

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2014/06/25
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Correction Number	CP-1347
Log Summary: Add a new attribute to describe the direction of a scan relative to the patient	
Name of Standard PS3.3 2013, PS3.6 2013	
<p>Rationale for Correction:</p> <p>There is a need to be able to determine the direction that a patient was scanned, i.e. whether the images were acquired beginning at the head and progressing towards the feet, or vice-versa. It is not possible to reliably deduce this from information currently available in the PET IOD for several reasons:</p> <ol style="list-style-type: none"> 1. Patient direction (i.e. head-first/feet-first) is not synonymous with scan direction. 2. Acquisition Time (0008,0032) is not always populated, and when populated may not reflect different acquisition times of each frame within a single acquisition. 3. Frame Reference Time (0054,1300) is not always populated. <p>The proposal is to add a new DICOM Attribute to indicate the direction of the scan; either head-to-feet or feet-to-head.</p>	
Correction Wording:	

Add the following attribute to the PS3.3 Table C.8-9, NM Image Module attributes

Attribute Name	Tag	Type	Description
Scan Progression Direction	(0054,0501)	3	The anatomical order in which the slices were acquired. Enumerated Values are: FEET_TO_HEAD = Slices closest to the patient's feet were acquired first. HEAD_TO_FEET = Slices closest to the patient's head were acquired first.

Add the following attribute to the PS3.3 Table C.8-60, PET Series Module attributes

Attribute Name	Tag	Type	Description
Scan Progression Direction	(0054,0501)	3	The anatomical order in which the slices were acquired. Enumerated Values are:

			<p>FEET_TO_HEAD = Slices closest to the patient's feet were acquired first.</p> <p>HEAD_TO_FEET = Slices closest to the patient's head were acquired first.</p>
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Add the following attribute to the PS3.3 Table C.8.22-2, Enhanced PET Acquisition Module attributes

Attribute Name	Tag	Type	Description
Scan Progression Direction	(0054,0501)	3	<p>Describes the anatomical direction that slices are progressing when considered in the order in which they were acquired.</p> <p>Enumerated Values are: FEET_TO_HEAD = Images closest to the patient's feet were acquired first. HEAD_TO_FEET = Images closest to the patient's head were acquired first.</p>

Add the following attribute to the PS3.6, Section 6 – Registry of DICOM Data Elements

Tag	Name	Keyword	VR	VM
(0054,0501)	Scan Progression Direction	ScanProgressionDirection	CS	1