DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2024-03-24
Person Assigned	Bjoern Nolte bjoern.nolte@siemens-healthineers.com
Submitter Name	Ingo Wilkening ingo.wilkening@siemens-healthineers.com
	Klaus Wolf Klaus.wolf@siemens-healthineers.com)
Submission Date	2023-08-24

Correction Number	CP-2327
Log Summary: Inconsistent meaning used for (113930, DCM, Size Specific Dose Estimate)	
Name of Standard PS3.16 2024a	
Rationale for Correction: Part 16 contains inconsistencies. **Table D-1. DICOM Controlled Terminology Definitions** has DCM Code Value "113930" with Code Meaning "Size Specific Dose Estimate". In **Table TID 10013. CT Irradiation Event Data**, line 30 it is same Code Meaning as in Table D-1. In **Table TID 10042. Irradiation Event Summary Data**, line 33, it is "(113930, DCM, "Size Specific Dose Estimation")" - "Estimation" instead of "Estimate". The Code Meanings should be consistent throughout the DICOM standard. The term "Estimate" is favored as it is already listed in the table D-1 Definitions for "113930", and same text "Estimate" is used multiple times in other Definitions, and used in TID 10013. When the term is used to describe the method, rather than the parameter, "estimation" is used.	
Correction Wording:	

Update PS3.16 according to:	

Table TID 10034. Radiation Dose Estimate Parameters

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	EV (128434, DCM, "Radiation Dose Estimate Parameters")	1	M		
2	>	CONTAINS	NUM	DCID 10069 "Radiation Dose Estimati~~one~~ Parameter"	1-n	MC	IF Row 4 absent	UNITS = DCID 82 "Measurement Unit"
4	>	CONTAINS	COMPOSITE	EV (128436, DCM, "Radiation Dose Composite Parameters")	1-n	MC	IF Row 2 absent	

Table TID 10042. Irradiation Event Summary Data

32	>>	CONTAINS	NUM	EV (113838, DCM, "DLP")	1	M		UNITS = EV (mGy.cm, UCUM, "mGy.cm")
33	>>	CONTAINS	NUM	EV (113930, DCM, "Size Specific Dose Estima~~tione~~")	1-n	U		UNITS = EV (mGy, UCUM, "mGy")
34	>>>	HAS CONCEPT MOD	CODE	EV (370129005, SCT, "Measurement Method")	1	M		DCID 10023 "Size Specific Dose Estimation Method for CT"

Content Item Descriptions

Row 33	More than one Size Specific Dose Estima~~tione~~ may be included, for example if different computation methods are used.

CID 10069 Radiation Dose Estima~~tione~~ Parameter

Keyword: **RadiationDoseEstima~~tione~~Parameter**

FHIR Keyword: **dicom-cid-10069-RadiationDoseEstima~~tione~~Parameter**

Table CID 10069. Radiation Dose Estima~~tione~~ Parameter

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
…				

Table D-1. DICOM Controlled Terminology Definitions (Coding Scheme Designator "DCM" Coding Scheme Version "01")

Code Value	Code Meaning	Definition	Notes
…			
113934	AAPM 204 Lateral Dimension	The Size Specific Dose **Estima~~tione~~** is computed using Table 1B (32cm phantom) or Table 2B (16cm phantom) of [AAPM Report 204].	

Code Value	Code Meaning	Definition	Notes
…			
113935	AAPM 204 AP Dimension	The Size Specific Dose **Estimati~~one~~** is computed using Table 1C (32cm phantom) or Table 2C (16cm phantom) of [AAPM Report 204].	
113936	AAPM 204 Sum of Lateral and AP Dimension	The Size Specific Dose **Estimati~~one~~** is computed using Table 1A (32cm phantom) or Table 2A (16cm phantom) of [AAPM Report 204].	
113937	AAPM 204 Effective Diameter Estimated From Patient Age	The Size Specific Dose **Estimati~~one~~** is computed using Table 1D (32cm phantom) or Table 2D (16cm phantom) using an effective diameter estimated from the patient's age using Table 3 of [AAPM Report 204].	
…			
128464	*Radiation Dose Estimati~~one~~ Parameter Type*	*Parameters used in mathematical, simulation, or empirical calculations for radiation dose estimation __methods__.*	***Retired***