

DICOM Correction Item

Correction Number	CP-476
Log Summary:	Add pre-coordinated view codes for ultrasound
Type of Modification	Name of Standard
Modification	PS 3.3 2004
Rationale for Correction:	
<p>IHE Cardiology has identified a user desire to use pre-coordinated codes for the cardiac view in ultrasound imaging. Currently, the ultrasound IOD has attributes Transducer Position Sequence (0008,2249) and Transducer Orientation Sequence (0008,2244) that allow post-coordinated codes. Other IODs (notably DX) use View Code Sequence (0054,0220) to allow a pre-coordinated code. More importantly, the Echocardiography SR Template specifies the use of pre-coordinated cardiac view codes.</p> <p>This CP proposes adding the View Code Sequence (0054,0220) to the Ultrasound IOD, with a Baseline Context Group 12226 for cardiac views (as specified in Supplement 72). The Transducer Position Sequence (0008,2249) and Transducer Orientation Sequence (0008,2244), which have not been widely implemented, are retired in favor of View Code Sequence. This will enhance commonality between the Ultrasound IOD and other modality IODs.</p>	
Sections of documents affected	
PS 3.3 Annex C Table C.8-18	
Correction Wording:	

<i>Amend PS 3.3 Section C.8.5.6:</i>

**Table C.8-18
 US IMAGE MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
...			
<i>Include 'General Anatomy Optional Macro' Table 10-7</i>			For intravascular ultrasound, DCIDs 3010 and 3015 are specified for the Anatomic Region Sequence and DCID 3019 is specified for the Anatomic Region Modifier Sequence. No other Context IDs are specified.
Transducer Position Sequence	(0008,2240)	3	Sequence of one or more items that identifies the transducer position used in this image. See Section C.8.5.6.1.19.
>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 4.	
>Transducer Position Modifier Sequence	(0008,2242)	3	Sequence of one or more items that modifies the primary transducer position of interest in this image. See Section C.8.5.6.1.19.

>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 5.	
Transducer Orientation Sequence	(0008,2244)	3	Sequence of one or more Items that identifies the Transducer Orientation used in this image. See Section C.8.5.6.1.20.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 6.	
>Transducer Orientation Modifier Sequence	(0008,2246)	3	Sequence of one or more Items that modifies the primary Transducer Orientation of interest in this image. See Section C.8.5.6.1.20.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 7.	
View Code Sequence	(0054,0220)	3	Sequence that describes the view of the patient anatomy in this image. Only a single Item shall be permitted in this Sequence. See Section C.8.5.6.1.19.
>Include 'Code Sequence Macro' Table 8.8-1		See Section C.8.5.6.1.19 for Context Group IDs.	
>View Modifier Code Sequence	(0054,0222)	3	Sequence that provides modifiers for the view of the patient anatomy. Zero or more Items shall be permitted in this Sequence. See Section C.8.5.6.1.19.
>>Include 'Code Sequence Macro' Table 8.8-1		See Section C.8.5.6.1.19 for Context Group IDs.	
...			

...
C.8.5.6.1.19 ~~Transducer Position~~ View Code Sequence

The view of the patient anatomy may be described using coded terminology in the View Code Sequence (0054,0220). The view is typically specified by transducer position relative to the patient anatomy and/or transducer orientation.

The view may be described by a single Code Sequence Item, or by combination of post-coordinated Code Sequence Items. The principal coded item is specified in View Code Sequence, and modifier terms in the View Modifier Code Sequence (0054,0222). The Baseline Context IDs for post-coordinated encoding of view are:

- BCID 4 Anatomic Region (typically used for the primary coded item)
- BCID 5 Transducer Approach
- BCID 6 Transducer Orientation
- BCID 7 Ultrasound Beam Path

Any of these Context Groups may be used in either the View Code Sequence or the View Modifier Code Sequence.

For cardiac imaging, a Baseline Context ID with pre-coordinated view codes is specified:

- BCID 12226 Echocardiography Image View

Note: Transducer Position Sequence (0008,2240) and Transducer Orientation Sequence (0008,2244), defined in this module in an earlier edition of the Standard (see PS3.3-2004), are retired.

Note: ~~These Attributes are intended to replace the Transducer Position (0008,2200) Attribute.~~

C.8.5.6.1.20 ~~Transducer Orientation Sequence (Retired)~~

Note: ~~These Attributes are intended to replace the Transducer Orientation (0008,2204) Attribute.~~

Retire data elements from PS 3.6:

(0008,2240)	<i>Transducer Position Sequence</i>	SQ	1	<u>RET</u>
(0008,2242)	<i>Transducer Position Modifier Sequence</i>	SQ	1	<u>RET</u>
(0008,2244)	<i>Transducer Orientation Sequence</i>	SQ	1	<u>RET</u>
(0008,2246)	<i>Transducer Orientation Modifier Sequence</i>	SQ	1	<u>RET</u>