

DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2024-11-11
Person Assigned	Nolte
Submitter Name	Ingo.Wilkening@siemens-healthineers.com
Submission Date	2024-05-07

Correction Number	CP-2408																																																					
Log Summary:	CID Entries that are inconsistent or incomplete																																																					
Name of Standard	PS3.16																																																					
Rationale for Correction:	<p>PS3.16 contains some entries in CIDs that are incomplete or inconsistent. Those entries are in CIDs rarely used and might not been noticed until now.</p> <p>1) Table CID 12300. Core Echo Measurement has a missing CodeValue: (, LN, "Main pulmonary artery Vmax")</p> <table border="1"> <tr> <td>LN</td> <td>80049-0</td> <td>Main pulmonary artery diameter</td> <td></td> <td>C4069645</td> <td>(cm, UCUM, "cm")</td> </tr> <tr> <td>LN</td> <td> </td> <td>Main pulmonary artery Vmax</td> <td></td> <td></td> <td>(cm/s, UCUM, "cm/s")</td> </tr> <tr> <td>LN</td> <td>80050-8</td> <td>Mitral annulus diastolic diameter - A2C</td> <td></td> <td>C4069644</td> <td>(cm, UCUM, "cm")</td> </tr> </table> <p>(use LN 11720-0 Main pulmonary artery Peak systolic flow velocity US.doppler)</p> <p>2) Table CID 6334. mpMRI Assessment Type from PI-RADS® has DCM CodeValue to be doubted: (Margin, DCM, "Margin")</p> <table border="1" style="background-color: #e0e0e0;"> <thead> <tr> <th colspan="5">Table CID 6334. mpMRI Assessment Type from PI-RADS®</th> </tr> <tr> <th>Coding Scheme Designator</th> <th>Code Value</th> <th>Code Meaning</th> <th>SNOMED-RT ID</th> <th>UMLS Concept Unique ID</th> </tr> </thead> <tbody> <tr> <td>NCIt</td> <td>C9440</td> <td>Abnormality</td> <td></td> <td>C1704258</td> </tr> <tr> <td>SCT</td> <td>300842002</td> <td>Shape</td> <td>G-C2FE</td> <td>C0522512</td> </tr> <tr> <td>DCM</td> <td>Margin</td> <td>Margin</td> <td></td> <td></td> </tr> <tr> <td>RADLEX</td> <td>RID6049</td> <td>Signal characteristic</td> <td></td> <td></td> </tr> <tr> <td>RADLEX</td> <td>RID6058</td> <td>Enhancement pattern</td> <td></td> <td></td> </tr> </tbody> </table> <p>The hyperlink points to https://dicom.nema.org/medical/dicom/current/output/html/part16.html#DCM_111037 The code 111037 exists and is valid in Table D-1. DICOM Controlled Terminology Definitions (Coding Scheme Designator "DCM" Coding Scheme Version "01") Obviously, intended CodeValue was "111037" – not "Margin".</p>	LN	80049-0	Main pulmonary artery diameter		C4069645	(cm, UCUM, "cm")	LN	 	Main pulmonary artery Vmax			(cm/s, UCUM, "cm/s")	LN	80050-8	Mitral annulus diastolic diameter - A2C		C4069644	(cm, UCUM, "cm")	Table CID 6334. mpMRI Assessment Type from PI-RADS®					Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID	NCIt	C9440	Abnormality		C1704258	SCT	300842002	Shape	G-C2FE	C0522512	DCM	Margin	Margin			RADLEX	RID6049	Signal characteristic			RADLEX	RID6058	Enhancement pattern		
LN	80049-0	Main pulmonary artery diameter		C4069645	(cm, UCUM, "cm")																																																	
LN	 	Main pulmonary artery Vmax			(cm/s, UCUM, "cm/s")																																																	
LN	80050-8	Mitral annulus diastolic diameter - A2C		C4069644	(cm, UCUM, "cm")																																																	
Table CID 6334. mpMRI Assessment Type from PI-RADS®																																																						
Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID																																																		
NCIt	C9440	Abnormality		C1704258																																																		
SCT	300842002	Shape	G-C2FE	C0522512																																																		
DCM	Margin	Margin																																																				
RADLEX	RID6049	Signal characteristic																																																				
RADLEX	RID6058	Enhancement pattern																																																				

3) [Table CID 6337. mpMRI Prostate Abnormality from PI-RADS®](#) has DCM CodeValues to be doubted:
 (Focal abnormality,DCM,"Focal abnormality")
 (Non-focal abnormality,DCM,"Non-focal abnormality")

Table CID 6337. mpMRI Prostate Abnormality from PI-RADS®

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	RADLEX C
DCM	Focal abnormality	Focal abnormality		
SCT	87017008	Focal	G-A351	RID34301
NCIt	C110961	Index lesion		RID11517
SCT	52988006	Lesion	M-01100	RID38780
SCT	4147007	Mass	M-03000	RID3874
SCT	27925004	Nodule	M-03010	RID3875
DCM	Non-focal abnormality	Non-focal abnormality		

Similar to (2) the hyperlinks point to numeric DCM codes

https://dicom.nema.org/medical/dicom/current/output/html/part16.html#DCM_130591

https://dicom.nema.org/medical/dicom/current/output/html/part16.html#DCM_130592

Those links are valid and CodeMeaning in Table D-1 matches to CodeMeaning in CID 6337.

Obviously intended DCM codes were 130591 and 130592.

4) [Table CID 4401. Fitzpatrick Skin Type](#) contains “LN” (LOINC) codes, but the codes do not have the typical appearance of a LOINC code. They start with a “C”.

Table CID 4401. Fitzpatrick Skin Type

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
LN	C74569	Fitzpatrick Skin Type I		C2700185
LN	C74570	Fitzpatrick Skin Type II		C2700186
LN	C74571	Fitzpatrick Skin Type III		C2700187
LN	C74572	Fitzpatrick Skin Type IV		C2700188
LN	C74573	Fitzpatrick Skin Type V		C2700189
LN	C74574	Fitzpatrick Skin Type VI		C2700190

The hyperlink behind those CodeValues points to like

http://ncit.nci.nih.gov/ncitbrowser/ConceptReport.jsp?dictionary=NCI_Thesaurus&ns=NCI_Thesaurus&code=C74569

Apparently, those are NCI Thesaurus Codes. Following the link shows those on NCI web-page, with correct Code Meaning as given in the table CID 4401.

Thus, the CodingSchemeDesignator “NCIt” would be expected here.

5) [Table CID 100. Quantitative Diagnostic Imaging Procedure](#) contains (RPID5427,RADLEX,"NM head perfusion brain PET-CT AV-45"). The CodeValue is to be doubted. Hyperlink to RADLEX is missing.

LN	39632-5	CT perfusion head with contrast IV		C1543694
LN	39632-5	SPECT brain		C1543694
RADLEX	RPID5427	NM head perfusion brain PET-CT AV-45		

The code "RPID5427" does not exist in [RadLex Playbook Browser](#). No other Code with that Meaning was found.

Suggestion: Remove the concept, which was only included for illustrative purposes anyway.

6) [Table CID 3227. QTc Measurement](#) contains a space in a CodeValue

Table CID 3227. QTc Measurement			
Coding Scheme Designator	Code Value	Code Meaning	ISO/IEEE 11073 MDC Equivalent Reference ID (Informative)
MDC	2:15876	QTc interval global	MDC_ECG_TIME_PD_QTC
MDC	2: 33792	QTc interval per lead	MDC_ECG_TIME_PD_QTC_<lead>
MDC	2:15880	QTc global using Bazett formula	MDC_ECG_TIME_PD_QTC_BAZETT

"2 : 33792" should be "2 : 33792".

Suggestion: Delete the space

Correction Wording:

Update PS3.16, [Table CID 12300. Core Echo Measurement](#) with appropriate CodeValue.

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID	Units
LN	11720-0	Main pulmonary artery Vmax		C0551839	(cm/s, UCUM, "cm/s")

Update PS3.16, [Table CID 6334. mpMRI Assessment Type from PI-RADS®](#)

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID	mpMRI Assessment Values

DCM	Margin-111037	Margin			CID 6341 "MRI Margin Characteristic"
-----	-------------------------------	--------	--	--	--

Update PS3.16, [Table CID 6337. mpMRI Prostate Abnormality from PI-RADS®](#)

Coding Scheme Designator	Code Value	Code Meaning
DCM	Focal abnormality-130591	Focal abnormality
DCM	Non-focal abnormality-130592	Non-focal abnormality

Update PS3.16, [Table CID 4401. Fitzpatrick Skin Type](#)

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
LN-NCIt	C74569	Fitzpatrick Skin Type I		
LN-NCIt	C74570	Fitzpatrick Skin Type II		
LN-NCIt	C74571	Fitzpatrick Skin Type III		
LN-NCIt	C74572	Fitzpatrick Skin Type IV		
LN-NCIt	C74573	Fitzpatrick Skin Type V		
LN-NCIt	C74574	Fitzpatrick Skin Type VI		

Update PS3.16

Update [Table CID 100. Quantitative Diagnostic Imaging Procedure](#), remove obsolete RPID code:

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
RADLEX	RPID5427	NM head perfusion brain PET-CT AV-45		

Update PS3.16, [Table CID 3227. QTc Measurement](#), change "2 : 33792" to "2:33792"

Coding Scheme Designator	Code Value	Code Meaning	ISO/IEEE 11073 MDC Equivalent Reference ID (Informative)

MDC	2:33792 <u>2:33792</u>	QTc interval per lead	MDC_ECG_TIME_PD_QTC_<lead>
-----	--------------------------------------	-----------------------	----------------------------