (Merz)       | 99ALOKA                                         | A12013-005                        | AC, Merz 1996                       |
| APTD (Merz)     | 99ALOKA                                         | A12013-006                        | APAD, Merz 1996                     |
| AXT (Tokyo U)   | 99ALOKA                                         | A12013-007                        | AxT, Tokyo                          |
| BD (Jeanty)     | 99ALOKA                                         | A12013-008                        | BD, Jeanty 1984                     |
| BPD (Campbell)  | 99ALOKA                                         | A12013-009                        | BPD, Campbell                       |
| BPD (Chitty)    | 99ALOKA                                         | A12013-010                        | BPD-oi, Chitty 1994                 |
| BPD (Hadlock)   | 99ALOKA                                         | A12013-011                        | BPD, Hadlock 1982                   |
| BPD (Merz)      | 99ALOKA                                         | A12013-012                        | BPD, Merz 1996                      |

| <b>Label</b>           | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|------------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| <i>BPD (Sabbagha)</i>  | 99ALOKA                                         | A12013-013                        | <i>BPD, Sabbagha 1976</i>           |
| <i>CRL (JSUM'03)</i>   | 99ALOKA                                         | A12013-016                        | <i>CRL, JSUM 2003</i>               |
| <i>CRL (Tokyo U)</i>   | 99ALOKA                                         | A12013-017                        | <i>CRL, Tokyo</i>                   |
| <i>EES (Goldstein)</i> | 99ALOKA                                         | A12013-018                        | <i>EES, Goldstein 1994</i>          |
| <i>FIB (Merz)</i>      | 99ALOKA                                         | A12013-019                        | <i>FIB, Merz 1996</i>               |
| <i>FL (Campbell)</i>   | 99ALOKA                                         | A12013-020                        | <i>FL, Campbell</i>                 |
| <i>FL (Chitty)</i>     | 99ALOKA                                         | A12013-021                        | <i>FL, Chitty 1994</i>              |
| <i>FL (Hadlock)</i>    | 99ALOKA                                         | A12013-022                        | <i>FL, Hadlock 1982</i>             |
| <i>FL (Jea-95%)</i>    | 99ALOKA                                         | A12013-025                        | <i>FL, Jeanty 95% 1983</i>          |
| <i>FL (Merz)</i>       | 99ALOKA                                         | A12013-026                        | <i>FL, Merz 1996</i>                |
| <i>FL (Warda)</i>      | 99ALOKA                                         | A12013-027                        | <i>FL, Warda 1985</i>               |
| <i>GS (Tokyo U)</i>    | 99ALOKA                                         | A12013-028                        | <i>GS, Tokyo</i>                    |
| <i>HC (Campbell)</i>   | 99ALOKA                                         | A12013-029                        | <i>HC, Campbell</i>                 |
| <i>HC (Chitty)</i>     | 99ALOKA                                         | A12013-030                        | <i>HC, Chitty 1994</i>              |
| <i>HC (Hadlock)</i>    | 99ALOKA                                         | A12013-031                        | <i>HC, Hadlock 1982</i>             |
| <i>HC2 (Merz)</i>      | 99ALOKA                                         | A12013-033                        | <i>HC, Merz 1996</i>                |
| <i>HL (Hansmann)</i>   | 99ALOKA                                         | A12013-034                        | <i>Humerus, Hansmann 1985</i>       |
| <i>HL (Jea-95%)</i>    | 99ALOKA                                         | A12013-035                        | <i>Humerus, Jeanty 95% 1983</i>     |
| <i>HL (Merz)</i>       | 99ALOKA                                         | A12013-036                        | <i>Humerus, Merz 1996</i>           |
| <i>NBL (Sonek)</i>     | 99ALOKA                                         | A12013-037                        | <i>NBL, Sonek 2003</i>              |
| <i>OFD (Merz)</i>      | 99ALOKA                                         | A12013-038                        | <i>OFD, Merz 1996</i>               |
| <i>RAD (Merz)</i>      | 99ALOKA                                         | A12013-039                        | <i>Radius, Merz 1996</i>            |
| <i>TIB (Jea-95%)</i>   | 99ALOKA                                         | A12013-040                        | <i>Tibia, Jeanty 95% 1983</i>       |
| <i>TIB (Merz)</i>      | 99ALOKA                                         | A12013-041                        | <i>Tibia, Merz 1996</i>             |
| <i>TL (Chitkara U)</i> | 99ALOKA                                         | A12013-042                        | <i>TL, Chitkara 1987</i>            |
| <i>TTD (Hansmann)</i>  | 99ALOKA                                         | A12013-043                        | <i>TAD, Hansmann 1985</i>           |
| <i>TTD (Merz)</i>      | 99ALOKA                                         | A12013-044                        | <i>TAD, Merz 1996</i>               |
| <i>ULNA (Jea-95%)</i>  | 99ALOKA                                         | A12013-045                        | <i>Ulna, Jeanty 95% 1983</i>        |
| <i>ULNA (Merz)</i>     | 99ALOKA                                         | A12013-046                        | <i>Ulna, Merz 1996</i>              |
| <i>AC (JSUM'03)</i>    | 99ALOKA                                         | A12013-047                        | <i>AC, JSUM 2003</i>                |
| <i>BPD (JSUM'03)</i>   | 99ALOKA                                         | A12013-048                        | <i>BPD, JSUM 2003</i>               |
| <i>BPD (Osaka U)</i>   | 99ALOKA                                         | A12013-049                        | <i>BPD, Osaka</i>                   |
| <i>CRL (Osaka U)</i>   | 99ALOKA                                         | A12013-050                        | <i>CRL, Osaka</i>                   |
| <i>FL (JSUM'03)</i>    | 99ALOKA                                         | A12013-051                        | <i>FL, JSUM 2003</i>                |
| <i>FL (O'Brien)</i>    | 99ALOKA                                         | A12013-052                        | <i>FL, O'Brien 1981</i>             |
| <i>FL (Osaka U)</i>    | 99ALOKA                                         | A12013-053                        | <i>FL, Osaka</i>                    |

| <b>Label</b>                 | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>        |
|------------------------------|-------------------------------------------------|-----------------------------------|--------------------------------------------|
| <i>FTA (Osaka U)</i>         | 99ALOKA                                         | A12013-054                        | <i>FTA, Osaka</i>                          |
| <i>HL (Osaka U)</i>          | 99ALOKA                                         | A12013-055                        | <i>Humerus, Osaka</i>                      |
| <i>CRL (BMUS 2009)</i>       | 99ALOKA                                         | A12013-056                        | <i>CRL, BMUS 2009</i>                      |
| <i>HC3 (BMUS 2009)</i>       | 99ALOKA                                         | A12013-057                        | <i>HC, BMUS 2009</i>                       |
| <i>FL (BMUS 2009)</i>        | 99ALOKA                                         | A12013-058                        | <i>FL, BMUS 2009</i>                       |
| <i>HC3 (BMUS-95% 2009)</i>   | 99ALOKA                                         | A12013-059                        | <i>HC, BMUS-95% 2009</i>                   |
| <i>AC2 (BMUS-95% 2009)</i>   | 99ALOKA                                         | A12013-060                        | <i>AC, BMUS-95% 2009</i>                   |
| <i>FL (BMUS-95% 2009)</i>    | 99ALOKA                                         | A12013-061                        | <i>FL, BMUS-95% 2009</i>                   |
| <i>BPD (CFEF-97% 2006)</i>   | 99ALOKA                                         | A12013-062                        | <i>BPD, CFEF-97% 2006</i>                  |
| <i>HC3 (CFEF-97% 2006)</i>   | 99ALOKA                                         | A12013-063                        | <i>HC, CFEF-97% 2006</i>                   |
| <i>AC2 (CFEF-97% 2006)</i>   | 99ALOKA                                         | A12013-064                        | <i>AC, CFEF-97% 2006</i>                   |
| <i>FL (CFEF-97% 2006)</i>    | 99ALOKA                                         | A12013-066                        | <i>FL, CFEF-97% 2006</i>                   |
| <i>BPD (CFEF-90% 2006)</i>   | 99ALOKA                                         | A12013-067                        | <i>BPD, CFEF-90% 2006</i>                  |
| <i>HC3 (CFEF-90% 2006)</i>   | 99ALOKA                                         | A12013-068                        | <i>HC, CFEF-90% 2006</i>                   |
| <i>AC2 (CFEF-90% 2006)</i>   | 99ALOKA                                         | A12013-069                        | <i>AC, CFEF-90% 2006</i>                   |
| <i>FL (CFEF-90% 2006)</i>    | 99ALOKA                                         | A12013-071                        | <i>FL, CFEF-90% 2006</i>                   |
| <i>GA Table/Equ. (User1)</i> | 99ALOKA                                         | A12013-072                        | <i>GA, User defined Table or Equation1</i> |
| <i>GA Table/Equ. (User2)</i> | 99ALOKA                                         | A12013-073                        | <i>GA, User defined Table or Equation2</i> |
| <i>GA Table/Equ. (User3)</i> | 99ALOKA                                         | A12013-074                        | <i>GA, User defined Table or Equation3</i> |
| <i>GA Table/Equ. (User4)</i> | 99ALOKA                                         | A12013-075                        | <i>GA, User defined Table or Equation4</i> |
| <i>GA Table/Equ. (User5)</i> | 99ALOKA                                         | A12013-076                        | <i>GA, User defined Table or Equation5</i> |
| <i>GA Table/Equ. (User6)</i> | 99ALOKA                                         | A12013-077                        | <i>GA, User defined Table or Equation6</i> |
| <i>GA Table/Equ. (User7)</i> | 99ALOKA                                         | A12013-078                        | <i>GA, User defined Table or Equation7</i> |

| <b>Label</b>           | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>      |
|------------------------|---------------------------------------------|-------------------------------|--------------------------------------|
| GA Table/Equ. (User8)  | 99ALOKA                                     | A12013-079                    | GA, User defined Table or Equation8  |
| GA Table/Equ. (User9)  | 99ALOKA                                     | A12013-080                    | GA, User defined Table or Equation9  |
| GA Table/Equ. (User10) | 99ALOKA                                     | A12013-081                    | GA, User defined Table or Equation10 |
| GA Table/Equ. (User11) | 99ALOKA                                     | A12013-082                    | GA, User defined Table or Equation11 |
| GA Table/Equ. (User12) | 99ALOKA                                     | A12013-083                    | GA, User defined Table or Equation12 |
| GA Table/Equ. (User13) | 99ALOKA                                     | A12013-084                    | GA, User defined Table or Equation13 |
| GA Table/Equ. (User14) | 99ALOKA                                     | A12013-085                    | GA, User defined Table or Equation14 |
| GA Table/Equ. (User15) | 99ALOKA                                     | A12013-086                    | GA, User defined Table or Equation15 |
| GA Table/Equ. (User16) | 99ALOKA                                     | A12013-087                    | GA, User defined Table or Equation16 |
| GA Table/Equ. (User17) | 99ALOKA                                     | A12013-088                    | GA, User defined Table or Equation17 |
| GA Table/Equ. (User18) | 99ALOKA                                     | A12013-089                    | GA, User defined Table or Equation18 |
| GA Table/Equ. (User19) | 99ALOKA                                     | A12013-090                    | GA, User defined Table or Equation19 |
| GA Table/Equ. (User20) | 99ALOKA                                     | A12013-091                    | GA, User defined Table or Equation20 |

CID 12014 OB Fetal Body Weight Equations and Tables

(Local Version: 20051202, 20200302)

| <b>Label</b>           | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>      |
|------------------------|---------------------------------------------|-------------------------------|--------------------------------------|
| FW Equation (Campbell) | LN                                          | 11756-4                       | EFW by AC, Campbell 1975             |
| FW Equation (Hadlock5) | LN                                          | 11732-5                       | EFW by AC, BPD, FL, HC, Hadlock 1985 |
| FW Equation (Hadlock1) | LN                                          | 11751-5                       | EFW by AC, FL, Hadlock 1985          |
| FW Equation (Hadlock2) | LN                                          | 11746-5                       | EFW by AC, FL, HC, Hadlock 1985      |
| FW Equation (Hadlock4) | LN                                          | 11754-9                       | EFW by AC, HC Hadlock 1984           |

| <b>Label</b>                  | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>       |
|-------------------------------|---------------------------------------------|-------------------------------|---------------------------------------|
| FW Equation (Hansmann)        | LN                                          | 33139-7                       | EFW by BPD, TTD, Hansmann 1986        |
| FW Equation (Shepard)         | LN                                          | 11739-0                       | EFW by AC and BPD, Shepard 1982       |
| FW Equation (Shinozuka)       | LN                                          | 33142-1                       | EFW2 by Shinozuka 1996                |
| FW Equation (Tokyo U)         | LN                                          | 33144-7                       | EFW by BPD, APAD, TAD, FL, Tokyo 1987 |
| <i>FW Equation (Hadlock3)</i> | 99ALOKA                                     | <i>A12014-001</i>             | <i>EFW by BPD, AC, FL, Hadlock</i>    |
| <i>FW Equation (JSUM'03)</i>  | 99ALOKA                                     | <i>A12014-002</i>             | <i>EFW by BPD, AC, FL, JSUM 2003</i>  |
| <i>FW Equation (Osaka U)</i>  | 99ALOKA                                     | <i>A12014-003</i>             | <i>EFW by BPD, FTA, FL, Osaka</i>     |
| <i>FW Equation (Warsof)</i>   | 99ALOKA                                     | <i>A12014-004</i>             | <i>EFW by BPD, AC, Warsof 1977</i>    |
| <i>FW Equation (User1)</i>    | 99ALOKA                                     | <i>A12014-005</i>             | <i>EFW by User defined Equation1</i>  |
| <i>FW Equation (User2)</i>    | 99ALOKA                                     | <i>A12014-006</i>             | <i>EFW by User defined Equation2</i>  |
| <i>FW Equation (User3)</i>    | 99ALOKA                                     | <i>A12014-007</i>             | <i>EFW by User defined Equation3</i>  |
| <i>FW Equation (User4)</i>    | 99ALOKA                                     | <i>A12014-008</i>             | <i>EFW by User defined Equation4</i>  |
| <i>FW Equation (User5)</i>    | 99ALOKA                                     | <i>A12014-009</i>             | <i>EFW by User defined Equation5</i>  |

CID 12015 Fetal Growth Equations and Tables

(Local Version: 20051202, 20200302)

| <b>Label</b>                                       | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>    |
|----------------------------------------------------|---------------------------------------------|-------------------------------|------------------------------------|
| CI (BPD <sub>o</sub> /OFD <sub>o</sub> ) (Hadlock) | LN                                          | 33158-7                       | Cephalic Index by GA, Hadlock 1981 |
| HC/AC (Campbell)                                   | LN                                          | 33182-7                       | HC/AC by GA, Campbell 1977         |
| <i>FL/AC (Hadlock)</i>                             | 99ALOKA                                     | <i>A12015-001</i>             | <i>FL/AC by GA, Hadlock 1983</i>   |
| <i>FL/HC (Hadlock)</i>                             | 99ALOKA                                     | <i>A12015-002</i>             | <i>FL/HC by GA, Hadlock 1984</i>   |
| <i>FL/BPD (Hohler)</i>                             | 99ALOKA                                     | <i>A12015-003</i>             | <i>FL/BPD by GA, Hohler 1981</i>   |
| <i>AFI (Jeng)</i>                                  | 99ALOKA                                     | <i>A12015-004</i>             | <i>AFI by GA, Jeng et al.</i>      |
| <i>AFI (Moore)</i>                                 | 99ALOKA                                     | <i>A12015-005</i>             | <i>AFI by GA, Moore et al.</i>     |
| <i>AFI (Phelan)</i>                                | 99ALOKA                                     | <i>A12015-006</i>             | <i>AFI by GA, Phelan et al.</i>    |

| <b>Label</b>        | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|---------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| AC (JSUM'03)        | 99ALOKA                                         | A12015-007                        | AC by GA, JSUM 2003                 |
| BPD (JSUM'03)       | 99ALOKA                                         | A12015-008                        | BPD by GA, JSUM 2003                |
| BPD (Osaka U)       | 99ALOKA                                         | A12015-009                        | BPD by GA, Osaka                    |
| CRL (Osaka U)       | 99ALOKA                                         | A12015-010                        | CRL by GA, Osaka                    |
| FL (JSUM'03)        | 99ALOKA                                         | A12015-011                        | FL by GA, JSUM 2003                 |
| FL (O'Brien)        | 99ALOKA                                         | A12015-012                        | FL by GA, O'Brien 1981              |
| FL (Osaka U)        | 99ALOKA                                         | A12015-013                        | FL by GA, Osaka                     |
| FTA (Osaka U)       | 99ALOKA                                         | A12015-014                        | FTA by GA, Osaka                    |
| HL (Osaka U)        | 99ALOKA                                         | A12015-015                        | Humerus by GA, Osaka                |
| BPD (CFEF-97% 2006) | 99ALOKA                                         | A12015-016                        | BPD by GA, CFEF-97% 2006            |
| HC3 (CFEF-97% 2006) | 99ALOKA                                         | A12015-017                        | HC by GA, CFEF-97% 2006             |
| AC2 (CFEF-97% 2006) | 99ALOKA                                         | A12015-018                        | AC by GA, CFEF-97% 2006             |
| FL (CFEF-97% 2006)  | 99ALOKA                                         | A12015-020                        | FL by GA, CFEF-97% 2006             |
| BPD (CFEF-90% 2006) | 99ALOKA                                         | A12015-021                        | BPD by GA, CFEF-90% 2006            |
| HC3 (CFEF-90% 2006) | 99ALOKA                                         | A12015-022                        | HC by GA, CFEF-90% 2006             |
| AC2 (CFEF-90% 2006) | 99ALOKA                                         | A12015-023                        | AC by GA, CFEF-90% 2006             |
| FL (CFEF-90% 2006)  | 99ALOKA                                         | A12015-025                        | FL by GA, CFEF-90% 2006             |
| BPD (Had 84_90%)    | LN                                              | 33198-3                           | BPD by GA, Hadlock 1984             |
| HC (Had 84_90%)     | LN                                              | 33173-6                           | HC by GA, Hadlock 1984              |
| AC (Had 84_90%)     | LN                                              | 33146-2                           | AC by GA, Hadlock 1984              |
| FL (Had 84_90%)     | LN                                              | 33166-0                           | FL by GA, Hadlock 1984              |
| BPD (Had 84_97%)    | LN                                              | 33166-0                           | BPD by GA, Hadlock 1984             |
| HC(Had 84_97%)      | LN                                              | 33173-6                           | HC by GA, Hadlock 1984              |
| AC (Had 84_97%)     | LN                                              | 33146-2                           | AC by GA, Hadlock 1984              |
| FL (Had 84_97%)     | LN                                              | 33166-0                           | FL by GA, Hadlock 1984              |

| <b>Label</b>                                      | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>                 |
|---------------------------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------------------------|
| <i>GA Table/Equ.<br/>(User1)</i>                  | 99ALOKA                                         | A12015-026                        | <i>GA by GA, User defined Table or Equation1</i>    |
| <i>GA Table/Equ.<br/>(User2)</i>                  | 99ALOKA                                         | A12015-027                        | <i>GA by GA, User defined Table or Equation2</i>    |
| <i>GA Table/Equ.<br/>(User3)</i>                  | 99ALOKA                                         | A12015-028                        | <i>GA by GA, User defined Table or Equation3</i>    |
| <i>GA Table/Equ.<br/>(User4)</i>                  | 99ALOKA                                         | A12015-029                        | <i>GA by GA, User defined Table or Equation4</i>    |
| <i>GA Table/Equ.<br/>(User5)</i>                  | 99ALOKA                                         | A12015-030                        | <i>GA by GA, User defined Table or Equation5</i>    |
| <i>GA Table/Equ.<br/>(User6)</i>                  | 99ALOKA                                         | A12015-031                        | <i>GA by GA, User defined Table or Equation6</i>    |
| <i>GA Table/Equ.<br/>(User7)</i>                  | 99ALOKA                                         | A12015-032                        | <i>GA by GA, User defined Table or Equation7</i>    |
| <i>GA Table/Equ.<br/>(User8)</i>                  | 99ALOKA                                         | A12015-033                        | <i>GA by GA, User defined Table or Equation8</i>    |
| <i>GA Table/Equ.<br/>(User9)</i>                  | 99ALOKA                                         | A12015-034                        | <i>GA by GA, User defined Table or Equation9</i>    |
| <i>GA Table/Equ.<br/>(User10)</i>                 | 99ALOKA                                         | A12015-035                        | <i>GA by GA, User defined Table or Equation10</i>   |
| <i>GA Table/Equ.<br/>(User11)</i>                 | 99ALOKA                                         | A12015-036                        | <i>GA by GA, User defined Table or Equation11</i>   |
| <i>GA Table/Equ.<br/>(User12)</i>                 | 99ALOKA                                         | A12015-037                        | <i>GA by GA, User defined Table or Equation12</i>   |
| <i>GA Table/Equ.<br/>(User13)</i>                 | 99ALOKA                                         | A12015-038                        | <i>GA by GA, User defined Table or Equation13</i>   |
| <i>GA Table/Equ.<br/>(User14)</i>                 | 99ALOKA                                         | A12015-039                        | <i>GA by GA, User defined Table or Equation14</i>   |
| <i>GA Table/Equ.<br/>(User15)</i>                 | 99ALOKA                                         | A12015-040                        | <i>GA by GA, User defined Table or Equation15</i>   |
| <i>GA Table/Equ.<br/>(User16)</i>                 | 99ALOKA                                         | A12015-041                        | <i>GA by GA, User defined Table or Equation16</i>   |
| <i>GA Table/Equ.<br/>(User17)</i>                 | 99ALOKA                                         | A12015-042                        | <i>GA by GA, User defined Table or Equation17</i>   |
| <i>GA Table/Equ.<br/>(User18)</i>                 | 99ALOKA                                         | A12015-043                        | <i>GA by GA, User defined Table or Equation18</i>   |
| <i>GA Table/Equ.<br/>(User19)</i>                 | 99ALOKA                                         | A12015-044                        | <i>GA by GA, User defined Table or Equation19</i>   |
| <i>GA Table/Equ.<br/>(User20)</i>                 | 99ALOKA                                         | A12015-045                        | <i>GA by GA, User defined Table or Equation20</i>   |
| <i>Fetus Ratio<br/>Table/Equation<br/>(User1)</i> | 99ALOKA                                         | A12015-046                        | <i>Fetus Ratio, User defined Table or Equation1</i> |

| <b>Label</b>                              | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>                     |
|-------------------------------------------|---------------------------------------------|-------------------------------|-----------------------------------------------------|
| <i>Fetus Ratio Table/Equation (User2)</i> | 99ALOKA                                     | A12015-047                    | <i>Fetus Ratio, User defined Table or Equation2</i> |
| <i>Fetus Ratio Table/Equation (User3)</i> | 99ALOKA                                     | A12015-048                    | <i>Fetus Ratio, User defined Table or Equation3</i> |
| <i>Fetus Ratio Table/Equation (User4)</i> | 99ALOKA                                     | A12015-049                    | <i>Fetus Ratio, User defined Table or Equation4</i> |
| <i>Fetus Ratio Table/Equation (User5)</i> | 99ALOKA                                     | A12015-050                    | <i>Fetus Ratio, User defined Table or Equation5</i> |
| <i>Fetus Ratio Table/Equation (User6)</i> | 99ALOKA                                     | A12015-051                    | <i>Fetus Ratio, User defined Table or Equation6</i> |
| <i>AFI Table/Equation (User1)</i>         | 99ALOKA                                     | A12015-052                    | <i>AFI by User defined Table or Equation1</i>       |
| <i>AFI Table/Equation (User2)</i>         | 99ALOKA                                     | A12015-053                    | <i>AFI by User defined Table or Equation2</i>       |

CID 12016 Estimated Fetal Weight Percentile Equations and Tables (Local Version: 20051202, 2160617, 20200302)

| <b>Label</b>                            | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>            |
|-----------------------------------------|---------------------------------------------|-------------------------------|--------------------------------------------|
| FW Growth (Hadlock)                     | LN                                          | 33183-5                       | FWP by GA, Hadlock 1991                    |
| FW Growth (Brenner)                     | LN                                          | 33189-2                       | FWP by GA, Brenner 1976                    |
| <i>FW Growth (Doubilet)</i>             | 99ALOKA                                     | A12016-001                    | <i>FW, Doubilet 1997</i>                   |
| <i>FW Growth (Yarkoni(Twins))</i>       | 99ALOKA                                     | A12016-005                    | <i>Twins FW, Yarkoni 1987</i>              |
| CFEF_97%                                | 99ALOKA                                     | A12016-006                    | FW, CFEF-97% 2014                          |
| CFEF_90%                                | 99ALOKA                                     | A12016-007                    | FW, CFEF-90% 2014                          |
| <i>FW Growth Table/Equation (User1)</i> | 99ALOKA                                     | A12016-008                    | <i>FW, User defined Table or Equation1</i> |
| <i>FW Growth Table/Equation (User2)</i> | 99ALOKA                                     | A12016-009                    | <i>FW, User defined Table or Equation2</i> |

| Label                                   | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)                |
|-----------------------------------------|-----------------------------------------|---------------------------|--------------------------------------------|
| <i>FW Growth Table/Equation (User3)</i> | 99ALOKA                                 | A12016-010                | <i>FW, User defined Table or Equation3</i> |
| <i>FW Growth Table/Equation (User4)</i> | 99ALOKA                                 | A12016-011                | <i>FW, User defined Table or Equation4</i> |
| <i>FW Growth Table/Equation (User5)</i> | 99ALOKA                                 | A12016-012                | <i>FW, User defined Table or Equation5</i> |

CID 12017 Growth Distribution Rank

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | DCM                                     | 125013                    | Growth Z-score              |

CID 12018 OB-GYN Summary

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | LN                                      | 11878-6                   | Number of Fetuses           |

CID 12019 OB-GYN Fetus Summary

(Local Version: 20151202, 20150515, 20151201)

| Label                        | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)           |
|------------------------------|-----------------------------------------|---------------------------|---------------------------------------|
| Composite US-GA              | LN                                      | 11888-5                   | Composite Ultrasound Age              |
| LMP-GA                       | LN                                      | 11885-1                   | Gestational Age by LMP                |
| FW                           | LN                                      | 11727-5                   | Estimated Weight                      |
| - (FW %ile rank by Doubilet) | LN                                      | 11767-1                   | EFW percentile rank                   |
| FHR                          | LN                                      | 11948-7                   | Fetal Heart Rate                      |
| <i>PreHR(Amnio)</i>          | 99ALOKA                                 | A12019-001                | <i>Fetal Heart Rate before Biopsy</i> |
| <i>PstHR(Amnio)</i>          | 99ALOKA                                 | A12019-002                | <i>Fetal Heart Rate after Biopsy</i>  |
| <i>Auto FHR</i>              | 99ALOKA                                 | A12019-003                | <i>Auto Fetal Heart Rate</i>          |
| EFW Ratio<br>(up to 5 items) | 99ALOKA                                 | A12019-004                | <i>Estimated Fetal Weight Ratio</i>   |

CID 12101 Vascular Summary

| Label    | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|----------|-----------------------------------------|---------------------------|-----------------------------|
| Comments | DCM                                     | 121106                    | Comment                     |

CID 12104 Extracranial Arteries

(Local Version: 20200424)

| Label                                    | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)                           |
|------------------------------------------|-----------------------------------------|---------------------------|-------------------------------------------------------|
| BIFUR                                    | SRT                                     | T-45160                   | Carotid Bifurcation                                   |
| CCA prox<br>CCA mid<br>CCA distal        | SRT                                     | T-45100                   | Common Carotid Artery                                 |
| ECA                                      | SRT                                     | T-45200                   | External Carotid Artery                               |
| ICA<br>ICA prox<br>ICA mid<br>ICA distal | SRT                                     | T-45300                   | Internal Carotid Artery                               |
| VA<br>VERT                               | SRT                                     | T-45700                   | Vertebral Artery                                      |
| max-IMT                                  | 99ALOKA                                 | A12104-001                | Maximum Intima-media thickness                        |
| mean-IMT                                 | 99ALOKA                                 | A12104-002                | Mean Intima-media thickness                           |
| CCA-IMT (Auto)                           | 99ALOKA                                 | A12104-003                | Intima-media thickness of CCA by auto-detection       |
| ICA-IMT (Auto)                           | 99ALOKA                                 | A12104-004                | Intima-media thickness of ICA by auto-detection       |
| ECA-IMT (Auto)                           | 99ALOKA                                 | A12104-005                | Intima-media thickness of ECA by auto-detection       |
| BIF-IMT (Auto)                           | 99ALOKA                                 | A12104-006                | Intima-media thickness of BIFUR by auto-detection     |
| CmeanIMt (Auto)                          | 99ALOKA                                 | A12104-007                | Mean Carotid Intima-media thickness by auto-detection |
| IMT-C10                                  | 99ALOKA                                 | A12104-008                | IMT-C10                                               |
| Auto IMT-C10                             | 99ALOKA                                 | A12104-009                | IMT-C10 by auto-detection                             |

CID 12105 Intracranial Cerebral Vessels

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| ACA   | SRT                                     | T-45540                   | Anterior Cerebral Artery    |

| <b>Label</b> | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|--------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| TICA         | SRT                                             | R-102BD                           | Terminal internal carotid artery    |
| MCA          | SRT                                             | T-45600                           | Middle Cerebral Artery              |
| PCA          | SRT                                             | T-45900                           | Posterior Cerebral Artery           |
| PCoA         | SRT                                             | T-45320                           | Posterior Communicating Artery      |

CID 12106 Intracranial Cerebral Vessels (unilateral)

(Local Version: 20060807)

| <b>Label</b> | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|--------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| BA           | SRT                                             | T-45800                           | Basilar Artery                      |
| ACoA         | SRT                                             | T-45530                           | Anterior Communicating Artery       |

CID 12107 Upper Extremity Arteries

(Local Version: 20060807)

| <b>Label</b> | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|--------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| AA           | SRT                                             | T-47100                           | Axillary Artery                     |
| BA           | SRT                                             | T-47160                           | Brachial Artery                     |
| RA           | SRT                                             | T-47300                           | Radial Artery                       |
| ScA          | SRT                                             | T-46100                           | Subclavian Artery                   |
| SPA          | SRT                                             | T-47240                           | Superficial Palmar Arch             |
| UA           | SRT                                             | T-47200                           | Ulnar Artery                        |
| DBA          | 99ALOKA                                         | A12107-001                        | Deep Brachial Artery                |
| BasA         | 99ALOKA                                         | A12107-002                        | Basilic Artery                      |
| Upr Art.1    | 99ALOKA                                         | A12107-003                        | User Definition Artery1             |
| Upr Art.2    | 99ALOKA                                         | A12107-004                        | User Definition Artery2             |
| Upr Art.3    | 99ALOKA                                         | A12107-005                        | User Definition Artery3             |
| Upr Art.4    | 99ALOKA                                         | A12107-006                        | User Definition Artery4             |
| Upr Art.5    | 99ALOKA                                         | A12107-007                        | User Definition Artery5             |
| Upr Art.6    | 99ALOKA                                         | A12107-008                        | User Definition Artery6             |
| Upr Art.7    | 99ALOKA                                         | A12107-009                        | User Definition Artery7             |
| Upr Art.8    | 99ALOKA                                         | A12107-010                        | User Definition Artery8             |

## CID 12108 Upper Extremity Veins

(Local Version: 20060807)

| Label       | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------------|--------------------------------------|------------------------|--------------------------|
| AV          | SRT                                  | T-49110                | Axillary vein            |
| BasV        | SRT                                  | T-48052                | Basilic vein             |
| BV          | SRT                                  | T-49350                | Brachial vein            |
| CV          | SRT                                  | T-49240                | Cephalic vein            |
| IJV         | SRT                                  | T-48170                | Internal Jugular vein    |
| RV          | SRT                                  | T-49340                | Radial vein              |
| ScV         | SRT                                  | T-48330                | Subclavian vein          |
| UV          | SRT                                  | T-49330                | Ulnar vein               |
| DBV         | 99ALOKA                              | A12108-001             | Deep Brachial vein       |
| Upr Vein.1  | 99ALOKA                              | A12108-002             | User Definition Vein1    |
| Upr Vein.2  | 99ALOKA                              | A12108-003             | User Definition Vein2    |
| Upr Vein.3  | 99ALOKA                              | A12108-004             | User Definition Vein3    |
| Upr Vein.4  | 99ALOKA                              | A12108-005             | User Definition Vein4    |
| Upr Vein.5  | 99ALOKA                              | A12108-006             | User Definition Vein5    |
| Upr Vein.6  | 99ALOKA                              | A12108-007             | User Definition Vein6    |
| Upr Vein..7 | 99ALOKA                              | A12108-008             | User Definition Vein7    |
| Upr Vein.8  | 99ALOKA                              | A12108-009             | User Definition Vein8    |

## CID 12109 Lower Extremity Arteries

| Label                     | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)   |
|---------------------------|--------------------------------------|------------------------|----------------------------|
| CIA                       | SRT                                  | T-46710                | Common Iliac Artery        |
| ATA                       | SRT                                  | T-47700                | Anterior Tibial Artery     |
| CFA                       | SRT                                  | T-47400                | Common Femoral Artery      |
| DPA                       | SRT                                  | T-47741                | Dorsalis Pedis Artery      |
| EIA                       | SRT                                  | T-46910                | External Iliac Artery      |
| IIA                       | SRT                                  | T-46740                | Internal Iliac Artery      |
| PerA                      | SRT                                  | T-47630                | Peroneal Artery            |
| PopA                      | SRT                                  | T-47500                | Popliteal Artery           |
| PTA                       | SRT                                  | T-47600                | Posterior Tibial Artery    |
| DFA (Deep Femoral Artery) | SRT                                  | T-47440                | Profunda Femoris Artery    |
| SFA                       | SRT                                  | T-47403                | Superficial Femoral Artery |
| Lwr Art.1                 | 99ALOKA                              | A12109-001             | User Definition Artery1    |
| Lwr Art.2                 | 99ALOKA                              | A12109-002             | User Definition Artery2    |

| <b>Label</b>     | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| <i>Lwr Art.3</i> | 99ALOKA                                         | A12109-003                        | <i>User Definition Artery3</i>      |
| <i>Lwr Art.4</i> | 99ALOKA                                         | A12109-004                        | <i>User Definition Artery4</i>      |
| <i>Lwr Art.5</i> | 99ALOKA                                         | A12109-005                        | <i>User Definition Artery5</i>      |
| <i>Lwr Art.6</i> | 99ALOKA                                         | A12109-006                        | <i>User Definition Artery6</i>      |
| <i>Lwr Art.7</i> | 99ALOKA                                         | A12109-007                        | <i>User Definition Artery7</i>      |
| <i>Lwr Art.8</i> | 99ALOKA                                         | A12109-008                        | <i>User Definition Artery8</i>      |

CID 12110 Lower Extremity Veins

| <b>Label</b>            | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|-------------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| ATV                     | SRT                                             | T-49630                           | Anterior Tibial Vein                |
| CFV                     | SRT                                             | G-035B                            | Common Femoral Vein                 |
| CIV                     | SRT                                             | T-48920                           | Common Iliac Vein                   |
| EIV                     | SRT                                             | T-48930                           | External Iliac Vein                 |
| GSV                     | SRT                                             | T-49530                           | Great Saphenous Vein                |
| LSV                     | SRT                                             | T-49550                           | Lesser Saphenous Vein               |
| PerV                    | SRT                                             | T-49650                           | Peroneal Vein                       |
| PopV                    | SRT                                             | T-49640                           | Popliteal Vein                      |
| PTV                     | SRT                                             | T-49620                           | Posterior Tibial Vein               |
| DFV (Deep Femoral Vein) | SRT                                             | T-49660                           | Profunda Femoris Vein               |
| SFV                     | SRT                                             | G-035A                            | Superficial Femoral Vein            |
| IIV                     | SRT                                             | T-48940                           | Internal iliac vein                 |
| <i>Lwr Vein.1</i>       | 99ALOKA                                         | A12110-001                        | <i>User Definition Vein1</i>        |
| <i>Lwr Vein.2</i>       | 99ALOKA                                         | A12110-002                        | <i>User Definition Vein2</i>        |
| <i>Lwr Vein.3</i>       | 99ALOKA                                         | A12110-003                        | <i>User Definition Vein3</i>        |
| <i>Lwr Vein.4</i>       | 99ALOKA                                         | A12110-004                        | <i>User Definition Vein4</i>        |
| <i>Lwr Vein.5</i>       | 99ALOKA                                         | A12110-005                        | <i>User Definition Vein5</i>        |
| <i>Lwr Vein.6</i>       | 99ALOKA                                         | A12110-006                        | <i>User Definition Vein6</i>        |
| <i>Lwr Vein.7</i>       | 99ALOKA                                         | A12110-007                        | <i>User Definition Vein7</i>        |
| <i>Lwr Vein.8</i>       | 99ALOKA                                         | A12110-008                        | <i>User Definition Vein8</i>        |

## CID 12111 Abdominal Arteries (lateral)

(Local Version: 20070424)

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| CIA   | SRT                                     | T-46710                   | Common Iliac Artery         |

## CID 12112 Abdominal Arteries (unilateral)

| Label               | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)    |
|---------------------|-----------------------------------------|---------------------------|--------------------------------|
| A-Ao                | SRT                                     | T-42000                   | Aorta                          |
| CA                  | SRT                                     | T-46400                   | Celiac Axis                    |
| CHA                 | SRT                                     | T-46421                   | Common Hepatic Artery          |
| IMA                 | SRT                                     | T-46520                   | Inferior Mesenteric Artery     |
| HA, Right           | SRT                                     | T-46423                   | Right Branch of Hepatic Artery |
| HA, Left            | SRT                                     | T-46427                   | Left Branch of Hepatic Artery  |
| SA                  | SRT                                     | T-46460                   | Splenic Artery                 |
| SMA<br>Prandial SMA | SRT                                     | T-46510                   | Superior Mesenteric Artery     |
| Artery1             | 99ALOKA                                 | A12112-001                | User Definition Artery1        |
| Artery2             | 99ALOKA                                 | A12112-002                | User Definition Artery2        |
| Artery3             | 99ALOKA                                 | A12112-003                | User Definition Artery3        |

## CID 12114 Abdominal Veins (unilateral)

| Label                                   | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)                   |
|-----------------------------------------|-----------------------------------------|---------------------------|-----------------------------------------------|
| Main PV                                 | SRT                                     | T-48810                   | Portal Vein                                   |
| Lt.PV                                   | SRT                                     | T-4881F                   | Left Main Branch of Portal Vein               |
| Rt.PV                                   | SRT                                     | T-4882A                   | Right Main Branch of Portal Vein              |
| Prox Shunt<br>Mid Shunt<br>Distal Shunt | SRT                                     | G-036C                    | Transjugular Intrahepatic Portosystemic Shunt |

## CID 12115 Renal Vessels

| Label   | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|---------|-----------------------------------------|---------------------------|-----------------------------|
| Renal-A | SRT                                     | T-46600                   | Renal Artery                |

CID 12116 Vessel Segment Modifiers

| Label      | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|------------|--------------------------------------|------------------------|--------------------------|
| - (distal) | SRT                                  | G-A119                 | Distal                   |
| - (mid)    | SRT                                  | G-A188                 | Mid-longitudinal         |
| - (prox)   | SRT                                  | G-A118                 | Proximal                 |

CID 12117 Vessel Branch Modifiers

(Local Version: 20200424)

| Label                 | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-----------------------|--------------------------------------|------------------------|--------------------------|
| - ( <i>Farwall</i> )  | 99ALOKA                              | A12117-001             | <i>far wall</i>          |
| - ( <i>Nearwall</i> ) | 99ALOKA                              | A12117-002             | <i>near wall</i>         |

CID 12120 Blood Velocity Measurements

(Local Version: 20150515, 20151201)

| Label                          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)    |
|--------------------------------|--------------------------------------|------------------------|-----------------------------|
| EDV                            | LN                                   | 11653-3                | End Diastolic Velocity      |
| PSV<br>pV                      | LN                                   | 11726-7                | Peak Systolic Velocity      |
| MnV                            | LN                                   | 11692-1                | Time averaged peak velocity |
| DV( <i>Ductus Venosus</i> ), a | 99ALOKA                              | A12120-001             | <i>atrial contraction</i>   |

CID 12121 Vascular Indices and Ratios

(Local Version: 20070424, 20150515, 20151201)

| Label                            | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                  |
|----------------------------------|--------------------------------------|------------------------|-----------------------------------------------------------|
| ACC                              | LN                                   | 20167-3                | Acceleration Index                                        |
| PI                               | LN                                   | 12008-9                | Pulsatility Index                                         |
| RI                               | LN                                   | 12023-8                | Resistivity Index                                         |
| S/D                              | LN                                   | 12144-2                | Systolic to Diastolic Velocity Ratio                      |
| AccT/FlowT                       | 99ALOKA                              | A12121-001             | <i>Acceleration Time to Flow Time Ratio</i>               |
| DV( <i>Ductus Venosus</i> ), a/S | 99ALOKA                              | A12121-002             | <i>atrial contraction to Systolic peak Velocity Ratio</i> |
| DV( <i>Ductus Venosus</i> ), S/a | 99ALOKA                              | A12121-003             | <i>Systolic peak to atrial contraction Velocity Ratio</i> |

| <b>Label</b>       | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>                              |
|--------------------|---------------------------------------------|-------------------------------|--------------------------------------------------------------|
| AccT               | LN                                          | 20168-1                       | Acceleration Time                                            |
| FlowT              | 99ALOKA                                     | A12122-001                    | Flow Time                                                    |
| 1 max-IMT<br>1 IMT | 99ALOKA                                     | A12122-002                    | Intima-media thickness 1                                     |
| 2 max-IMT<br>2 IMT | 99ALOKA                                     | A12122-003                    | Intima-media thickness 2                                     |
| 3 max-IMT<br>3 IMT | 99ALOKA                                     | A12122-004                    | Intima-media thickness 3                                     |
| 4 max-IMT          | 99ALOKA                                     | A12122-005                    | Intima-media thickness 4                                     |
| 5 max-IMT          | 99ALOKA                                     | A12122-006                    | Intima-media thickness 5                                     |
| 6 max-IMT          | 99ALOKA                                     | A12122-007                    | Intima-media thickness 6                                     |
| 7 max-IMT          | 99ALOKA                                     | A12122-008                    | Intima-media thickness 7                                     |
| 8 max-IMT          | 99ALOKA                                     | A12122-009                    | Intima-media thickness 8                                     |
| 9 max-IMT          | 99ALOKA                                     | A12122-010                    | Intima-media thickness 9                                     |
| 10 max-IMT         | 99ALOKA                                     | A12122-011                    | Intima-media thickness 10                                    |
| max-IMT            | 99ALOKA                                     | A12122-012                    | Maximum Intima-media thickness                               |
| mean-IMT           | 99ALOKA                                     | A12122-013                    | Mean Intima-media thickness                                  |
| D-max              | 99ALOKA                                     | A12122-014                    | Maximum Intima-media thickness at diastole                   |
| D-min              | 99ALOKA                                     | A12122-015                    | Minimum Intima-media thickness at diastole                   |
| D-average<br>D-avg | 99ALOKA                                     | A12122-016                    | Average Intima-media thickness at diastole                   |
| D-C10              | 99ALOKA                                     | A12122-017                    | IMT-C10 at diastole                                          |
| D-SD               | 99ALOKA                                     | A12122-018                    | Standard Deviation of Intima-media thickness at diastole     |
| D-points           | 99ALOKA                                     | A12122-019                    | Measured number of Intima-media thickness points at diastole |
| D-width            | 99ALOKA                                     | A12122-020                    | Width of ROI at diastole                                     |
| S-max              | 99ALOKA                                     | A12122-021                    | Maximum Intima-media thickness at systole                    |
| S-min              | 99ALOKA                                     | A12122-022                    | Minimum Intima-media thickness at systole                    |
| S-average<br>S-avg | 99ALOKA                                     | A12122-023                    | Average Intima-media thickness at systole                    |
| S-C10              | 99ALOKA                                     | A12122-024                    | IMT-C10 at systole                                           |
| S-SD               | 99ALOKA                                     | A12122-025                    | Standard Deviation of Intima-media thickness at systole      |
| S-points           | 99ALOKA                                     | A12122-026                    | Measured number of Intima-media thickness points at systole  |

| <b>Label</b>      | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>                |
|-------------------|---------------------------------------------|-------------------------------|------------------------------------------------|
| <i>S-width</i>    | 99ALOKA                                     | A12122-027                    | <i>Width of ROI at systole</i>                 |
| <i>D-1 IMT</i>    | 99ALOKA                                     | A12122-028                    | <i>Intima-media thickness 1 at diastole</i>    |
| <i>D-2 IMT</i>    | 99ALOKA                                     | A12122-029                    | <i>Intima-media thickness 2 at diastole</i>    |
| <i>D-3 IMT</i>    | 99ALOKA                                     | A12122-030                    | <i>Intima-media thickness 3 at diastole</i>    |
| <i>D-mean-IMT</i> | 99ALOKA                                     | A12122-031                    | <i>Mean Intima-media thickness at diastole</i> |
| <i>S-1 IMT</i>    | 99ALOKA                                     | A12122-032                    | <i>Intima-media thickness 1 at systole</i>     |
| <i>S-2 IMT</i>    | 99ALOKA                                     | A12122-033                    | <i>Intima-media thickness 2 at systole</i>     |
| <i>S-3 IMT</i>    | 99ALOKA                                     | A12122-034                    | <i>Intima-media thickness 3 at systole</i>     |
| <i>S-mean-IMT</i> | 99ALOKA                                     | A12122-035                    | <i>Mean Intima-media thickness at systole</i>  |
| <i>C10</i>        | 99ALOKA                                     | A12122-036                    | <i>IMT-C10</i>                                 |

CID 12124 Renal Ratios

| <b>Label</b> | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>   |
|--------------|---------------------------------------------|-------------------------------|-----------------------------------|
| RAR          | LN                                          | 33869-9                       | Renal Artery/Aorta velocity ratio |

CID 12140 Pelvic Vasculature Anatomical Location

| <b>Label</b> | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> |
|--------------|---------------------------------------------|-------------------------------|---------------------------------|
| UmA          | SRT                                         | T-F1810                       | Umbilical Artery                |
| UtA          | SRT                                         | T-46820                       | Uterine Artery                  |

CID 12141 Fetal Vasculature Anatomical Location

(Local Version: 20150515)

| <b>Label</b>              | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> |
|---------------------------|---------------------------------------------|-------------------------------|---------------------------------|
| MCA                       | SRT                                         | T-45600                       | Middle Cerebral Artery          |
| D-Ao                      | SRT                                         | T-D0765                       | Descending Aorta                |
| <i>DV(Ductus Venosus)</i> | 99ALOKA                                     | A12141-001                    | <i>Ductus Venosus</i>           |

| Label                          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                  |
|--------------------------------|--------------------------------------|------------------------|-----------------------------------------------------------|
| LVIDd                          | LN                                   | 29436-3                | Left Ventricle Internal End Diastolic Dimension           |
| LVIDs                          | LN                                   | 29438-9                | Left Ventricle Internal Systolic Dimension                |
| FS                             | LN                                   | 18051-3                | Left Ventricular Fractional Shortening                    |
| IVSd                           | LN                                   | 18154-5                | Interventricular Septum Diastolic Thickness               |
| IVS/LVPW                       | LN                                   | 18155-2                | Interventricular Septum to Posterior Wall Thickness Ratio |
| %IVSTF                         | LN                                   | 18054-7                | Interventricular Septum % Thickening                      |
| IVSs                           | LN                                   | 18158-6                | Interventricular Septum Systolic Thickness                |
| %PWTF                          | LN                                   | 18053-9                | Left Ventricle Posterior Wall % Thickening                |
| LVLd<br>LVL4d<br>LVL2d         | LN                                   | 18077-8                | Left Ventricle diastolic major axis                       |
| LVLs<br>LVL4s<br>LVL2s         | LN                                   | 18076-0                | Left Ventricle systolic major axis                        |
| LVPWs                          | LN                                   | 18156-0                | Left Ventricle Posterior Wall Systolic Thickness          |
| LVPWd                          | LN                                   | 18152-9                | Left Ventricle Posterior Wall Diastolic Thickness         |
| LVSLMVd<br>LVSLMV <sub>s</sub> | 99ALOKA                              | A12201-001             | Left Ventricular Short Axis Length at Mitral Valve        |
| thick                          | 99ALOKA                              | A12201-002             | Mean Wall Thickness                                       |
| EDL<br>EDL <sub>epi</sub>      | 99ALOKA                              | A12201-003             | Left Ventricular End Diastolic Length                     |
| b                              | 99ALOKA                              | A12201-004             | Short Axis Radius Calculated from Short Axis Cavity Area  |

## CID 12202 Left Ventricle Volume

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)              |
|-------|--------------------------------------|------------------------|---------------------------------------|
| EDV   | LN                                   | 18026-5                | Left Ventricular End Diastolic Volume |
| ESV   | LN                                   | 18148-7                | Left Ventricular End Systolic Volume  |
| EF    | LN                                   | 18043-0                | Left Ventricular Ejection Fraction    |

| Label                                            | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                        |
|--------------------------------------------------|--------------------------------------|------------------------|-----------------------------------------------------------------|
| LVM                                              | LN                                   | 18087-7                | Left Ventricle Mass                                             |
| IRT                                              | LN                                   | 18071-1                | Left Ventricular Isovolumic Relaxation Time                     |
| LVM/BSA                                          | 99ALOKA                              | A12203-001             | Left Ventricular Mass Index                                     |
| %difD<br>%difS                                   | 99ALOKA                              | A12203-003             | Long Axis(at End Diastole or End Systole) Length % Difference   |
| mFS                                              | 99ALOKA                              | A12203-004             | Midwall Fractional Shortening                                   |
| areaEF <sub>lx</sub>                             | 99ALOKA                              | A12203-005             | Area Ejection Fraction at Long Axis View                        |
| areaEF <sub>sx</sub>                             | 99ALOKA                              | A12203-006             | Area Ejection Fraction at Short Axis View                       |
| MVCF                                             | 99ALOKA                              | A12203-009             | Mean Velocity of Circumferential Fiber Shortening               |
| LVDF <sub>T</sub>                                | 99ALOKA                              | A12203-010             | Left Ventricle Diastole Filling Time                            |
| E/Em                                             | 99ALOKA                              | A12203-011             | Ratio of MV E-Wave Peak Vel. to Early Diastolic Myocardium Vel. |
| LVDF <sub>T</sub> /RR                            | 99ALOKA                              | A12203-012             | Ratio of Left Ventricle Diastole Filling Time to R-R interval   |
| GLS<br>GLS(ap4C)<br>GLS(ap2C)<br>GLS3<br>GLS(3P) | 99ALOKA                              | A12203-013             | Global Longitudinal Strain                                      |
| LVOT/AV(pV)                                      | 99ALOKA                              | A12203-014             | pV Ratio of LVOT to AV                                          |
| LVOT/AV(VTI)                                     | 99ALOKA                              | A12203-015             | VTI Ratio of LVOT to AV                                         |
| LVMi1.7(Devereux)<br>LVMi1.7(ASE)                | 99ALOKA                              | A12203-016             | Left Ventricle Mass adjusted by Height(1.7)                     |
| LVMi2.16(Devereux)<br>LVMi2.16(ASE)              | 99ALOKA                              | A12203-017             | Left Ventricle Mass adjusted by Height(2.16)                    |
| LVMi2.7(Devereux)<br>LVMi2.7(ASE)                | 99ALOKA                              | A12203-018             | Left Ventricle Mass adjusted by Height(2.7)                     |
| ML3d<br>ML3s<br>ML4d<br>ML4s<br>ML2d<br>ML2s     | 99ALOKA                              | A12203-019             | Myocardial Length                                               |

| Label             | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                            |
|-------------------|--------------------------------------|------------------------|-----------------------------------------------------|
| RVDd              | LN                                   | 20304-2                | Right Ventricular Internal Diastolic Dimension      |
| RVDs              | LN                                   | 20305-9                | Right Ventricular Internal Systolic Dimension       |
| RVSP              | SRT                                  | G-0380                 | Right Ventricular Peak Systolic Pressure            |
| RVAWd             | LN                                   | 18153-7                | Right Ventricular Anterior Wall Diastolic Thickness |
| RVAWs             | LN                                   | 18157-8                | Right Ventricular Anterior Wall Systolic Thickness  |
| <i>RV Area ED</i> | 99ALOKA                              | A12204-001             | <i>Right Ventricular Diastolic Area</i>             |
| <i>RV Area ES</i> | 99ALOKA                              | A12204-002             | <i>Right Ventricular Systolic Area</i>              |
| <i>RV FAC</i>     | 99ALOKA                              | A12204-003             | <i>Right Ventricular Fractional Area Change</i>     |
| <i>RVDd base</i>  | 99ALOKA                              | A12204-004             | <i>End-diastolic Basal Diameter</i>                 |
| <i>RVDd mid</i>   | 99ALOKA                              | A12204-005             | <i>End-diastolic Mid-cavity Diameter</i>            |
| <i>RVLd</i>       | 99ALOKA                              | A12204-006             | <i>Right Ventricular End-diastolic Length</i>       |
| <i>RV WT</i>      | 99ALOKA                              | A12204-007             | <i>Right Ventricular Wall Thickness</i>             |

| Label                        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                           |
|------------------------------|--------------------------------------|------------------------|--------------------------------------------------------------------|
| LADs                         | LN                                   | 29469-4                | Left Atrium Antero-posterior Systolic Dimension                    |
| LADs/AODd                    | LN                                   | 17985-3                | Left Atrium to Aortic Root Ratio                                   |
| LALA4s                       | LN                                   | 17977-0                | Left Atrium Systolic Area                                          |
| <i>LADd</i>                  | 99ALOKA                              | A12205-001             | <i>Left Atrium Antero-posterior Diastolic Dimension</i>            |
| <i>LAL4s</i><br><i>LAL2s</i> | 99ALOKA                              | A12205-002             | <i>Left Atrium systolic major axis</i>                             |
| <i>LALA2s</i>                | 99ALOKA                              | A12205-003             | <i>Left Atrium Systolic Area by Apical two chamber</i>             |
| <i>LA Volume</i>             | 99ALOKA                              | A12205-004             | <i>Left Atrial Volume</i>                                          |
| <i>LA Volume/BSA</i>         | 99ALOKA                              | A12205-005             | <i>Left Atrial Volume divided by Body Surface Area</i>             |
| <i>%difS</i>                 | 99ALOKA                              | A12205-006             | <i>Long Axis at End Systole Length % Difference of Left Atrium</i> |
| <i>LAS4s</i><br><i>LAS2s</i> | 99ALOKA                              | A12205-007             | <i>Left Atrium systolic minor axis</i>                             |

## CID 12206 Echocardiography Right Atrium

(Local Version: 20060807)

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     |
|----------------|--------------------------------------|------------------------|--------------------------------------------------------------|
| RAP            | LN                                   | 18070-3                | Right Atrium Systolic Pressure                               |
| RALA4s         | LN                                   | 17988-7                | Right Atrium Systolic Area                                   |
| RAL4s<br>RAL2s | 99ALOKA                              | A12206-001             | Right Atrium systolic major axis                             |
| RALA2s         | 99ALOKA                              | A12206-002             | Right Atrium Systolic Area by Apical two chamber             |
| RA Volume      | 99ALOKA                              | A12206-003             | Right Atrial Volume                                          |
| RA Volume/BSA  | 99ALOKA                              | A12206-004             | Right Atrial Volume divided by Body Surface Area             |
| %difS          | 99ALOKA                              | A12206-005             | Long Axis at End Systole Length % Difference of Right Atrium |
| RAS4s<br>RAS2s | 99ALOKA                              | A12206-006             | Right Atrium systolic minor axis                             |

## CID 12207 Echocardiography Mitral Valve

(Local Version: 20060807, 20200424)

| Label         | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     |
|---------------|--------------------------------------|------------------------|--------------------------------------------------------------|
| aV            | LN                                   | 17978-8                | Mitral Valve A-Wave Peak Velocity                            |
| eV            | LN                                   | 18037-2                | Mitral Valve E-Wave Peak Velocity                            |
| E/A (Doppler) | LN                                   | 18038-0                | Mitral Valve E to A Ratio                                    |
| DecT          | SRT                                  | G-0384                 | Mitral Valve E-Wave Deceleration Time                        |
| E-Fslop       | LN                                   | 18040-6                | Mitral Valve E-F Slope by M-Mode                             |
| EPSS          | LN                                   | 18036-4                | Mitral Valve EPSS, E wave                                    |
| Adur          | SRT                                  | G-0385                 | Mitral Valve A-Wave Duration                                 |
| dP/dt         | LN                                   | 18035-6                | Mitral Regurgitation dP/dt derived from Mitral Reg. velocity |
| C-Eamp        | 99ALOKA                              | A12207-001             | Mitral Valve Dimension of C point to E point by M-Mode       |
| C-Aamp        | 99ALOKA                              | A12207-002             | Mitral Valve Dimension of C point to A point by M-Mode       |
| A/E           | 99ALOKA                              | A12207-003             | Mitral Valve C-A Dimension to C-E Dimension Ratio by M-Mode  |
| E/A           | 99ALOKA                              | A12207-004             | Mitral Valve C-E Dimension to C-A Dimension Ratio by M-Mode  |
| Edur          | 99ALOKA                              | A12207-005             | Mitral Valve E-Wave Duration                                 |
| A/E (Doppler) | 99ALOKA                              | A12207-006             | Mitral Valve A to E Ratio                                    |
| EPG           | 99ALOKA                              | A12207-007             | Mitral Valve E-wave Peak Pressure Gradient                   |

| Label                                     | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                              |
|-------------------------------------------|--------------------------------------|------------------------|-------------------------------------------------------|
| APG                                       | 99ALOKA                              | A12207-008             | Mitral Valve A-wave Peak Pressure Gradient            |
| PVAdur-Adur                               | 99ALOKA                              | A12207-009             | Subtraction of A-wave Duration from PVA-wave Duration |
| VTI(MR)                                   | 99ALOKA                              | A12207-010             | Velocity Time Integral of Mitral Regurgitant Flow     |
| MR PISA                                   | 99ALOKA                              | A12207-012             | Mitral Regurgitant Proximal Isovelocity Surface Area  |
| SV(MV)                                    | 99ALOKA                              | A12207-013             | Flow Volume of Mitral Valve Annulus in Flow           |
| Reg. Volume                               | 99ALOKA                              | A12207-014             | Mitral valve Regurgitant volume                       |
| Em                                        | LN                                   | 78185-6                | MV med ann Peak e' wave US.TDI                        |
| IVA(l)<br>IVA(s)                          | 99ALOKA                              | A12207-015             | Isovolumic Acceleration                               |
| av e'                                     | 99ALOKA                              | A12207-016             | Average of e'(l) and e'(s)                            |
| D-Eamp                                    | 99ALOKA                              | A12207-017             | D-E amplitude                                         |
| MAPSE                                     | 99ALOKA                              | A12207-018             | Mitral Annular Plane Systolic Excursion               |
| Ann Area                                  | 99ALOKA                              | A12207-019             | Mitral Annulus Area                                   |
| Ann PLAX                                  | 99ALOKA                              | A12207-020             | Mitral Annulus Diameter PLAX                          |
| e'/a'(l)<br>e'/a'(s)                      | 99ALOKA                              | A12207-021             | Mitral Valve Ea to Aa Ratio                           |
| IVC Vel(m)<br>IVC Vel(l)<br>IVC Vel(s)    | 99ALOKA                              | A12207-022             | Peak MV Annular Velocity in Isovolumic Contraction    |
| E/av e'                                   | 99ALOKA                              | A12207-023             | Ratio of MV Peak Velocity to LV av e'                 |
| TE-e'<br>TE-e'(m)<br>TE-e'(l)<br>TE-e'(s) | 99ALOKA                              | A12207-024             | Time E to e'                                          |
| IVC TPV(m)<br>IVC TPV(l)<br>IVC TPV(s)    | 99ALOKA                              | A12207-025             | Time to peak velocity in isovolumic contractuion      |
| SV (MV)                                   | 99ALOKA                              | A12207-026             | Flow Volume of Mitral Valve Annulus in Flow (1)       |

CID 12208 Echocardiography Tricuspid Valve (Local Version: 20060807, 20140307, 20200424)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)      |
|-------|--------------------------------------|------------------------|-------------------------------|
| dP/dt | LN                                   | 18034-9                | Tricuspid Regurgitation dP/dt |

| <b>Label</b>                                             | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>                                       |
|----------------------------------------------------------|---------------------------------------------|-------------------------------|-----------------------------------------------------------------------|
| <i>C-Eamp</i>                                            | 99ALOKA                                     | A12208-001                    | <i>Tricuspid Valve Dimension of C point to E point by M-Mode</i>      |
| <i>C-Aamp</i>                                            | 99ALOKA                                     | A12208-002                    | <i>Tricuspid Valve Dimension of C point to A point by M-Mode</i>      |
| <i>D-Eamp</i>                                            | 99ALOKA                                     | A12208-003                    | <i>Tricuspid Valve Dimension of D point to E point by M-Mode</i>      |
| <i>E-Fslop</i>                                           | 99ALOKA                                     | A12208-004                    | <i>Tricuspid Valve Velocity from E point to F point by M-Mode</i>     |
| <i>D-Eslop</i>                                           | 99ALOKA                                     | A12208-005                    | <i>Tricuspid Valve Velocity from D point to E point by M-Mode</i>     |
| <i>A/E</i>                                               | 99ALOKA                                     | A12208-006                    | <i>Tricuspid Valve C-A Dimension to C-E Dimension Ratio by M-Mode</i> |
| <i>E/A</i>                                               | 99ALOKA                                     | A12208-007                    | <i>Tricuspid Valve C-E Dimension to C-A Dimension Ratio by M-Mode</i> |
| <i>VTI(TR)</i>                                           | 99ALOKA                                     | A12208-008                    | <i>Velocity Time Integral of Tricuspid Regurgitant Flow</i>           |
| <i>TR PISA</i>                                           | 99ALOKA                                     | A12208-010                    | <i>Tricuspid Regurgitant Proximal Isovelocity Surface Area</i>        |
| <i>SV(TV)</i>                                            | 99ALOKA                                     | A12208-011                    | <i>Flow Volume of Tricuspid Valve Annulus in Flow</i>                 |
| <i>TAPSE</i>                                             | 99ALOKA                                     | A12208-012                    | <i>Tricuspid Annular Plane Systolic Excursion</i>                     |
| <i>A/E</i>                                               | 99ALOKA                                     | A12208-013                    | <i>Peak A wave/Peak E wave by US</i>                                  |
| <i>Edur</i>                                              | 99ALOKA                                     | A12208-014                    | <i>E-Wave Duration</i>                                                |
| <i>EPG</i>                                               | 99ALOKA                                     | A12208-015                    | <i>E-Wave Peak Gradient</i>                                           |
| <i>TV E/e'(s)</i>                                        | 99ALOKA                                     | A12208-016                    | <i>Ratio of TV Peak Velocity to RV Peak Tissue Velocity E-Wave</i>    |
| <i>Ann Vmax e'</i><br><i>TV e'(s)</i><br><i>TV e'(l)</i> | 99ALOKA                                     | A12208-017                    | <i>Right Ventricular Peak Early Diastolic Tissue Velocity</i>         |
| <i>TV s'(s)</i><br><i>TV s'(l)</i>                       | 99ALOKA                                     | A12208-018                    | <i>Right Ventricular Peak Systolic Tissue Velocity</i>                |
| <i>Ann Vmax a'</i><br><i>TV a'(s)</i><br><i>TV a'(l)</i> | 99ALOKA                                     | A12208-020                    | <i>RV Peak Diastolic Tissue Velocity During Atrial Systole</i>        |
| <i>dt</i>                                                | 99ALOKA                                     | A12208-021                    | <i>Time Difference between v1 and v2</i>                              |
| <i>Ann Area</i>                                          | 99ALOKA                                     | A12208-022                    | <i>Tricuspid Annulus Area</i>                                         |
| <i>TV C-Odur</i>                                         | 99ALOKA                                     | A12208-023                    | <i>Tricuspid Valve Closure to Opening Time</i>                        |

| <b>Label</b>           | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b>                                  |
|------------------------|---------------------------------------------|-------------------------------|------------------------------------------------------------------|
| ET                     | LN                                          | 18042-2                       | Pulmonic Valve Ejection Time                                     |
| AccT/ET                | SRT                                         | G-0388                        | Ratio of Pulmonic Valve Acceleration Time to Ejection Time       |
| <i>A wave amp</i>      | 99ALOKA                                     | A12209-001                    | <i>Pulmonic Valve Dimension of F point to A point by M-Mode</i>  |
| <i>B-Camp</i>          | 99ALOKA                                     | A12209-002                    | <i>Pulmonic Valve Dimension of B point to C point by M-Mode</i>  |
| <i>E-Fslop</i>         | 99ALOKA                                     | A12209-003                    | <i>Pulmonic Valve Velocity from E point to F point by M-Mode</i> |
| <i>B-Cslop</i>         | 99ALOKA                                     | A12209-004                    | <i>Pulmonic Valve Velocity from B point to C point by M-Mode</i> |
| VTI(PR)                | 99ALOKA                                     | A12209-005                    | Velocity Time Integral of Pulmonic Regurgitant Flow              |
| PR PISA                | 99ALOKA                                     | A12209-007                    | Pulmonic Regurgitant Proximal Isovelocity Surface Area           |
| <i>Ann diam trans</i>  | 99ALOKA                                     | A12209-009                    | <i>Transverse Annulus Diameter</i>                               |
| <i>dur diastole</i>    | 99ALOKA                                     | A12209-010                    | <i>Duration of Diastole</i>                                      |
| <i>PR index</i>        | 99ALOKA                                     | A12209-011                    | <i>Ratio of PR dur to PR Index</i>                               |
| <i>PR VCW/Ann diam</i> | 99ALOKA                                     | A12209-012                    | <i>Ratio of PR VCW to Ann diam a-p</i>                           |
| PADP<br>sPAP<br>mPAP   | 99ALOKA                                     | A12209-013                    | Pulmonary Artery Pressure                                        |
| PR dur                 | 99ALOKA                                     | A12209-014                    | Pulmonary Valve Regurgitation Duration                           |
| PR VCW                 | 99ALOKA                                     | A12209-015                    | Pulmonary Valve Regurgitation Vena Contracta Diameter            |
| Ann Area               | 99ALOKA                                     | A12209-016                    | Pulmonary Annulus Area                                           |
| VR                     | 99ALOKA                                     | A12209-017                    | Velocity Ratio of RVOT velocity to Pulmonic Valve velocity       |

| <b>Label</b>                  | <b>Coding Scheme Designator (0008,0102)</b> | <b>Code Value (0008,0100)</b> | <b>Code Meaning (0008,0104)</b> |
|-------------------------------|---------------------------------------------|-------------------------------|---------------------------------|
| MPA MPG<br>LPA MPG<br>RPA MPG | LN                                          | 20256-4                       | Mean Gradient                   |

| <b>Label</b>                  | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|-------------------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| MPA PG<br>LPA PG<br>RPA PG    | LN                                              | 20247-3                           | Peak Gradient                       |
| MPA MnV<br>LPA MnV<br>RPA MnV | LN                                              | 20352-1                           | Mean Velocity                       |
| MPA pV<br>LPA pV<br>RPA pV    | LN                                              | 11726-7                           | Peak Velocity                       |
| MPA VTI<br>LPA VTI<br>RPA VTI | LN                                              | 20354-7                           | Velocity Time Integral              |

CID 12211 Echocardiography Aortic Valve

(Local Version: 20060807, 20200424)

| <b>Label</b>           | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>                      |
|------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------------|
| ET                     | LN                                              | 18041-4                           | Aortic Valve Ejection Time                               |
| AccT/ET                | SRT                                             | G-0382                            | Ratio of Aortic Valve Acceleration Time to Ejection Time |
| VTI(AR)                | 99ALOKA                                         | A12211-001                        | Velocity Time Integral of Aortic Regurgitant Flow        |
| AR PISA                | 99ALOKA                                         | A12211-003                        | Aortic Regurgitant Proximal Isovelocity Surface Area     |
| AV Ann diam<br>Ao Ring | 99ALOKA                                         | A12211-004                        | Aortic Annulus Diameter                                  |
| Ann dmax               | 99ALOKA                                         | A12211-005                        | Aortic Annulus Maximum Diameter                          |
| Ann dmin               | 99ALOKA                                         | A12211-006                        | Aortic Annulus Minimum Diameter                          |
| Jet<br>A/LVOT(CSA)     | 99ALOKA                                         | A12211-007                        | Aortic Regurgitant Jet Area/LVOT Area                    |
| Jet W/LVOT             | 99ALOKA                                         | A12211-008                        | Aortic Regurgitant Jet Width/LVOT Width                  |
| AR VCW                 | 99ALOKA                                         | A12211-009                        | Aortic Regurgitation Vena Contracta Width                |
| Ann Area               | 99ALOKA                                         | A12211-010                        | Aortic Valve Annulus Area                                |
| VR                     | 99ALOKA                                         | A12211-011                        | Velocity Ratio of LVOT to AV                             |

| <b>Label</b> | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>  |
|--------------|-------------------------------------------------|-----------------------------------|--------------------------------------|
| AODd<br>AODs | LN                                              | 18015-8                           | Aortic Root Diameter                 |
| MPG          | LN                                              | 20256-4                           | Mean Gradient                        |
| PG           | LN                                              | 20247-3                           | Peak Gradient                        |
| MnV          | LN                                              | 20352-1                           | Mean Velocity                        |
| pV           | LN                                              | 11726-7                           | Peak Velocity                        |
| VTI          | LN                                              | 20354-7                           | Velocity Time Integral               |
| Sinus of V   | 99ALOKA                                         | A12212-001                        | Sinus of Valsalva                    |
| Sino tube    | 99ALOKA                                         | A12212-002                        | Sinotubular junction                 |
| Aortic Arch  | 99ALOKA                                         | A12212-003                        | Aortic Arch                          |
| Asc Aorta    | 99ALOKA                                         | A12212-004                        | Ascending Aorta                      |
| Desc Aorta   | 99ALOKA                                         | A12212-005                        | Descending Aorta                     |
| Abdom Aorta  | 99ALOKA                                         | A12212-006                        | Abdominal Aorta                      |
| Hepatic Vein | 99ALOKA                                         | A12212-007                        | Hepatic Vein                         |
| Ao STJ       | 99ALOKA                                         | A12212-008                        | Aortic Sinotubular Junction Diameter |
| Ao SV        | 99ALOKA                                         | A12212-009                        | Aortic Sinuses of Valsalva Diameter  |

| <b>Label</b> | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>                      |
|--------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------------|
| PVS          | LN                                              | 29450-4                           | Pulmonary Vein Systolic Peak Velocity                    |
| PVD          | LN                                              | 29451-2                           | Pulmonary Vein Diastolic Peak Velocity                   |
| S/D          | LN                                              | 29452-0                           | Pulmonary Vein Systolic to Diastolic Ratio               |
| PVA          | LN                                              | 29453-8                           | Pulmonary Vein Atrial Contraction Reversal Peak Velocity |
| PVAdur       | SRT                                             | G-038B                            | Pulmonary Vein A-Wave Duration                           |
| D-VTI        | SRT                                             | G-038D                            | Pulmonary Vein D-Wave Velocity Time Integral             |
| S-VTI        | SRT                                             | G-038C                            | Pulmonary Vein S-Wave Velocity Time Integral             |
| DecT         | 99ALOKA                                         | A12214-001                        | Deceleration Time of D-Wave Flow                         |
| SF           | 99ALOKA                                         | A12214-002                        | Systolic Fraction                                        |

CID 12215 Echocardiography Vena Cavae

| Label     | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)      |
|-----------|--------------------------------------|------------------------|-------------------------------|
| Insp Exp  | LN                                   | 18006-7                | Inferior Vena Cava Diameter   |
| %Collapse | LN                                   | 18050-5                | Inferior Vena Cava % Collapse |

CID 12217 Echocardiography Cardiac Shunt

(Local Version: 20200424)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                         |
|-------|--------------------------------------|------------------------|------------------------------------------------------------------|
| Qp/Qs | LN                                   | 29462-9                | Pulmonary-to-Systemic Shunt Flow Ratio                           |
| Qp-Qs | 99ALOKA                              | A12217-001             | <i>Pulmonary minus Systemic Shunt Flow - Doppler Volume Flow</i> |

CID 12218 Echocardiography Congenital

(Local Version: 20200424)

| Label       | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                               |
|-------------|--------------------------------------|------------------------|--------------------------------------------------------|
| ASD Ao Rim  | 99ALOKA                              | A12218-001             | <i>Atrial Septal Defect Rim diameter(Ao Position)</i>  |
| ASD SVC Rim | 99ALOKA                              | A12218-002             | <i>Atrial Septal Defect Rim diameter(SVC Position)</i> |
| ASD IVC Rim | 99ALOKA                              | A12218-003             | <i>Atrial Septal Defect Rim diameter(IVC Position)</i> |

CID 12220 Echocardiography Common Measurements

(Local Version: 20060807)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| HR    | LN                                   | 8867-4                 | Heart rate               |
| RR    | DCM                                  | 122182                 | <i>R-R interval</i>      |

CID 12221 Flow Direction

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | SRT                                  | R-42047                | Antegrade Flow           |
| -     | SRT                                  | R-42E61                | Retrograde Flow          |

| Label                                                                                          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)        |
|------------------------------------------------------------------------------------------------|--------------------------------------|------------------------|---------------------------------|
| MR Vol<br>TR Vol<br>PR Vol<br>AR Vol                                                           | LN                                   | 33878-0                | Volume Flow                     |
| MR Flow Rt<br>TR Flow Rt<br>PR Flow Rt<br>AR Flow Rt                                           | LN                                   | 34141-2                | Peak Instantaneous Flow Rate    |
| CSA(LVOT)<br>CSA(RVOT)<br>MVA<br>MVA(P1/2T)<br>AVA<br>MR EROA<br>TR EROA<br>PR EROA<br>AR EROA | SRT                                  | G-038E                 | Cardiovascular Orifice Area     |
| LVOT<br>RVOT<br>MV Diam<br>TV Diam<br>AVDs                                                     | SRT                                  | G-038F                 | Cardiovascular Orifice Diameter |
| MR RF<br>TR RF<br>PR RF<br>AR RF                                                               | SRT                                  | G-0390                 | Regurgitant Fraction            |
| pV                                                                                             | LN                                   | 11726-7                | Peak Velocity                   |
| MnV                                                                                            | LN                                   | 20352-1                | Mean Velocity                   |
| PG                                                                                             | LN                                   | 20247-3                | Peak Gradient                   |
| MPG                                                                                            | LN                                   | 20256-4                | Mean Gradient                   |
| VTI<br>VTI(MVannu)<br>VTI(TVannu)                                                              | LN                                   | 20354-7                | Velocity Time Integral          |
| P1/2T                                                                                          | LN                                   | 20280-4                | Pressure Half-Time              |
| AccT                                                                                           | LN                                   | 20168-1                | Acceleration Time               |

| <b>Label</b>                                                             | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>     |
|--------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------|-----------------------------------------|
| PEP                                                                      | 99ALOKA                                         | A12222-001                        | Pre-Ejection Period                     |
| PEP/ET                                                                   | 99ALOKA                                         | A12222-002                        | PEP/ET                                  |
| FlowT                                                                    | 99ALOKA                                         | A12222-003                        | Flow Time                               |
| PISA Radius                                                              | 99ALOKA                                         | A12222-004                        | Radius of Flow Convergence              |
| MR Alias V (Vr)<br>TR Alias V (Vr)<br>PR Alias V (Vr)<br>AR Alias V (Vr) | 99ALOKA                                         | A12222-005                        | Aliasing Velocity                       |
| Angle (PISA)                                                             | 99ALOKA                                         | A12222-006                        | Proximal Isovelocity Surface Area Angle |
| AR VC Diam<br>MR VC Diam<br>TR VC Diam<br>PR VC Diam                     | 99ALOKA                                         | A12222-007                        | Vena Contracta Diameter                 |
| sMnV<br>dMnV                                                             | 99ALOKA                                         | A12222-008                        | Mean Velocity (1)                       |
| sMnV<br>dMnV                                                             | 99ALOKA                                         | A12222-009                        | Mean Velocity (2)                       |
| PG1                                                                      | 99ALOKA                                         | A12222-010                        | Peak Gradient 1                         |
| PG2                                                                      | 99ALOKA                                         | A12222-011                        | Peak Gradient 2                         |
| PG1                                                                      | 99ALOKA                                         | A12222-012                        | Peak Pressure Gradient 1                |
| PG2                                                                      | 99ALOKA                                         | A12222-013                        | Peak Pressure Gradient 2                |
| ACC                                                                      | 99ALOKA                                         | A12222-014                        | Acceleration Slope (1)                  |
| ACC                                                                      | 99ALOKA                                         | A12222-015                        | Acceleration Slope (2)                  |
| AccT                                                                     | 99ALOKA                                         | A12222-016                        | Acceleration Time (1)                   |
| AccT                                                                     | 99ALOKA                                         | A12222-017                        | Acceleration Time (2)                   |
| Em                                                                       | 99ALOKA                                         | A12222-018                        | Ann Peak e' wave (1)                    |
| Em                                                                       | 99ALOKA                                         | A12222-019                        | Ann Peak e' wave (2)                    |
| Ann-Ost Lt.                                                              | 99ALOKA                                         | A12222-020                        | Annulus-Ostium Left diameter            |
| Ann-Ost Rt.                                                              | 99ALOKA                                         | A12222-021                        | Annulus-Ostium Right diameter           |
| Ann diam a-p                                                             | 99ALOKA                                         | A12222-022                        | Anterior-Posterior Annulus Diameter     |
| APG                                                                      | 99ALOKA                                         | A12222-023                        | A-Wave Peak Gradient                    |
| V1<br>v1                                                                 | 99ALOKA                                         | A12222-024                        | Blood Flow Velocity 1                   |
| v1                                                                       | 99ALOKA                                         | A12222-025                        | Blood Flow Velocity 1(1)                |
| v1                                                                       | 99ALOKA                                         | A12222-026                        | Blood Flow Velocity 1(2)                |
| V2<br>v2                                                                 | 99ALOKA                                         | A12222-027                        | Blood Flow Velocity 2                   |

| <b>Label</b>                                               | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b>                      |
|------------------------------------------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------------------|
| v2                                                         | 99ALOKA                                         | A12222-028                        | Blood Flow Velocity 2(1)                                 |
| v2                                                         | 99ALOKA                                         | A12222-029                        | Blood Flow Velocity 2(2)                                 |
| V1                                                         | 99ALOKA                                         | A12222-030                        | Blood Flow Velocity at Peak Pressure Gradient 1          |
| V2                                                         | 99ALOKA                                         | A12222-031                        | Blood Flow Velocity at Peak Pressure Gradient 2          |
| AVAi(pV)<br>PVAi(VTI)<br>PVAi(pV)<br>TVAi(VTI)<br>TVAi(pV) | 99ALOKA                                         | A12222-032                        | Cardiovascular Orifice Area Index                        |
| Ann diam comm<br>Ann diam comm                             | 99ALOKA                                         | A12222-033                        | Commissural Diameter                                     |
| PGed<br>PRend PG                                           | 99ALOKA                                         | A12222-034                        | Diastolic Pressure Gradient                              |
| Em/Am                                                      | 99ALOKA                                         | A12222-035                        | Ea to Aa Ratio                                           |
| Em/Am                                                      | 99ALOKA                                         | A12222-036                        | Ea to Aa Ratio (1)                                       |
| Em/Am                                                      | 99ALOKA                                         | A12222-037                        | Ea to Aa Ratio (2)                                       |
| dPEP                                                       | 99ALOKA                                         | A12222-038                        | Interventricular Dyssynchrony - Interventricular Delay   |
| IVCT<br>RIVCT                                              | 99ALOKA                                         | A12222-039                        | Isovolumic Contraction Time                              |
| RIVCT                                                      | 99ALOKA                                         | A12222-040                        | Isovolumic Contraction Time (1)                          |
| RIVCT                                                      | 99ALOKA                                         | A12222-041                        | Isovolumic Contraction Time (2)                          |
| IVRT<br>RIVRT                                              | 99ALOKA                                         | A12222-042                        | Isovolumic Relaxation Time                               |
| RIVRT                                                      | 99ALOKA                                         | A12222-043                        | Isovolumic Relaxation Time (1)                           |
| RIVRT                                                      | 99ALOKA                                         | A12222-044                        | Isovolumic Relaxation Time (2)                           |
| Am                                                         | 99ALOKA                                         | A12222-045                        | Peak Diastolic Tissue Velocity During Atrial Systole     |
| Am                                                         | 99ALOKA                                         | A12222-046                        | Peak Diastolic Tissue Velocity During Atrial Systole (1) |
| Am                                                         | 99ALOKA                                         | A12222-047                        | Peak Diastolic Tissue Velocity During Atrial Systole (2) |
| Sm1                                                        | 99ALOKA                                         | A12222-048                        | Peak Systolic Tissue Velocity 1                          |
| Sm1                                                        | 99ALOKA                                         | A12222-049                        | Peak Systolic Tissue Velocity 1(1)                       |
| Sm1                                                        | 99ALOKA                                         | A12222-050                        | Peak Systolic Tissue Velocity 1(2)                       |
| Sm2                                                        | 99ALOKA                                         | A12222-051                        | Peak Systolic Tissue Velocity 2                          |
| Sm2                                                        | 99ALOKA                                         | A12222-052                        | Peak Systolic Tissue Velocity 2(1)                       |

| Label          | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                             |
|----------------|--------------------------------------|------------------------|----------------------------------------------------------------------|
| <i>Sm2</i>     | 99ALOKA                              | A12222-053             | <i>Peak Systolic Tissue Velocity 2(2)</i>                            |
| <i>E/Em</i>    | 99ALOKA                              | A12222-054             | <i>Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (1)</i> |
| <i>E/Em</i>    | 99ALOKA                              | A12222-055             | <i>Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (2)</i> |
| <i>Jet A</i>   | 99ALOKA                              | A12222-056             | <i>Regurgitation Jet Area</i>                                        |
| <i>Jet H</i>   | 99ALOKA                              | A12222-057             | <i>Regurgitation Jet Height</i>                                      |
| <i>Jet W</i>   | 99ALOKA                              | A12222-058             | <i>Regurgitation Jet Width</i>                                       |
| <i>dt time</i> | 99ALOKA                              | A12222-059             | <i>Time</i>                                                          |
| <i>time</i>    | 99ALOKA                              | A12222-060             | <i>Time (1)</i>                                                      |
| <i>time</i>    | 99ALOKA                              | A12222-061             | <i>Time (2)</i>                                                      |

CID 12223 Echocardiography Stroke Volume Origin

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)      |
|-------|--------------------------------------|------------------------|-------------------------------|
| -     | SNM3 <sup>1</sup>                    | T-32650                | Left Ventricle Outflow Tract  |
| -     | SNM3                                 | T-32550                | Right Ventricle Outflow Tract |

Note: 1. Actually "SRT" described in CID 12243 is included in Structured Report, not "SNM3".

CID 12224 Ultrasound Image Modes

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | SRT                                  | G-03A2                 | 2D mode                  |
| -     | SRT                                  | G-0394                 | M mode                   |
| -     | SRT                                  | R-409E4                | Doppler Pulsed           |
| -     | SRT                                  | R-409E3                | Doppler Continuous Wave  |

CID 12226 Echocardiography Image View

(Local Version: 20200424)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                         |
|-------|--------------------------------------|------------------------|--------------------------------------------------|
| -     | SRT                                  | G-A19B                 | Apical two chamber                               |
| -     | SRT                                  | G-A19C                 | Apical four chamber                              |
| -     | SRT                                  | G-0398                 | Parasternal short axis at the aortic valve level |

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                             |
|-------|--------------------------------------|------------------------|------------------------------------------------------|
| -     | SRT                                  | G-039A                 | Parasternal short axis at the Mitral Valve level     |
| -     | SRT                                  | G-039B                 | Parasternal short axis at the Papillary Muscle level |
| -     | 99ALOKA                              | A12226-001             | Apical three chamber                                 |

CID 12227 Echocardiography Measurement Method

(Local Version: 20200424)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                              |
|-------|--------------------------------------|------------------------|-------------------------------------------------------|
| -     | 99ALOKA                              | A12227-001             | Valsalva                                              |
| -     | 99ALOKA                              | A12227-002             | Mean Pulmonary Arterial Pressure                      |
| -     | 99ALOKA                              | A12227-003             | Left Ventricle Mass for Pediatric                     |
| -     | 99ALOKA                              | A12227-004             | Left Ventricle Mass for Pediatric by Modified Simpson |

CID 12228 Volume Methods

(Local Version: 20190123, 20200424)

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     |
|-------|--------------------------------------|------------------------|--------------------------------------------------------------|
| -     | DCM                                  | 125204                 | Area-Length Biplane                                          |
| -     | DCM                                  | 125205                 | Area-Length Single Plane                                     |
| -     | DCM                                  | 125206                 | Cube Method                                                  |
| -     | DCM                                  | 125207                 | Method of Disks, Biplane                                     |
| -     | DCM                                  | 125208                 | Method of Disks, Single Plane                                |
| -     | DCM                                  | 125209                 | Teichholz                                                    |
| -     | 99ALOKA                              | A12228-001             | Method of Disks, Single Plane with Apical two chamber        |
| -     | 99ALOKA                              | A12228-002             | Gibson                                                       |
| -     | 99ALOKA                              | A12228-003             | Modified Simpson's                                           |
| -     | 99ALOKA                              | A12228-004             | Bullet                                                       |
| -     | 99ALOKA                              | A12228-005             | Method of Disks, Biplane of LA                               |
| -     | 99ALOKA                              | A12228-006             | Method of Disks, Single Plane with Apical four chamber of LA |
| -     | 99ALOKA                              | A12228-007             | Method of Disks, Single Plane with Apical two chamber of LA  |
| -     | 99ALOKA                              | A12228-008             | Method of Disks, Biplane of RA                               |

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                     |
|-------|--------------------------------------|------------------------|--------------------------------------------------------------|
| -     | 99ALOKA                              | A12228-009             | Method of Disks, Single Plane with Apical four chamber of RA |
| -     | 99ALOKA                              | A12228-010             | Method of Disks, Single Plane with Apical two chamber of RA  |
| -     | 99ALOKA                              | A12228-011             | Area-Length Biplane of Left Atrium                           |
| -     | 99ALOKA                              | A12228-012             | Area-Length Biplane of Right Atrium                          |
| -     | 99ALOKA                              | A12228-013             | 2D Speckle Tracking, Single Plane                            |
| -     | 99ALOKA                              | A12228-014             | 2D Speckle Tracking, Multi Plane                             |
| -     | 99ALOKA                              | A12228-015             | Method of Disks, 3 planes                                    |

#### CID 12229 Area Methods

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                      |
|-------|--------------------------------------|------------------------|-----------------------------------------------|
| -     | DCM                                  | 125210                 | Area by Pressure Half-Time                    |
| -     | DCM                                  | 125215                 | Continuity Equation by Velocity Time Integral |
| -     | DCM                                  | 125216                 | Proximal Isovelocity Surface Area             |
| -     | DCM                                  | 125220                 | Planimetry                                    |
| -     | 99ALOKA                              | A12228-013             | 2D Speckle Tracking, Single Plane             |
| -     | 99ALOKA                              | A12228-014             | 2D Speckle Tracking, Multi Plane              |

#### CID 12230 Gradient Methods

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| -     | DCM                                  | 125218                 | Simplified Bernoulli     |

#### CID 12231 Volume Flow Methods

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)          |
|-------|--------------------------------------|------------------------|-----------------------------------|
| -     | DCM                                  | 125219                 | Doppler Volume Flow               |
| -     | DCM                                  | 125216                 | Proximal Isovelocity Surface Area |

## CID 12232 Myocardium Mass Methods

(Local Version: 20060807)

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)        |
|-------|-----------------------------------------|---------------------------|------------------------------------|
| -     | DCM                                     | 125221                    | Left Ventricle Mass by M-mode      |
| -     | 99ALOKA                                 | A12232-001                | Left Ventricle Mass by Area Length |
| -     | 99ALOKA                                 | A12232-002                | Left Ventricle Mass by Penn        |

## CID 12233 Cardiac Phase

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | SRT                                     | F-32020                   | Systole                     |
| -     | SRT                                     | F-32011                   | End Diastole                |
| -     | DCM                                     | 109070                    | End Systole                 |
| -     | SRT                                     | R-FAB5B                   | End Systole                 |

## CID 12234 Respiration State

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | SRT                                     | F-20010                   | During Inspiration          |
| -     | SRT                                     | F-20020                   | During Expiration           |

## CID 12235 Mitral Valve Anatomic Sites

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | SRT                                     | T-35313                   | Mitral Annulus              |

## CID 12236 Echo Anatomic Sites

(Local Version: 20200424)

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)            |
|-------|-----------------------------------------|---------------------------|----------------------------------------|
| -     | 99ALOKA                                 | A12236-001                | Proximal Right Ventricle Outflow Tract |
| -     | 99ALOKA                                 | A12236-002                | Distal Right Ventricle Outflow Tract   |
| -     | 99ALOKA                                 | A12236-003                | Septal Mitral Annulus                  |
| -     | 99ALOKA                                 | A12236-004                | Septal Tricuspid Annulus               |
| -     | 99ALOKA                                 | A12236-005                | Lateral Tricuspid Annulus              |

| <b>Label</b> | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|--------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| -            | 99ALOKA                                         | A12236-006                        | <i>Epicardium</i>                   |
| -            | 99ALOKA                                         | A12236-007                        | <i>Ascending Aorta</i>              |
| -            | 99ALOKA                                         | A12236-008                        | <i>Descending Aorta</i>             |
| -            | 99ALOKA                                         | A12236-009                        | <i>Transverse Aorta</i>             |
| -            | 99ALOKA                                         | A12236-010                        | <i>Abdominal Aorta</i>              |
| -            | 99ALOKA                                         | A12236-011                        | <i>Patent Foramen Ovale</i>         |
| -            | 99ALOKA                                         | A12236-012                        | <i>Patent Ductus Arteriosus</i>     |
| -            | 99ALOKA                                         | A12236-013                        | <i>Main Pulmonary Artery</i>        |
| -            | 99ALOKA                                         | A12236-014                        | <i>Left Pulmonary Artery</i>        |
| -            | 99ALOKA                                         | A12236-015                        | <i>Right Pulmonary Artery</i>       |
| -            | 99ALOKA                                         | A12236-016                        | <i>Aortic Valve Annulus</i>         |

CID 12239 Cardiac Output Properties

| <b>Label</b>                  | <b>Coding Scheme Designator<br/>(0008,0102)</b> | <b>Code Value<br/>(0008,0100)</b> | <b>Code Meaning<br/>(0008,0104)</b> |
|-------------------------------|-------------------------------------------------|-----------------------------------|-------------------------------------|
| SV<br>SV(LVOT)<br>SV(RVOT)    | SRT                                             | F-32120                           | Stroke Volume                       |
| CO<br>CO(LVOT)<br>CO(RVOT)    | SRT                                             | F-32100                           | Cardiac Output                      |
| COI<br>COI(LVOT)<br>COI(RVOT) | SRT                                             | F-32110                           | Cardiac Index                       |
| SVI<br>SVI(LVOT)<br>SVI(RVOT) | SRT                                             | F-00078                           | Stroke Index                        |

## CID 12240 Left Ventricle Area

(Local Version: 20200424)

| Label                                                   | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)                                           |
|---------------------------------------------------------|-----------------------------------------|---------------------------|-----------------------------------------------------------------------|
| LVLAs<br>LVLA4s<br>LVLA2s<br>LVSAMVs<br>LVSAPMs         | SRT                                     | G-0374                    | Left Ventricular Systolic Area                                        |
| LVLAd<br>LVLA4d<br>LVLA2d<br>LVSAMVd<br>LVSAPMd<br>Aend | SRT                                     | G-0375                    | Left Ventricular Diastolic Area                                       |
| areaEF<br>areaEF4<br>areaEF2<br>areaEFmv<br>areaEFpm    | SRT                                     | G-0376                    | Left Ventricular Fractional Area Change                               |
| Aepi                                                    | SRT                                     | G-0379                    | Left Ventricle Epicardial Diastolic Area, psax<br>pap view            |
| <i>LVAd PM Endo</i>                                     | <i>99ALOKA</i>                          | <i>A12240-001</i>         | <i>Left Ventricular Endocardial Diastolic Area,<br/>psax pap view</i> |

## CID 12241 Tricuspid Valve Finding Sites

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | SRT                                     | T-35111                   | Tricuspid Annulus           |

## CID 12242 Aortic Valve Finding Sites

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|-------|-----------------------------------------|---------------------------|-----------------------------|
| -     | SRT                                     | T-35410                   | Aortic Valve Ring           |

CID 12243 Left Ventricle Finding Sites

| Label | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104)  |
|-------|-----------------------------------------|---------------------------|------------------------------|
| -     | SRT                                     | T-32650                   | Left Ventricle Outflow Tract |

CID ALOKA\_001 OB Original Vascular Measurement Group

This Context Group is private definition.

| Label   | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|---------|-----------------------------------------|---------------------------|-----------------------------|
| OB Dop1 | 99ALOKA                                 | ALOKA_001-001             | OB User Definition Doppler1 |
| OB Dop2 | 99ALOKA                                 | ALOKA_001-002             | OB User Definition Doppler2 |
| OB Dop3 | 99ALOKA                                 | ALOKA_001-003             | OB User Definition Doppler3 |

CID ALOKA\_002 User Defined Equation Group

This Context Group is private definition.

| Label                                  | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|----------------------------------------|-----------------------------------------|---------------------------|-----------------------------|
| User defined equation result parameter | 99ALOKA                                 | ALOKA_002-001             | Calculated result           |
| User defined equation parameter        | 99ALOKA                                 | ALOKA_002-002             | Equation parameter          |

CID ALOKA\_003 Common Measurement Items

This Context Group is private definition.

| Label                                       | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|---------------------------------------------|-----------------------------------------|---------------------------|-----------------------------|
| Length(Gallbladder)<br>Length(Renal Volume) | SRT                                     | G-D7FE                    | Length                      |
| Width(Gallbladder)<br>Width(Renal Volume)   | SRT                                     | G-A220                    | Width                       |

| Label                                     | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                                         |
|-------------------------------------------|--------------------------------------|------------------------|------------------------------------------------------------------|
| b(Spleen Index) Wall Thickness(GB Wall-T) | LN                                   | 59089-3                | Thickness                                                        |
| Aorta Diam<br>PV Diam                     | SRT                                  | M-02550                | Diameter                                                         |
| a(Spleen Index)                           | SRT                                  | G-A185                 | Long axis                                                        |
| A-P(Renal Volume)                         | SRT                                  | R-10206                | Antero-posterior                                                 |
| Area(SOL1,2)                              | SRT                                  | G-A166                 | Area                                                             |
| Volume(SOL1,2)<br>Volume(Renal Volume)    | SRT                                  | G-D705                 | Volume                                                           |
| Vessel(%STEN O Diam)                      | SRT                                  | G-0364                 | Vessel Lumen Diameter                                            |
| Vessel(%STEN O Area)                      | SRT                                  | G-0366                 | Vessel Lumen Cross-Sectional Area                                |
| <i>Residual(%STE NO Diam)</i>             | 99ALOKA                              | ALOKA_003-001          | <i>Residual Vessel Lumen Diameter</i>                            |
| <i>%Diam Steno (%STENO Diam)</i>          | 99ALOKA                              | ALOKA_003-002          | <i>Stenosis Ratio calculated by Vessel and Residual Diameter</i> |
| <i>Residual(%STE NO Area)</i>             | 99ALOKA                              | ALOKA_003-003          | <i>Residual Vessel Lumen Cross-Sectional Area</i>                |
| <i>%Area Steno (%STENO Area)</i>          | 99ALOKA                              | ALOKA_003-004          | <i>Stenosis Ratio calculated by Vessel and Residual Area</i>     |
| <i>Diam1(SOL1,2)</i>                      | 99ALOKA                              | ALOKA_003-005          | <i>Diameter1</i>                                                 |
| <i>Diam2(SOL1,2)</i>                      | 99ALOKA                              | ALOKA_003-006          | <i>Diameter2</i>                                                 |
| <i>Diam3(SOL1,2)</i>                      | 99ALOKA                              | ALOKA_003-007          | <i>Diameter3</i>                                                 |
| <i>L1(Liver)</i>                          | 99ALOKA                              | ALOKA_003-008          | <i>Length1</i>                                                   |
| <i>L2(Liver)</i>                          | 99ALOKA                              | ALOKA_003-009          | <i>Length2</i>                                                   |

CID ALOKA\_004 Echocardiography Analysis Measurement Items

(Local Version: 20190123)

This Context Group is private definition.

| Label       | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------------|--------------------------------------|------------------------|--------------------------|
| Peak Global | 99ALOKA                              | ALOKA_004-001          | Peak GLS                 |
| Peak Global | 99ALOKA                              | ALOKA_004-002          | Peak GLS of Overlay      |

| Label            | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)                 |
|------------------|--------------------------------------|------------------------|------------------------------------------|
| -                | 99ALOKA                              | ALOKA_004-003          | Averaged Peak GLS                        |
| L. Strain(EN)[%] | 99ALOKA                              | ALOKA_004-004          | GLS-Sel.                                 |
| L. Strain(EN)[%] | 99ALOKA                              | ALOKA_004-005          | GLS-Sel. of Overlay                      |
| Time from R      | 99ALOKA                              | ALOKA_004-006          | Time from R to Peak GLS phase            |
| Time from R      | 99ALOKA                              | ALOKA_004-007          | Time from R to Peak GLS phase of Overlay |
| Time from R      | 99ALOKA                              | ALOKA_004-008          | Time from R to GLS-Sel. phase            |
| Time from R      | 99ALOKA                              | ALOKA_004-009          | Time from R to GLS-Sel. phase of Overlay |

CID ALOKA\_005 Abdomen Original Measurements Group (Local Version: 20190301)

This Context Group is private definition.

| Label        | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104)       |
|--------------|--------------------------------------|------------------------|--------------------------------|
| Gallbladder  | SRT                                  | T-63000                | Gall Bladder                   |
| Liver        | SRT                                  | T-62000                | Liver                          |
| Pancreas     | SRT                                  | T-65000                | Pancreas                       |
| P-Duct       | SRT                                  | T-65010                | Pancreatic duct                |
| Spleen       | SRT                                  | T-C3000                | Spleen                         |
| %STENO Diam  | 99ALOKA                              | ALOKA_005-001          | Vessel Diameter Stenosis Ratio |
| %STENO Area  | 99ALOKA                              | ALOKA_005-002          | Vessel Area Stenosis Ratio     |
| GB Wall-T    | 99ALOKA                              | ALOKA_005-003          | Gall Bladder Wall              |
| CBD          | 99ALOKA                              | ALOKA_005-004          | Common Bile Duct               |
| Renal Volume | 99ALOKA                              | ALOKA_005-005          | Renal Volume                   |
| SOL1         | 99ALOKA                              | ALOKA_005-006          | Space Occupying Lesion1        |
| SOL2         | 99ALOKA                              | ALOKA_005-007          | Space Occupying Lesion2        |
| Aorta Diam   | 99ALOKA                              | ALOKA_005-008          | Aorta Diameter                 |
| PV Diam      | 99ALOKA                              | ALOKA_005-009          | Portal Vein Diameter           |

CID ALOKA\_006 Abdomen Original Measurement Items (Local Version: 20190301)

This Context Group is private definition.

| Label | Coding Scheme Designator (0008,0102) | Code Value (0008,0100) | Code Meaning (0008,0104) |
|-------|--------------------------------------|------------------------|--------------------------|
| CBD   | 99ALOKA                              | ALOKA_006-001          | Common Bile Duct         |
| Head  | 99ALOKA                              | ALOKA_006-002          | Pancreas Head            |

| Label   | Coding Scheme Designator<br>(0008,0102) | Code Value<br>(0008,0100) | Code Meaning<br>(0008,0104) |
|---------|-----------------------------------------|---------------------------|-----------------------------|
| Body    | 99ALOKA                                 | ALOKA_006-003             | Pancreas Body               |
| Tail    | 99ALOKA                                 | ALOKA_006-004             | Pancreas Tail               |
| P-Duct  | 99ALOKA                                 | ALOKA_006-005             | Pancreas Duct               |
| SI(AXB) | 99ALOKA                                 | ALOKA_006-006             | Spleen Index                |

#### 8.6.4 Private Code Definitions

This section specifies the meanings of private codes used in Structured Reports.

##### Private Code Definitions (Non-Advanced Cardiac, Coding Scheme Designator: "99ALOKA", Coding Scheme Version: not specified)

| Code Value | Code Meaning                                                                | Definition                                                                                                                                                                                                                                                                                                                                                                                             |
|------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A-001      | Pre-prandial                                                                | Pre-prandial                                                                                                                                                                                                                                                                                                                                                                                           |
| A-002      | OB Original Fetal Measurement Group                                         | Concept Name of TID ALOKA-5000 row1.                                                                                                                                                                                                                                                                                                                                                                   |
| A-003      | OB-GYN Original Measurement Group                                           | Concept Name of TID ALOKA-5001 row1.                                                                                                                                                                                                                                                                                                                                                                   |
| A-004      | User Defined Equation                                                       | Concept Name of TID ALOKA-301 row1.                                                                                                                                                                                                                                                                                                                                                                    |
| A-005      | User Defined Equation Group Number                                          | Concept Name of TID ALOKA-301 row2.                                                                                                                                                                                                                                                                                                                                                                    |
| A-006      | User Defined Equation Group Name                                            | Concept Name of TID ALOKA-301 row3.                                                                                                                                                                                                                                                                                                                                                                    |
| A-007      | User Defined Parameter Number                                               | Concept Name of TID ALOKA-302 row2.                                                                                                                                                                                                                                                                                                                                                                    |
| A-008      | User Defined Parameter Name                                                 | Concept Name of TID ALOKA-302 row3.                                                                                                                                                                                                                                                                                                                                                                    |
| A-009      | User Defined Equation                                                       | Concept Name of TID ALOKA-302 row4.                                                                                                                                                                                                                                                                                                                                                                    |
| A-010      | OB-GYN User Defined Measurement Group                                       | Concept Name of TID ALOKA-5002 row1                                                                                                                                                                                                                                                                                                                                                                    |
| A-011      | Original Measurement Group of Abodomen                                      | Concept Name of TID ALOKA-5100 row2                                                                                                                                                                                                                                                                                                                                                                    |
| A3663-001  | BSA =<br>$0.0003207 \times WT^{(0.7285 - 0.0188 \log(WT))} \times HT^{0.3}$ | BSA = $0.0003207 \times WT^{(0.7285 - 0.0188 \log(WT))} \times HT^{0.3}$<br>Body Surface Area computed from patient height(HT) and weight(WT). The formula is derived by Boyd :<br>$BSA = 0.0003207 \times WT[g]^{(0.7285 - 0.0188 \log(WT[g]))} \times HT[cm]^{0.3}$<br><br>Reference :<br>Boyd E. The growth of the surface area of the human body. Minneapolis:university of Minnesota Press, 1935. |

| Code Value | Code Meaning                              | Definition                                                                                                                                                                                                                             |
|------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A3663-002  | BSA =<br>0.007358*HT^0.725*WT^0.425       | BSA = 0.007358*HT^0.725*WT^0.425<br>Body Surface Area computed from patient height(HT) and weight(WT). The formula is derived by Shintani :<br>BSA = 0.007358*HT[cm]^0.725*WT[kg]^0.425<br><br>Reference :<br>臨床検査法概要 29版, 金井泉 著, 金原出版 |
| A12004-001 | Cephalic Index(BPDo/OFD0)                 | Cephalic Index = BPDo/OFD0                                                                                                                                                                                                             |
| A12004-002 | LVW/HW                                    | LVW/HW                                                                                                                                                                                                                                 |
| A12005-001 | Binocular Distance                        | Binocular Distance                                                                                                                                                                                                                     |
| A12005-002 | Biparietal Diameter outer-to-outer        | Biparietal Diameter outer-to-outer                                                                                                                                                                                                     |
| A12005-003 | Fetal Trunk Cross Sectional Area          | Fetal Trunk Cross Sectional Area                                                                                                                                                                                                       |
| A12005-004 | Length of Vertebrae                       | Length of Vertebrae                                                                                                                                                                                                                    |
| A12005-005 | Occipital-Frontal Diameter outer-to-outer | Occipital-Frontal Diameter outer-to-outer                                                                                                                                                                                              |
| A12005-006 | Abdominal Diameter                        | Abdominal Diameter                                                                                                                                                                                                                     |
| A12005-007 | Thoracic Length                           | Thoracic Length                                                                                                                                                                                                                        |
| A12005-008 | Head Circumference for Merz, Hansmann     | Head Circumference for Merz, Hansmann                                                                                                                                                                                                  |
| A12005-009 | Amniotic Fluid Volume                     | Amniotic Fluid Volume                                                                                                                                                                                                                  |
| A12005-010 | Head Circumference for BMUS               | Head Circumference for BMUS                                                                                                                                                                                                            |
| A12005-011 | Abdominal Circumference for BMUS          | Abdominal Circumference for BMUS                                                                                                                                                                                                       |
| A12005-012 | Maximum Vertical Pocket                   | "Ultrasonography in Obstetrics and Gynecology 5th Edition"<br>Peter Callen<br>November 28, 2007. pp.760-767                                                                                                                            |
| A12006-001 | Nasal Bone Length                         | Nasal Bone Length                                                                                                                                                                                                                      |
| A12009-001 | Early Embryonic Size                      | Early Embryonic Size                                                                                                                                                                                                                   |
| A12009-002 | Gestational Sac Diameter 1                | Gestational Sac Diameter 1                                                                                                                                                                                                             |
| A12009-003 | Gestational Sac Diameter 2                | Gestational Sac Diameter 2                                                                                                                                                                                                             |
| A12009-004 | Gestational Sac Diameter 3                | Gestational Sac Diameter 3                                                                                                                                                                                                             |
| A12009-005 | Mean Gestational Sac Diameter             | Mean Gestational Sac Diameter                                                                                                                                                                                                          |
| A12011-001 | Cervix Width                              | Cervix Width                                                                                                                                                                                                                           |
| A12011-002 | Cervix Antero-Posterior Diameter          | Cervix Antero-Posterior Diameter                                                                                                                                                                                                       |
| A12011-003 | Pre Void Bladder Length                   | Pre Void Bladder Length                                                                                                                                                                                                                |

| Code Value | Code Meaning                                | Definition                                                                                                                                                                                                                                                               |
|------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12011-004 | Pre Void Bladder Antero-Posterior Diameter  | Pre Void Bladder Antero-Posterior Diameter                                                                                                                                                                                                                               |
| A12011-005 | Pre Void Bladder Width                      | Pre Void Bladder Width                                                                                                                                                                                                                                                   |
| A12011-006 | Pre Void Bladder Volume                     | Pre Void Bladder Volume                                                                                                                                                                                                                                                  |
| A12011-007 | Post Void Bladder Length                    | Post Void Bladder Length                                                                                                                                                                                                                                                 |
| A12011-008 | Post Void Bladder Antero-Posterior Diameter | Post Void Bladder Antero-Posterior Diameter                                                                                                                                                                                                                              |
| A12011-009 | Post Void Bladder Width                     | Post Void Bladder Width                                                                                                                                                                                                                                                  |
| A12011-010 | Post Void Bladder Volume                    | Post Void Bladder Volume                                                                                                                                                                                                                                                 |
| A12011-011 | Bladder Void Volume                         | Bladder Void Volume                                                                                                                                                                                                                                                      |
| A12013-001 | AC, Campbell                                | Materials provided: Professor Campbell's Group at Harris Birthright Centre, King's College Hospital                                                                                                                                                                      |
| A12013-002 | AC, Chitty 1994                             | Charts of fetal size : 3. Abdominal measurements Lyn S Chitty. British Journal of Obstetrics and Gynaecology February 1994, Vol.101, pp.125-131 <Table 4>                                                                                                                |
| A12013-003 | AC, Hadlock 1982                            | Fetal Abdominal Circumference as a Predictor of Menstrual Age. Hadlock FP, Deter RL, Harrist RB, Park SK. AJR 139:367-370, August 1982                                                                                                                                   |
| A12013-005 | AC, Merz 1996                               | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-006 | APAD, Merz 1996                             | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-007 | AxT, Tokyo                                  | 胎児生理の総合的解析による新しい周産期管理へのアプローチ. 東京大学 岡井 崇他. 日本産婦人科学会雑誌 第38巻 第8号 別冊                                                                                                                                                                                                         |
| A12013-008 | BD, Jeanty 1984                             | Estimation of Gestational Age from Measurements of Fetal Long Bones. Jeanty P, Rodesch F, Delbeke D, Dumont JE. Journal of Ultrasound in Medicine 3:75-79, February 1984                                                                                                 |
| A12013-009 | BPD, Campbell                               | Materials provided: Professor Campbell's Group at Harris Birthright Centre, King's College Hospital                                                                                                                                                                      |
| A12013-010 | BPD-oi, Chitty 1994                         | Charts of fetal size : 2. Head measurements. Lyn S Chitty. British Journal of Obstetrics and Gynaecology February 1994, Vol.101, pp.35-43 <Table 4,7>                                                                                                                    |
| A12013-011 | BPD, Hadlock 1982                           | Fetal Biparietal Diameter : A Critical Re-evaluation of the Relation to Menstrual Age by means of Real-time Ultrasound. Hadlock FP, Deter RL, Harrist RB, Park SK : Journal of Ultrasound in Medicine 1:97, 97-104                                                       |

| Code Value | Code Meaning        | Definition                                                                                                                                                                                                                                                               |
|------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12013-012 | BPD, Merz 1996      | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-013 | BPD, Sabbagha 1976  | Sonar Biparietal Diameter : I. Analysis of Percentile Growth Differences in Two Normal Populations Using Same Methodology. Sabbagha RE, Barton FB, Barton BA. American Journal of Obstetrics and Gynecology 126:479-484, October 1976                                    |
| A12013-016 | CRL, JSUM 2003      | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                                           |
| A12013-017 | CRL, Tokyo          | 胎児生理の総合的解析による新しい周産期管理へのアプローチ. 東京大学 岡井 崇他. 日本産婦人科学会雑誌 第38巻 第8号 別冊                                                                                                                                                                                                         |
| A12013-018 | EES, Goldstein 1994 | Endovaginal Ultrasonographic Measurement of Early Embryonic Size as a Means of Assessing Gestational Age. Steven R. Goldstein, MD, Robert Wolfson, MD, PhD. J. Ultrasound Med. 13:27-31, 1994. <Figure 3>                                                                |
| A12013-019 | FIB, Merz 1996      | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-020 | FL, Campbell        | Materials provided: Professor Campbell's Group at Harris Birthright Centre, King's College Hospital                                                                                                                                                                      |
| A12013-021 | FL, Chitty 1994     | Charts of fetal size : 4. Femur length. Lyn S Chitty. British Journal of Obstetrics and Gynaecology February 1994, Vol.101, pp.132-135 <Table 2>                                                                                                                         |
| A12013-022 | FL, Hadlock 1982    | Fetal Femur Length as a Predictor of Menstrual Age : Sonographically Measured. Hadlock FP, Deter RL, Harrist RB, Park SK. AJR 138:875-878, May 1982                                                                                                                      |
| A12013-025 | FL, Jeanty 95% 1983 | 『Fetal limb biometry』 Radiology 1983 ; 147 : 602. Table Data : 95 percentile data form «Growth format»                                                                                                                                                                   |
| A12013-026 | FL, Merz 1996       | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-027 | FL, Warda 1985      | Fetal Femur Length : A Critical Reevaluation of the Relationship to Menstrual Age. Warda AH, Deter RL, Rossavik IK, Carpenter RJ, Hadlock FP. American Journal of Obstetrics and Gynecology 66(1):69-75, July 1985                                                       |

| Code Value | Code Meaning             | Definition                                                                                                                                                                                                                                                               |
|------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12013-028 | GS, Tokyo                | 胎児生理の総合的解析による新しい周産期管理へのアプローチ. 東京大学 岡井 崇他. 日本産婦人科学会雑誌 第38巻 第8号 別冊                                                                                                                                                                                                         |
| A12013-029 | HC, Campbell             | Materials provided: Professor Campbell's Group at Harris Birthright Centre, King's College Hospital                                                                                                                                                                      |
| A12013-030 | HC, Chitty 1994          | Charts of fetal size : 2. Head measurements. Lyn S Chitty. British Journal of Obstetrics and Gynaecology February 1994, Vol.101, pp.35-43 <Table 4,7>                                                                                                                    |
| A12013-031 | HC, Hadlock 1982         | Fetal Head Circumference : Relation to Menstrual Age. Hadlock FP, Deter RL, Harrist RB, Park SK. AJR 138:649-653, April 1982                                                                                                                                             |
| A12013-033 | HC, Merz 1996            | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-034 | Humerus, Hansmann 1985   | Ultrasound Diagnosis in Obstetrics and Gynecology. Hansmann M., Hackeloer B.J. and Staudach A. Springer-Verlag, Berlin, Heidelberg, New York, Tokyo 1985                                                                                                                 |
| A12013-035 | Humerus, Jeanty 95% 1983 | 『Fetal limb biometry』 Radiology 1983 ; 147 : 602. Table Data : 95 percentile data form «Growth format»                                                                                                                                                                   |
| A12013-036 | Humerus, Merz 1996       | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-037 | NBL, Sonek 2003          | Nasal bone length throughout gestation : normal ranges based on 3537 fetal ultrasound measurements. J. D. SONEK. Ultrasound Obstet Gynecol 2003 ; 21 ; 152-155                                                                                                           |
| A12013-038 | OFD, Merz 1996           | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-039 | Radius, Merz 1996        | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form «Growth format» |
| A12013-040 | Tibia, Jeanty 95% 1983   | 『Fetal limb biometry』 Radiology 1983 ; 147 : 602. Table Data : 95 percentile data form «Growth format»                                                                                                                                                                   |

| Code Value | Code Meaning          | Definition                                                                                                                                                                                                                                                                                                                                                                                      |
|------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12013-041 | Tibia, Merz 1996      | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form 《Growth format》                                                                                                                        |
| A12013-042 | TL, Chitkara 1987     | Prenatal sonographic assessment of the fetal thorax: Normal values. Usha Chitkara, M.D., Joanne Rosenberg, R.D.M.S., Frank A. Chervenak, M.D., Gertrud S. Berkowitz, Ph.D., Rebecca Levine, M.A., Richard M. Fagerstrom, Ph.D., Barbara Walker, R.D.M.S., and Richard L. Berkowitz, M.D. American Journal of Obstetrics and Gynecology, Volume 156, Number 5, May 1987, pp.1069-1074. <Table 2> |
| A12013-043 | TAD, Hansmann 1985    | Ultrasound Diagnosis in Obstetrics and Gynecology. Hansmann M., Hackeloer B.J. and Staudach A. Springer-Verlag, Berlin, Heidelberg, New York, Tokyo 1985                                                                                                                                                                                                                                        |
| A12013-044 | TAD, Merz 1996        | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form 《Growth format》                                                                                                                        |
| A12013-045 | Ulna, Jeanty 95% 1983 | 『Fetal limb biometry』 Radiology 1983 ; 147 : 602. Table Data : 95 percentile data form 《Growth format》                                                                                                                                                                                                                                                                                          |
| A12013-046 | Ulna, Merz 1996       | Das normale fetale Wachstumsprofil - ein einheitliches Modell zur Berechnung von Normkurven für die gängigen Kopf-und Abdomenparameter sowie die großen Extremitätenknochen. Ultraschall in Med. 17(1996),153 - 162 Table Data : 95 percentile data form 《Growth format》                                                                                                                        |
| A12013-047 | AC, JSUM 2003         | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                                                                                                                                                                  |
| A12013-048 | BPD, JSUM 2003        | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                                                                                                                                                                  |
| A12013-049 | BPD, Osaka            | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                                                                                                                                                                  |
| A12013-050 | CRL, Osaka            | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                                                                                                                                                                  |
| A12013-051 | FL, JSUM 2003         | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                                                                                                                                                                  |
| A12013-052 | FL, O'Brien 1981      | Assessment of Gestational Age in the Second Trimester by Real-Time Ultrasound Measurement of the Femur Length. O'Brien GD, Queenan JT, Campbell S (American Journal of Obstetrics & Gynecology 139:540-545, Mar. 1981) Table Data : 《Growth format》                                                                                                                                             |

| Code Value | Code Meaning       | Definition                                                                                                                                                                                                      |
|------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12013-053 | FL, Osaka          | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫.<br>Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                               |
| A12013-054 | FTA, Osaka         | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫.<br>Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                               |
| A12013-055 | Humerus, Osaka     | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫.<br>Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                               |
| A12013-056 | CRL, BMUS 2009     | [Fetal Size and Dating: Charts Recommended for Clinical Obstetric Practice]<br>Pam Lougha, Lyn Chitty, Tony Evans & Trish Chudleigh<br>Ultrasound 2009;17(3):160-166<br>British Medical Ultrasound Society:2009 |
| A12013-057 | HC, BMUS 2009      | [Fetal Size and Dating: Charts Recommended for Clinical Obstetric Practice]<br>Pam Lougha, Lyn Chitty, Tony Evans & Trish Chudleigh<br>Ultrasound 2009;17(3):160-166<br>British Medical Ultrasound Society:2009 |
| A12013-058 | FL, BMUS 2009      | [Fetal Size and Dating: Charts Recommended for Clinical Obstetric Practice]<br>Pam Lougha, Lyn Chitty, Tony Evans & Trish Chudleigh<br>Ultrasound 2009;17(3):160-166<br>British Medical Ultrasound Society:2009 |
| A12013-059 | HC, BMUS-95% 2009  | [Fetal Size and Dating: Charts Recommended for Clinical Obstetric Practice]<br>Pam Lougha, Lyn Chitty, Tony Evans & Trish Chudleigh<br>Ultrasound 2009;17(3):160-166<br>British Medical Ultrasound Society:2009 |
| A12013-060 | AC, BMUS-95% 2009  | [Fetal Size and Dating: Charts Recommended for Clinical Obstetric Practice]<br>Pam Lougha, Lyn Chitty, Tony Evans & Trish Chudleigh<br>Ultrasound 2009;17(3):160-166<br>British Medical Ultrasound Society:2009 |
| A12013-061 | FL, BMUS-95% 2009  | [Fetal Size and Dating: Charts Recommended for Clinical Obstetric Practice]<br>Pam Lougha, Lyn Chitty, Tony Evans & Trish Chudleigh<br>Ultrasound 2009;17(3):160-166<br>British Medical Ultrasound Society:2009 |
| A12013-062 | BPD, CFEF-97% 2006 | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8  |

| Code Value | Code Meaning                    | Definition                                                                                                                                                                                                     |
|------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12013-063 | HC, CFEF-97% 2006               | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-064 | AC, CFEF-97% 2006               | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-066 | FL, CFEF-97% 2006               | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-067 | BPD, CFEF-90% 2006              | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-068 | HC, CFEF-90% 2006               | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-069 | AC, CFEF-90% 2006               | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-071 | FL, CFEF-90% 2006               | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12013-072 | User defined Table or Equation1 | User defined Table or Equation1                                                                                                                                                                                |
| A12013-073 | User defined Table or Equation2 | User defined Table or Equation2                                                                                                                                                                                |
| A12013-074 | User defined Table or Equation3 | User defined Table or Equation3                                                                                                                                                                                |
| A12013-075 | User defined Table or Equation4 | User defined Table or Equation4                                                                                                                                                                                |

| Code Value | Code Meaning                     | Definition                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12013-076 | User defined Table or Equation5  | User defined Table or Equation5                                                                                                                                                                                                                                                                                                                                                                                          |
| A12013-077 | User defined Table or Equation6  | User defined Table or Equation6                                                                                                                                                                                                                                                                                                                                                                                          |
| A12013-078 | User defined Table or Equation7  | User defined Table or Equation7                                                                                                                                                                                                                                                                                                                                                                                          |
| A12013-079 | User defined Table or Equation8  | User defined Table or Equation8                                                                                                                                                                                                                                                                                                                                                                                          |
| A12013-080 | User defined Table or Equation9  | User defined Table or Equation9                                                                                                                                                                                                                                                                                                                                                                                          |
| A12013-081 | User defined Table or Equation10 | User defined Table or Equation10                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-082 | User defined Table or Equation11 | User defined Table or Equation11                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-083 | User defined Table or Equation12 | User defined Table or Equation12                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-084 | User defined Table or Equation13 | User defined Table or Equation13                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-085 | User defined Table or Equation14 | User defined Table or Equation14                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-086 | User defined Table or Equation15 | User defined Table or Equation15                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-087 | User defined Table or Equation16 | User defined Table or Equation16                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-088 | User defined Table or Equation17 | User defined Table or Equation17                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-089 | User defined Table or Equation18 | User defined Table or Equation18                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-090 | User defined Table or Equation19 | User defined Table or Equation19                                                                                                                                                                                                                                                                                                                                                                                         |
| A12013-091 | User defined Table or Equation20 | User defined Table or Equation20                                                                                                                                                                                                                                                                                                                                                                                         |
| A12014-001 | EFW by BPD, AC, FL, Hadlock      | Estimation of fetal weight with the use of head,body,and femur measurement - A prospective study. Frank P. Hadlock, R.B.Harrist, Ralph S.Sharman, Russel L Deter, and Seung K.Park. Am J Obstet Gynecol :Volume151 Number3: 333-337, February1,1985.<br><br>Sonographic Estimation of Fetal weight. Frank P. Hadlock, R.B.Harrist, Robert J.Carpenter, Russel L Deter, Seung K.Park. Radiology Volume150 Number2:535-540 |
| A12014-002 | EFW by BPD, AC, FL, JSUM 2003    | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                                                                                                                                                                                           |
| A12014-003 | EFW by BPD, FTA, FL, Osaka       | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                                                                                                                                                                                           |

| Code Value | Code Meaning                  | Definition                                                                                                                                                                                                                                                                                                 |
|------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12014-004 | EFW by BPD, AC, Warsof 1977   | The estimation of fetal weight by computer-assisted analysis. Steven L.Warsof, Parviz Gohari, Richard L. Berkowitz, John C.Hobbins. Am J Obstet Gynecol :Volume 128 Number 8 : 881-892, August 15, 1977                                                                                                    |
| A12014-005 | EFW by User defined Equation1 | EFW by User defined Equation1                                                                                                                                                                                                                                                                              |
| A12014-006 | EFW by User defined Equation2 | EFW by User defined Equation2                                                                                                                                                                                                                                                                              |
| A12014-007 | EFW by User defined Equation3 | EFW by User defined Equation3                                                                                                                                                                                                                                                                              |
| A12014-008 | EFW by User defined Equation4 | EFW by User defined Equation4                                                                                                                                                                                                                                                                              |
| A12014-009 | EFW by User defined Equation5 | EFW by User defined Equation5                                                                                                                                                                                                                                                                              |
| A12015-001 | FL/AC by GA, Hadlock 1983     | A Date-Independent Predictor of Intrauterine Growth Retardation : Femur Length/Abdominal Circumference Ratio. Hadlock FP, Deter RL, Harrist RB, Roecker E, Park SK. American Journal of Roentgenology 141:979-984, November 1983                                                                           |
| A12015-002 | FL/HC by GA, Hadlock 1984     | The Femur Length/Head Circumference Relation in Obstetric Sonography. Frank P. Hadlock, MD, Ronald B. Harrist, PhD, Yogesh Shah, MD, Seung K. Park, MD. Journal of Ultrasound in Medicine, Volume 3, October 1984, pp.439-442. <Table 1>                                                                   |
| A12015-003 | FL/BPD by GA, Hohler 1981     | Comparison of Ultrasound Femur Length and Biparietal Diameter in Late Pregnancy. Hohler CW, Quetel TA. American Journal of Obstetrics and Gynecology 141:759-762, December 1981                                                                                                                            |
| A12015-004 | AFI by GA, Jeng et al.        | Amniotic Fluid Index Measurement with the Four-Quadrant Technique During Pregnancy. Cherng-Jye Jeng, M.D., Tian-Jii Jou, M.D., Kuo-Gon Wang, M.D., Yuh-Cheng Yang, M.D., Yi-Nan Lee, M.D., Chung-Chi Lan, M.D. The Journal of Reproductive Medicine, Volume 35, Number 7, July 1990, pp.674-677. <Table 1> |
| A12015-005 | AFI by GA, Moore et al.       | The amniotic fluid index in normal human pregnancy. Thomas R. Moore, MD, and Jonathan E. Cayle, MD. American Journal of Obstetrics and Gynecology, Volume 162, Number 5, May 1990, pp.1168-1173. <Table 6>                                                                                                 |
| A12015-006 | AFI by GA, Phelan et al.      | Amniotic Fluid Volume Assessment with the Four-Quadrant Technique at 36-42 Weeks' Gestation. Jeffrey P. Phelan, M.D., Carl Vernon Smith, M.D., Paula Broussard, R.N., Mary Small, M.D. The Journal of Reproductive Medicine, Volume 32, Number 7, July 1987, pp.540-542. <Table 1>                         |
| A12015-007 | AC by GA, JSUM 2003           | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                                                                             |

| Code Value | Code Meaning             | Definition                                                                                                                                                                                                                                          |
|------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12015-008 | BPD by GA, JSUM 2003     | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                      |
| A12015-009 | BPD by GA, Osaka         | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                      |
| A12015-010 | CRL by GA, Osaka         | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                      |
| A12015-011 | FL by GA, JSUM 2003      | 超音波胎児計測の標準化と日本人の基準値の公示について. J Med Ultrasonics Vol.30 No.3 2003                                                                                                                                                                                      |
| A12015-012 | FL by GA, O'Brien 1981   | Assessment of Gestational Age in the Second Trimester by Real-Time Ultrasound Measurement of the Femur Length. O'Brien GD, Queenan JT, Campbell S (American Journal of Obstetrics & Gynecology 139:540-545, Mar. 1981) Table Data : 《Growth format》 |
| A12015-013 | FL by GA, Osaka          | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                      |
| A12015-014 | FTA by GA, Osaka         | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                      |
| A12015-015 | Humerus by GA, Osaka     | 超音波胎児体格計測によるIUGR診断. 青木 嶺夫. Perinatal Care Vol.9 No.5,(407-422)                                                                                                                                                                                      |
| A12015-016 | BPD by GA, CFEF-97% 2006 | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8                                      |
| A12015-017 | HC by GA, CFEF-97% 2006  | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8                                      |
| A12015-018 | AC by GA, CFEF-97% 2006  | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8                                      |
| A12015-020 | FL by GA, CFEF-97% 2006  | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8                                      |
| A12015-021 | BPD by GA, CFEF-90% 2006 | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8                                      |

| Code Value | Code Meaning                               | Definition                                                                                                                                                                                                     |
|------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12015-022 | HC by GA, CFEF-90% 2006                    | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12015-023 | AC by GA, CFEF-90% 2006                    | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12015-025 | FL by GA, CFEF-90% 2006                    | [French fetal biometry: reference equations and comparison with other charts.]<br>Salomon LJ, Duyme M, Crequat J, Brodaty G, Talmant C, Fries N, Althuser M<br>Ultrasound Obstet Gynecol. 2006 Aug;28(2):193-8 |
| A12015-026 | GA by GA, User defined Table or Equation1  | GA by GA, User defined Table or Equation1                                                                                                                                                                      |
| A12015-027 | GA by GA, User defined Table or Equation2  | GA by GA, User defined Table or Equation2                                                                                                                                                                      |
| A12015-028 | GA by GA, User defined Table or Equation3  | GA by GA, User defined Table or Equation3                                                                                                                                                                      |
| A12015-029 | GA by GA, User defined Table or Equation4  | GA by GA, User defined Table or Equation4                                                                                                                                                                      |
| A12015-030 | GA by GA, User defined Table or Equation5  | GA by GA, User defined Table or Equation5                                                                                                                                                                      |
| A12015-031 | GA by GA, User defined Table or Equation6  | GA by GA, User defined Table or Equation6                                                                                                                                                                      |
| A12015-032 | GA by GA, User defined Table or Equation7  | GA by GA, User defined Table or Equation7                                                                                                                                                                      |
| A12015-033 | GA by GA, User defined Table or Equation8  | GA by GA, User defined Table or Equation8                                                                                                                                                                      |
| A12015-034 | GA by GA, User defined Table or Equation9  | GA by GA, User defined Table or Equation9                                                                                                                                                                      |
| A12015-035 | GA by GA, User defined Table or Equation10 | GA by GA, User defined Table or Equation10                                                                                                                                                                     |
| A12015-036 | GA by GA, User defined Table or Equation11 | GA by GA, User defined Table or Equation11                                                                                                                                                                     |
| A12015-037 | GA by GA, User defined Table or Equation12 | GA by GA, User defined Table or Equation12                                                                                                                                                                     |
| A12015-038 | GA by GA, User defined Table or Equation13 | GA by GA, User defined Table or Equation13                                                                                                                                                                     |
| A12015-039 | GA by GA, User defined Table or Equation14 | GA by GA, User defined Table or Equation14                                                                                                                                                                     |
| A12015-040 | GA by GA, User defined Table or Equation15 | GA by GA, User defined Table or Equation15                                                                                                                                                                     |

| Code Value | Code Meaning                                 | Definition                                                                                                                                                                                                                                                                                         |
|------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12015-041 | GA by GA, User defined Table or Equation16   | GA by GA, User defined Table or Equation16                                                                                                                                                                                                                                                         |
| A12015-042 | GA by GA, User defined Table or Equation17   | GA by GA, User defined Table or Equation17                                                                                                                                                                                                                                                         |
| A12015-043 | GA by GA, User defined Table or Equation18   | GA by GA, User defined Table or Equation18                                                                                                                                                                                                                                                         |
| A12015-044 | GA by GA, User defined Table or Equation19   | GA by GA, User defined Table or Equation19                                                                                                                                                                                                                                                         |
| A12015-045 | GA by GA, User defined Table or Equation20   | GA by GA, User defined Table or Equation20                                                                                                                                                                                                                                                         |
| A12015-046 | Fetus Ratio, User defined Table or Equation1 | Fetus Ratio, User defined Table or Equation1                                                                                                                                                                                                                                                       |
| A12015-047 | Fetus Ratio, User defined Table or Equation2 | Fetus Ratio, User defined Table or Equation2                                                                                                                                                                                                                                                       |
| A12015-048 | Fetus Ratio, User defined Table or Equation3 | Fetus Ratio, User defined Table or Equation3                                                                                                                                                                                                                                                       |
| A12015-049 | Fetus Ratio, User defined Table or Equation4 | Fetus Ratio, User defined Table or Equation4                                                                                                                                                                                                                                                       |
| A12015-050 | Fetus Ratio, User defined Table or Equation5 | Fetus Ratio, User defined Table or Equation5                                                                                                                                                                                                                                                       |
| A12015-051 | Fetus Ratio, User defined Table or Equation6 | Fetus Ratio, User defined Table or Equation6                                                                                                                                                                                                                                                       |
| A12015-052 | AFI by User defined Table or Equation1       | AFI by User defined Table or Equation1                                                                                                                                                                                                                                                             |
| A12015-053 | AFI by User defined Table or Equation2       | AFI by User defined Table or Equation2                                                                                                                                                                                                                                                             |
| A12016-001 | FW, Doubilet 1997                            | Improved Birth Weight Table for Neonates Developed from Gestations Dated by Early Ultrasonography: Doubilet PM et al; J Ultrasound Med 16;241-249, 1997                                                                                                                                            |
| A12016-005 | Twins FW, Yarkoni 1987                       | Estimated Fetal Weight in the Evaluation of Growth in Twin Gestations: A Prospective Longitudinal Study. Shaul Yarkoni, MD, E. Albert Reece, MD, Theodore Holford, PhD, Theresa Z. O'Connor, MPH, And John C. Hobbins, MD. Obstetrics & Gynecology, Volume 69, Number 4, April 1987, pp.636-639.   |
| A12016-006 | FW, CFEF-97% 2014                            | Courbe d'estimation de poids fœtal 2014 par le Collège français d'échographie fœtale (CFEF)<br>M. Massoud, M. Duyme, M. Fontanges, D. Combourieu, Collège français d'échographie foetale (CFEF)<br>Journal de Gynécologie Obstétrique et Biologie de la Reproduction - accepté le 15 janvier 2015. |

| Code Value | Code Meaning                                          | Definition                                                                                                                                                                                                                                                                                        |
|------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12016-007 | FW, CFEF-90% 2014                                     | Courbe d'estimation de poids fœtal 2014 par le Collège français d'échographie fœtale (CFEF)<br>M. Massoud, M. Duyme, M. Fontanges, D. Combourieu, Collège français d'échographie fœtale (CFEF)<br>Journal de Gynécologie Obstétrique et Biologie de la Reproduction - accepté le 15 janvier 2015. |
| A12016-008 | FW, User defined Table or Equation1                   | FW, User defined Table or Equation1                                                                                                                                                                                                                                                               |
| A12016-009 | FW, User defined Table or Equation2                   | FW, User defined Table or Equation2                                                                                                                                                                                                                                                               |
| A12016-010 | FW, User defined Table or Equation3                   | FW, User defined Table or Equation3                                                                                                                                                                                                                                                               |
| A12016-011 | FW, User defined Table or Equation4                   | FW, User defined Table or Equation4                                                                                                                                                                                                                                                               |
| A12016-012 | FW, User defined Table or Equation5                   | FW, User defined Table or Equation5                                                                                                                                                                                                                                                               |
| A12019-001 | Fetal Heart Rate before Biopsy                        | Fetal Heart Rate before Biopsy                                                                                                                                                                                                                                                                    |
| A12019-002 | Fetal Heart Rate after Biopsy                         | Fetal Heart Rate after Biopsy                                                                                                                                                                                                                                                                     |
| A12019-003 | Auto Fetal Heart Rate                                 | Automated FHR Measurement                                                                                                                                                                                                                                                                         |
| A12019-004 | Estimated Fetal Weight Ratio                          | EFW Ratio = ( Estimated Fetal Weight / Weightest Fetal Weight ) * 100 [%]                                                                                                                                                                                                                         |
| A12104-001 | Maximum Intima-media thickness                        | Maximum Intima-media thickness                                                                                                                                                                                                                                                                    |
| A12104-002 | Mean Intima-media thickness                           | Mean Intima-media thickness                                                                                                                                                                                                                                                                       |
| A12104-003 | Intima-media thickness of CCA by auto-detection       | Intima-media thickness of Common Carotid Artery by auto-detection                                                                                                                                                                                                                                 |
| A12104-004 | Intima-media thickness of ICA by auto-detection       | Intima-media thickness of Internal Carotid Artery by auto-detection                                                                                                                                                                                                                               |
| A12104-005 | Intima-media thickness of ECA by auto-detection       | Intima-media thickness of External Carotid Artery by auto-detection                                                                                                                                                                                                                               |
| A12104-006 | Intima-media thickness of BIFUR by auto-detection     | Intima-media thickness of Carotid Bifurcation by auto-detection                                                                                                                                                                                                                                   |
| A12104-007 | Mean Carotid Intima-media thickness by auto-detection | Mean Carotid Intima-media thickness by auto-detection                                                                                                                                                                                                                                             |
| A12104-008 | IMT-C10                                               | IMT-C10<br><br>“超音波による頸動脈病変の標準的評価法 2017”<br>JSUM0515 GUIDELINE                                                                                                                                                                                                                                    |
| A12104-009 | IMT-C10 by auto-detection                             | IMT-C10 by auto-detection                                                                                                                                                                                                                                                                         |
| A12107-001 | Deep Brachial Artery                                  | Deep Brachial Artery                                                                                                                                                                                                                                                                              |
| A12107-002 | Basilic Artery                                        | Basilic Artery                                                                                                                                                                                                                                                                                    |

| <b>Code Value</b> | <b>Code Meaning</b>     | <b>Definition</b>                        |
|-------------------|-------------------------|------------------------------------------|
| A12107-003        | User Definition Artery1 | Upr Art.1 (User Definition Artery)       |
| A12107-004        | User Definition Artery2 | Upr Art.2 (User Definition Artery)       |
| A12107-005        | User Definition Artery3 | Upr Art.3 (User Definition Artery)       |
| A12107-006        | User Definition Artery4 | Upr Art.4 (User Definition Artery)       |
| A12107-007        | User Definition Artery5 | Upr Art.5 (User Definition Artery)       |
| A12107-008        | User Definition Artery6 | Upr Art.6 (User Definition Artery)       |
| A12107-009        | User Definition Artery7 | Upr Art.7 (User Definition Artery)       |
| A12107-010        | User Definition Artery8 | Upr Art.8 (User Definition Artery)       |
| A12108-001        | Deep Brachial vein      | Deep Brachial Vein                       |
| A12108-002        | User Definition Vein1   | Upr Vein.1 (User Definition Vein)        |
| A12108-003        | User Definition Vein2   | Upr Vein.2 (User Definition Vein)        |
| A12108-004        | User Definition Vein3   | Upr Vein.3 (User Definition Vein)        |
| A12108-005        | User Definition Vein4   | Upr Vein.4 (User Definition Vein)        |
| A12108-006        | User Definition Vein5   | Upr Vein.5 (User Definition Vein)        |
| A12108-007        | User Definition Vein6   | Upr Vein.6 (User Definition Vein)        |
| A12108-008        | User Definition Vein7   | Upr Vein.7 (User Definition Vein)        |
| A12108-009        | User Definition Vein8   | Upr Vein.8 (User Definition Vein)        |
| A12109-001        | User Definition Artery1 | Lwr Art.1 (User Definition Artery)       |
| A12109-002        | User Definition Artery2 | Lwr Art.2 (User Definition Artery)       |
| A12109-003        | User Definition Artery3 | Lwr Art.3 (User Definition Artery)       |
| A12109-004        | User Definition Artery4 | Lwr Art.4 (User Definition Artery)       |
| A12109-005        | User Definition Artery5 | Lwr Art.5 (User Definition Artery)       |
| A12109-006        | User Definition Artery6 | Lwr Art.6 (User Definition Artery)       |
| A12109-007        | User Definition Artery7 | Lwr Art.7 (User Definition Artery)       |
| A12109-008        | User Definition Artery8 | Lwr Art.8 (User Definition Artery)       |
| A12110-001        | User Definition Vein1   | Lwr Vein.1 (User Definition Vein)        |
| A12110-002        | User Definition Vein2   | Lwr Vein.2 (User Definition Vein)        |
| A12110-003        | User Definition Vein3   | Lwr Vein.3 (User Definition Vein)        |
| A12110-004        | User Definition Vein4   | Lwr Vein.4 (User Definition Vein)        |
| A12110-005        | User Definition Vein5   | Lwr Vein.5 (User Definition Vein)        |
| A12110-006        | User Definition Vein6   | Lwr Vein.6 (User Definition Vein)        |
| A12110-007        | User Definition Vein7   | Lwr Vein.7 (User Definition Vein)        |
| A12110-008        | User Definition Vein8   | Lwr Vein.8 (User Definition Vein)        |
| A12112-001        | User Definition Artery1 | Artery1 (User Definition Artery (Abdom)) |
| A12112-002        | User Definition Artery2 | Artery2 (User Definition Artery (Abdom)) |

| Code Value | Code Meaning                                       | Definition                                                                                                                                                                                                                                                                                                                                                   |
|------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12112-003 | User Definition Artery3                            | Artery3 (User Definition Artery (Abdom))                                                                                                                                                                                                                                                                                                                     |
| A12117-001 | far wall                                           | far wall<br><br>“超音波による頸動脈病変の標準的評価法 2017”<br>JSUM0515 GUIDELINE                                                                                                                                                                                                                                                                                              |
| A12117-002 | near wall                                          | near wall<br><br>“超音波による頸動脈病変の標準的評価法 2017”<br>JSUM0515 GUIDELINE                                                                                                                                                                                                                                                                                             |
| A12120-001 | atrial contraction                                 | 日本超音波医学会用語・診断基準委員会<br>“胎児静脈血流波形基準値(2013) 胎児静脈管(ductus venosus:DV) PI, a/Sおよび胎児下大静脈(inferior vena cava:IVC) PLI(preload index), a/Sの計測法と週数毎の基準値”<br><br>In Europe:<br>K. Hecher, S. Campbell, R. Snijders and K. Nicolaides<br>Ultrasound Obstet. Gynecol. 4 (1994) 381-390                                                                                   |
| A12120-002 | Peak Diastolic Velocity                            | [Reference ranges for fetal venous and atrioventricular blood flow parameters]<br>K. Hecher, S. Campbell, R. Snijders and K. Nicolaides<br>Ultrasound Obstet. Gynecol. 4 (1994) 381-390                                                                                                                                                                      |
| A12121-001 | Acceleration Time to Flow Time Ratio               | Acceleration Time to Flow Time Ratio                                                                                                                                                                                                                                                                                                                         |
| A12121-002 | atrial contraction to Systolic peak Velocity Ratio | 日本超音波医学会用語・診断基準委員会<br>“胎児静脈血流波形基準値(2013) 胎児静脈管(ductus venosus:DV) PI, a/Sおよび胎児下大静脈(inferior vena cava:IVC) PLI(preload index), a/Sの計測法と週数毎の基準値”<br><br>In Europe:<br>“Reference ranges for fetal venous and atrioventricular blood flow parameters”<br>K. Hecher, S. Campbell, R. Snijders and K. Nicolaides<br>Ultrasound Obstet. Gynecol. 4 (1994) 381-390 |

| Code Value | Code Meaning                                             | Definition                                                                                                                                                                                                                                                                                                                                                                       |
|------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12121-003 | Systolic peak to atrial contraction Velocity Ratio       | <p>日本超音波医学会用語・診断基準委員会</p> <p>“胎児静脈血流波形基準値(2013) 胎児静脈管(ductus venosus:DV) PI, a/Sおよび胎児下大静脈(inferior vena cava:IVC) PLI(preload index), a/Sの計測法と週数毎の基準値”</p> <p>In Europe:</p> <p>“Reference ranges for fetal venous and atrioventricular blood flow parameters”</p> <p>K. Hecher, S. Campbell, R. Snijders and K. Nicolaides<br/>Ultrasound Obstet. Gynecol. 4 (1994) 381-390</p> |
| A12121-004 | Peak velocity index for veins                            | <p>[Reference ranges for fetal venous and atrioventricular blood flow parameters]</p> <p>K. Hecher, S. Campbell, R. Snijders and K. Nicolaides<br/>Ultrasound Obstet. Gynecol. 4 (1994) 381-390</p>                                                                                                                                                                              |
| A12122-001 | Flow Time                                                | Flow Time                                                                                                                                                                                                                                                                                                                                                                        |
| A12122-002 | Intima-media thickness 1                                 | Intima-media thickness 1                                                                                                                                                                                                                                                                                                                                                         |
| A12122-003 | Intima-media thickness 2                                 | Intima-media thickness 2                                                                                                                                                                                                                                                                                                                                                         |
| A12122-004 | Intima-media thickness 3                                 | Intima-media thickness 3                                                                                                                                                                                                                                                                                                                                                         |
| A12122-005 | Intima-media thickness 4                                 | Intima-media thickness 4                                                                                                                                                                                                                                                                                                                                                         |
| A12122-006 | Intima-media thickness 5                                 | Intima-media thickness 5                                                                                                                                                                                                                                                                                                                                                         |
| A12122-007 | Intima-media thickness 6                                 | Intima-media thickness 6                                                                                                                                                                                                                                                                                                                                                         |
| A12122-008 | Intima-media thickness 7                                 | Intima-media thickness 7                                                                                                                                                                                                                                                                                                                                                         |
| A12122-009 | Intima-media thickness 8                                 | Intima-media thickness 8                                                                                                                                                                                                                                                                                                                                                         |
| A12122-010 | Intima-media thickness 9                                 | Intima-media thickness 9                                                                                                                                                                                                                                                                                                                                                         |
| A12122-011 | Intima-media thickness 10                                | Intima-media thickness 10                                                                                                                                                                                                                                                                                                                                                        |
| A12122-012 | Maximum Intima-media thickness                           | Mean Intima-media thickness                                                                                                                                                                                                                                                                                                                                                      |
| A12122-013 | Mean Intima-media thickness                              | Mean Intima-media thickness                                                                                                                                                                                                                                                                                                                                                      |
| A12122-014 | Maximum Intima-media thickness at diastole               | Maximum Intima-media thickness at diastole                                                                                                                                                                                                                                                                                                                                       |
| A12122-015 | Minimum Intima-media thickness at diastole               | Minimum Intima-media thickness at diastole                                                                                                                                                                                                                                                                                                                                       |
| A12122-016 | Average Intima-media thickness at diastole               | Average Intima-media thickness at diastole                                                                                                                                                                                                                                                                                                                                       |
| A12122-017 | IMT-C10 at diastole                                      | IMT-C10 at diastole                                                                                                                                                                                                                                                                                                                                                              |
| A12122-018 | Standard Deviation of Intima-media thickness at diastole | Standard Deviation of Intima-media thickness at diastole                                                                                                                                                                                                                                                                                                                         |

| Code Value | Code Meaning                                                 | Definition                                                     |
|------------|--------------------------------------------------------------|----------------------------------------------------------------|
| A12122-019 | Measured number of Intima-media thickness points at diastole | Measured number of Intima-media thickness points at diastole   |
| A12122-020 | Width of ROI at diastole                                     | Width of ROI at diastole                                       |
| A12122-021 | Maximum Intima-media thickness at systole                    | Maximum Intima-media thickness at systole                      |
| A12122-022 | Minimum Intima-media thickness at systole                    | Minimum Intima-media thickness at systole                      |
| A12122-023 | Average Intima-media thickness at systole                    | Average Intima-media thickness at systole                      |
| A12122-024 | IMT-C10 at systole                                           | IMT-C10 at systole                                             |
| A12122-025 | Standard Deviation of Intima-media thickness at systole      | Standard Deviation of Intima-media thickness at systole        |
| A12122-026 | Measured number of Intima-media thickness points at systole  | Measured number of Intima-media thickness points at systole    |
| A12122-027 | Width of ROI at systole                                      | Width of ROI at systole                                        |
| A12122-028 | Intima-media thickness 1 at diastole                         | Intima-media thickness 1 at diastole                           |
| A12122-029 | Intima-media thickness 2 at diastole                         | Intima-media thickness 2 at diastole                           |
| A12122-030 | Intima-media thickness 3 at diastole                         | Intima-media thickness 3 at diastole                           |
| A12122-031 | Mean Intima-media thickness at diastole                      | Mean Intima-media thickness at diastole                        |
| A12122-032 | Intima-media thickness 1 at systole                          | Intima-media thickness 1 at systole                            |
| A12122-033 | Intima-media thickness 2 at systole                          | Intima-media thickness 2 at systole                            |
| A12122-034 | Intima-media thickness 3 at systole                          | Intima-media thickness 3 at systole                            |
| A12122-035 | Mean Intima-media thickness at systole                       | Mean Intima-media thickness at systole                         |
| A12122-036 | IMT-C10                                                      | IMT-C10<br><br>“超音波による頸動脈病変の標準的評価法 2017”<br>JSUM0515 GUIDELINE |

| Code Value | Code Meaning                                                    | Definition                                                                                                                                                                                                                                                                                                                                                                       |
|------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12141-001 | Ductus Venosus                                                  | <p>日本超音波医学会用語・診断基準委員会</p> <p>“胎児静脈血流波形基準値(2013) 胎児静脈管(ductus venosus:DV) PI, a/Sおよび胎児下大静脈(inferior vena cava:IVC) PLI(preload index), a/Sの計測法と週数毎の基準値”</p> <p>In Europe:</p> <p>“Reference ranges for fetal venous and atrioventricular blood flow parameters”</p> <p>K. Hecher, S. Campbell, R. Snijders and K. Nicolaides<br/>Ultrasound Obstet. Gynecol. 4 (1994) 381-390</p> |
| A12201-001 | Left Ventricular Short Axis Length at Mitral Valve              | Left Ventricular Short Axis Length at Mitral Valve                                                                                                                                                                                                                                                                                                                               |
| A12201-002 | Mean Wall Thickness                                             | Mean Wall Thickness                                                                                                                                                                                                                                                                                                                                                              |
| A12201-003 | Left Ventricular End Diastolic Length                           | Left Ventricular End Diastolic Length                                                                                                                                                                                                                                                                                                                                            |
| A12201-004 | Short Axis Radius Calculated from Short Axis Cavity Area        | Short Axis Radius Calculated from Short Axis Cavity Area                                                                                                                                                                                                                                                                                                                         |
| A12203-001 | Left Ventricular Mass Index                                     | <p>Left Ventricular Mass Index (LVMI).</p> <p><math>LVMI = LVM / BSA</math></p> <p>LVMI unit is g/m<sup>2</sup>, mass unit in gram and BSA unit in m<sup>2</sup>.</p>                                                                                                                                                                                                            |
| A12203-003 | Long Axis(at End Diastole or End Systole) Length % Difference   | <p>Long Axis(at End Diastole or End Systole) Length Percentage Difference. Length Percentage Difference unit is %.</p>                                                                                                                                                                                                                                                           |
| A12203-004 | Midwall Fractional Shortening                                   | Midwall Fractional Shortening (mFS)                                                                                                                                                                                                                                                                                                                                              |
| A12203-005 | Area Ejection Fraction at Long Axis View                        | Area Ejection Fraction at Long Axis View                                                                                                                                                                                                                                                                                                                                         |
| A12203-006 | Area Ejection Fraction at Short Axis View                       | Area Ejection Fraction at Short Axis View                                                                                                                                                                                                                                                                                                                                        |
| A12203-009 | Mean Velocity of Circumferential Fiber Shortening               | Mean Velocity of Circumferential Fiber Shortening                                                                                                                                                                                                                                                                                                                                |
| A12203-010 | Left Ventricle Diastole Filling Time                            | Left Ventricle Diastole Filling Time                                                                                                                                                                                                                                                                                                                                             |
| A12203-011 | Ratio of MV E-Wave Peak Vel. to Early Diastolic Myocardium Vel. | Ratio of Mitral Valve E-Wave Peak Velocity to Early Diastolic Myocardium Velocity                                                                                                                                                                                                                                                                                                |
| A12203-012 | Ratio of Left Ventricle Diastole Filling Time to R-R interval   | Ratio of Left Ventricle Diastole Filling Time to R-R interval                                                                                                                                                                                                                                                                                                                    |

| Code Value | Code Meaning                                                | Definition                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12203-013 | Global Longitudinal Strain                                  | Global Longitudinal Strain<br>Bi-Plane GLS = { [ ( A4C ES Circum-length - A4C ED Circum-length ) / A4C ED Circum-length ] + [ ( A2C ES Circum-length - A2C ED Circum-length ) / A2C ED Circum-length ] } * 50<br><br>4ch GLS = { ( A4C ES Circum-length - A4C ED Circum-length ) / A4C ED Circum-length } * 100<br><br>2ch GLS = { ( A2C ES Circum-length - A2C ED Circum-length ) / A2C ED Circum-length } * 100 |
| A12203-014 | pV Ratio of LVOT to AV                                      | pV Ratio of LVOT to AV                                                                                                                                                                                                                                                                                                                                                                                            |
| A12203-015 | VTI Ratio of LVOT to AV                                     | VTI Ratio of LVOT to AV                                                                                                                                                                                                                                                                                                                                                                                           |
| A12203-016 | Left Ventricle Mass adjusted by Height(1.7)                 | Left Ventricle Mass adjusted by Height(1.7)                                                                                                                                                                                                                                                                                                                                                                       |
| A12203-017 | Left Ventricle Mass adjusted by Height(2.16)                | Left Ventricle Mass adjusted by Height(2.16)                                                                                                                                                                                                                                                                                                                                                                      |
| A12203-018 | Left Ventricle Mass adjusted by Height(2.7)                 | Left Ventricle Mass adjusted by Height(2.7)                                                                                                                                                                                                                                                                                                                                                                       |
| A12203-019 | Myocardial Length                                           | Myocardial Length                                                                                                                                                                                                                                                                                                                                                                                                 |
| A12204-001 | Right Ventricular Diastolic Area                            | Right Ventricular Diastolic Area                                                                                                                                                                                                                                                                                                                                                                                  |
| A12204-002 | Right Ventricular Systolic Area                             | Right Ventricular Systolic Area                                                                                                                                                                                                                                                                                                                                                                                   |
| A12204-003 | Right Ventricular Fractional Area Change                    | RV FAC = 100 * (RV Area ED - RV Area ES) / RV Area ED. Unit is %.                                                                                                                                                                                                                                                                                                                                                 |
| A12204-004 | End-diastolic Basal Diameter                                | End-diastolic Basal Diameter                                                                                                                                                                                                                                                                                                                                                                                      |
| A12204-005 | End-diastolic Mid-cavity Diameter                           | End-diastolic Mid-cavity Diameter                                                                                                                                                                                                                                                                                                                                                                                 |
| A12204-006 | Right Ventricular End-diastolic Length                      | Right Ventricular End-diastolic Length                                                                                                                                                                                                                                                                                                                                                                            |
| A12204-007 | Right Ventricular Wall Thickness                            | Right Ventricular Wall Thickness                                                                                                                                                                                                                                                                                                                                                                                  |
| A12205-001 | Left Atrium Antero-posterior Diastolic Dimension            | Left Atrium Antero-posterior Diastolic Dimension                                                                                                                                                                                                                                                                                                                                                                  |
| A12205-002 | Left Atrium systolic major axis                             | Left Atrium systolic major axis                                                                                                                                                                                                                                                                                                                                                                                   |
| A12205-003 | Left Atrium Systolic Area by Apical two chamber             | Left Atrium Systolic Area by Apical two chamber                                                                                                                                                                                                                                                                                                                                                                   |
| A12205-004 | Left Atrial Volume                                          | Left Atrial Volume                                                                                                                                                                                                                                                                                                                                                                                                |
| A12205-005 | Left Atrial Volume divided by Body Surface Area             | Left Atrial Volume divided by Body Surface Area                                                                                                                                                                                                                                                                                                                                                                   |
| A12205-006 | Long Axis at End Systole Length % Difference of Left Atrium | Long Axis at End Systole Length Percentage Difference of Left Atrium                                                                                                                                                                                                                                                                                                                                              |

| Code Value | Code Meaning                                                 | Definition                                                                         |
|------------|--------------------------------------------------------------|------------------------------------------------------------------------------------|
| A12205-007 | Left Atrium systolic minor axis                              | Left Atrium systolic minor axis                                                    |
| A12206-001 | Right Atrium systolic major axis                             | Right Atrium systolic major axis                                                   |
| A12206-002 | Right Atrium Systolic Area by Apical two chamber             | Right Atrium Systolic Area by Apical two chamber                                   |
| A12206-003 | Right Atrial Volume                                          | Right Atrial Volume                                                                |
| A12206-004 | Right Atrial Volume divided by Body Surface Area             | Right Atrial Volume divided by Body Surface Area                                   |
| A12206-005 | Long Axis at End Systole Length % Difference of Right Atrium | Long Axis at End Systole Length Percentage Difference of Right Atrium              |
| A12206-006 | Right Atrium systolic minor axis                             | Right Atrium systolic minor axis                                                   |
| A12207-001 | Mitral Valve Dimension of C point to E point by M-Mode       | Mitral Valve Dimension of C point to E point by M-Mode                             |
| A12207-002 | Mitral Valve Dimension of C point to A point by M-Mode       | Mitral Valve Dimension of C point to A point by M-Mode                             |
| A12207-003 | Mitral Valve C-A Dimension to C-E Dimension Ratio by M-Mode  | Mitral Valve C-A Dimension to C-E Dimension Ratio by M-Mode                        |
| A12207-004 | Mitral Valve C-E Dimension to C-A Dimension Ratio by M-Mode  | Mitral Valve C-E Dimension to C-A Dimension Ratio by M-Mode                        |
| A12207-005 | Mitral Valve E-Wave Duration                                 | Mitral Valve E-Wave Duration                                                       |
| A12207-006 | Mitral Valve A to E Ratio                                    | Mitral Valve A to E Ratio                                                          |
| A12207-007 | Mitral Valve E-wave Peak Pressure Gradient                   | Mitral Valve E-wave Peak Pressure Gradient                                         |
| A12207-008 | Mitral Valve A-wave Peak Pressure Gradient                   | Mitral Valve A-wave Peak Pressure Gradient                                         |
| A12207-009 | Subtraction of A-wave Duration from PVA-wave Duration        | Subtraction of Mitral A-wave Duration from Pulmonary Vein Atrial Reversal Duration |
| A12207-010 | Velocity Time Integral of Mitral Regurgitant Flow            | Velocity Time Integral of Mitral Regurgitant Flow                                  |
| A12207-012 | Mitral Regurgitant Proximal Isovelocity Surface Area         | Mitral Regurgitant Proximal Isovelocity Surface Area                               |
| A12207-013 | Flow Volume of Mitral Valve Annulus in Flow                  | Flow Volume of Mitral Valve Annulus in Flow                                        |
| A12207-014 | Mitral valve Regurgitant volume                              | Mitral valve Regurgitant volume                                                    |
| A12207-015 | Isovolumic Acceleration                                      | Isovolumic Acceleration                                                            |
| A12207-016 | Average of e'(l) and e'(s)                                   | Average of e'(l) and e'(s)                                                         |
| A12207-017 | D-E amplitude                                                | D-E amplitude                                                                      |

| Code Value | Code Meaning                                                   | Definition                                                     |
|------------|----------------------------------------------------------------|----------------------------------------------------------------|
| A12207-018 | Mitral Annular Plane Systolic Excursion                        | Mitral Annular Plane Systolic Excursion                        |
| A12207-019 | Mitral Annulus Area                                            | Mitral Annulus Area                                            |
| A12207-020 | Mitral Annulus Diameter PLAX                                   | Mitral Annulus Diameter PLAX                                   |
| A12207-021 | Mitral Valve Ea to Aa Ratio                                    | Mitral Valve Ea to Aa Ratio                                    |
| A12207-022 | Peak MV Annular Velocity in Isovolumic Contraction             | Peak MV Annular Velocity in Isovolumic Contraction             |
| A12207-023 | Ratio of MV Peak Velocity to LV av e'                          | Ratio of MV Peak Velocity to LV av e'                          |
| A12207-024 | Time E to e'                                                   | Time E to e'                                                   |
| A12207-025 | Time to peak velocity in isovolumic contractuion               | Time to peak velocity in isovolumic contractuion               |
| A12207-026 | Flow Volume of Mitral Valve Annulus in Flow (1)                | Flow Volume of Mitral Valve Annulus in Flow (1)                |
| A12208-001 | Tricuspid Valve Dimension of C point to E point by M-Mode      | Tricuspid Valve Dimension of C point to E point by M-Mode      |
| A12208-002 | Tricuspid Valve Dimension of C point to A point by M-Mode      | Tricuspid Valve Dimension of C point to A point by M-Mode      |
| A12208-003 | Tricuspid Valve Dimension of D point to E point by M-Mode      | Tricuspid Valve Dimension of D point to E point by M-Mode      |
| A12208-004 | Tricuspid Valve Velocity from E point to F point by M-Mode     | Tricuspid Valve Velocity from E point to F point by M-Mode     |
| A12208-005 | Tricuspid Valve Velocity from D point to E point by M-Mode     | Tricuspid Valve Velocity from D point to E point by M-Mode     |
| A12208-006 | Tricuspid Valve C-A Dimension to C-E Dimension Ratio by M-Mode | Tricuspid Valve C-A Dimension to C-E Dimension Ratio by M-Mode |
| A12208-007 | Tricuspid Valve C-E Dimension to C-A Dimension Ratio by M-Mode | Tricuspid Valve C-E Dimension to C-A Dimension Ratio by M-Mode |
| A12208-008 | Velocity Time Integral of Tricuspid Regurgitant Flow           | Velocity Time Integral of Tricuspid Regurgitant Flow           |
| A12208-010 | Tricuspid Regurgitant Proximal Isovelocity Surface Area        | Tricuspid Regurgitant Proximal Isovelocity Surface Area        |
| A12208-011 | Flow Volume of Tricuspid Valve Annulus in Flow                 | Flow Volume of Tricuspid Valve Annulus in Flow                 |
| A12208-012 | Tricuspid Annular Plane Systolic Excursion                     | Tricuspid Annular Plane Systolic Excursion                     |

| <b>Code Value</b> | <b>Code Meaning</b>                                         | <b>Definition</b>                                           |
|-------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| A12208-013        | Peak A wave/Peak E wave by US                               | Peak A wave/Peak E wave by US                               |
| A12208-014        | E-Wave Duration                                             | E-Wave Duration                                             |
| A12208-015        | E-Wave Peak Gradient                                        | E-Wave Peak Gradient                                        |
| A12208-016        | Ratio of TV Peak Velocity to RV Peak Tissue Velocity E-Wave | Ratio of TV Peak Velocity to RV Peak Tissue Velocity E-Wave |
| A12208-017        | Right Ventricular Peak Early Diastolic Tissue Velocity      | Right Ventricular Peak Early Diastolic Tissue Velocity      |
| A12208-018        | Right Ventricular Peak Systolic Tissue Velocity             | Right Ventricular Peak Systolic Tissue Velocity             |
| A12208-020        | RV Peak Diastolic Tissue Velocity During Atrial Systole     | RV Peak Diastolic Tissue Velocity During Atrial Systole     |
| A12208-021        | Time Difference between v1 and v2                           | Time Difference between v1 and v2                           |
| A12208-022        | Tricuspid Annulus Area                                      | Tricuspid Annulus Area                                      |
| A12208-023        | Tricuspid Valve Closure to Opening Time                     | Tricuspid Valve Closure to Opening Time                     |
| A12209-001        | Pulmonic Valve Dimension of F point to A point by M-Mode    | Pulmonic Valve Dimension of F point to A point by M-Mode    |
| A12209-002        | Pulmonic Valve Dimension of B point to C point by M-Mode    | Pulmonic Valve Dimension of B point to C point by M-Mode    |
| A12209-003        | Pulmonic Valve Velocity from E point to F point by M-Mode   | Pulmonic Valve Velocity from E point to F point by M-Mode   |
| A12209-004        | Pulmonic Valve Velocity from B point to C point by M-Mode   | Pulmonic Valve Velocity from B point to C point by M-Mode   |
| A12209-005        | Velocity Time Integral of Pulmonic Regurgitant Flow         | Velocity Time Integral of Pulmonic Regurgitant Flow         |
| A12209-007        | Pulmonic Regurgitant Proximal Isovelocity Surface Area      | Pulmonic Regurgitant Proximal Isovelocity Surface Area      |
| A12209-009        | Transverse Annulus Diameter                                 | Transverse Annulus Diameter                                 |
| A12209-010        | Duration of Diastole                                        | Duration of Diastole                                        |
| A12209-011        | Ratio of PR dur to PR Index                                 | Ratio of PR dur to PR Index                                 |
| A12209-012        | Ratio of PR VCW to Ann diam a-p                             | Ratio of PR VCW to Ann diam a-p                             |
| A12209-013        | Pulmonary Artery Pressure                                   | Pulmonary Artery Pressure                                   |
| A12209-014        | Pulmonary Valve Regurgitation Duration                      | Pulmonary Valve Regurgitation Duration                      |

| Code Value | Code Meaning                                               | Definition                                                         |
|------------|------------------------------------------------------------|--------------------------------------------------------------------|
| A12209-015 | Pulmonary Valve Regurgitation Vena Contracta Diameter      | Pulmonary Valve Regurgitation Vena Contracta Diameter              |
| A12209-016 | Purmonary Annulus Area                                     | Purmonary Annulus Area                                             |
| A12209-017 | Velocity Ratio of RVOT velocity to Pulmonic Valve velocity | Velocity Ratio of RVOT velocity to Pulmonic Valve velocity         |
| A12211-001 | Velocity Time Integral of Aortic Regurgitant Flow          | Velocity Time Integral of Aortic Regurgitant Flow                  |
| A12211-003 | Aortic Regurgitant Proximal Isovelocity Surface Area       | Aortic Regurgitant Proximal Isovelocity Surface Area               |
| A12211-004 | Aortic Annulus Diameter                                    | Aortic Annulus Diameter                                            |
| A12211-005 | Aortic Annulus Maximun Diamter                             | Aortic Annulus Maximun Diamter                                     |
| A12211-006 | Aortic Annulus Minimum Diamter                             | Aortic Annulus Minimum Diamter                                     |
| A12211-007 | Aortic Regurgitant Jet Area/LVOT Area                      | Aortic Regurgitant Jet Area/LVOT Area                              |
| A12211-008 | Aortic Regurgitant Jet Width/LVOT Width                    | Aortic Regurgitant Jet Width/LVOT Width                            |
| A12211-009 | Aortic Regurgitation Vena Contracta Width                  | Aortic Regurgitation Vena Contracta Width                          |
| A12211-010 | Aortic Valve Annulus Area                                  | Aortic Valve Annulus Area                                          |
| A12211-011 | Velocity Ratio of LVOT to AV                               | Velocity Ratio of LVOT to AV                                       |
| A12212-001 | Sinus of Valsalva                                          | Sinus of Valsalva                                                  |
| A12212-002 | Sinotubular junction                                       | Sinotubular junction                                               |
| A12212-003 | Aortic Arch                                                | Aortic Arch                                                        |
| A12212-004 | Ascending Aorta                                            | Ascending Aorta                                                    |
| A12212-005 | Descending Aorta                                           | Descending Aorta                                                   |
| A12212-006 | Abdominal Aorta                                            | Abdominal Aorta                                                    |
| A12212-007 | Hepatic Vein                                               | Hepatic Vein                                                       |
| A12212-008 | Aortic Sinotubular Junction Diameter                       | Aortic Sinotubular Junction Diameter                               |
| A12212-009 | Aortic Sinuses of Valsalva Diameter                        | Aortic Sinuses of Valsalva Diameter                                |
| A12214-001 | Deceleration Time of D-Wave Flow                           | Deceleration Time of D-Wave Flow                                   |
| A12214-002 | Systolic Fraction                                          | Systolic Fraction = $[S-VTI / (S-VTI + D-VTI)] * 100$ . Unit is %. |
| A12217-001 | Pulmonary minus Systemic Shunt Flow - Doppler Volume Flow  | Pulmonary minus Systemic Shunt Flow - Doppler Volume Flow          |

| <b>Code Value</b> | <b>Code Meaning</b>                             | <b>Definition</b>                               |
|-------------------|-------------------------------------------------|-------------------------------------------------|
| A12218-001        | Atrial Septal Defect Rim diameter(Ao Position)  | Atrial Septal Defect Rim diameter(Ao Position)  |
| A12218-002        | Atrial Septal Defect Rim diameter(SVC Position) | Atrial Septal Defect Rim diameter(SVC Position) |
| A12218-003        | Atrial Septal Defect Rim diameter(IVC Position) | Atrial Septal Defect Rim diameter(IVC Position) |
| A12222-001        | Pre-Ejection Period                             | Pre-Ejection Period                             |
| A12222-002        | PEP/ET                                          | Ratio of Pre-Ejection Period to Ejection Time   |
| A12222-003        | Flow Time                                       | Flow Time                                       |
| A12222-004        | Radius of Flow Convergence                      | Radius of Flow Convergence                      |
| A12222-005        | Aliasing Velocity                               | Aliasing Velocity                               |
| A12222-006        | Proximal Isovelocity Surface Area Angle         | Proximal Isovelocity Surface Area Angle         |
| A12222-007        | Vena Contracta Diameter                         | Vena Contracta Diameter                         |
| A12222-008        | Mean Velocity (1)                               | Mean Velocity (1)                               |
| A12222-009        | Mean Velocity (2)                               | Mean Velocity (2)                               |
| A12222-010        | Peak Gradient 1                                 | Peak Gradient 1                                 |
| A12222-011        | Peak Gradient 2                                 | Peak Gradient 2                                 |
| A12222-012        | Peak Pressure Gradient 1                        | Peak Pressure Gradient 1                        |
| A12222-013        | Peak Pressure Gradient 2                        | Peak Pressure Gradient 2                        |
| A12222-014        | Acceleration Slope (1)                          | Acceleration Slope (1)                          |
| A12222-015        | Acceleration Slope (2)                          | Acceleration Slope (2)                          |
| A12222-016        | Acceleration Time (1)                           | Acceleration Time (1)                           |
| A12222-017        | Acceleration Time (2)                           | Acceleration Time (2)                           |
| A12222-018        | Ann Peak e' wave (1)                            | Ann Peak e' wave (1)                            |
| A12222-019        | Ann Peak e' wave (2)                            | Ann Peak e' wave (2)                            |
| A12222-020        | Annulus-Ostium Left diameter                    | Annulus-Ostium Left diameter                    |
| A12222-021        | Annulus-Ostium Right diameter                   | Annulus-Ostium Right diameter                   |
| A12222-022        | Anterior-Posterior Annulus Diameter             | Anterior-Posterior Annulus Diameter             |
| A12222-023        | A-Wave Peak Gradient                            | A-Wave Peak Gradient                            |
| A12222-024        | Blood Flow Velocity 1                           | Blood Flow Velocity 1                           |
| A12222-025        | Blood Flow Velocity 1(1)                        | Blood Flow Velocity 1(1)                        |
| A12222-026        | Blood Flow Velocity 1(2)                        | Blood Flow Velocity 1(2)                        |
| A12222-027        | Blood Flow Velocity 2                           | Blood Flow Velocity 2                           |
| A12222-028        | Blood Flow Velocity 2(1)                        | Blood Flow Velocity 2(1)                        |
| A12222-029        | Blood Flow Velocity 2(2)                        | Blood Flow Velocity 2(2)                        |

| <b>Code Value</b> | <b>Code Meaning</b>                                      | <b>Definition</b>                                        |
|-------------------|----------------------------------------------------------|----------------------------------------------------------|
| A12222-030        | Blood Flow Velocity at Peak Pressure Gradient 1          | Blood Flow Velocity at Peak Pressure Gradient 1          |
| A12222-031        | Blood Flow Velocity at Peak Pressure Gradient 2          | Blood Flow Velocity at Peak Pressure Gradient 2          |
| A12222-032        | Cardiovascular Orifice Area Index                        | Cardiovascular Orifice Area Index                        |
| A12222-033        | Commissural Diameter                                     | Commissural Diameter                                     |
| A12222-034        | Diastolic Pressure Gradient                              | Diastolic Pressure Gradient                              |
| A12222-035        | Ea to Aa Ratio                                           | Ea to Aa Ratio                                           |
| A12222-036        | Ea to Aa Ratio (1)                                       | Ea to Aa Ratio (1)                                       |
| A12222-037        | Ea to Aa Ratio (2)                                       | Ea to Aa Ratio (2)                                       |
| A12222-038        | Interventricular Dyssynchrony - Interventricular Delay   | Interventricular Dyssynchrony - Interventricular Delay   |
| A12222-039        | Isovolumic Contraction Time                              | Isovolumic Contraction Time                              |
| A12222-040        | Isovolumic Contraction Time (1)                          | Isovolumic Contraction Time (1)                          |
| A12222-041        | Isovolumic Contraction Time (2)                          | Isovolumic Contraction Time (2)                          |
| A12222-042        | Isovolumic Relaxation Time                               | Isovolumic Relaxation Time                               |
| A12222-043        | Isovolumic Relaxation Time (1)                           | Isovolumic Relaxation Time (1)                           |
| A12222-044        | Isovolumic Relaxation Time (2)                           | Isovolumic Relaxation Time (2)                           |
| A12222-045        | Peak Diastolic Tissue Velocity During Atrial Systole     | Peak Diastolic Tissue Velocity During Atrial Systole     |
| A12222-046        | Peak Diastolic Tissue Velocity During Atrial Systole (1) | Peak Diastolic Tissue Velocity During Atrial Systole (1) |
| A12222-047        | Peak Diastolic Tissue Velocity During Atrial Systole (2) | Peak Diastolic Tissue Velocity During Atrial Systole (2) |
| A12222-048        | Peak Systolic Tissue Velocity 1                          | Peak Systolic Tissue Velocity (1)                        |
| A12222-049        | Peak Systolic Tissue Velocity 1(1)                       | Peak Systolic Tissue Velocity 1(1)                       |
| A12222-050        | Peak Systolic Tissue Velocity 1(2)                       | Peak Systolic Tissue Velocity 1(2)                       |
| A12222-051        | Peak Systolic Tissue Velocity 2                          | Peak Systolic Tissue Velocity (2)                        |
| A12222-052        | Peak Systolic Tissue Velocity 2(1)                       | Peak Systolic Tissue Velocity 2(1)                       |

| Code Value | Code Meaning                                                  | Definition                                                                                                                                                                                                                                                                                                                                                                      |
|------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12222-053 | Peak Systolic Tissue Velocity 2(2)                            | Peak Systolic Tissue Velocity 2(2)                                                                                                                                                                                                                                                                                                                                              |
| A12222-054 | Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (1) | Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (1)                                                                                                                                                                                                                                                                                                                   |
| A12222-055 | Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (2) | Ratio of MV E-Wave Peak V to Early Diastolic Myocardium V (2)                                                                                                                                                                                                                                                                                                                   |
| A12222-056 | Regurgitation Jet Area                                        | Regurgitation Jet Area                                                                                                                                                                                                                                                                                                                                                          |
| A12222-057 | Regurgitation Jet Height                                      | Regurgitation Jet Height                                                                                                                                                                                                                                                                                                                                                        |
| A12222-058 | Regurgitation Jet Width                                       | Regurgitation Jet Width                                                                                                                                                                                                                                                                                                                                                         |
| A12222-059 | Time                                                          | Time                                                                                                                                                                                                                                                                                                                                                                            |
| A12222-060 | Time (1)                                                      | Time (1)                                                                                                                                                                                                                                                                                                                                                                        |
| A12222-061 | Time (2)                                                      | Time (2)                                                                                                                                                                                                                                                                                                                                                                        |
| A12226-001 | Apical three chamber                                          | Apical three chamber                                                                                                                                                                                                                                                                                                                                                            |
| A12227-001 | Valsalva                                                      | Valsalva                                                                                                                                                                                                                                                                                                                                                                        |
| A12227-002 | Mean Pulmonary Arterial Pressure                              | Mean Pulmonary Arterial Pressure                                                                                                                                                                                                                                                                                                                                                |
| A12227-003 | Left Ventricle Mass for Pediatric                             | Left Ventricle Mass for Pediatric                                                                                                                                                                                                                                                                                                                                               |
| A12227-004 | Left Ventricle Mass for Pediatric by Modified Simpson         | Left Ventricle Mass for Pediatric by Modified Simpson                                                                                                                                                                                                                                                                                                                           |
| A12228-001 | Method of Disks, Single Plane with Apical two chamber         | Method of Disks, Single Plane with Apical two chamber                                                                                                                                                                                                                                                                                                                           |
| A12228-002 | Gibson                                                        | <p>EDV and ESV are calculated as follows.</p> $EDV = \pi / 6 * LVIDd^2 * (0.98 * LVIDd + 5.90)$ $ESV = \pi / 6 * LVIDs^2 * (1.14 * LVIDs + 4.18)$ <p>Volume unit is milliliter and length in cm.</p> <p>Reference :</p> <p>Gibson, D. G. Measurement of left ventricular volumes in man by echocardiography – comparison with biplane angiographs. Br.Heart J. 1971;33:614.</p> |

| Code Value | Code Meaning                                                 | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12228-003 | Modified Simpson's                                           | <p>Volume = <math>(LVL / 9) * (4 * LVSAMV + 2 * LVSAPM + (LVSAMV * LVSAPM)^{(1 / 2)})</math><br/> Volume unit is milliliter, length in cm and area in cm<sup>2</sup>.</p> <p>References :<br/> Folland, ED, et al. Assessment of Left Ventricular Ejection Fraction and Volumes by Real-Time, Two-Dimensional Echocardiography. Circulation,1979;60:760-766.</p> <p>A. F. Parisi, MD et al. Approaches to Determination of Left Ventricular Volume and Ejection Fraction by Real-Time Two-Dimensional Echocardiography. Clin.Cardiol.2,257-263(1979).</p> |
| A12228-004 | Bullet                                                       | <p>Volume = <math>(5 * LVSAPM * LVL) / 6</math><br/> Volume unit is milliliter, length in cm and area in cm<sup>2</sup>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                              |
| A12228-005 | Method of Disks, Biplane of LA                               | Method of Disks, Biplane of Left Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| A12228-006 | Method of Disks, Single Plane with Apical four chamber of LA | Method of Disks, Single Plane with Apical four chamber of Left Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| A12228-007 | Method of Disks, Single Plane with Apical two chamber of LA  | Method of Disks, Single Plane with Apical two chamber of Left Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| A12228-008 | Method of Disks, Biplane of RA                               | Method of Disks, Biplane of Right Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| A12228-009 | Method of Disks, Single Plane with Apical four chamber of RA | Method of Disks, Single Plane with Apical four chamber of Right Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| A12228-010 | Method of Disks, Single Plane with Apical two chamber of RA  | Method of Disks, Single Plane with Apical two chamber of Right Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| A12228-011 | Area-Length Biplane of Left Atrium                           | Area-Length Biplane of Left Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| A12228-012 | Area-Length Biplane of Right Atrium                          | Area-Length Biplane of Right Atrium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| A12228-013 | 2D Speckle Tracking, Single Plane                            | <p>2D Speckle Tracking, Single Plane display<br/> Speckle Tracking</p> <p>Definitions for a Common Standard for 2D Speckle Tracking Echocardiography: Consensus Document of the EACVI/ASE/Industry Task Force to Standardize Deformation Imaging(J Am Soc Echocardiogr 2015;28:183-93.)(European Heart Journal – Cardiovascular Imaging (2015) 16, 1–11)</p>                                                                                                                                                                                              |

| Code Value | Code Meaning                       | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A12228-014 | 2D Speckle Tracking, Multi Plane   | 2D Speckle Tracking, Multi Plane display<br>Speckle Tracking<br>Definitions for a Common Standard for 2D Speckle Tracking Echocardiography: Consensus Document of the EACVI/ASE/Industry Task Force to Standardize Deformation Imaging(J Am Soc Echocardiogr 2015;28:183-93.)(European Heart Journal – Cardiovascular Imaging (2015) 16, 1–11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| A12228-015 | Method of Disks, 3 planes          | Mean value calculated by results from 3 chamber view, 4 chamber view, and 2 chamber view.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| A12232-001 | Left Ventricle Mass by Area Length | $\text{Mass} = 1.05 * ( (5 * A_{epi} * (LVLd + \text{thick}) / 6) - (5 * A_{end} * LVLd / 6) )$ $\text{thick} = (A_{epi} / \pi)^{(1/2)} - (A_{end} / \pi)^{(1/2)}$ <p>References :</p> <p>Nelson B. Schiller, MD, et al. Recommendations for Quantitation of the Left Ventricle by Two-Dimensional Echocardiography. American Society of Echocardiography Committee on Standards, Subcommittee on Quantitation of Two-Dimensional Echocardiograms. Journal of the American Society of Echocardiography Vol.2, No.5 September-October 1989.358-367.</p> <p>Nelson B. Schiller, MD, et al. Two-Dimensional Echocardiographic Determination of Left Ventricular Volume, Systolic Function, and Mass: Summary and Discussion of the 1989 Recommendations of the American Society of Echocardiography. Circulation Vol.84, No.3 1991;84 [Suppl I]: I -280- I -287.</p> |
| A12232-002 | Left Ventricle Mass by Penn        | $\text{Mass} = 1.04 * ((IVSd + LVIDd + LVPWd)^3 - LVIDd^3) - 13.6$ <p>Mass unit is grams and length in cm.</p> <p>References :</p> <p>Richard B. Devereux. Detection of Left Ventricular Hypertrophy by M-Mode Echocardiography. Anatomic Validation, Standardization, and Comparison to Other Methods. Hypertension 9 [Suppl II]; II - 19 - 26, 1987.</p> <p>Donald C. Wallerson and Richard B. Devereux. Reproducibility of Echocardiographic Left Ventricular Measurements. Hypertension 9 [Suppl II]; II - 6 - 18, 1987.</p> <p>American Society of Echocardiography Committee on Standards, Subcommittee on Quantitation of Two-Dimensional Echocardiograms. Recommendations for Quantitation of the Left Ventricle by Two-Dimensional Echocardiography. Journal of the American Society of Echocardiography Volume 2 Number 5 September-October 1989.</p>   |

| Code Value    | Code Meaning                                               | Definition                                                                                  |
|---------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| A12236-001    | Proximal Right Ventricle Outflow Tract                     | Proximal Right Ventricle Outflow Tract                                                      |
| A12236-002    | Distal Right Ventricle Outflow Tract                       | Distal Right Ventricle Outflow Tract                                                        |
| A12236-003    | Septal Mitral Annulus                                      | Septal Mitral Annulus                                                                       |
| A12236-004    | Septal Tricuspid Annulus                                   | Septal Tricuspid Annulus                                                                    |
| A12236-005    | Lateral Tricuspid Annulus                                  | Lateral Tricuspid Annulus                                                                   |
| A12236-006    | Epicardium                                                 | Epicardium                                                                                  |
| A12236-007    | Ascending Aorta                                            | Ascending Aorta                                                                             |
| A12236-008    | Descending Aorta                                           | Descending Aorta                                                                            |
| A12236-009    | Transverse Aorta                                           | Transverse Aorta                                                                            |
| A12236-010    | Abdominal Aorta                                            | Abdominal Aorta                                                                             |
| A12236-011    | Patent Foramen Ovale                                       | Patent Foramen Ovale                                                                        |
| A12236-012    | Patent Ductus Arteriosus                                   | Patent Ductus Arteriosus                                                                    |
| A12236-013    | Main Pulmonary Artery                                      | Main Pulmonary Artery                                                                       |
| A12236-014    | Left Pulmonary Artery                                      | Left Pulmonary Artery                                                                       |
| A12236-015    | Right Pulmonary Artery                                     | Right Pulmonary Artery                                                                      |
| A12236-016    | Aortic Valve Annulus                                       | Aortic Valve Annulus                                                                        |
| A12240-001    | Left Ventricular Endocardial Diastolic Area, psax pap view | Left Ventricular Endocardial Diastolic Area, psax pap view                                  |
| ALOKA_001-001 | OB User Definition Doppler1                                | User Definition Doppler Measurement for OB Application.                                     |
| ALOKA_001-002 | OB User Definition Doppler2                                | User Definition Doppler Measurement for OB Application.                                     |
| ALOKA_001-003 | OB User Definition Doppler3                                | User Definition Doppler Measurement for OB Application.                                     |
| ALOKA_001-005 | Ductus Venosus                                             | Ductus Venosus                                                                              |
| ALOKA_002-001 | Calculated result                                          | Result Parameter of User Definition Equation Measurement for "User's calculation function". |
| ALOKA_002-002 | Equation parameter                                         | Parameter of User Definition Equation Measurement for "User's calculation function".        |
| ALOKA_003-001 | Residual Vessel Lumen Diameter                             | Residual Diameter                                                                           |
| ALOKA_003-002 | Stenosis Ratio calculated by Vessel and Residual Diameter  | $\%STENO = 100 * (A-B) / A$<br>A : Vessel Lumen diameter<br>B : Residual diameter           |
| ALOKA_003-003 | Residual Vessel Lumen Cross-Sectional Area                 | Residual Area                                                                               |

| Code Value    | Code Meaning                                          | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALOKA_003-004 | Stenosis Ratio calculated by Vessel and Residual Area | $\%STENO = 100 * (A-B) / A$<br><br>A : Vessel Lumen Area<br>B : Residual Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ALOKA_003-005 | Diameter1                                             | Diameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ALOKA_003-006 | Diameter2                                             | Diameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ALOKA_003-007 | Diameter3                                             | Diameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ALOKA_003-008 | Length1                                               | Length                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ALOKA_003-009 | Length2                                               | Length                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ALOKA_004-001 | Peak GLS                                              | <p>Peak of Global Longitudinal Strain</p> $GLS(\%) = (MLs - MLd) / MLd;$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|               |                                                       | <p>References : Lang, Roberto M., et al. "Guidelines and Standards, Recommendations for cardiac chamber quantification by echocardiography in adults: an update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging." European Heart Journal-Cardiovascular Imaging 16.3 (2015): 233-271.</p> <p>2.3. Global Longitudinal Strain (GLS). Lagrangian strain is defined as the change in length of an object within a certain direction relative to its baseline length:</p> $Strain(\%) = (Lt - L0) / L0;$ <p>where Lt is the length at time t, and L0 is the initial length at time 0. The most commonly used strain-based measure of LV global systolic function is GLS. It is usually assessed by speckle-tracking echocardiography (STE) 22-24 (Table 1). On 2DE, peak GLS describes the relative length change of the LV myocardium between end-diastole and end-systole:</p> $GLS(\%) = (MLs - MLd) / MLd;$ <p>where ML is myocardial length at end-systole (MLs) and end-diastole (MLd). Because MLs is smaller than MLd, peak GLS is a negative number. This negative nature of GLS can lead to confusion when describing increases or decreases in strain.</p> |
| ALOKA_004-002 | Peak GLS of Overlay                                   | same as above                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Code Value    | Code Meaning                             | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALOKA_004-003 | Averaged Peak GLS                        | <p>Averaged Peak Global Longitudinal Strain</p> <p>For example:</p> $\{ \text{Peak GLS (2ch)} + \text{Peak GLS (4ch)} \} / 2,$ $\{ \text{Peak GLS (2ch)} + \text{Peak GLS (3ch)} + \text{Peak GLS (4ch)} \} / 3$ <p>References : Lang, Roberto M., et al. "Guidelines and Standards, Recommendations for cardiac chamber quantification by echocardiography in adults: an update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging." European Heart Journal-Cardiovascular Imaging 16.3 (2015): 233-271.</p> <p>"GLS measurements should be made in the three standard apical views and averaged. (P7)</p> |
| ALOKA_004-004 | GLS-Sel.                                 | <p>Selected value of Global Longitudinal Strain</p> $\text{Global Longitudinal Strain} = \{ L(t) - L(\text{R-wave}) \} / L(\text{R-wave}) \times 100$ <p>References : Definitions for a common standard for 2D speckle tracking echocardiography: consensus document of the EACVI/ASE/Industry Task Force to standardize deformation imaging, European Heart Journal Cardiovascular Imaging, 2015, 16, 1-11</p>                                                                                                                                                                                                                                               |
| ALOKA_004-005 | GLS-Sel. of Overlay                      | <p>Selected value of Global Longitudinal Strain by using some images.</p> <p>For example</p> $[\text{GLS}_{4\text{ch}}(t) + \text{GLS}_{3\text{ch}}(t) + \text{GLS}_{2\text{ch}}(t)] / 3$                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| ALOKA_004-006 | Time from R to Peak GLS phase            | Time from R to Peak GLS phase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ALOKA_004-007 | Time from R to Peak GLS phase of Overlay | Time from R to Peak GLS phase by using some images.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ALOKA_004-008 | Time from R to GLS-Sel. phase            | Time from R to selected GLS phase .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ALOKA_004-009 | Time from R to GLS-Sel. phase of Overlay | Time from R-wave to selected time at Global Longitudinal Strain by using some images.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| ALOKA_005-001 | Vessel Diameter Stenosis Ratio           | %Steno Diam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| ALOKA_005-002 | Vessel Area Stenosis Ratio               | %Steno Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Code Value    | Code Meaning            | Definition                  |
|---------------|-------------------------|-----------------------------|
| ALOKA_005-003 | Gall Bladder Wall       | Gall Bladder Wall Thickness |
| ALOKA_005-004 | Common Bile Duct        | CBD                         |
| ALOKA_005-005 | Renal Volume            | Lt/Rt.Renal Volume          |
| ALOKA_005-006 | Space Occupying Lesion1 | SOL                         |
| ALOKA_005-007 | Space Occupying Lesion2 | SOL                         |
| ALOKA_005-008 | Aorta Diameter          | Aorta Diam.                 |
| ALOKA_005-009 | Portal Vein Diameter    | PV Diam.                    |
| ALOKA_006-001 | Common Bile Duct        | Common Bile Duct            |
| ALOKA_006-002 | Pancreas Head           | Pancreas Head               |
| ALOKA_006-003 | Pancreas Body           | Pancreas Body               |
| ALOKA_006-004 | Pancreas Tail           | Pancreas Tail               |
| ALOKA_006-005 | Pancreas Duct           | Pancreas Duct               |
| ALOKA_006-006 | Spleen Index            | SI = Long axis × Thickness  |

**Private Code Definitions (Advanced Cardiac,  
Coding Scheme Designator: "99IMPROOF", Coding Scheme Version: not specified)**

| Code Value | Code Meaning                                 | Definition                                                                       |
|------------|----------------------------------------------|----------------------------------------------------------------------------------|
| RWT        | Relative Wall Thickness                      | Left Ventricle - Relative Wall Thickness                                         |
| LVEI       | LV Eccentricity Index                        | Left Ventricle - Eccentricity Index - End Diastole                               |
| LVEI       | LV Eccentricity Index                        | Left Ventricle - Eccentricity Index - End Systole                                |
| SPWMD      | Septal-to-Posterior-Wall Motion Delay        | Left Ventricle - Septal-to-Posterior-Wall Motion Delay                           |
| CA_LV_VCF  | Velocity of Circumferential Fiber Shortening | Left Ventricle - Velocity of Circumferential Fiber Shortening - Teichholz        |
| RWT        | Relative Wall Thickness                      | Left Ventricle - Relative Wall Thickness                                         |
| CA_LV_DIF  | Major axis length difference                 | Left Ventricle - Major axis length diastolic difference - End Diastole           |
| CA_LV_DIF  | Major axis length difference                 | Left Ventricle - Major axis length systolic difference - End Systole             |
| THI_Myo    | Myocardial Thickness                         | Left Ventricle - Myocardial thickness - Left Ventricle Mass by Truncated Ellipse |

| Code Value         | Code Meaning                                               | Definition                                                                                                           |
|--------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| RADsax             | Short axis radius calculated from short axis cavity area   | Left Ventricle - Short axis radius calculated from short axis cavity area - Left Ventricle Mass by Truncated Ellipse |
| THI_Myo            | Myocardial Thickness                                       | Left Ventricle - Myocardial thickness                                                                                |
| AOs2LAs            | Aortic Root to Left Atrium Ratio                           | Aortic Root Diameter to Left Atrium Diameter Ratio - Systole                                                         |
| LAs2AOd            | Left Atrium Systole to Aortic Root Diastole Diameter Ratio | Left Atrium Systole to Aortic Root Diastole Diameter Ratio                                                           |
| CA_DIAM_SINO       | Aortic Sinotubular Junction Diameter                       | Aorta - Diameter - Sinotubular junction                                                                              |
| CA_DIAM_SINUS      | Aortic Sinuses of Valsalva Diameter                        | Aorta - Diameter - Sinus Valsava                                                                                     |
| CA_DIAM_ANN        | Aortic Annulus Diameter                                    | Aorta - Diameter - Annulus                                                                                           |
| AOs2LAs            | Aortic Root to Left Atrium Ratio                           | Left Atrium - Aortic Root Diameter to Left Atrium Diameter Ratio                                                     |
| LAs2AOd            | Left Atrium Systole to Aortic Root Diastole Diameter Ratio | Left Atrium Systole to Aortic Root Diastole Diameter Ratio                                                           |
| CA_MV_A2E          | Mitral Valve A to E Ratio                                  | Mitral Valve - A to E Ratio - Antegrade Flow                                                                         |
| CA_MV_DUR          | Mitral Valve E-Wave Duration                               | Mitral Valve - E-Wave Duration - Antegrade Flow                                                                      |
| CA_MV_Dia_C        | Mitral Valve Commissural Diameter                          | Mitral Annulus - Diameter - Systole - commissural                                                                    |
| CA_MV_Dia_AP       | Mitral Valve Anterior-Posterior Annulus Diameter           | Mitral Annulus - Diameter - Systole - anterior-posterior                                                             |
| CA_MV_Ea2Aa        | Mitral Valve Ea to Aa Ratio                                | Left Ventricle Doppler Tissue Imaging - Mitral Valve Ea to Aa Ratio - Medial Mitral Annulus                          |
| CA_MV_EWAVEAmpl    | Amplitude E- Wave                                          | Mitral Valve - Amplitude E- Wave                                                                                     |
| CA_MV_AWAVEAmpl    | Amplitude A-Wave                                           | Mitral Valve - Amplitude A-Wave                                                                                      |
| CA_MV_DEWAVEAmpl   | Amplitude D-E Wave                                         | Mitral Valve - Amplitude D-E Wave                                                                                    |
| MV_AMPL_A2E_AMPL_E | A-Wave Amplitude to E-Wave Amplitude                       | Mitral Valve - A-Wave Amplitude to E-Wave Amplitude                                                                  |
| MV_AMPL_E2E_AMPL_A | E-Wave Amplitude to A-Wave Amplitude                       | Mitral Valve - E-Wave Amplitude to A-Wave Amplitude                                                                  |
| MAPSE              | Mitral Annular Plane Systolic Excursion                    | Left Ventricle - Mitral Annular Plane Systolic Excursion                                                             |
| CA_DIAM_VC         | Vena Contracta Diameter                                    | Mitral Valve - Vena Contracta Diameter                                                                               |
| HEIGHT_JET         | Jet Height                                                 | Mitral Valve - Jet Height                                                                                            |

| Code Value        | Code Meaning                                            | Definition                                                                                                                   |
|-------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| CA_REG_VOL        | Regurgitation Volume                                    | Mitral Valve - Regurgitation volume - Regurgitant Flow - Doppler Mode                                                        |
| CA_AV_P           | Aortic Valve Pressure                                   | Aortic Valve - Pressure - End Diastole - Regurgitant Flow - Doppler Mode                                                     |
| dPEP              | Interventricular Delay                                  | Interventricular Dyssynchrony - Interventricular Delay - Doppler Mode                                                        |
| LVOTTOAoV_V P     | Maximum velocity in the LVOT to Maximum velocity in AV  | Aortic Valve - Maximum velocity in the LVOT to Maximum velocity in AV - Antegrade Flow - Doppler Mode                        |
| LVOTTOAoV_V TI    | VTI in the LVOT to VTI in AV                            | Aortic Valve - VTI in the LVOT to VTI in AV - Antegrade Flow - Doppler Mode                                                  |
| CA_DIAM_VC        | Vena Contracta Diameter                                 | Aortic Valve - Vena Contracta Diameter                                                                                       |
| HEIGHT_JET        | Jet Height                                              | Aortic Valve - Jet Height                                                                                                    |
| CA_AR_WIDT H_JET  | Jet Width                                               | Aortic Valve - Jet Width                                                                                                     |
| CA_AR_WJET 2LVOTD | Jet Width to LVOT Diam                                  | Aortic Valve - Jet Width to LVOT diam                                                                                        |
| CA_TV_A2E         | Tricuspid Valve A to E Ratio                            | Tricuspid Valve - A to E Ratio - Antegrade Flow                                                                              |
| TV_Dia_CC         | Tricuspid Valve Commissural Diameter                    | Tricuspid Annulus - Diameter - Systole - commissural                                                                         |
| TV_Dia_AP         | Tricuspid Valve Anterior-Posterior Annulus Diamater     | Tricuspid Annulus - Diameter - Systole - anterior-posterior                                                                  |
| RV_Ea             | Right Ventricular Peak Early Diastolic Tissue Velocity  | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Early Diastolic Tissue Velocity - Medial Tricuspid Annulus   |
| RV_Aa             | RV Peak Diastolic Tissue Velocity During Atrial Systole | Right Ventricle Doppler Tissue Imaging - RV Peak Diastolic Tissue Velocity During Atrial Systole - Medial Tricuspid Annulus  |
| RV_Sa             | Right Ventricular Peak Systolic Tissue Velocity         | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Systolic Tissue Velocity - Medial Mitral Annulus             |
| RV_Ea             | Right Ventricular Peak Early Diastolic Tissue Velocity  | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Early Diastolic Tissue Velocity - Lateral Tricuspid Annulus  |
| RV_Aa             | RV Peak Diastolic Tissue Velocity During Atrial Systole | Right Ventricle Doppler Tissue Imaging - RV Peak Diastolic Tissue Velocity During Atrial Systole - Lateral Tricuspid Annulus |
| RV_Sa             | Right Ventricular Peak Systolic Tissue Velocity         | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Systolic Tissue Velocity - Lateral Mitral Annulus            |
| CA_DIAM_VC        | Vena Contracta Diameter                                 | Tricuspid Valve - Vena Contracta Diameter                                                                                    |
| HEIGHT_JET        | Jet Height                                              | Tricuspid Valve - Jet Height                                                                                                 |
| dPEP              | Interventricular Delay                                  | Interventricular Dyssynchrony - Interventricular Delay - Doppler Mode                                                        |

| Code Value       | Code Meaning                                     | Definition                                                                                                             |
|------------------|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| CA_DIAM_VC       | Vena Contracta Diameter                          | Pulmonary Valve - Vena Contracta Diameter - 2D mode                                                                    |
| HEIGHT_JET       | Jet Height                                       | Pulmonary Valve - Jet Height                                                                                           |
| MPAP             | Mean Pulmonary Artery Pressure                   | Pulmonary Artery - Mean Pulmonary Artery Pressure                                                                      |
| CA_VTI_AWave_PVE | Pulmonary Vein A-Wave Velocity Time Integral     | Pulmonary Veins - A-Wave Velocity Time Integral - Antegrade Flow                                                       |
| CA_PVE_SF        | Systolic Fraction                                | Pulmonary Veins - Systolic Fraction                                                                                    |
| RVWT             | Right Ventricular Wall Thickness                 | Right Ventricle - Wall Thickness                                                                                       |
| CA_RV_L_BaseApex | Right Ventricular base-apex Length               | Right Ventricle - Right Ventricular base-apex Length - End Diastole                                                    |
| RVWT             | Right Ventricular Wall Thickness                 | Right Ventricle - Wall Thickness                                                                                       |
| TAPSE            | Tricuspid Annular Plane Systolic Excursion       | Right Ventricle - Tricuspid Annular Plane Systolic Excursion                                                           |
| AREA_DIA_RV      | Right Ventricular Diastolic Area                 | Right Ventricle - Area - End Diastole                                                                                  |
| AREA_SYS_RV      | Right Ventricular Systolic Area                  | Right Ventricle - Area - End Systole                                                                                   |
| RVFAC            | Right Ventricular Fractional Area Change         | Right Ventricle - Fractional Area Change                                                                               |
| DIAM_VC_Sup      | Superior Vena Cava Diameter                      | Vena Cava - Diameter - Superior                                                                                        |
| DIAM_VC_Sup      | Superior Vena Cava Diameter                      | Vena Cava - Diameter - During Inspiration - Superior                                                                   |
| DIAM_VC_Sup      | Superior Vena Cava Diameter                      | Vena Cava - Diameter - During Expiration - Superior                                                                    |
| DIAM_SUPINF      | Left Atrium Superior-inferior Systolic Dimension | Left Atrium - Diameter - Systole - Superior-Inferior                                                                   |
| DIAM_MIDLAT      | Left Atrium Medial-lateral Systolic Dimension    | Left Atrium - Diameter - Systole - Medial-Lateral                                                                      |
| CA_RA_MAJAXES    | Right Atrium Systolic Major Axis                 | Right Atrium - Systolic major axis - 2D mode - Apical four chamber                                                     |
| CA_RA_MINAXES    | Right Atrium Systolic Minor Axis                 | Right Atrium - Systolic minor axis - 2D mode - Apical four chamber                                                     |
| CA_RA_VOLes      | Right Atrial End Systolic Volume                 | Right Atrium - End Systolic Volume - Area-Length, Single Plane                                                         |
| CA_RA_VOLes      | Right Atrial End Systolic Volume                 | Right Atrium - End Systolic Volume - Area-Length, Single Plane - Body Surface Area                                     |
| CA_RA_VOLes      | Right Atrial End Systolic Volume                 | Right Atrium - End Systolic Volume - 2D mode - Method of Disks, Single Plane - Apical four chamber                     |
| CA_RA_VOLes      | Right Atrial End Systolic Volume                 | Right Atrium - End Systolic Volume - 2D mode - Method of Disks, Single Plane - Apical four chamber - Body Surface Area |

| <b>Code Value</b> | <b>Code Meaning</b>                                     | <b>Definition</b>                                                                                                            |
|-------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| CA_MV_Ea2Aa       | Mitral Valve Ea to Aa Ratio                             | Left Ventricle Doppler Tissue Imaging - Mitral Valve Ea to Aa Ratio - Medial Mitral Annulus                                  |
| CA_MV_ATa         | Mitral Valve Acceleration time of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Acceleration time of Ea - Medial Mitral Annulus                         |
| CA_MV_ARa         | Mitral Valve Acceleration rate of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Acceleration rate of Ea - Medial Mitral Annulus                         |
| CA_MV_DTa         | Mitral Valve Deceleration time of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Deceleration time of Ea - Medial Mitral Annulus                         |
| CA_MV_DRa         | Mitral Valve Deceleration rate of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Deceleration rate of Ea - Medial Mitral Annulus                         |
| CA_MV_Ea2Aa       | Mitral Valve Ea to Aa Ratio                             | Left Ventricle Doppler Tissue Imaging - Mitral Valve Ea to Aa Ratio - Lateral Mitral Annulus                                 |
| CA_MV_ATa         | Mitral Valve Acceleration time of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Acceleration time of Ea - Lateral Mitral Annulus                        |
| CA_MV_ARa         | Mitral Valve Acceleration rate of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Acceleration rate of Ea - Lateral Mitral Annulus                        |
| CA_MV_DTa         | Mitral Valve Deceleration time of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Deceleration time of Ea - Lateral Mitral Annulus                        |
| CA_MV_DRa         | Mitral Valve Deceleration rate of Ea                    | Left Ventricle Doppler Tissue Imaging - Mitral Valve Deceleration rate of Ea - Lateral Mitral Annulus                        |
| RV_Ea             | Right Ventricular Peak Early Diastolic Tissue Velocity  | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Early Diastolic Tissue Velocity - Medial Tricuspid Annulus   |
| RV_Aa             | RV Peak Diastolic Tissue Velocity During Atrial Systole | Right Ventricle Doppler Tissue Imaging - RV Peak Diastolic Tissue Velocity During Atrial Systole - Medial Tricuspid Annulus  |
| RV_Sa             | Right Ventricular Peak Systolic Tissue Velocity         | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Systolic Tissue Velocity - Medial Mitral Annulus             |
| RV_Ea             | Right Ventricular Peak Early Diastolic Tissue Velocity  | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Early Diastolic Tissue Velocity - Lateral Tricuspid Annulus  |
| RV_Aa             | RV Peak Diastolic Tissue Velocity During Atrial Systole | Right Ventricle Doppler Tissue Imaging - RV Peak Diastolic Tissue Velocity During Atrial Systole - Lateral Tricuspid Annulus |
| RV_Sa             | Right Ventricular Peak Systolic Tissue Velocity         | Right Ventricle Doppler Tissue Imaging - Right Ventricular Peak Systolic Tissue Velocity - Lateral Mitral Annulus            |
| CA_CS_PF-SF       | Pulmonary minus Systemic Shunt Flow                     | Cardiac Shunt Study - Pulmonary minus Systemic Shunt Flow - Doppler Volume Flow                                              |

### 8.6.5 Standard Extended and Private Template Definitions (Non-Advanced Cardiac)

This section defines the Standard Extended template and Private templates.

#### Extended Template Definitions TID 5000 OB-GYN Ultrasound Procedure Report

|    | NL | Rel with Parent | VT        | Concept Name                                        | VM  | Req Type | Condition | Value set Constraint                                                                                      |
|----|----|-----------------|-----------|-----------------------------------------------------|-----|----------|-----------|-----------------------------------------------------------------------------------------------------------|
| 1  |    |                 | CONTAINER | EV(12500,DCM, "OB-GYN Ultrasound Procedure Report") | 1   | M        |           |                                                                                                           |
| 2  | >  | HAS CONCEPT MOD | INCLUDE   | DTID(1204)                                          | 1   | U        |           |                                                                                                           |
| 3  | >  | HAS OBS CONTEXT | INCLUDE   | DTID(1001)                                          | 1   | M        |           |                                                                                                           |
| 4  | >  | CONTAINS        | INCLUDE   | DTID(5001)                                          | 1   | U        |           |                                                                                                           |
| 5  | >  | CONTAINS        | CONTAINER | DT(111028, DCM, "Image Library")                    | 1   | U        |           |                                                                                                           |
| 6  | >> | CONTAINS        | IMAGE     | No purpose of reference                             | 1-n | M        |           |                                                                                                           |
| 7  | >  | CONTAINS        | INCLUDE   | DTID(5002)                                          | 1   | U        |           |                                                                                                           |
| 8  | >  | CONTAINS        | INCLUDE   | DTID(5004)                                          | 1-n | U        |           |                                                                                                           |
| 9  | >  | CONTAINS        | INCLUDE   | DTID(5005)                                          | 1-n | U        |           |                                                                                                           |
| 10 | >  | CONTAINS        | INCLUDE   | DTID(5006)                                          | 1-n | U        |           |                                                                                                           |
| 11 | >  | CONTAINS        | INCLUDE   | DTID(5007)                                          | 1-n | U        |           |                                                                                                           |
| 12 | >  | CONTAINS        | INCLUDE   | DTID(5009)                                          | 1-n | U        |           |                                                                                                           |
| 13 | >  | CONTAINS        | INCLUDE   | DTID(5011)                                          | 1-n | U        |           |                                                                                                           |
| 14 | >  | CONTAINS        | INCLUDE   | DTID(5010)                                          | 1   | U        |           |                                                                                                           |
| 15 | >  | CONTAINS        | INCLUDE   | DTID(5015)                                          | 1   | U        |           |                                                                                                           |
| 16 | >  | CONTAINS        | INCLUDE   | DTID(5012)                                          | 1   | U        |           |                                                                                                           |
| 17 | >  | CONTAINS        | INCLUDE   | DTID(5013)                                          | 1   | U        |           | \$Laterality = EV (G-A101,SRT,"Left")<br>\$Number = EV (11879-4, LN, "Number of follicles in left ovary") |

|    | NL | Rel with Parent | VT        | Concept Name                                          | VM  | Req Type | Condition | Value set Constraint                                                                                          |
|----|----|-----------------|-----------|-------------------------------------------------------|-----|----------|-----------|---------------------------------------------------------------------------------------------------------------|
| 18 | >  | CONTAINS        | INCLUDE   | DTID(5013)                                            | 1   | U        |           | \$Laterality = EV (G-A100, SRT, "Right")<br>\$Number = EV (11880-2, LN, "Number of follicles in right ovary") |
| 19 | >  | CONTAINS        | CONTAINER | EV(121070, DCM, "Finding Site")                       | 1-n | U        |           |                                                                                                               |
| 20 | >> | HAS CONCEPT MOD | CODE      | EV(G-C0E3, SRT, "Finding Site")                       | 1   | M        |           | EV(T-F6800, SRT, "Embryonic Vascular Structure")                                                              |
| 21 | >> | CONTAINS        | INCLUDE   | DTID(5025)                                            | 1   | M        |           | \$AnatomyGroup= DCID(12141)                                                                                   |
| 22 | >  | CONTAINS        | CONTAINER | EV(121070, DCM, "Findings")                           | 1-n | U        |           |                                                                                                               |
| 23 | >> | HAS CONCEPT MOD | CODE      | EV(G-C0E3, SRT, "Finding Site")                       | 1   | M        |           | EV(T-D6007, SRT, "Pelvic Vascular Structure")                                                                 |
| 24 | >> | CONTAINS        | INCLUDE   | DTID(5026)                                            | 1   | M        |           | \$AnatomyGroup= DCID(12140)                                                                                   |
| 25 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-5001)                                      | 1   | U        |           | \$Anatomy = DCID(12140)<br>\$Meas = DCID(12119)                                                               |
| 26 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-5000)                                      | 1-n | U        |           | \$Anatomy = DCID(12140)<br>\$Meas = DCID(12119)                                                               |
| 27 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-5000)                                      | 1-n | U        |           | \$Anatomy = DCID(ALOKA_001)<br>\$Meas = DCID(12119)                                                           |
| 28 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-5002) OB-GYN User Defined Equation Section | 1-n | U        |           |                                                                                                               |
| 29 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-301) User Defined Equation Section         | 1-n | U        |           |                                                                                                               |

**Extended Template Definitions**  
**TID 5100 Vascular Ultrasound Procedure Report**

|   | NL | Rel with Parent | VT        | Concept Name                                               | VM  | Req Type | Condition | Value set Constraint                                                                                                                                                   |
|---|----|-----------------|-----------|------------------------------------------------------------|-----|----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 |    |                 | CONTAINER | EV(12510,DCM, "Vascular Ultrasound Procedure Report")      | 1   | M        |           |                                                                                                                                                                        |
| 2 | >  | HAS OBS CONTEXT | CODE      | EV(R-40FB8, SRT, "Temporal periods Relating to Procedure") | 1   | U        |           | DCID(12102) Temporal Periods Relating To Procedure or Therapy                                                                                                          |
| 3 | >  | HAS CONCEPT MOD | INCLUDE   | DTID(1204) Language of Content Item and Descendants        | 1   | U        |           |                                                                                                                                                                        |
| 4 | >  | HAS OBS CONTEXT | INCLUDE   | DTID(1001)Observation Context                              | 1   | M        |           |                                                                                                                                                                        |
| 5 | >  | CONTAINS        | INCLUDE   | DTID(5101) Vascular Patient Characteristics                | 1   | U        |           |                                                                                                                                                                        |
| 6 | >  | CONTAINS        |           | EV(111028, DCM, "Image Library")                           | 1   | U        |           |                                                                                                                                                                        |
| 7 | >> | CONTAINS        |           | No purpose of reference                                    | 1-n | M        |           |                                                                                                                                                                        |
| 8 | >  | CONTAINS        | INCLUDE   | DTID(5102) Vascular Procedure Summary Section              | 1   | U        |           |                                                                                                                                                                        |
| 9 | >  | CONTAINS        | INCLUDE   | DTID(5103) Vascular Ultrasound Section                     | 1   | U        |           | \$SectionScope = DT (T-40501, SRT, "Blood Vessel of Head")<br>\$SectionLaterality = EV (G-A101, SRT, "Left")<br>\$Anatomy = DCID (12105) Intracranial Cerebral Vessels |

|    | NL | Rel with Parent | VT      | Concept Name                                    | VM | Req Type | Condition | Value set Constraint                                                                                                                                                                                                             |
|----|----|-----------------|---------|-------------------------------------------------|----|----------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-40501,<br>SRT, "Blood<br>Vessel of Head")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12105) Intracranial<br>Cerebral Vessels                                     |
| 11 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-40501,<br>SRT, "Blood<br>Vessel of Head")<br>\$SectionLaterality =<br>EV (G-A103, SRT,<br>"Unilateral")<br>\$Anatomy = DCID<br>(12106) Intracranial<br>Cerebral Vessels<br>(unilateral)                |
| 12 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-45005, SRT,<br>"Artery of neck")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12104) Extracranial<br>Arteries<br>\$AnatomyRatio =<br>DCID (12123)<br>Carotid Ratios |

|    | NL | Rel with Parent | VT      | Concept Name                                    | VM | Req Type | Condition | Value set Constraint                                                                                                                                                                                                            |
|----|----|-----------------|---------|-------------------------------------------------|----|----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-45005, SRT,<br>"Artery of neck")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12104) xtracranial<br>Arteries<br>\$AnatomyRatio =<br>DCID(12123)<br>Carotid Ratios |
| 14 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-47040, SRT,<br>"Artery of Lower<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12109) Lower<br>Extremity Arteries                                     |
| 15 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-47040, SRT,<br>"Artery of Lower<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12109) Lower<br>Extremity Arteries                                    |
| 16 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-49403, SRT,<br>"Vein of Lower<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12110) Lower<br>Extremity Veins                                          |

|    | NL | Rel with Parent | VT      | Concept Name                                    | VM | Req Type | Condition | Value set Constraint                                                                                                                                                                         |
|----|----|-----------------|---------|-------------------------------------------------|----|----------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-49403, SRT,<br>"Vein of Lower<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12110) Lower<br>Extremity Veins      |
| 18 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-47020, SRT,<br>"Artery Of Upper<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12107) Upper<br>Extremity Arteries  |
| 19 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-47020, SRT,<br>"Artery Of Upper<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12107) Upper<br>Extremity Arteries |
| 20 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-49103, SRT,<br>"Vein Of Upper<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12108) Upper<br>Extremity Veins       |

|    | NL | Rel with Parent | VT      | Concept Name                                    | VM | Req Type | Condition | Value set Constraint                                                                                                                                                                                                                     |
|----|----|-----------------|---------|-------------------------------------------------|----|----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-49103, SRT,<br>"Vein Of Upper<br>Extremity")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12108) Upper<br>Extremity Veins                                                  |
| 22 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-71019, SRT,<br>"Vascular Structure<br>Of Kidney")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12115) Renal<br>Vessels<br>\$AnatomyRatio =<br>DCID (12124)<br>Renal Ratios  |
| 23 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-71019, SRT,<br>"Vascular Structure<br>Of Kidney")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12115) Renal<br>Vessels<br>\$AnatomyRatio =<br>DCID (12124)<br>Renal Ratios |

|    | NL | Rel with Parent | VT      | Concept Name                                    | VM | Req Type | Condition | Value set Constraint                                                                                                                                                                             |
|----|----|-----------------|---------|-------------------------------------------------|----|----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-46002,<br>SRT, "Artery<br>of Abdomen")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12111) Abdominal<br>Arteries (lateral)          |
| 25 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-46002,<br>SRT, "Artery of<br>Abdomen")<br>\$SectionLaterality =<br>EV (G-A100, SRT,<br>"Right")<br>\$Anatomy = DCID<br>(12111) Abdominal<br>Arteries (lateral)         |
| 26 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-46002,<br>SRT, "Artery of<br>Abdomen")<br>\$SectionLaterality =<br>EV (G-A103, SRT,<br>"Unilateral")<br>\$Anatomy = DCID<br>(12112) Abdominal<br>Arteries (unilateral) |
| 27 | >  | CONTAINS        | INCLUDE | DTID(5103)<br>Vascular<br>Ultrasound<br>Section | 1  | U        |           | \$SectionScope =<br>DT (T-487A0,<br>SRT, "Vein of<br>Abdomen")<br>\$SectionLaterality =<br>EV (G-A101, SRT,<br>"Left")<br>\$Anatomy = DCID<br>(12113) Abdominal<br>Veins(lateral)                |

|    | NL | Rel with Parent | VT      | Concept Name                                           | VM  | Req Type | Condition | Value set Constraint                                                                                                                                                                                          |
|----|----|-----------------|---------|--------------------------------------------------------|-----|----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 28 | >  | CONTAINS        | INCLUDE | DTID(5103) Vascular Ultrasound Section                 | 1   | U        |           | \$SectionScope = DT (T-487A0, SRT, "Vein of Abdomen")<br>\$SectionLaterality = EV (G-A100, SRT, "Right")<br>\$Anatomy = DCID (12113) Abdominal Veins(lateral)                                                 |
| 29 | >  | CONTAINS        | INCLUDE | DTID(5103) Vascular Ultrasound Section                 | 1   | U        |           | \$SectionScope = DT (T-487A0, SRT, " Vein of Abdomen")<br>\$SectionLaterality = EV (G-A103, SRT, "Unilateral")<br>\$Anatomy = DCID (12114) Abdominal Veins(unilateral)                                        |
| 30 | >  | CONTAINS        | INCLUDE | DTID(5105) Ultrasound Graft Section                    | 1   | U        |           |                                                                                                                                                                                                               |
| 31 | >  | CONTAINS        | INCLUDE | DTID(ALOKA-301) User Defined Equation Section          | 1-n | U        |           |                                                                                                                                                                                                               |
| 32 | >  | CONTAINS        | INCLUDE | DTID(ALOKA-5100) Vascular Original Measurement section | 1   | U        |           | \$SectionScope= DT(A-011, 99ALOKA, "Original Measurement Group of Abdomen")<br>\$Anatomy = DCID(ALOKA_005) Abdomen Original Measurements Group<br>\$Meas = DCID(ALOKA_006) Abdomen Original Measurement Items |

**Extended Template Definitions**  
**TID 5200 Echocardiography Ultrasound Procedure Report**

|    | NL | Rel with Parent | VT        | Concept Name                                                | VM  | Req Type | Condition | Value set Constraint                                                                                                     |
|----|----|-----------------|-----------|-------------------------------------------------------------|-----|----------|-----------|--------------------------------------------------------------------------------------------------------------------------|
| 1  |    |                 | CONTAINER | EV (125200, DCM, "Adult Echocardiography Procedure Report") | 1   | M        |           |                                                                                                                          |
| 2  | >  | HAS CONCEPT MOD | INCLUDE   | DTID (1204) Language of Content Item and Descendants        | 1   | U        |           |                                                                                                                          |
| 3  | >  | HAS OBS CONTEXT | INCLUDE   | DTID (1001) Observation Context                             | 1   | M        |           |                                                                                                                          |
| 4  | >  | CONTAINS        | CONTAINER | DT (121064, DCM, "Current Procedure Descriptions")          | 1   | U        |           |                                                                                                                          |
| 5  | >> | CONTAINS        | CODE      | DT (125203, DCM, "Acquisition Protocol")                    | 1-n | M        |           | BCID (12001) Ultrasound Protocol Types                                                                                   |
| 6  | >  | CONTAINS        | INCLUDE   | DTID (5201) Echocardiography Patient Characteristics        | 1   | U        |           |                                                                                                                          |
| 7  | >  | CONTAINS        | CONTAINER | (111028, DCM, "Image Library")                              | 1   | U        |           |                                                                                                                          |
| 8  | >> | CONTAINS        | IMAGE     | No purpose of reference                                     | 1-n | M        |           |                                                                                                                          |
| 9  | >  | CONTAINS        | INCLUDE   | DTID(5202) Echo Section                                     | 1   | U        |           | \$SectionSubject = EV (T-32600, SRT, "Left Ventricle")<br>\$MeasType = DCID (12200)<br>Echocardiography Left Ventricle   |
| 10 | >  | CONTAINS        | INCLUDE   | DTID(5202) Echo Section                                     | 1   | U        |           | \$SectionSubject = EV (T-32500, SRT, "Right Ventricle")<br>\$MeasType = DCID (12204)<br>Echocardiography Right Ventricle |

|    | NL | Rel with Parent | VT      | Concept Name               | VM | Req Type | Condition | Value set Constraint                                                                                                                 |
|----|----|-----------------|---------|----------------------------|----|----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------|
| 11 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-32300, SRT,<br>"Left Atrium")<br>\$MeasType = DCID<br>(12205)<br>Echocardiography<br>Left Atrium         |
| 12 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-32200, SRT,<br>"Right Atrium")<br>\$MeasType = DCID<br>(12206)<br>Echocardiography<br>Right Atrium       |
| 13 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-35400, SRT,<br>"Aortic Valve")<br>\$MeasType = DCID<br>(12211)<br>Echocardiography<br>Aortic Valve       |
| 14 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-35300, SRT,<br>"Mitral Valve")<br>\$MeasType = DCID<br>(12207)<br>Echocardiography<br>Mitral Valve       |
| 15 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-35200, SRT,<br>"Pulmonic Valve")<br>\$MeasType = DCID<br>(12209)<br>Echocardiography<br>Pulmonic Valve   |
| 16 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-35100, SRT,<br>"Tricuspid Valve")<br>\$MeasType = DCID<br>(12208)<br>Echocardiography<br>Tricuspid Valve |

|    | NL | Rel with Parent | VT      | Concept Name               | VM | Req Type | Condition | Value set Constraint                                                                                                                                     |
|----|----|-----------------|---------|----------------------------|----|----------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-42000, SRT,<br>"Aorta")<br>\$MeasType= DCID<br>(12212)<br>Echocardiography<br>Aorta                                          |
| 18 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-44000, SRT,<br>"Pulmonary artery")<br>\$MeasType DCID<br>(12210) =<br>Echocardiography<br>Pulmonary Artery                   |
| 19 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-48600, SRT,<br>"Vena Cava"<br>\$MeasType = DCID<br>(12215)<br>Echocardiography<br>Vena Cavae                                 |
| 20 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-48581, SRT,<br>"Pulmonary Venous<br>Structure")<br>\$MeasType = DCID<br>(12214)<br>Echocardiography<br>Pulmonary Veins       |
| 21 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (T-39050,SRT,<br>"Pericardial cavity")<br>\$MeasType = DCID<br>12250<br>"CardiacUltrasound<br>Common<br>LinearMeasuremen<br>ts" |
| 22 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section | 1  | U        |           | \$SectionSubject =<br>EV (P5-30031,<br>SRT, "Cardiac<br>Shunt Study")<br>\$MeasType = DCID<br>(12217)<br>Echocardiography<br>Cardiac Shunt               |

|    | NL | Rel with Parent | VT      | Concept Name                                            | VM  | Req Type | Condition | Value set Constraint                                                                                                                                                  |
|----|----|-----------------|---------|---------------------------------------------------------|-----|----------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 23 | >  | CONTAINS        | INCLUDE | DTID(5202)<br>Echo Section                              | 1   | U        |           | \$SectionSubject =<br>EV (D4-30000,<br>SRT, "Congenital<br>Anomaly of<br>Cardiovascular<br>System")<br>\$MeasType = DCID<br>(12218)<br>Echocardiography<br>Congenital |
| 24 | >  | CONTAINS        | INCLUDE | DTID(5204)<br>Wall Motion<br>Analysis                   | 1-n | U        |           | \$Procedure = DT<br>(P5-B3121, SRT,<br>"Echocardiography<br>for Determining<br>Ventricular<br>Contraction")                                                           |
| 25 | >  | CONTAINS        | INCLUDE | DTID(ALOKA-<br>301) User<br>Defined Equation<br>Section | 1-n | U        |           |                                                                                                                                                                       |

**Private Template Definitions**  
**TID ALOKA-300 Common Original Measurement Section**

|   | NL | Rel with Parent       | VT        | Concept Name                    | VM  | Req Type | Condition | Value set Constraint                                           |
|---|----|-----------------------|-----------|---------------------------------|-----|----------|-----------|----------------------------------------------------------------|
| 1 |    |                       | CONTAINER | \$AnatomyGroup                  | 1   | M        |           |                                                                |
| 2 | >  | HAS<br>CONCEPT<br>MOD | CODE      | EV(G-C171,<br>SRT,"Laterality") | 1   | U        |           | \$SectionLaterality                                            |
| 3 | >  | CONTAINS              | INCLUDE   | DTID(300)                       | 1-n | M        |           | \$Measurement =<br>\$ MeasType<br>\$Derivation =<br>DCID(3627) |

**Private Template Definitions**  
**TID ALOKA-301 User Defined Equation Section**

|   | NL | Rel with Parent | VT        | Concept Name                                              | VM  | Req Type | Condition | Value set Constraint |
|---|----|-----------------|-----------|-----------------------------------------------------------|-----|----------|-----------|----------------------|
| 1 |    |                 | CONTAINER | EV (A-004, 99ALOKA, "User Defined Equation")              | 1   | M        |           |                      |
| 2 | >  | CONTAINS        | TEXT      | EV (A-005, 99ALOKA, "User Defined Equation Group Number") | 1   | U        |           |                      |
| 3 | >  | CONTAINS        | TEXT      | EV (A-006, 99ALOKA, "User Defined Equation Group Name")   | 1   | M        |           |                      |
| 4 | >> | HAS PROPERTIES  | INCLUDE   | DTID(ALOKA-302) User Defined Equation Items Section       | 1-n | M        |           |                      |

**Private Template Definitions**  
**TID ALOKA-302 User Defined Equation Items Section**

|   | NL | Rel with Parent | VT      | Concept Name                                        | VM | Req Type | Condition | Value set Constraint                                                                                      |
|---|----|-----------------|---------|-----------------------------------------------------|----|----------|-----------|-----------------------------------------------------------------------------------------------------------|
| 1 |    |                 | INCLUDE | DTID(300) Measurement                               | 1  | M        |           | \$Measurement = DCID(ALOKA_002) User Defined Equation Group<br>\$Derivation = DCID(3627) Measurement Type |
| 2 | >  | INFERRED FROM   | TEXT    | EV(A-007, 99ALOKA, "User Defined Parameter Number") | 1  | U        |           |                                                                                                           |
| 3 | >  | INFERRED FROM   | TEXT    | EV (A-008, 99ALOKA, "User Defined Parameter Name")  | 1  | U        |           |                                                                                                           |

|   |   |               |      |                                              |   |   |  |  |
|---|---|---------------|------|----------------------------------------------|---|---|--|--|
| 4 | > | INFERRED FROM | TEXT | EV (A-009, 99ALOKA, "User Defined Equation") | 1 | U |  |  |
|---|---|---------------|------|----------------------------------------------|---|---|--|--|

**Private Template Definitions  
TID ALOKA-5000 OB Original Fetal Measurement Section**

|   | NL | Rel with Parent | VT        | Concept Name                                              | VM  | Req Type | Condition                                                                  | Value set Constraint                                                                 |
|---|----|-----------------|-----------|-----------------------------------------------------------|-----|----------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1 |    |                 | CONTAINER | EV(A-002, 99ALOKA, "OB Original Fetal Measurement Group") | 1   | M        |                                                                            |                                                                                      |
| 2 | >  | HAS OBS CONTEXT | INCLUDE   | DTID(1008)                                                | 1   | MC       | If this template is invoked more than once to describe more than one fetus |                                                                                      |
| 3 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-300)                                           | 1-n | M        |                                                                            | \$AnatomyGroup = \$Anatomy<br>\$MeasType = \$Meas<br>\$SectionLaterality = DCID(244) |

**Private Template Definitions  
TID ALOKA-5001 OB-GYN Original Measurement Section**

|   | NL | Rel with Parent | VT        | Concept Name                                                  | VM  | Req Type | Condition | Value set Constraint                                                                 |
|---|----|-----------------|-----------|---------------------------------------------------------------|-----|----------|-----------|--------------------------------------------------------------------------------------|
| 1 |    |                 | CONTAINER | EV(A-003, 99ALOKA, "OB-GYN Original Fetal Measurement Group") | 1   | M        |           |                                                                                      |
| 2 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-300)                                               | 1-n | M        |           | \$AnatomyGroup = \$Anatomy<br>\$MeasType = \$Meas<br>\$SectionLaterality = DCID(244) |

**Private Template Definitions**  
**TID ALOKA-5002 OB-GYN User Defined Equation Section**

|   | NL | Rel with Parent | VT        | Concept Name                                                | VM  | Req Type | Condition                                      | Value set Constraint |
|---|----|-----------------|-----------|-------------------------------------------------------------|-----|----------|------------------------------------------------|----------------------|
| 1 |    |                 | CONTAINER | EV(A-010, 99ALOKA, "OB-GYN User Defined Measurement Group") | 1   |          |                                                |                      |
| 2 | >  | HAS OBS CONTEXT | INCLUDE   | DTID(1008) Subject Context, Fetus                           | 1   | MC       | IFF this template is invoked to describe fetus |                      |
| 3 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-301) User Defined Equation Section               | 1-n | M        |                                                |                      |

Note: It is configurable to output TID ALOKA-5002 described in prior version of the DICOM Conformance Statement of this product for backward compatibility.

**Private Template Definitions**  
**TID ALOKA-5100 Vascular Original Measurement Section**

|   | NL | Rel with Parent | VT        | Concept Name    | VM  | Req Type | Condition | Value set Constraint                                                                 |
|---|----|-----------------|-----------|-----------------|-----|----------|-----------|--------------------------------------------------------------------------------------|
| 1 |    |                 | CONTAINER | \$SectionScope  | 1   | M        |           |                                                                                      |
| 2 | >  | CONTAINS        | INCLUDE   | DTID(ALOKA-300) | 1-n | M        |           | \$AnatomyGroup = \$Anatomy<br>\$MeasType = \$Meas<br>\$SectionLaterality = DCID(244) |