

DICOM Correction Item

Correction Number		CP-561
Log Summary: Additional value within C.8.2.1 CT Image Module Attribute		
Type of Modification	Name of Standard	
Addition	PS 3.3 - 2004	
Rationale for Correction		
<p>The Enhanced CT Image IOD contains dose-related parameters that are not present in the original CT IOD. These are becoming increasingly important to meet German and European X-ray Radiation Dose Record Requirements as required by the Euratom guideline and the German RoeV (Roentgenverordnung), ZVEI recommendations (Zentralverband Elektroindustrie, Germany) for dose-evaluation. This includes SOP Instances from the installed base of CT equipment that may never be able to support the new IODs, or the Dose Reporting mechanisms proposed in Sup 94, but which could usefully be upgraded to support additional optional attributes.</p> <p>It is proposed to add the dose-related attributes from the Enhanced CT Image IOD to the original CT IOD as optional attributes, on the basis that if they were important and appropriate to include in the enhanced object, then they are equally legitimate to add to the original object.</p> <p>Note that this proposal differs from the original CP 258, which proposed adding dose attributes to the Radiation Dose Module of the MPPS (not the image IOD), and which was cancelled in favor of Sup 94.</p> <p>Note that this change is to the old CT IOD that has one slice per image, so there are at the image level. The new CT IOD place this information at the frame level and uses functional group macros.</p>		
Sections of documents affected:		
PS 3.3 Table C.8-3 CT Image Module Attributes		
Correction Wording:		

**Table C.8-3
 CT IMAGE MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
...
<u>Exposure Modulation Type</u>	<u>(0018,9323)</u>	<u>3</u>	<u>A label describing the type of exposure modulation used for the purpose of limiting the dose.</u> <u>Defined Terms:</u> <u> NONE</u>
<u>Estimated Dose Saving</u>	<u>(0018,9324)</u>	<u>3</u>	<u>A percent value of dose saving due to the use of Exposure Modulation Type (0018,9323). A negative percent value of dose savings reflects an increase of exposure.</u>
<u>CTDIvol</u>	<u>(0018,9345)</u>	<u>3</u>	<u>Computed Tomography Dose Index (CTDI_{vol})_z in mGy according to IEC 60601-2-44, Ed.2.1 (Clause 29.1.103.4). The Volume CTDI_{vol,z}. It describes the average dose for this image for the selected CT conditions of operation.</u>