

DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2018/03/23
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Correction Number	CP-1769
Log Summary:	Add Dose Units for Parametric Maps
Name of Standard	PS3.16
Rationale for Correction:	<p>Supp191 created the CID 10070 "Radiation Dose Types" and included it in the CID 7180 "Abstract Multi-Dimensional Image Model Component Semantics".</p> <p>These Radiation Dose Types are also intended to be used in Parametric Maps, e.g. Skin Dose Maps.</p> <p>In PS3.3 A.75.5.1 "Parametric Map Functional Groups Description" and in the Table C.7.6.16-12b "Real World Value Mapping Item Macro Attributes", the Baseline CID for Concept Code Sequence for Concept Name of (G-C1C6, SRT, "Quantity") is CID 7180, and the Measurement Units Code Sequence (0040,08EA) is CID 7181 "Abstract Multi-Dimensional Image Model Component Units", or as specified in the macro invocation.</p> <p>The problem is that in CID 7181 there is no code for radiation dose units.</p> <p>Need to add radiation dose units to CID 7181. It was recommended to use CP 1665 as an example for the new way to specify units to specific concepts to which they apply. Therefore, a new CID will be created in this CP for the radiation dose units and will be included in CID 7181. Additionally, the CID 10070 "Radiation Dose Types" will include a new column for units, referencing that new CID.</p> <p>The code meaning of the units is specified as the abbreviation, not fully spelled out, given the precedent of the use of radiation dose units in various existing templates.</p>
Correction Wording:	

Change in PS 3.16: Amend CID 7181 to include new CID for Radiation Dose Units

CID 7181 Abstract Multi-dimensional Image Model Component Units

Type: Extensible
Version: 20170413yyymmdd
UID: 1.2.840.10008.6.1.918

Table CID 7181. Abstract Multi-dimensional Image Model Component Units

Coding Scheme Designator	Code Value	Code Meaning
<i>Include CID 3500 "Pressure Units"</i>		
<i>Include CID 3502 "Hemodynamic Resistance Units"</i>		
<i>Include CID 3503 "Indexed Hemodynamic Resistance Units"</i>		
<i>Include CID 7460 "Units of Linear Measurement"</i>		
<i>Include CID 7461 "Units of Area Measurement"</i>		
<i>Include CID 7462 "Units of Volume Measurement"</i>		
<i>Include CID 84 "PET Units"</i>		
<i>Include CID 7277 "Units of Diffusion Rate Area Over Time"</i>		
<i>Include CID xxx1 "Radiation Dose Units"</i>		
UCUM	1	no units
UCUM	{ratio}	ratio
UCUM	[hnsfU]	Hounsfield Unit
...		

Change in PS 3.16 2017d: Amend CID 10070 to include units

CID 10070 Radiation Dose Types

Type: Extensible
Version: 20170405
UID: 1.2.840.10008.6.1.1164

Table CID 10070. Radiation Dose Types

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-CT Concept ID	UMLS Concept Unique ID	Units
DCM	128513	Absorbed Dose			DCID xxx1 "Radiation Dose Units"
DCM	128512	Equivalent Dose			DCID xxx1 "Radiation Dose Units"

Change in PS 3.16 2017d: Add CID for Radiation Dose Units

CID xxx1 Radiation Dose Units

Type: Extensible
Version: yyyymmdd
UID: xxxxx

Table CID xxx1. Radiation Dose Units

Coding Scheme Designator	Code Value	Code Meaning
UCUM	Gy	Gy
UCUM	Sv	Sv