Digital Imaging and Communications in Medicine (DICOM)

Supplement 241: Structural Heart Procedural SR Template

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Scope and Field of Application

This supplement introduces SR templates for minimally invasive Structural Heart Procedures. These procedures involve interventions to address various conditions or abnormalities affecting the structures of the heart, excluding the coronary arteries. Unlike open-heart surgery, these interventions are minimally invasive, typically catheter-based.

Periprocedural imaging follows a consistent pattern of three phases: preprocedural assessment, intraprocedural assessment, and postprocedural assessment (i.e., follow-up). Throughout all three phases, echocardiography is the primary imaging modality. X-ray angiography is predominantly utilized for intraprocedural guidance. CT may also find application in the pre-operative assessment and follow-up. The templates proposed in the supplement are based the Simplified Adult Echocardiography Templates (root TID 5300), modified to support multimodality image acquisition.

Structural Heart Procedures include:

- TAVI: Transcatheter Aortic Valve Implantation
- TAVR: Transcatheter Aortic Valve Replacement
- TTVr: Transcatheter Tricuspid Valve Replacement
- TTVR: Transcatheter Tricuspid Valve Repair
- TEER: Transcatheter Edge-to-Edge Repair
- TMVR/TMVr: Transcatheter Mitral Valve Replacement
- LAAO: Left Atrial Appendage Occlusion

Changes to NEMA Standards Publication PS3.16

Digital Imaging and Communications in Medicine (DICOM) Part 16: Content Mapping Resource

Modify Table TID 5240. Myocardial Strain Analysis as follows

NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
		CONTAINER	DT (59776-5, LN, "Findings")	1	Μ		
>	CONTAINS		coordinated	1	Μ		
×	CONTAINS	INCLUDE	DTID 5301 "Pre- coordinated <u>CardiacEcho</u> Measurement"	1-n	U		\$Measurement = DCID 12309 "Core Echo Strain Measurement" \$Preferred = DCID 12301 "Measurement Selection Reason"
>	CONTAINS		coordinated	1	М		
\sim	CONTAINS	INCLUDE	DTID 5302 "Post- coordinated CardiacEcho Measurement "	1-n	U		\$AnatomicSite = DCID 12305 "Basic Echo Anatomic Site" \$Preferred = DCID 12301 "Measurement Selection Reason" \$Property = DCID 12311 "Echo Measured Strain
		 > CONTAINS >> CONTAINS >> CONTAINS 	 CONTAINS CONTAINER CONTAINS INCLUDE CONTAINS CONTAINER CONTAINS CONTAINER 	> CONTAINER DT (59776-5, LN, "Findings") > CONTAINS CONTAINER EV (125301, DCM, "Precoordinated Measurements") >> CONTAINS INCLUDE DTID 5301 "Precoordinated CardiacEcho Measurement" >> CONTAINS CONTAINER EV (125302, DCM, "Post-coordinated Measurements") >> CONTAINS CONTAINER EV (125302, DCM, "Post-coordinated Measurements") >> CONTAINS INCLUDE DTID 5302 "Post-coordinated CardiacEcho	CONTAINER DT (59776-5, LN, "Findings") 1 CONTAINS CONTAINER EV (125301, DCM, "Precordinated Measurements") 1 CONTAINS INCLUDE DTID 5301 "Precordinated CardiacEcho Measurement" 1-n CONTAINS CONTAINER EV (125302, DCM, "Post-coordinated Measurements") 1-n CONTAINS CONTAINER EV (125302, DCM, "Post-coordinated Measurements") 1-n CONTAINS INCLUDE DTID 5302 "Post-coordinated CardiacEcho 1-n	CONTAINER DT (59776-5, LN, "Findings") 1 M CONTAINS CONTAINER EV (125301, DCM, "Precoordinated Measurements") 1 M CONTAINS INCLUDE DTID 5301 "Precoordinated CardiacEcho Measurement" 1-n U CONTAINS CONTAINER EV (125302, DCM, "Post- Measurements") 1 M CONTAINS CONTAINER EV (125302, DCM, "Post- Measurements") 1 M CONTAINS INCLUDE DTID 5302 "Post- Coordinated Measurements") 1-n U CONTAINS INCLUDE DTID 5302 "Post- Coordinated Measurements") 1-n U	Image: Container of the second sec

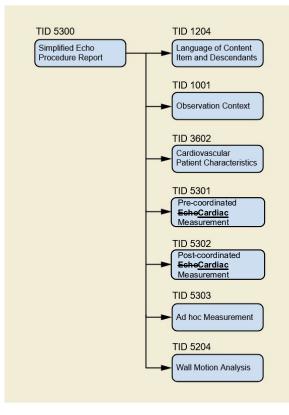
Table TID 5240. Myocardial Strain Analysis

Modify Table TID 5229. Cardiac Ultrasound Post-Coordinated Measurement Section as follows:

Table TID 5229. Cardiac Ultrasound Post-Coordinated Measurement Section

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1				EV (59776-5, LN, "Findings")	1	Μ		
2	^	CONTAINS		DTID 5302 "Post- coordinated <u>Cardiac</u> Echo Measurement"	1-n	U		\$Measurement = \$Measurement

Modify Figure A-10b. Simplified Adult Echocardiography Template Structure as follows:





Modify Table TID 5300. Simplified Echo Procedure Report as follows:

Table TID 5300. Simplified Echo Procedure Report

NL	Rel with Parent	VT	Concept Name	Req Type	Condition	Value Set Constraint

CONTAINS		coordinated CardiacEcho	1-n	Μ	\$Measurement = DCID 12300 "Core Echo Measurement" \$Preferred = DCID 12301
					"Measurement Selection Reason"
CONTAINS		"Post-coordinated	1	Μ	
CONTAINS		coordinated CardiacEcho	1-n	U	<u>\$AnatomicSite = DCID</u> <u>12305 "Basic Echo</u> <u>Anatomic Site</u>
					\$Preferred = DCID 12301 "Measurement Selection Reason"
CONTAINS	CONTAINER	EV (125303, DCM, "Adhoc Measurements")	1	М	
CONTAINS			1-n	U	\$Property =DCID 12304 " Echo <u>Cardiovascular</u> Measured Property"
CONTAINS		coordinated CardiacEcho	1-n	U	\$Measurement = DCID 12300 "Core Echo Measurement"
					\$Preferred = DCID 12301 "Measurement Selection Reason"
CONTAINS		"Post-coordinated	1	Μ	
CONTAINS		coordinated CardiacEcho	1-n	U	<u>\$AnatomicSite = DCID</u> <u>12305 "Basic Echo</u> <u>Anatomic Site"</u>
					\$Preferred = DCID 12301 "Measurement Selection Reason"
		EV (125303, DCM, "Adhoc Measurements")	1	М	
CONTAINS		DTID 5303 "Adhoc Measurement"	1-n	U	\$Property =DCID 12304 " Echo <u>Cardiovascular</u>
	CONTAINS CONTAINS CONTAINS CONTAINS CONTAINS CONTAINS CONTAINS	CONTAINS CONTAINER CONTAINS INCLUDE CONTAINS CONTAINER CONTAINS INCLUDE CONTAINS INCLUDE CONTAINS CONTAINER CONTAINS INCLUDE	CONTAINSCONTAINEREV (125302, DCM, "Post-coordinated Measurements")CONTAINSINCLUDEDTID 5302 "Post- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5303 "Adhoc Measurement")CONTAINSINCLUDEDTID 5303 "Adhoc Measurement")CONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEcho Measurements")CONTAINSINCLUDEDTID 5302 "Post- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5302 "Post- coordinated CardiacEcho Measurement")CONTAINSINCLUDEDTID 5303 "AdhocCONTAINSINCLUDEDTID 5303 "Adhoc	coordinated CardiacEehe Measurement"coordinated CardiacEehe Measurement"CONTAINSCONTAINEREV (125302, DCM, "Post-coordinated Measurements")1CONTAINSINCLUDEDTID 5302 "Post- coordinated CardiacEehe Measurement"1-nCONTAINSCONTAINEREV (125303, DCM, "Adhoc Measurements")1CONTAINSINCLUDEDTID 5303 "Adhoc Measurement"1-nCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nCONTAINSINCLUDEDTID 5302, DCM, "Post-coordinated Measurements")1-nCONTAINSINCLUDEDTID 5302, "Post- coordinated CardiacEehe Measurement"1-nCONTAINSINCLUDEDTID 5303, DCM, "Adhoc Measurements")1CONTAINSINCLUDEDTID 5303, DCM, "Adhoc Measurements")1	coordinated CardiacEehe Measurement"1MCONTAINSCONTAINEREV (125302, DCM, "Post-coordinated Measurements")1MCONTAINSINCLUDEDTID 5302 "Post- coordinated CardiacEehe Measurement"1-nUCONTAINSCONTAINEREV (125303, DCM, "Adhoc Measurements")1MCONTAINSINCLUDEDTID 5303 "Adhoc Measurement"1-nUCONTAINSINCLUDEDTID 5303 "Adhoc Measurement"1-nUCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nUCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nUCONTAINSINCLUDEDTID 5301 "Pre- coordinated CardiacEehe Measurement"1-nUCONTAINSCONTAINEREV (125302, DCM, measurements")1MCONTAINSINCLUDEDTID 5302 "Post- coordinated CardiacEehe Measurement"1-nUCONTAINSCONTAINEREV (125303, DCM, "Adhoc Measurements")1MCONTAINSCONTAINEREV (125303, DCM, "Adhoc Measurements")1M

Content Item Descriptions

Row 13	These are measurements that can be encoded using a standardized structure of post-coordinated codes. Measurements which correspond to the full semantics of one of the pre-coordinated codes in CID 12300 "Core Echo Measurement" should be encoded in Row 11 instead.
	\$Measurement shall be provided, but is not constrained to a CID.
	Multiple instances of the same measurement code may be present in the container. Each instance represents a different sample or derivation.
	CID 12305 "Basic Echo Anatomic Site" contains concepts that are sufficient for mapping the full set of ASE standard measurements. It is recommended that these locations be used unless a more detailed location is necessary.
	This template makes no requirement that any or all samples be sent. For example, a mean value of all the samples of a given measurement could be sent without sending all or any of the samples from which the mean was calculated. Device configuration and/or operator interactions determine what measurements are sent.
Row 15	These are adhoc measurements encoded with minimal semantics.
	Row 13 can be used to encode measurements with more complete semantics.
	\$Units shall be provided, but is not constrained to a CID.
	Device configuration and/or operator interactions determine what measurements are sent.
Rows 17- 24	When present, these rows contain measurements and associate them with a specific stage of a staged procedure.

Modify TID 5301 Pre-coordinated Echo Measurement as follows

TID 5301 Pre-coordinated CardiacEcho Measurement

This template codes numeric **<u>cardiac</u>echo** measurements where most of the details about the nature of the measurement have been pre-coordinated in the measurement code. In contrast, see TID 5302 "Post-coordinated **<u>Cardiac</u>Echo** Measurement".

The pre-coordinated measurement code is provided when this Template is included from a parent Template.

Table TID 5301. Parameters

Parameter Name	Parameter Usage
\$Measurement	Coded term or Context Group for Concept Name of measurement
\$Preferred	Flag the preferred value by indicating the reason it was selected as preferred.

Type: Non-Extensible Order: Significant Root: No

Table TID 5301. Pre-coordinated CardiacEcho Measurement

...

Content Item Descriptions

Row	The reason that this value was selected as the preferred value for the measured concept.
2	The parent template may allow TID 5301 "Pre-coordinated CardiacEcho Measurement" to be included multiple times with the same Measurement Concept Name, for example to allow multiple samples of the measurement.
	A given Measurement Concept Name might appear only once in the instance, in which case this this row may or may not be present. A given Measurement Concept Name may appear multiple times, however this row shall not be present for more than one value of the given Measurement Concept Name. E.g. multiple measurements of (11706-9, LN, "Aortic Valve Peak Systolic Flow") may be present, but only one may be selected as preferred.

Modify TID 5302 Post-coordinated Echo Measurement as follows

TID 5302 Post-coordinated CardiacEcho Measurement

This template codes numeric echo measurements where most of the details about the nature of the measurement have been post-coordinated in modifiers and acquisition context. In contrast, see TID 5301 "Pre-coordinated **CardiacEcho** Measurement"-.

This template is intended to be used for User-defined and Vendor-defined **<u>Cardiac</u>Echo** Measurements.

Several modifier rows are conditional and are omitted when the modifier concept is not significant for the measurement encoded in the item. When these modifiers are included by the sender, it indicates that the modifier concept is significant and receivers will generally treat the measurements differently than similar measurements sent that omit that modifier.

Note<u>s</u>

1. The codes in the CIDs referenced below were sufficient to accurately encode all the best practice echo measurements recommended by the ASE. If, however, a new code is needed to record a specific User-defined or Vendor-defined measurement, most of the CIDs are extensible. It is not unreasonable to expect that measurements might be made at other Finding Sites than those listed in CID 12305 "Basic Echo Anatomic Site", or using Measurement Methods beyond those listed in CID 12227 "Echocardiography Measurement Method"-.

2. This template can be used for cardiac measurements performed by a variety of modalities such as Ultrasound, CT and MR.

The concept modifiers in the template below were sufficient to accurately encode all the best practice echo measurements recommended by the ASE. Although TID 5302 "Post-coordinated **CardiacEcho** Measurement" is extensible and adding new modifiers is not prohibited, the meaning and significance of such new modifiers will generally not be understood by receiving systems, delaying or preventing import of such measurements. Further, adding modifiers that replicate the meaning of an existing modifier is prohibited.

If such measurements cannot be encoded with the following structure, an implementation may choose to code the measurement in TID 5303 "Adhoc Measurement", or to use TID 5200 "Echocardiography Procedure Report" instead of TID 5300 "Simplified Echo Procedure Report".

Table TID 5302. Parameters

Parameter Name	Parameter Usage
\$Measurement	Coded term or Context Group for Concept Name of measurement.
\$Preferred	Flag the preferred value by indicating the reason it was selected as preferred.
\$Property	Coded term or Context Group for the Measured Property.
<pre>\$AnatomicSite</pre>	Coded term or Context Group for the Finding Site of the measurement.

Type: Extensible Order: Significant Root: No

Rel with VT Concept Name VM Req Condition Value Set Ν Parent Туре Constraint . . 8 CODE EV (363698007, >HAS 1 Μ \$AnatomicSite DCID CONCEPT SCT, "Finding Site") 12305 "Basic Echo MOD Anatomic Site" 9 HAS CODE EV (125305, DCM, DCID 12302 "Echo 1 Μ CONCEPT "Finding Observation Finding Observation MOD Type") Type" HAS CODE EV (125307, DCM, 1 10 Μ \$Property CONCEPT 'Measured Defaults to DCID MOD Property") 12304 "Echo Cardiovascular Measured Property"

Table TID 5302. Post-coordinated CardiacEcho Measurement

4.4					4	MO		
11		HAS CONCEPT MOD		EV (260674002, SCT, "Flow Direction")	1	MC	IFF value of Row 9 = (44324008, SCT, "Hemodynamic Measurements") and the Flow Direction is significant for this measurement.	
12		HAS CONCEPT MOD		EV (370129005, SCT, "Measurement Method")	1	MC	IFF the Measurement Method is significant for this measurement.	DCID 12227 "Echocardiography Measurement Method"
13	>	HAS ACQ CONTEXT		EV (399264008, SCT, "Image Mode")	1	MC	IFF the Image Mode is significant for this measurement.	DCID 12224 "Ultrasound Image Mode"
14	>	HAS ACQ CONTEXT	CODE	EV (111031, DCM, "Image View")	1	MC	IFF the Image View is significant for this measurement.	
15		HAS CONCEPT MOD		EV (272518008, SCT, "Cardiac Cycle Point")	1	MC	IFF the Cardiac Cycle Point is significant for this measurement.	DCID 12307 "Cardiac Phase and Time Point"

Content Item Descriptions

		pre-coordinated code that incorporates all the semantics of Rows 7, 8, 9, 10, 11, 12, 13, 14, 17 for this measurement.
p te s	oreviou emplat e.g., 99 system	de is intended to allow parsers to recognize post-coordinated measurements that have been usly encountered, thus facilitating incorporation of the measurement into databases, report tes, registries, etc. Typically these codes will be from a vendor or site specific coding scheme PACME. Sending the same code consistently in different reports will depend on the recording maintaining a stable list of these pre-coordinated codes. Such a list might be configured or lly generated and managed.
е	ensure	all be populated by the recording system. If the recording system does not have a method to that all occurrences of the same post-coordinated measurement use the same code, it shall code (125304, DCM, "Untrackable Measurement").
	No	te
	1.	Two measurements with the same pre-coordinated code have, by definition, the same semantics (except for "Untrackable Measurements")
	2.	Two measurements with the same constellation of modifier values have the same semantics but may have different pre-coordinated codes because they
		 come from carts of different vendors who don't share the same code table
		come from carts of the same vendor, but the carts don't share the same code table
		 come from the same cart, but it's code table has been modified
		 come from the same cart, but it does not maintain a code table
	3.	Two measurements with the same constellation of modifier values and different pre- coordinated codes have the same semantics and the receiver is entitled to treat them as the same (with respect to the scope of those modifiers)
	4.	Recommended units for various Measured Properties (Row 10) can be found in the Units column of CID 12304 " Eche <u>Cardiovascular</u> Measured Property" .
	5.	When the Measurement Type (Row 7) is (125313, DCM, "Indexed"), (118586006, SCT, "Ratio") or (125314, DCM, "Fractional Change"), the Units for Row 1 corresponds to the fully calculated \$Measurement, incorporating both the numerator (Row 10) and the denominator (Row 17). E.g. a measure of Left Ventricular Outflow Tract Diameter / BSA would have units of (cm/m2, UCUM, "cm/m2") in Row 1, (125313, DCM, "Indexed") in Row 7, (81827009, SCT, "Diameter") in Row 10, and (8277-6, LN, "Body Surface Area") in Row 17.
_	One or Row 1.	more additional fully pre-coordinated codes which are semantically equivalent to the code in
		ay be used to communicate known mappings, such as to national registry codes or other s' codes.

Row The reason that this value was selected as the preferred value for the measured concept.

The parent template may allow TID 5301 "Pre-coordinated **CardiacEche** Measurement" to be included multiple times with the same Measurement Concept Name, for example to allow multiple samples of the measurement.

A given Measurement Concept Name might appear only once in the instance, in which case this this row may or may not be present. A given Measurement Concept Name may appear multiple times, however this row shall not be present for more than one value of a given measured concept. E.g. multiple measurements of (11706-9, LN, "Aortic Valve Peak Systolic Flow") may be present, but only one may be selected as preferred.

•••

Row The finding site reflects the anatomical location where the measurement is taken.

CID 12305 "Basic Echo Anatomic Site" contains the codes which proved to be sufficient for mapping the full set of ASE standard measurements.

It is recommended to use these locations unless a more detailed location is truly necessary.

. . .

Modify TID 5303 Adhoc Measurement as follows:

TID 5303 Adhoc Measurement

This Template codes numeric echo measurements where most of the details about the nature of the measurement are not communicated. The measurement is identified in terms of the property measured, such as Length, Diameter, Area, Velocity etc. and some measurement context may established by reference to spatial coordinates on an image or a waveform. A displayable label is included but there is no managed code identifying the measurement.

The template is intended to be used to include adhoc, one-time measurements whose need is determined during imaging study or reviewing session.

Measurements that are taken in an adhoc fashion but are selected from the set of pre-coordinated or postcoordinated measurements that are configured on the Ultrasound System should be coded using TID 5301 "Pre-coordinated **CardiacEcho** Measurement" or TID 5302 "Post-coordinated **CardiacEcho** Measurement".

• • •

Update CID 12304 Echo Measured Property as follows (since few if any of the Measured Properties are specific to Echo, and the list is useful in other Cardiovascular modalities):

CID 12304 Echo-CardiovascularMeasured Property

The Units column contains the proper UCUM representation of the recommended units for the measured property

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: <u>EchoCardiovascularMeasuredProperty</u> FHIR Keyword: dicom-cid-12304-<u>EchoCardiovascular</u>MeasuredProperty Type: Extensible

Version: 20240920 202xxxx UID: 1.2.840.10008.6.1.1145

Table CID 12304. Echo Cardiovascular Measured Property

• • •

Add the following TID to Part 16 Annex A:

Structural Heart Procedure Templates

The templates that comprise the Structural Heart Procedure Templates Report are interconnected as in Figure A-10c.

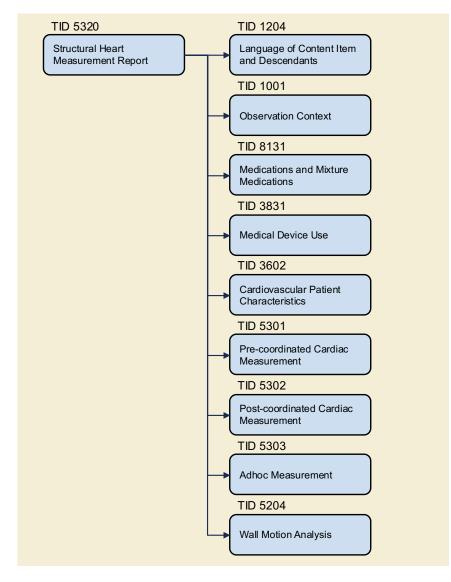


Figure A-10c. Structural Heart Procedure Template Structure

TID 5320 Structural Heart Measurement Report

This template forms the top of a content tree that allows a device to describe the results of periprocedural imaging associated with minimally invasive structural heart procedures. It may be used during preoperative assessment, intraprocedural assessment, or follow-up. While it mirrors the Simplified Echo Procedure Report, it is designed for measurements taken in one of several modalities, i.e., Echo, CT and MR.

This template does not include an Image Library. Image Content Items in the Echo Measurement templates (for example to indicate Source of Measurement) shall be included with by-value relationships, not with by-reference relationships.

Measurements in this template (except for the Wall Motion Analysis) are collected into one of three containers, each with a specific sub-template and constraints appropriate to the purpose of the container.

- Pre-coordinated Measurements (many taken from the STS/ACC TVT Registry).
- Post-coordinated Measurements
- Adhoc Measurements

Type: Non-Extensible Order: Significant Root: Yes

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	DCID 12344 "Structural Heart Measurement Report Document Title"	1	М		
2	>	HAS CONCEPT MOD		DTID 1204 "Language of Content Item and Descendants"	1	U		
3	>	HAS OBS CONTEXT	INCLUDE	DTID 1001 "Observation Context"	1	М		
4	>	CONTAINS	CONTAINER	DT (55111-9, LN, "Current Procedure Descriptions")	1	U		
5	~	CONTAINS	CODE	EV (121139, DCM, "Modality")	1	Μ		Shall be a code derived from Modality (0008,0060) in the Image Instances.
6	>>	CONTAINS	TEXT	DT (125203, DCM, "Acquisition Protocol")	1	U		
7	>>	CONTAINS	INCLUDE	DTID 8131 "Medications and Mixture Medications"	1-n	U		\$DrugAdministered = BCID 12342 "Bradycardiac Agents"

TID 5320. Structural Heart Measurement Report

8	>>	CONTAINS	NUM	EV (8867-4, LN, "Heart Rate")	1	U	UNITS = EV ({H.B.}/min, UCUM, "BPM")
9	>	CONTAINS	CONTAINER	EV (18785-6, LN, "Indications for Procedure")	1	U	
10	>>	CONTAINS	CODE	EV (118797008, SCT, "Heart Procedure")	1	U	BCID 12331 "Structural Heart Procedures"
11	>>>	HAS CONCEPT MOD	CODE	EV (121071, DCM, "Finding")	1-n	U	DCID 12341 "Indication for Structural Heart Procedure"
12	>>>	HAS CONCEPT MOD	TEXT	EV (121071, DCM, "Finding")	1	U	
13	>>>	HAS CONCEPT MOD	INCLUDE	DTID 3831 "Medical Device Use"	1	U	\$Device = BCID 12332 "Structural Heart Devices"
14	>	CONTAINS	INCLUDE	DTID 3602 "Cardiovascular Patient Characteristics"	1	U	
15	>	CONTAINS	CONTAINER	EV (125301, DCM, "Pre-coordinated Measurements")	1	М	
16	>>	CONTAINS	INCLUDE	DTID 5301 "Pre- coordinated Cardiac Measurement"	1-n	U	\$Measurement = DCID 12333 "Structural Heart Measurement" \$Preferred = DCID 12301 "Measurement
							Selection Reason"
17	>	CONTAINS	CONTAINER	EV (125302, DCM, "Post-coordinated Measurements")	1	Μ	
18	>>	CONTAINS	INCLUDE	DTID 5302 Post- coordinated Cardiac Measurement	1-n	U	\$AnatomicSite = DCID 12339 "Structural Heart Procedure Anatomic Site" \$Preferred = DCID
							12301 "Measurement Selection Reason"
19	>	CONTAINS	CONTAINER	EV (125303, DCM, "Adhoc Measurements")	1	Μ	
20	>>	CONTAINS	INCLUDE	DTID 5303 "Adhoc Measurement"	1-n	U	\$Property =DCID 12304 " Ech o <u>Cardiovascular</u> Measured Property"
21	>	CONTAINS	INCLUDE	DTID 5204 "Wall Motion Analysis"	1-n	U	

22	>	CONTAINS	CONTAINER	EV <u>(C0034375,</u>	1	U	
				<u>UMLS, "Qualitative</u>			
				<u>Evaluations")</u>			
23	\sim	CONTAINS	CODE	BCID 12345 "Cardiac	1-n	М	BCID 3716 "Severity"
				Structure Calcification			_
				Qualitative Evaluation"			

Content Item Descriptions

Row 4	This container describes the periprocedural imaging during which the measurements were taken.
Row 6	User-defined type of clinical acquisition protocol for creating images or image-derived measurements. May be taken from Protocol Name (0018,1030) or from Performed Procedure Step Description (0040,0254).
Row 7	Bradycardic medications administered to lower the heart rate during the imaging study.
Row 8	The nominal heart rate immediately prior to the start of image acquisition. If a bradycardic agent is administered, this is measured after its administration.
Row 9	This container provides details regarding the structural heart surgical procedure that is supported by the periprocedural imaging procedure described in Row 4.
Row 12	A text string containing one or more sentences describing one or more indications, possibly with additional comments from the physician or technologist.
Row 16	These are measurements from a standardized list of pre-coordinated codes. Measurements that do not correspond to the full semantics of one of the pre-coordinated codes in the Value Set Constraint can likely be encoded in Row 18 instead.
	Multiple instances of the same measurement code may be present in the container. Each instance represents a different sample or derivation.
	This template makes no requirement that any or all samples be sent. For example, a mean value of all the samples of a given measurement could be sent without sending all or any of the samples from which the mean was calculated. Device configuration and/or operator interactions determine what measurements are sent.

Row 18	These are measurements that can be encoded using a standardized structure of post- coordinated codes. Measurements that correspond to the full semantics of one of the pre- coordinated codes should be encoded in Row 16 instead.
	\$Measurement shall be provided, but is not constrained to a CID.
	Multiple instances of the same measurement code may be present in the container. Each instance represents a different sample or derivation.
	CID 12339 "Structural Heart Procedure Anatomic Site" contains concepts appropriate for mapping STS/ACC TVT Registry measurements. It is recommended that these locations be used unless a more detailed location is necessary.
	This template makes no requirement that any or all samples be sent. For example, a mean value of all the samples of a given measurement could be sent without sending all or any of the samples from which the mean was calculated. Device configuration and/or operator interactions determine what measurements are sent.
Row 19	These are adhoc measurements encoded with minimal semantics.
	Row 18 can be used to encode measurements with more complete semantics.
	\$Units shall be provided, but is not constrained to a CID.
	Device configuration and/or operator interactions determine what measurements are sent.
Row 22	These are name-value pairs to encode qualitative assessments of cardiac structure calcification severity.

Modify Table CID 12226. Echocardiography Image View as follows:

Version: 20240920 20250405

Table CID 12226. Echocardiography Image View

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
Include CID 12312 "Feta	al Echocardiogra	phy Image View"		
Include CID 12343 "Tra Planes"				
SCT	399232001	Apical two chamber	G-A19B	C1302267
SCT	399214001	Apical four chamber	G-A19C	C1302256

Add the following CIDs to Part 16 Annex B:

CID 12331 Structural Heart Procedure

This context group includes codes that may be used to identify Structural Heart Procedures.

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: StructuralHeartProcedure FHIR Keyword: dicom-cid-12331-StructuralHeartProcedure Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1516

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	1184601001	Revision of transcatheter aortic valve implantation		C5568478
SCT	1217005008	Bioprosthetic transcatheter aortic valve implantation		C5687705
SCT	720583008	Transcatheter implantation of mitral valve		C4303983
SCT	1231449003	Transcatheter repair of tricuspid valve		C5202507
SCT	1255141008	Transcatheter annuloplasty of tricuspid valve		C5768806
SCT	1237589003	Transcatheter repair of leaflet of tricuspid valve		C5768119
SCT	787162002	Implantation of pulmonary valve prosthesis or synthetic device		C3161311
SCT	1231726001	Bioprosthetic mitral valve prosthesis transcatheter implantation		C5689010
SCT	8069005	Implantation of tricuspid valve prosthesis or synthetic device	P1-32512	C0190102
UMLS	C0844084	Percutaneous closure of atrial septal defect		C0844084
UMLS	C3275093	Left atrial appendage occlusion		C3275093
UMLS	C2921037	Implantation of mitral valve leaflet clip		C2921037

Table CID 12331. Structural Heart Procedure

CID 12332 Structural Heart Device

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: StructuralHeartDevice FHIR Keyword: dicom-cid-12332-StructuralHeartDevice Type: Extensible

Version: 20250405 UID: 1.2.840.10008.6.1.1517

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID	Trade Name (Informative)
DCM	131112	Left atrial appendage closure device			
DCM	131111	Ball type left atrial appendage closure device			Watchman ^{™,} WaveCrest, Conformal
DCM	131110	Ball and disk type left atrial appendage closure device			Amulet™
SCT	84683006	Aortic valve prosthesis	A-04116	C0182431	
SCT	860577005	Aortic valve bioprosthesis		C5395726	
SCT	716779003	Mitral annuloplasty transvalvular implant	R-FFA5	C4274279	Cardioband
SCT	17107009	Mitral valve prosthesis	A-04118	C0182494	Sapien 3, Tendyne, Tiara, Intrepid, CardiAQ
SCT	464887003	Mitral valve clip	R-FCF0D	C3881921	MitraClip™, Pascal
SCT	1141607002	Transcatheter biologic tricuspid valve prosthesis		C5545443	Evoque
SCT	703201004	Tricuspid valve prosthesis	R-FBB69	C1322659	
SCT	860585001	Transcatheter pulmonary valve bioprosthesis		C5395736	Melody™

Table CID 12332. Structural Heart Device

CID 12333 Structural Heart Measurement

The Units column contains the proper UCUM representation of the recommended units for the measured property.

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: StructuralHeartMeasurement FHIR Keyword: dicom-cid-12333-StructuralHeartMeasurement Type: Extensible

Version: 20250405 UID: 1.2.840.10008.6.1.1518

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID	Units
LN	8277-6	Body Surface Area		C0487992	(m2, UCUM, "m2")
DCM	131130	Transseptal puncture height			(mm, UCUM, "mm")
		rt Aortic Valve Measu			-
Include CID 12335 "Structural Heart Mitral Valve Measurement" Include CID 12336 "Structural Heart Tricuspid Valve Measurement"					
Include CID 12337 "Structural Heart Echo Measurement"					
Include CID 123	338 "Left Atrial Appe	endage Closure Mea	surement"		

Table CID 12333. Structural Heart Measurement

CID 12334 Aortic Valve Structural Measurement

The Units column contains the proper UCUM representation of the recommended units for the measured property.

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: AorticValveStructuralMeasurement FHIR Keyword: dicom-cid-12334-AorticValveStructuralMeasurement Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1519

Table CID 12334. Aortic Valve Structural Measurement

Coding Scheme Designator	Code Value	Code Meaning	SNOMED- RT ID	UMLS Concept Unique ID	Units
DCM	131140	Aorta sinotubular junction area			(cm2, UCUM, "cm2")
UMLS	C2059685	Aortic annulus area		C2059685	(cm2, UCUM, "cm2")
DCM	131143	Aortic annulus max diameter			(mm, UCUM, "mm")
DCM	131144	Aortic annulus min diameter			(mm, UCUM, "mm")
DCM	131145	Aortic annulus perimeter			(mm, UCUM, "mm")
DCM	131146	Aortic calcification volume			(mm3, UCUM, "mm3")
DCM	131148	Aortic root height			(mm, UCUM, "mm")

DCM	131149	Aortic sinotubular junction		(mm, UCUM,
		diameter		"mm")
DCM	131150	Aortic sinus of valsalva area		(cm2, UCUM, "cm2")
UMLS	C2059455	Aortic sinus of valsalva diameter	C2059455	(mm, UCUM, "mm")
DCM	131152	Aortic valve coaptation length		(mm, UCUM, "mm")
DCM	131153	Aortic valve noncoronary leaflet intercommissural angle		(deg, UCUM, "deg")
DCM	131154	Aortic valve right leaflet intercommissural angle		(deg, UCUM, "deg")
DCM	131155	Aortic valve left leaflet intercommissural angle		(deg, UCUM, "deg")
DCM	131156	Aortic valve noncoronary leaflet intercommissural distance		(mm, UCUM, "mm")
DCM	131157	Aortic valve right leaflet intercommissural distance		(mm, UCUM, "mm")
DCM	131158	Aortic valve left leaflet intercommissural distance		(mm, UCUM, "mm")
DCM	131159	Aortic valve left coronary leaflet height		(mm, UCUM, "mm")
DCM	131160	Aortic valve left coronary leaflet length		(mm, UCUM, "mm")
DCM	131161	Aortic valve noncoronary leaflet height		(mm, UCUM, "mm")
DCM	131162	Aortic valve noncoronary leaflet length		(mm, UCUM, "mm")
DCM	131163	Aortic valve right coronary leaflet height		(mm, UCUM, "mm")
DCM	131164	Aortic valve right coronary leaflet length		(mm, UCUM, "mm")
DCM	131165	Ascending Aorta diameter		(mm, UCUM, "mm")
DCM	131166	Left main coronary ostium height		(mm, UCUM, "mm")
DCM	131168	Maximum aortic plaque thickness		(mm, UCUM, "mm")
DCM	131169	Right coronary artery ostium height		(mm, UCUM, "mm")
DCM	131170	Right ventricle diastolic major axis		(mm, UCUM, "mm")
DCM	131171	Right ventricular diastolic mid segment minor axis		(mm, UCUM, "mm")
DCM	131172	Right ventricular diastolic basal minor axis		(mm, UCUM, "mm")

CID 12335 Mitral Valve Structural Measurement

The Units column contains the proper UCUM representation of the recommended units for the measured property.

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: MitralValveStructuralMeasurement FHIR Keyword: dicom-cid-12335-MitralValveStructuralMeasurement Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1520

Table CID 12335. Mitral Valve Structural Measurement

Coding Scheme Designator	Code Value	Code Meaning	SNOMED- RT ID	UMLS Concept Unique ID	Units
DCM	131173	Mitral anterior leaflet A1 scallop length			(mm, UCUM, "mm")
DCM	131174	Mitral anterior leaflet A2 scallop length			(mm, UCUM, "mm")
DCM	131175	Mitral anterior leaflet A3 scallop length			(mm, UCUM, "mm")
DCM	131176	Mitral anterior leaflet area			(cm2, UCUM, "cm2")
DCM	131177	Aorto-mitral inter annular angle			(deg, UCUM, "deg")
DCM	131178	Mitral commissure distance			(mm, UCUM, "mm")
DCM	131179	Mitral trigone-to-trigone distance			(mm, UCUM, "mm")
DCM	131180	Mitral annular excursion			(mm, UCUM, "mm")
DCM	131181	Mitral annulus anterolateral to posteromedial diameter			(mm, UCUM, "mm")
DCM	131182	Mitral annulus anteroposterior diameter			(mm, UCUM, "mm")
DCM	131183	Mitral annulus area			(mm, UCUM, "mm")
DCM	131185	Mitral annulus commissural diameter			(mm, UCUM, "mm")
DCM	131186	Mitral annulus diameter ratio			({ratio}}, UCUM, "ratio")
DCM	131187	Mitral annulus height			(mm, UCUM, "mm")
DCM	131188	Mitral annulus nonplanarity angle			(deg, UCUM, "deg")

	1		3
DCM	131189	Mitral annulus perimeter	(mm, UCUM,
			"mm")
DCM	131190	Mitral valve coaptation	(mm, UCUM,
		length	"mm")
DCM	131191	Mitral valve interpapillary	(mm, UCUM,
		distance	"mm")
DCM	131192	Anterolateral papillary	(mm, UCUM,
		muscle to the left trigone	"mm")
DCM	131193	Posteromedial papillary	(mm, UCUM,
		muscle to the right trigone	"mm")
DCM	131194	Mitral valve prolapse area	(cm2,
			UCUM,
			"cm2")
DCM	131195	Mitral valve prolapse	(ml, UCUM,
		volume	"ml")
DCM	131196	Mitral valve segment flail	(mm, UCUM,
		gap	"mm")
DCM	131197	Mitral valve sphericity	({ratio},
		index	UCUM,
			"ratio")
DCM	131198	Mitral valve tenting height	(mm, UCUM,
			"mm")
DCM	131199	Mitral valve tenting area	(cm2,
			ÚCUM,
			"cm2")
DCM	131200	Mitral valve tenting	(mm, UCUM,
		segment height A1-P1	"mm")
DCM	131201	Mitral valve tenting	(mm, UCUM,
		segment height A2-P2	"mm")
DCM	131202	Mitral valve tenting	(mm, UCUM,
		segment height A3-P3	"mm")
DCM	131203	Posterior mitral valve	(cm2,
		leaflet area	ÙCUM,
			"cm2")
DCM	131204	Posterior mitral valve	(mm, UCUM,
		leaflet length	"mm")
DCM	131205	Posterior mitral valve P1	(mm, UCUM,
		leaflet scallop length	"mm")
DCM	131206	Posterior mitral valve P2	(mm, UCUM,
		leaflet scallop length	"mm")
DCM	131207	Posterior mitral valve P3	(mm, UCUM,
		leaflet scallop length	"mm")
		icultor coullop longin	

CID 12336 Tricuspid Valve Structural Measurement

The Units column contains the proper UCUM representation of the recommended units for the measured property.

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: TricuspidValveStructuralMeasurement FHIR Keyword: dicom-cid-12336-TricuspidValveStructuralMeasurement Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1521

Coding Scheme Designator	Code Value	Code Meaning	SNOMED- RT ID	UMLS Concept Unique ID	Units
DCM	131208	Tricuspid annulus area			(cm2, UCUM, "cm2")
DCM	131209	Tricuspid annulus area diastolic systolic ratio			(%, UCUM, "%")
DCM	131210	Tricuspid annulus perimeter			(mm, UCUM, "mm")
DCM	131211	Tricuspid valve coaptation length			(mm, UCUM, "mm")
DCM	131212	Tricuspid valve major axis diastole			(mm, UCUM, "mm")
DCM	131213	Tricuspid valve minor axis			(mm, UCUM, "mm")
DCM	131214	Tricuspid valve sphericity index			(%, UCUM, "%")
DCM	131215	Tricuspid valve tenting height			(mm, UCUM, "mm")
DCM	131216	Tricuspid valve tenting volume			(ml, UCUM, "ml")

Table CID 12336. Tricuspid Valve Structural Measurement

CID 12337 Structural Heart Echo Measurement

The Units column contains the proper UCUM representation of the recommended units for the measured property.

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: StructuralHeartEchoMeasurement FHIR Keyword: dicom-cid-12337-StructuralHeartEchoMeasurement Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1522

Coding Scheme Designator	Code Value	Code Meaning	SNOME D-RT ID	UMLS Concept Unique ID	Units
LN	17997-8	Anterior mitral valve leaflet length		C0801047	(cm, UCUM, "cm")
LN	79955-1	Aorta sinotubular junction diameter at end systole by 2D		C4069750	(cm, UCUM, "cm")

Table CID 12337. Structural Heart Echo Measurement

				T age 2.
LN	82339-3	Aorta sinotubular junction diameter by 2D	C4298778	(mm, UCUM, "mm")
LN	82338-5	Aorta sinotubular junction diameter by M-mode	C4285208	(mm, UCUM, "mm")
LN	79941-1	Aortic regurgitant flow	C4071396	(ml/s, UCUM, "ml/s")
LN	79947-8	Aortic regurgitation pressure half-time	C4069754	(ms, ÚCUM, "ms")
LN	79948-6	Aortic regurgitation vena contracta width	C4069753	(cm, UCUM, "cm")
LN	79950-2	Aortic regurgitation volume (Continuity VTI)	C4070676	(ml, ÚCUM, "ml")
LN	79951-0	Aortic regurgitation volume (PISA)	C4070675	(ml, UCUM, "ml")
LN	18016-6	Aortic valve annulus diameter	C0801066	(cm, UCUM, "cm")
LN	79940-3	Aortic valve annulus diameter at end systole	C4070180	(cm, UCUM, "cm")
LN	79958-5	Aortic valve area (Continuity VTI)	C4069747	(cm2, UCUM, "cm2")
LN	77909-0	Aortic valve Effective regurgitant orifice area (PISA)	C4036554	(cm2, UCUM, "cm2")
LN	77910-8	Aortic valve Effective regurgitant orifice area (Volumetric)	C4036553	(cm2, UCUM, "cm2")
LN	17996-0	Aortic valve maximum cusp separation length	C0801046	(mm, UCUM, "mm")
LN	18093-5	Aortic valve orifice area (Continuity Vmax+Area)	C0801142	(cm2, UCUM, "cm2")
LN	18094-3	Aortic valve orifice area (Continuity Vmax+Diameter)	C0801143	(cm2, UCUM, "cm2")
LN	18091-9	Aortic valve orifice area (Continuity VTI+Area)	C0801140	(cm2, UCUM, "cm2")
LN	18092-7	Aortic valve orifice area (Continuity VTI+Diameter)	C0801141	(cm2, UCUM, "cm2")
LN	18090-1	Aortic valve orifice area (Continuity)	C0801139	(cm2, UCUM, "cm2")
LN	18089-3	Aortic valve orifice area	C0801138	(cm2, UCUM, "cm2")
LN	18104-0	Aortic valve pressure half time	C0801153	(ms, ÚCUM, "ms")
LN	18105-7	Aortic valve regurgitant blood flow pressure half-time	C0801154	(ms, UCUM, "ms")
LN	77908-2	Aortic valve vena contracta diameter	C4036555	(cm, UCUM, "cm")
LN	18012-5	Ascending thoracic aorta diameter	C0801062	(cm, UCUM, "cm")
LN	79966-8	Ascending thoracic aorta diameter during systole by 2D	C4069741	(cm, UCUM, "cm")

				0
LN	18013-3	Descending aortic diameter	C0801063	(cm, UCUM, "cm")
LN	79981-7	Left atrial end systolic volume biplane (area-length)	C4069726	(ml, UCUM, "ml")
LN	79982-5 Left atrial end systolic volume biplane (area-leng / BSA		C4069725	(ml/m2, UCUM, "ml/m2")
LN	79983-3	Left atrial end systolic volume biplane (MOD)	C4069724	(ml, UCUM, "ml")
LN	79984-1	Left atrial end systolic volume biplane (MOD) / BSA	C4069723	(ml/m2, UCUM, "ml/m2")
LN	79985-8	Left atrial end systolic volume single plane 2C (MOD)	C4069722	(ml, UCUM, "ml")
LN	79986-6	Left atrial end systolic volume single plane 4C (MOD)	C4069721	(ml, UCUM, "ml")
LN	24526-6	Left ventricular cardiac output	C0881769	(l/min, UCUM, "l/min")
LN	93649-2	Left ventricular cardiac output (biplane area-length)	C5212121	(l/min, UCUM, "l/min")
LN	20204-4	Left ventricular cardiac output (biplane ellipse)	C0803019	(l/min, UCUM, "l/min")
LN	20205-1	Left ventricular cardiac output (bullet)	C0803020	(l/min, UCUM, "l/min")
LN	76565-1	Left ventricular cardiac output (calculated)	C4037718	(l/min, UCUM, "l/min")
LN	76567-7	Left ventricular cardiac output (cube)	C4037716	(l/min, UCUM, "l/min")
LN	20206-9	Left ventricular cardiac output (cubed)	C0803021	(l/min, UCUM, "l/min")
LN	76571-9	Left ventricular cardiac output (Gibson)	C4037712	(l/min, UCUM, "l/min")
LN	20207-7	Left ventricular cardiac output (LVOT)	C0803022	(I/min, UCUM, "I/min")
LN	20208-5	Left ventricular cardiac output (modified biplane)	C0803023	(I/min, UCUM, "I/min")
LN	20212-7	Left ventricular cardiac output (single plane ellipse)	C0803027	(l/min, UCUM, "l/min")

LN	76569-3	Left ventricular cardiac output (Teichholz)	C4037714	(l/min, UCUM, "l/min")
LN	93647-6	Left ventricular cardiac output 2C (area-length)	C5212119	(l/min, UCUM, "l/min")
LN	93650-0	Left ventricular cardiac output 2C (MOD)	C5212122	(l/min, UCUM, "l/min")
LN	81390-7	Left ventricular cardiac output 3D	C4265387	(l/min, UCUM, "l/min")
LN	93648-4	Left ventricular cardiac output 4C (area-length)	C5212120	(l/min, UCUM, "l/min")
LN	93651-8	Left ventricular cardiac output 4C (MOD)	C5212123	(l/min, UCUM, "l/min")
LN	76564-4	Left ventricular cardiac output M-mode (calculated)	C4037719	(l/min, UCUM, "l/min")
LN	76566-9	Left ventricular cardiac output M-mode (cube)	C4037717	(l/min, UCUM, "l/min")
LN	76570-1	Left ventricular cardiac output M-mode (Gibson)	C4037713	(l/min, UCUM, "l/min")
LN	76568-5	Left ventricular cardiac output M-mode (Teichholz)	C4037715	(l/min, UCUM, "l/min")
LN	93632-8	Left ventricular outflow tract/Aortic valve VTI	C5212102	(%, UĆUM, "%")
LN	80032-6	Left ventricular posterior wall diastolic thickness	C4069662	(cm, UCUM, "cm")
LN	80031-8	Left ventricular posterior wall diastolic thickness M-mode	C4069663	(cm, UCUM, "cm")
LN	93663-3	Left ventricular sphericity index end diastole	C5212135	({ratio}, UCUM, "ratio")
LN	20324-0	Left ventricular stroke volume (aortic root calculated)	C0803139	(ml, UCUM, "ml")
LN	80050-8	Mitral annulus diastolic diameter - A2C	C4069644	(cm, UCUM, "cm")
LN	80051-6	Mitral annulus diastolic diameter - A4C	C4069643	(cm, UCUM, "cm")
LN	80052-4	Mitral annulus diastolic diameter - PLAX	C4069642	(cm, UCUM, "cm")
LN	80053-2	Mitral annulus VTI	C4069641	(cm, UCUM, "cm")

				i age z
LN	80059-9	Mitral regurgitation PISA radius	C4069635	(cm, UCUM, "cm")
LN	80061-5	Mitral regurgitation vena contracta width	C4069633	(cm, UCUM, "cm")
LN	20264-8	Mitral valve annulus area	C0803079	(cm2, UCUM, "cm2")
LN	18017-4	Mitral valve annulus diameter	C0801067	(cm, UCUM, "cm")
LN	29448-8	Mitral valve effective regurgitant orifice area (PISA)	C0944898	(cm2, UCUM, "cm2")
LN	77914-0	Mitral valve effective regurgitant orifice area (volumetric)	C4036549	(cm2, UCUM, "cm2")
LN	80073-0	Mitral valve mean gradient	C4069625	(mm[Hg], UCUM, "mmHg")
LN	77913-2	Mitral valve vena contracta diameter	C4036550	(cm, UCUM, "cm")
LN	59101-6	Pulmonary Artery Pressure using Accel Time	C2923436	(ms, UCUM, "ms")
LN	82341-9	Right ventricular Intrachamber systolic pressure	C4298777	(mm[Hg], UCUM, "mmHg")
LN	77903-3	Tricuspid Annular Plane Systolic Excursion	C4036560	(cm, UCUM, "cm")
LN	80091-2	Tricuspid annulus diameter end diastolic	C4069607	(cm, UCUM, "cm")
LN	18023-2	Tricuspid valve annulus diameter	C0801073	(cm, UCUM, "cm")
LN	20344-8	Tricuspid valve annulus region crossection area	C0803159	(cm2, UCUM, "cm2")
LN	79922-1	Tricuspid valve a-prime Vmax	C4069769	(cm/s, UCUM, "cm/s")
LN	81093-7 Tricuspid valve effective regurgitant orifice area (PISA)		C4265686	(mm2, UCUM, "mm2")
LN	81094-5	Tricuspid valve effective regurgitant orifice area (Volumetric)	C4265685	(mm2, UCUM, "mm2")
LN	79924-7			(cm/s, UCUM, "cm/s")
LN	79926-2	Tricuspid valve s-prime Vmax	C4069765	(cm/s, UCUM, "cm/s")

CID 12338 Left Atrial Appendage Closure Measurement

Measurements associated with a procedure to close a Left Atrial Appendage.

The Units column contains the proper UCUM representation of the recommended units for the measured property.

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: LeftAtrialAppendageClosureMeasurement FHIR Keyword: dicom-cid-12338-LeftAtrialAppendageClosureMeasurement Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1523

Coding Scheme Designator	Code Value	Code Meaning	SNOMED- RT ID	UMLS Concept Unique ID	Units
DCM	131217	Left atrial appendage closure device circumference			(mm, UCUM, "mm")
DCM	131218	Left atrial appendage closure device compression			(%, UCUM, "%")
DCM	131219	Left atrial appendage closure device diameter			(mm, UCUM, "mm")
DCM	131220	Left atrial appendage closure device size			(mm, UCUM, "mm")
DCM	131221	Left atrial appendage depth			(mm, UCUM, "mm")
DCM	131222	Left atrial appendage landing zone major axis			(mm, UCUM, "mm")
DCM	131223	Left atrial appendage major axis			(mm, UCUM, "mm")
DCM	131224	Left atrial appendage minor axis			(mm, UCUM, "mm")
DCM	131225	Left atrial appendage ostium perimeter			(mm, UCUM, "mm")

Table CID 12338. Left Atrial Appendage Closure Measurement

CID 12345 Cardiac Structure Calcification Qualitative Evaluation

These are qualitative evaluations of calcification in cardiac structures.

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: CardiacCalcificationQualitativeEvaluation FHIR Keyword: dicom-cid-12345-CardiacCalcificationQualitativeEvaluation Type: Extensible Version: 20240507 UID: 1.2.840.10008.6.1.1532

 Table CID 12345. Cardiac Structure Calcification Qualitative Evaluation

Coding Scheme Designator	Code Value	Code Meaning
DCM	131142	Aortic annulus calcification severity
DCM	131147	Aortic commissures calcification severity
DCM	131167	Left ventricular outflow tract calcification severity
DCM	131184	Mitral annulus calcification severity

CID 12339 Structural Heart Procedure Anatomic Site

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: StructuralHeartProcedureAnatomicSite FHIR Keyword: dicom-cid-12339-StructuralHeartProcedureAnatomicSite Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1524

Table CID 12339. Structural Heart Procedure Anatomic Site

Coding Scheme	Code Value	Code Meaning	SNOMED-RT	UMLS Concept
Designator	57004000	A autia avala	ID T 10000	Unique ID
SCT	57034009	Aortic arch	T-42300	C0003489
SCT	443167003	Aortic sinotubular junction	T-42102	C2733424
SCT	34202007	Aortic valve	T-35400	C0003501
SCT	46396001	Aortic valve commissure	T-35440	C0225964
SCT	81797008	Aortic valve cusp	T-35420	C0225958
SCT	77583004	Aortic valve ring	T-35410	C0225957
SCT	54247002	Ascending aorta	T-42100	C0003956
SCT	36371001	Left Sinus of Valsalva	T-42220	C0226017
SCT	89093001	Right Sinus of Valsalva	T-42210	C0226016
SCT	81128002	Structure Sinus of Valsalva	T-42200	C0037197
SCT	58095006	Interatrial septum structure	T-32150	C0225836
SCT	82471001	Left atrium	T-32300	C0225860
SCT	33626005	Left auricular appendage	T-32310	C0225861
DCM	131120	Ostium of Left Auricular		
		Appendage		
SCT	59438005	Left anterior descending	T-43110	C0226032
		coronary artery		
SCT	3227004	Left main coronary artery	T-43107	C0226031
SCT	87878005	Left ventricle	T-32600	C0225897
SCT	13418002	Left ventricle outflow tract	T-32650	C0225912
SCT	21498007	Anterior mitral valve leaflet	T-35321	C0225950
SCT	399086000	Lateral mitral annulus	G-0392	C1302198
SCT	399093001	Medial mitral annulus	G-0391	C1302199
SCT	65197004	Mitral annulus	T-35310	C0225947
SCT	91134007	Mitral valve	T-35300	C0026264
SCT	19198003	Mitral valve commissure	T-35340	C0225954
SCT	46807008	Mitral valve leaflet	T-35320	C0225949
SCT	57793009	Posterior mitral valve leaflet	T-35322	C0225951
SCT	81040000	Pulmonary artery	T-44000	C0034052
SCT	73829009	Right atrium	T-32200	C0225844
SCT	589001	Interventricular septum	T-32410	C0225870

SCT	53085002	Right ventricle	T-32500	C0225883
SCT	85235006	Left subclavian artery	T-46120	C0226262
SCT	29700009	Right subclavian artery	T-46110	C0226261
SCT	113259005	Tricuspid annulus	T-35110	C0225926
SCT	46030003	Tricuspid valve	T-35100	C0040960
SCT	3462006	Tricuspid valve commissure	T-35170	C0225933
Include CID 3746				

CID 12341 Indication for Structural Heart Procedure

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: IndicationForStructuralHeartProcedure FHIR Keyword: dicom-cid-12341-IndicationForStructuralHeartProcedure Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1525

Table CID 12341. Indication for Structural Heart Procedure

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	60573004	Aortic stenosis	D3-29021	C0003507
SCT	79619009	Mitral stenosis	D3-29011	C0026269
SCT	11851006	Mitral valve disease	D3-29010	C0026265
SCT	79619009	Mitral stenosis	D3-29011	C0026269
SCT	48724000	Mitral regurgitation	D3-29012	C0026266
SCT	373116009	Acute mitral regurgitation	D3-29096	C1298807
SCT	409712001	Mitral valve prolapse	D3-1081C	C0026267
SCT	195020003	Hypertrophic cardiomyopathy without obstruction	D3-20003	C0340425
SCT	20721001	Tricuspid valve disease	D3-29040	C0264882
SCT	111287006	Tricuspid regurgitation	D3-29042	C0040961
SCT	49915006	Tricuspid valve stenosis	D3-29041	C0040963
SCT	8722008	Aortic valve disease	D3-29020	C1260873
SCT	194983005	Aortic insufficiency	D3-29025	C0340377
SCT	60234000	Aortic regurgitation	D3-29022	C0003504
SCT	60573004	Aortic valve stenosis	D3-29021	C0003507
SCT	70142008	Atrial septal defect	D4-31220	C0018817
SCT	76267008	Pulmonic valve disease	D3-29050	C0034087
SCT	56786000	Pulmonic valve stenosis	D3-29051	C0034089
SCT	91434003	Pulmonic valve regurgitation	D3-29052	C0034088
SCT	30288003	Ventricular septal defect	D4-31150	C0018818

UMLS	C4015487	Left atrial dilation		C4015487
SCT	275514001	Impaired left	C0242698	C1277291
		ventricular function		
SCT	49436004	Atrial fibrillation	D3-31520	C0004238
SCT	135877001	Stroke risk	G-E037	C1277291
UMLS	C3468959	Intolerance to		C3468959
		anticoagulation		

CID 12342 Bradycardiac Agent

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: BradycardiacAgent FHIR Keyword: dicom-cid-12342-BradycardiacAgent Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1526

Table CID 12342. Bradycardiac Agent

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
SCT	33252009	Beta blocker	C-80135	C0001645
SCT	48698004	Calcium channel blocker	C-80160	C0006684
SCT	372700007	Nitrate vasodilator	F-618B5	C0360716

CID 12343 Transesophageal Echocardiography Scan Plane

Resources: HTML I FHIR JSON I FHIR XML I IHE SVS XML Keyword: TransesophagealEchocardiographyScanPlane FHIR Keyword: dicom-cid-12343-TransesophagealEchocardiographyScanPlane Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1527

Table CID 12343. Transesophageal Echocardiography Scan Plane

Coding Scheme Designator	Code Value	Code Meaning
DCM	131100	Mid-esophageal 0 degree TEE
DCM	131101	Mid-esophageal 45 degree TEE
DCM	131102	Mid-esophageal 60 degree TEE
DCM	131103	Mid-esophageal 90 degree TEE
DCM	131104	Mid-esophageal 135 degree TEE

CID 12344 Structural Heart Measurement Report Document Title Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML Keyword: StructuralHeartMeasurementReportDocumentTitle FHIR Keyword: dicom-cid-12344-StructuralHeartMeasurementReportDocumentTitle Type: Extensible Version: 20250405 UID: 1.2.840.10008.6.1.1528

Coding Scheme Designator	Code Value	Code Meaning
DCM	131090	Pre-procedural Structural Heart Measurement Report
DCM	131091	Intra-procedural Structural Heart Measurement Report
DCM	131092	Post-procedural Structural Heart Measurement Report

Table CID 12344. Structural Heart Measurement Report Document Title

Add the following Definitions to Annex D

Coding Scheme Design ator	Code Value	Code Meaning	Definition
DCM	131090	Pre-procedural Structural Heart Measurement Report	A report containing the quantitative results of human, or machine analysis of imaging acquired prior to a transcatheter structural heart procedure, focusing on measurements used to guide procedural planning and device selection.
DCM	131091	Intra-procedural Structural Heart Measurement Report	A report containing the quantitative results of human, or machine analysis of imaging acquired during a transcatheter structural heart procedure, focusing on real-time measurements to guide procedural execution and assess immediate outcomes.
DCM	131092	Post-procedural Structural Heart Measurement Report	A report containing the quantitative results of human, or machine analysis of imaging acquired after a transcatheter structural heart procedure, focusing on the evaluation of procedural success, device placement, and patient outcomes.
DCM	131100	Mid-esophageal 0 degree TEE	A mid-esophageal view directed anteriorly with the transesophageal transducer in its baseline orientation.
DCM	131101	Mid-esophageal 45 degree TEE	A mid-esophageal plane directed 45 degrees clockwise from the mid-esophageal 0 degree TEE.
DCM	131102	Mid-esophageal 60 degree TEE	A mid-esophageal plane directed 60 degrees clockwise from the mid-esophageal 0 degree TEE.
DCM	131103	Mid-esophageal 90 degree TEE	A mid-esophageal plane directed 90 degrees clockwise from the mid-esophageal 0 degree TEE.
DCM	131104	Mid-esophageal 135 degree TEE	A mid-esophageal plane directed 135 degrees clockwise from the mid-esophageal 0 degree TEE.
DCM	131110	Ball and disk type left atrial appendage closure device	A device, in the form of a disk and cylindrical lobe connected by a central waist, for sealing off a left atrium appendage.

DCM	131111	Ball type left atrial appendage closure device	A spherical device for sealing off a left atrium appendage.
DCM	131112	Left atrial appendage closure device	A device for sealing off a left atrium appendage.
DCM	131120	Ostium of Left Auricular Appendage	The anatomical orifice connecting the left atrial appendage to the left atrium of the heart.
DCM	131130	Transseptal puncture height	The distance from the mitral leaflets to the level of the transseptal puncture measured during systole in a four- chamber view, with the measurement line drawn parallel to the atrial septum.
DCM	131140	Aorta sinotubular junction area	The cross-sectional area of the ascending aorta measured between the aortic sinuses of Valsalva and normal tubular configuration of the aorta during diastole in 2D or 3D, in the long axis view.
DCM	131142	Aortic annulus calcification severity	The qualitative severity of calcification of the annulus of the aortic valve, evaluated during systole, in any view at the level of the annulus of the aortic valve.
DCM	131143	Aortic annulus max diameter	The widest diameter of the annulus of the aortic valve measured at systole, in a short axis view at the level of the annulus of the aortic valve.
DCM	131144	Aortic annulus min diameter	The narrowest diameter of the annulus of the aortic valve measured at systole, in a short axis view at the level of the annulus of the aortic valve.
DCM	131145	Aortic annulus perimeter	The length of the perimeter of the annulus of the aortic valve measured at systole, in a short axis view at the level of the annulus of the aortic valve.
DCM	131146	Aortic calcification volume	The volume of calcification of the annulus of the aortic valve, evaluated during systole, in a short axis view at the level of the annulus of the aortic valve, using a qualitative method.
DCM	131147	Aortic commissures calcification severity	The qualitative severity of calcification of the commissures of the aortic valve, evaluated at any time during the cardiac cycle, in any view at the level of the annulus of the aortic valve.
DCM	131148	Aortic root height	The distance from the aortic annulus to the sinotubular junction measured during diastole in the long axis view.
DCM	131149	Aortic sinotubular junction diameter	The diameter of the ascending aorta measured at the level of the sinotubular junction during diastole, in any view.
DCM	131150	Aortic sinus of valsalva area	The area within the sinus of valsalva measured during diastole, in a short axis view, at the level of the sinus of valsalva.
DCM	131152	Aortic valve coaptation length	The length of coaptation (where the aortic valve leaflets are in contact), measured during diastole in the long axis view.

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DCM	131153	Aortic valve noncoronary leaflet intercommissural angle	The angle between the two commissures of the noncoronary leaflet of the aortic valve measured during diastole, in a short axis view at the level of the aortic valve.
DCM	131154	Aortic valve right leaflet intercommissural angle	The angle between the two commissures of the right leaflet of the aortic valve measured during diastole, in a short axis view at the level of the aortic valve.
DCM	131155	Aortic valve left leaflet intercommissural angle	The angle between the two commissures of the left leaflet of the aortic valve measured during diastole, in a short axis view at the level of the aortic valve.
DCM	131156	Aortic valve noncoronary leaflet intercommissural distance	The straight-line distance between the two commissures of the left leaflet of the aortic valve measured during diastole, in a short axis view at the level of the aortic valve.
DCM	131157	Aortic valve right leaflet intercommissural distance	The straight-line distance between the two commissures of the right leaflet of the aortic valve measured during diastole, in a short axis view at the level of the aortic valve.
DCM	131158	Aortic valve left leaflet intercommissural distance	The straight-line distance between the two commissures of the left leaflet of the aortic valve measured during diastole, in a short axis view at the level of the aortic valve.
DCM	131159	Aortic valve left coronary leaflet height	The perpendicular distance from the plane of the annulus to the tip of the left coronary leaflet measured during diastole, in a long axis view.
DCM	131160	Aortic valve left coronary leaflet length	The distance along the surface of the left coronary leaflet from the tip to the hinge point of the leaflet to the aortic annulus, measured during diastole, in a long axis view.
DCM	131161	Aortic valve noncoronary leaflet height	The perpendicular distance from the plane of the annulus to the tip of the noncoronary leaflet measured during diastole, in a long axis view.
DCM	131162	Aortic valve noncoronary leaflet length	The distance along the surface of the noncoronary leaflet from the tip to the hinge point of the leaflet to the aortic annulus, measured during diastole, in a long axis view.
DCM	131163	Aortic valve right coronary leaflet height	The perpendicular distance from the plane of the annulus to the tip of the right coronary leaflet measured during diastole, in a long axis view.
DCM	131164	Aortic valve right coronary leaflet length	The distance along the surface of the right coronary leaflet from the tip to the hinge point of the leaflet to the aortic annulus, measured during diastole, in a long axis view.
DCM	131165	Ascending Aorta diameter	The diameter within the ascending aorta measured during diastole in 2D, in any view at the level of the right pulmonary artery.

DCM	131166	Left main coronary	The distance between the aortic annulus and the left
		ostium height	main coronary ostium measured at their closest points,
			during systole, in a long axis view.
DCM	131167	Left ventricular	The qualitative severity of calcification of the left
		outflow tract	ventricular outflow tract, from the annular plane to 5
		calcification	mm below, evaluated at any time during the cardiac
		severity	cycle and in any view.
DCM	131168	Maximum aortic	The maximum thickness of the largest atherosclerotic
		plaque thickness	plaque deposit found within the ascending aorta,
			measured during systole, in the view that demonstrates
			the thickest plaque, using any appropriate imaging
			method
DCM	131169	Right coronary	The distance between the aortic annulus and the right
2011	101100	artery ostium	main coronary ostium measured at their closest points,
		height	during systole, in a long axis view.
DCM	131170	Right ventricle	The internal longitudinal length of the right ventricle
DOW	131170	diastolic major	from the apex to the tricuspid annulus, measured
		axis	
DCM	131171		during diastole, in a four-chamber view.
DCIVI	1311/1	Right ventricular	The internal diameter of the right ventricle from the
		diastolic mid	interventricular septum to the free wall, measured at
		segment minor	the level of the papillary muscles during diastole, in a
D 014		axis	four-chamber view.
DCM	131172	Right ventricular	The internal diameter of the right ventricle from the
		diastolic basal	interventricular septum to the free wall, measured in
		minor axis	the basal third of the right ventricle during diastole, in a
			four-chamber view.
DCM	131173	Mitral anterior	The distance along the hinge line of the A1 scallop of
		leaflet A1 scallop	the anterior leaflet of the mitral valve, measured during
		length	systole, in the long axis view.
DCM	131174	Mitral anterior	The distance along the hinge line of the A2 scallop of
		leaflet A2 scallop	the anterior leaflet of the mitral valve, measured during
		length	systole, in the long axis view.
DCM	131175	Mitral anterior	The distance along the hinge line of the A3 scallop of
		leaflet A3 scallop	the anterior leaflet of the mitral valve, measured during
		length	systole, in the long axis view.
DCM	131176	Mitral anterior	The area of the atrial surface of the anterior leaflet of
		leaflet area	the mitral valve measured during systole, in a 3D en
			face view of the mitral valve.
DCM	131177	Aorto-mitral inter	The angle between the plane passing through the
_	_	annular angle	aortic annulus and the plane passing through the mitral
			annulus measured during systole, in the long axis view.
DCM	131178	Mitral commissure	The straight-line distance between the two
		distance	commissures of the anterior and posterior leaflets of
			the mitral valve measured during diastole, in a two-
			chamber view.
DCM	131179	Mitral trigone-to-	The straight-line distance between a point in the right
DON		trigone distance	
			trigone region of the mitral annulus and a point in the
			left trigone region of the mitral annulus, measured
	101100	Mitual and the	during systole, in a 3D en face view of the mitral valve.
DCM	131180	Mitral annular	The longitudinal displacement of the plane of the mitral
		excursion	annulus over the course of a cardiac cycle, measured
			any view.

DCM	131181	Mitral annulus anterolateral to posteromedial diameter	The diameter of the annulus of the mitral valve measured from the anterolateral aspect to the posteromedial aspect, during systole, in a 3D en face view of the mitral valve.
DCM	131182	Mitral annulus anteroposterior diameter	The diameter of the annulus of the mitral valve measured from the anterior aspect to the posterior aspect, during systole, in the short axis view at the level of the mitral annulus.
DCM	131183	Mitral annulus area	The area within the annulus of the mitral valve measured during systole, in a short axis view at the level of the annulus of the mitral valve.
DCM	131184	Mitral annulus calcification severity	The qualitative severity of calcification of the annulus of the mitral valve, evaluated during diastole, in any view, at the level of the annulus of the mitral valve.
DCM	131185	Mitral annulus commissural diameter	The diameter of the annulus of the mitral valve at the level of the commissures of the annulus, measured during systole, in a 3D en face view of the mitral valve.
DCM	131186	Mitral annulus diameter ratio	The ratio of the anteroposterior diameter of the mitral annulus and the anterolateral diameter of the mitral annulus, measured during systole.
DCM	131187	Mitral annulus height	The sum of the vertical distance from the highest point on the mitral annulus to the mitral annular plane and the vertical distance from the lowest point on the mitral annulus to the mitral annular plane. It is measured at systole, in a 3D transverse view of the mitral valve.
DCM	131188	Mitral annulus nonplanarity angle	The angle between a vector from the furthest anterior aspect of the annulus to the midpoint of the commissural diameter and a vector from the furthest posterior aspect of the annulus to the midpoint of the commissural diameter. It is measured at systole, in a 3D view of the mitral valve.
DCM	131189	Mitral annulus perimeter	The length of the perimeter of the annulus of the mitral valve measured during systole, in a short axis view at the level of the annulus of the mitral valve.
DCM	131190	Mitral valve coaptation length	The length of coaptation (where the anterior and posterior leaflets are in contact) of the mitral valve, measured during systole, in a 3D view.
DCM	131191	Mitral valve interpapillary distance	The distance between the two papillary muscle tips of the mitral valve, measured during diastole in a four- chamber view.
DCM	131192	Anterolateral papillary muscle to the left trigone	The distance between the anterolateral papillary muscle tip and a point in the left trigone region of the mitral annulus, measured during systole in a four- chamber view.
DCM	131193	Posteromedial papillary muscle to the right trigone	The distance between the posteromedial papillary muscle tip and a point in the right trigone region of the mitral annulus, measured during systole in a four- chamber view.
DCM	131194	Mitral valve prolapse area	The surface area of the portion of the mitral valve leaflets that is displaced above the annular plane (prolapsed) measured during systole, in a short axis view.
		prolapse area	(prolapsed) measured during systole, in a short axis

	101105	Mitrolychia	The volume encompassed by encyler plane and the
DCM	131195	Mitral valve	The volume encompassed by annular plane and the
		prolapse volume	portion of the mitral valve leaflets that is displaced
			above the annular plane (prolapsed) measured during
			systole, in a short axis view.
DCM	131196	Mitral valve	The distance between the tip of the free edge of a flail
		segment flail gap	mitral valve leaflet or segment and the plane of the
			mitral annulus measured during systole, in any view.
DCM	131197	Mitral valve	The ratio of the transverse diameter of the left ventricle
		sphericity index	at the level of the papillary muscle base divided by the
			longitudinal distance between the level of the papillary
			muscle base and the mitral annulus plane, measured
			at diastole in a four-chamber view. See
			https://doi.org/10.1016/j.jcmg.2008.12.025
DCM	131198	Mitral valve tenting	The perpendicular distance from the point of coaptation
DOW	131130	•	(where the anterior and posterior leaflets of the mitral
		height	
			valve meet) to the annular plane measured during
			systole, in a 3D or 2D view at the level of the mitral
			annulus.
DCM	131199	Mitral valve tenting	The area between the ventricular surface of the leaflets
		area	of the mitral valve and the annular plane measured
			during systole, in a 3D view at the level of the mitral
			annulus.
DCM	131200	Mitral valve tenting	The distance from the point where the A1-P1 scallops
		segment height	of the mitral valve contact (coaptation point) to the
		A1-P1	annular plane measured during systole, in a four-
			chamber view at the level of the mitral annulus.
DCM	131201	Mitral valve tenting	The distance from the point where the A2-P2 scallops
		segment height	of the mitral valve contact (coaptation point) to the
		A2-P2	annular plane measured during systole, in a four-
			chamber view at the level of the mitral annulus.
DCM	131202	Mitral valve tenting	The distance from the point where the A3-P3 scallops
		segment height	of the mitral valve contact (coaptation point) to the
		A3-P3	annular plane measured during systole, in a four-
		7010	chamber view at the level of the mitral annulus.
DCM	131203	Posterior mitral	The combined area of the P1, P2 and P3 leaflet
DCIVI	131203		
		valve leaflet area	scallops of the posterior mitral valve, measured during
DOM	404004		systole, in the long axis view.
DCM	131204	Posterior mitral	The distance along the hinge line of the posterior mitral
		valve leaflet length	valve P1, P2 and P3 leaflet scallops measured during
			systole, in the long axis view.
DCM	131205	Posterior mitral	The distance along the hinge line of the posterior mitral
		valve P1 leaflet	valve P1 leaflet scallop during systole, in the long axis
		scallop length	view.
DCM	131206	Posterior mitral	The distance along the hinge line of the posterior mitral
		valve P2 leaflet	valve P2 leaflet scallop during systole, in the long axis
		scallop length	view.
DCM	131207	Posterior mitral	The distance along the hinge line of the posterior mitral
	-	valve P3 leaflet	valve P3 leaflet scallop during systole, in the long axis
		scallop length	view.
DCM	131208	Tricuspid annulus	The area within the annulus of the tricuspid valve
DOW	101200	area	measured during diastole, in a 3D en face view of the
		alea	-
	1	1	tricuspid valve.

DOLL	404000		
DCM	131209	Tricuspid annulus	The area within the annulus of the tricuspid valve
		area diastolic	calculated at diastole divided by the area within the
		systolic ratio	annulus of the tricuspid valve calculated at systole, in a
			3D en face view of the tricuspid valve.
DCM	131210	Tricuspid annulus	The length of the perimeter of the annulus of the
		perimeter	tricuspid valve measured during diastole, in a four-
			chamber view.
DCM	131211	Tricuspid valve	The length of coaptation (where the anterior, posterior,
		coaptation length	and septal leaflets are in contact), measured during
			systole, in a 3D view.
DCM	131212	Tricuspid valve	The maximum diameter of the annulus of the tricuspid
		major axis diastole	valve measured during diastole, in a four-chamber
			view.
DCM	131213	Tricuspid valve	The minimum diameter of the annulus of the tricuspid
		minor axis	valve measured during diastole, in a four-chamber
			view.
DCM	131214	Tricuspid valve	The ratio of the maximum diameter of the annulus of
		sphericity index	the tricuspid valve and the minimum diameter of the
			annulus of the tricuspid valve, measured during
			diastole, in a four-chamber view.
DCM	131215	Tricuspid valve	The distance from the point where the leaflets of the
		tenting height	tricuspid valve contact (coaptation point) to the annular
			plane measured during systole, in a four-chamber 3D
			transverse view of the tricuspid valve.
DCM	131216	Tricuspid valve	The volume of the region between atrial surface of the
		tenting volume	leaflets and the annular plane measured during
			systole, in a 3D view of the tricuspid valve.
DCM	131217	Left atrial	The circumference of the left atrial appendage closure
		appendage	device after deployment, measured at the shoulder
		closure device	during end-systole in a 2D or 3D view of the left atrial
		circumference	appendage.
DCM	131218	Left atrial	The ratio of the diameter of the left atrial appendage
		appendage	closure device after deployment, measured at the
		closure device	shoulder during end-systole in a 2D or 3D view of the
		compression ratio	left atrial appendage, and diameter of the left atrial
			appendage closure device as specified by its
			manufacturer.
DCM	131219	Left atrial	The diameter of the left atrial appendage closure
		appendage	device after deployment, measured at the shoulder
		closure device	during end-systole in a 2D view of the left atrial
		diameter	appendage.
DCM	131220	Left atrial	The diameter of the left atrial appendage closure
	-	appendage	device as specified by its manufacturer.
		closure device	
		size	
DCM	131221	Left atrial	The maximum distance from the left atrial appendage
		appendage depth	orifice (the plane between the left upper pulmonary
			vein ridge and the left circumflex artery), to the most
			distal point of the left atrial appendage cavity,
			measured during end-diastole in a 2D view of the left
			atrial appendage.
	1		ana appendage.

		1	
DCM	131222	Left atrial appendage landing zone major axis	The maximum diameter of the left atrial appendage measured 1cm to 1.5cm inferior to the orifice (the plane between the left upper pulmonary vein ridge and the left circumflex artery), during end-systole, in a 2D view of the left atrial appendage.
DCM	131223	Left atrial appendage major axis	The maximum diameter of the left atrial appendage orifice (the plane between the left upper pulmonary vein ridge and the left circumflex artery), measured during end-systole, in a 2D view of the left atrial appendage.
DCM	131224	Left atrial appendage minor axis	The minimum diameter of the left atrial appendage orifice (the plane between the left upper pulmonary vein ridge and the left circumflex artery), measured during end-systole, in a 2D view of the left atrial appendage.
DCM	131225	Left atrial appendage ostium perimeter	The perimeter of the left atrial appendage orifice (the plane between the left upper pulmonary vein ridge and the left circumflex artery), measured during end- systole, in a 3D en face view of the left atrial appendage.

Add the following UID Values to Part 6 Annex A Table A-3:

Table A-3 CONTEXT GROUP UID VALUES

Context UID	Context Identifier	Context Group Name
1.2.840.10008.6.1.1516	12331	Structural Heart Procedures
1.2.840.10008.6.1.1517	12332	Structural Heart Devices
1.2.840.10008.6.1.1518	12333	Structural Heart Measurement
1.2.840.10008.6.1.1519	12334	Aortic Valve Structural Measurement
1.2.840.10008.6.1.1520	12335	Mitral Valve Structural Measurement
1.2.840.10008.6.1.1521	12336	Tricuspid Valve Structural Measurement
1.2.840.10008.6.1.1522	12337	Structural Heart Echo Measurement
1.2.840.10008.6.1.1523	12338	Left Atrial Appendage Closure Measurement
1.2.840.10008.6.1.1524	12339	Structural Heart Procedure Anatomic Site
1.2.840.10008.6.1.1525	12341	Indication for Structural Heart Procedure
1.2.840.10008.6.1.1526	12342	Bradycardiac Agents
1.2.840.10008.6.1.1527	12343	Transesophageal Echocardiography Scan Planes
1.2.840.10008.6.1.1528	12344	Structural Heart Measurement Report Document Title

1.2.840.10008.6.1.1532	12345	Cardiac Structure Calcification Qualitative
		Evaluation