

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2014/06/19
Person Assigned	Bas Revet (bas.revet@philips.com)
Submitter Name	WG-02, Francisco Sureda (francisco.sureda@med.ge.com)
Submission Date	2013/06/01

Correction Number	CP-1346
Log Summary: Add Table Information to X-Ray 3D IODs	
Name of Standard PS 3 2013	
<p>Rationale for Correction:</p> <p>During the angiography procedure there is a need to overlap the X-Ray 3D image to the fluoroscopy acquisitions and more generally to any 2D projection acquired during the procedure. In order to achieve this, the X-Ray 3D Angiographic image contains a matrix to relate the patient coordinates to the Isocenter coordinates. Therefore, the 3D image can be expressed in Isocenter coordinates and then re-projected to the further fluoroscopies.</p> <p>However, the table (where the patient is lying) may change its position and angles between the time of the 3D acquisition and the time of the further fluoroscopies. It is necessary to know precisely the table position/angles at the time of the 3D acquisition in order to calculate the movement of the 3D image with respect to the Isocenter for each fluoroscopy.</p> <p>In the X-Ray 3D Angiographic IOD, the X-Ray 3D Acquisition Sequence (0018,9507) already contains information related to the settings of the projection acquisition(s). This sequence provides quick access to these settings without needing to retrieve the original 2D XA image, or when the 2D images are not stored in DICOM objects.</p> <p>This CP proposes to include the table position and angles of the 3D acquisition in the X-Ray 3D Acquisition Sequence (0018,9507).</p>	
Correction Wording:	

Change in PS 3.3 Table C.8.21.3.2-1
--

**Table C.8.21.3.2-1
X-RAY 3D ANGIOGRAPHIC ACQUISITION MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
X-Ray 3D Acquisition Sequence	(0018,9507)	1	Each item represents an acquisition context related to one or more reconstructions. The values of the Acquisition Index (0020,9518) attribute may be used as index to Items in this sequence. One or more Items shall be included in this sequence.
...			
>Filter Beam Path Length Maximum	(0018,7058)	1C	See Attribute Description in Section C.8.7.10. Required if present and consistent in the contributing SOP Instances.
<u>>Table X Position to Isocenter</u>	<u>(0018,9466)</u>	<u>3</u>	<u>X position of the Table Reference Point with respect to the Isocenter (mm).</u> <u>See C.8.19.6.13.1.3 for further explanation.</u>
<u>>Table Y Position to Isocenter</u>	<u>(0018,9467)</u>	<u>3</u>	<u>Y position of the Table Reference Point with respect to the Isocenter (mm).</u> <u>See C.8.19.6.13.1.3 for further explanation.</u>
<u>>Table Z Position to Isocenter</u>	<u>(0018,9468)</u>	<u>3</u>	<u>Z position of the Table Reference Point with respect to the Isocenter (mm).</u> <u>See C.8.19.6.13.1.3 for further explanation.</u>
<u>>Table Horizontal Rotation Angle</u>	<u>(0018,9469)</u>	<u>3</u>	<u>Rotation of the table in the horizontal plane.</u> <u>See C.8.19.6.13.1.3 for further explanation.</u>
<u>>Table Head Tilt Angle</u>	<u>(0018,9470)</u>	<u>3</u>	<u>Angle of the head-feet axis of the table in degrees relative to the horizontal plane.</u> <u>See C.8.19.6.13.1.3 for further explanation.</u>
<u>>Table Cradle Tilt Angle</u>	<u>(0018,9471)</u>	<u>3</u>	<u>Angle of the left-right axis of the table in degrees relative to the horizontal plane.</u> <u>See C.8.19.6.13.1.3 for further explanation.</u>
<i>>Include 'X-Ray 3D General Positioner Movement Macro' Table C.8.21.3.1.3-1</i>			
...			