

## DICOM Correction Item

Correction Number CP-767	
Log Summary: Add Calculated Value, Laterality to TID 4002	
Type of Modification	Name of Standard
Extension	PS 3.3, 3.16 – 2007
<p>Rationale for Correction:</p> <p>Mammography CAD devices will be able to produce assessments and numeric values specific to one breast, that are not uniquely ascribed to Single Image Findings (SIF) or Composite Features (CF). CAD can annotate which images were used in such assessments through the Summary of Detections and Analyses sub-trees. However, in the CAD Processing and Findings Summary sub-tree, Individual Impression/Recommendations and Composite Features require annotation of CFs or SIFs as child content items, hence making it impossible to report the desired content items without such a reference.</p> <p>This proposal requests addition of Calculated Value as part of TID 4002 so that additional numeric factors can be annotated at the Overall Impression/Recommendation level. The architecture is taken from other templates where Calculated Value is used already. One difference, though is the addition of a Has Concept Modifier for Laterality so values related to a specific breast can be annotated. It also requests the addition of an optional Laterality concept modifier for the existing CODE content items in TID 4002.</p> <p>Update IOD Relationship Content Constraints to reflect the Mammography CAD SR and Chest CAD SR template extensions that have occurred over time.</p>	
Sections of documents affected	
PS 3.3 Table A.35.5-2, A.35.6-2, PS 3.16 TID 4002	
Correction Wording:	
<b>Modify PS 3.3, Table A.35.5-2</b>	

**Table A.35.5-2  
 RELATIONSHIP CONTENT CONSTRAINTS FOR MAMMOGRAPHY CAD SR IOD**

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	CODE, NUM, SCOORD, IMAGE <sup>1</sup> , CONTAINER, <u>TEXT, DATE</u> .
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATE, TIME, PNAME, <u>UIDREF</u> , COMPOSITE <sup>1</sup> .
IMAGE	HAS ACQ CONTEXT	TEXT, CODE, DATE, TIME, NUM.
CONTAINER, CODE, <u>NUM, COMPOSITE</u>	HAS CONCEPT MOD	TEXT, CODE <sup>2</sup> .
TEXT, CODE, <u>NUM</u>	HAS PROPERTIES	CONTAINER, TEXT, CODE, NUM, DATE, IMAGE <sup>1</sup> , SCOORD, <u>UIDREF</u> .
CODE, NUM	INFERRED FROM	CODE, NUM, SCOORD, CONTAINER, <u>TEXT, IMAGE</u> .
SCOORD	SELECTED FROM	IMAGE <sup>1</sup> .

**Modify PS 3.3, Table A.35.6-2**

**Table A.35.6-2**  
**RELATIONSHIP CONTENT CONSTRAINTS FOR CHEST CAD SR IOD**

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	CODE, NUM, IMAGE <sup>1</sup> , CONTAINER.
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATE, TIME, PNAME, UIDREF, COMPOSITE <sup>1</sup> .
IMAGE, WAVEFORM	HAS ACQ CONTEXT	TEXT, CODE, DATE, TIME, NUM.
CONTAINER, CODE, COMPOSITE, <b>NUM</b>	HAS CONCEPT MOD	TEXT, CODE <sup>2</sup> .
TEXT, CODE, NUM	HAS PROPERTIES	CONTAINER, TEXT, CODE, NUM, DATE, IMAGE <sup>1</sup> , WAVEFORM <sup>1</sup> , SCOORD, TCOORD, <b>UIDREF</b> .
CODE, NUM	INFERRED FROM	CODE, NUM, IMAGE <sup>1</sup> , WAVEFORM <sup>1</sup> , SCOORD, TCOORD, CONTAINER, <b>TEXT</b> .
SCOORD	SELECTED FROM	IMAGE <sup>1</sup> .
TCOORD	SELECTED FROM	SCOORD, IMAGE <sup>1</sup> , WAVEFORM <sup>1</sup> .

**Modify PS 3.16, TID 4002**

**TID 4002 Mammography CAD Impression/Recommendation Body Template**

The details of an impression and recommendation are expressed in this template. It is applied to both Mammography CAD Overall Impression/Recommendation (TID 4001) and Mammography CAD Individual Impression/Recommendation (TID 4003).

**TID 4002  
MAMMOGRAPHY CAD IMPRESSION/RECOMMENDATION BODY  
Type: Non-Extensible**

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
	1		CODE	<u>EV</u> (111005, DCM, "Assessment Category")	1-n	MC	At least one of rows 1, <del>2</del> ,3, <del>4</del> ,5, <del>6</del> , <del>8</del> , <del>9</del> shall be present.	DCID (6026) "Mammography Assessment"
	<del>2</del>	≥	<u>HAS CONCEPT MOD</u>	<u>EV (G-C171, SRT, "Laterality")</u>	1	<u>U</u>		<u>DCID (6022) Side</u>
	<del>23</del>		CODE	<u>EV</u> (111023, DCM, "Differential Diagnosis/ Impression")	1-n	MC	At least one of rows 1, <del>2</del> ,3, <del>4</del> ,5, <del>6</del> , <del>8</del> , <del>9</del> shall be present.	DCID (6002) "Change Since Last Mammogram or Prior Surgery"
	<del>4</del>	≥	<u>HAS CONCEPT MOD</u>	<u>EV (G-C171, SRT, "Laterality")</u>	1	<u>U</u>		<u>DCID (6022) Side</u>
	<del>35</del>		TEXT	<u>EV</u> (111033, DCM, "Impression Description")	1	MC	At least one of rows 1, <del>2</del> ,3, <del>4</del> ,5, <del>6</del> , <del>8</del> , <del>9</del> shall be present.	
	<del>46</del>		CODE	<u>EV</u> (111053, DCM, "Recommended Follow-up")	1-n	MC	At least one of rows 1, <del>2</del> ,3, <del>4</del> ,5, <del>6</del> , <del>8</del> , <del>9</del> shall be present.	DCID (6028) "Mammography Recommended Follow-up"
	<del>7</del>	≥	<u>HAS CONCEPT MOD</u>	<u>EV (G-C171, SRT, "Laterality")</u>	1	<u>U</u>		<u>DCID (6022) Side</u>
	<del>58</del>		NUM	<u>EV</u> (111055, DCM, "Recommended Follow-up Interval")	1	MC	At least one of rows 1, <del>2</del> ,3, <del>4</del> ,5, <del>6</del> , <del>8</del> , <del>9</del> shall be present. May be present only if (111054, DCM, "Recommended Follow-up Date") is <u>not</u> present.	UNITS = DCID (6046) "Units of Follow-up Interval"; Values = Integer ≥ 0, where 0 = immediate follow-up
	<del>69</del>		DATE	<u>EV</u> (111054, DCM, "Recommended Follow-up Date")	1	MC	At least one of rows 1, <del>2</del> ,3, <del>4</del> ,5, <del>6</del> , <del>8</del> , <del>9</del> shall be present. May be present only if (111055, DCM, "Recommended Follow-up Interval") is <u>not</u> present.	Shall be later than date of exam
	<del>710</del>		NUM	<u>EV</u> (111013, DCM, "Certainty of impression")	1	UC	May be present only if (111005, DCM, "Assessment Category"), (111023, DCM, "Differential Diagnosis/Impression") or (111033, DCM, "Impression Description") is present.	UNITS = <u>EV</u> (%), UCUM, "Percent") Values = 0 – 100
	<del>811</del>		INCLUDE	DTID (4019) "CAD Algorithm Identification"	1-n	M		
	<del>12</del>		<u>NUM</u>	<u>DCID (6142) Calculated Value</u>	1-n	<u>U</u>		
	<del>13</del>	≥	<u>HAS CONCEPT MOD</u>	<u>EV (G-C171, SRT, "Laterality")</u>	1	<u>U</u>		<u>DCID (6022) Side</u>
	<del>14</del>	≥	<u>HAS CONCEPT MOD</u>	<u>EV (121401, DCM, "Derivation")</u>	1	<u>M</u>		<u>DCID (6140) Calculation Methods</u>
	<del>15</del>	≥	<u>INFERRED FROM</u>	<u>EV (112034, DCM, "Calculation Description")</u>	1	<u>U</u>		

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Date: 2008/01/21  
Status: Final Text