

DICOM Correction Item

Correction Number		CP-244
Log Summary: Visible Light Pixel Spacing Sequence condition		
Type of Modification	Name of Standard	
Clarification	PS 3.3 2000	
Rationale for Correction		
<p>There is an illegal condition on the Pixel Spacing Sequence attribute in the Slide Coordinates Module, in which a Type 3 attribute has a condition, specifically that it may not be present if the Modality is not SM.</p> <p>Fortunately, the condition is irrelevant, since the Slice Coordinates Module is only included and is mandatory in a particular IOD, and that IOD specifies that Modality shall be SM anyway.</p> <p>Similarly, the condition on Image Center Point Coordinates Sequence is redundant.</p>		
Sections of documents affected		
PS 3.3 Table C.18.12.2-1		
PS 3.6		
Correction Wording:		

**Table A.32.1-3
VL SLIDE-COORDINATES MICROSCOPIC IMAGE IOD MODULES**

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Specimen Identification	C.7.1.2	M
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
Series	General Series	C.7.3.1	M
	Frame of Reference	C.7.4.1	M
Equipment	General Equipment	C.7.5.1	M
Image	General Image	C.7.6.1	M
	Image Pixel	C.7.6.3	M
	Acquisition Context	C.7.6.14	M
	VL Image	C.8.12.1	M
	Slide Coordinates	C.8.12.2	M
	Overlay Plane	C.9.2	U
	SOP Common	C.12.1	M

A.32.3.3 VL Slide-Coordinates Microscopic Image IOD Content Constraints

A.32.3.3.1 Modality

The value of Modality (0008,0060) shall be SM.

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**Table C.8.12.2-1
Slide Coordinates Module Attributes**

Attribute Name	Tag	Type	Attribute Description
Image Center Point Coordinates Sequence	(0040,071A)	2C	The coordinates of the center point of the Image in the Slide Coordinate System Frame of Reference. This sequence shall contain exactly one item. See Section C.8.12.2.1.1 of this Part for further explanation. Required if the value of Modality (0008,0060) is SM.
>X Offset in Slide Coordinate System	(0040,072A)	1C	The X offset in millimeters from the Origin of the Slide Coordinate System. See Figure C.8.12.2.1.1-1. Required if a sequence item is present.
>Y Offset in Slide Coordinate System	(0040,073A)	1C	The Y offset in millimeters from the Origin of the Slide Coordinate System. See Figure C.8.12.2.1.1-1. Required if a sequence item is present.
>Z Offset in Slide Coordinate System	(0040,074A)	2C	The Z offset in microns from the image substrate reference plane (i.e. utilized surface of a glass slide). Required if a sequence item is present.
Pixel Spacing Sequence	(0040,08D8)	3	Physical distance in the Imaging Subject, i.e. Patient or Specimen, between the center of each pixel along specified axes. One or more items may be present. May be present only if Modality (0008,0060) is SM.
>Coordinate System Axis Code Sequence	(0040,08DA)	1C	Axis of a coordinate system. This sequence shall contain exactly one item.
>>Include 'Code Sequence Macro' Table 8.8-1			Baseline Context ID is 95.
>Numeric Value	(0040,A30A)	1C	The distance between the center-points of adjacent pixels along the axis specified by Coordinate System Axis Code Sequence (0040,08DA). Required if a sequence item is present.
>Measurement Units Code Sequence	(0040,08EA)	1C	Units of the measurement. This sequence shall contain exactly one item. Required if a sequence item is present.
>>Include 'Code Sequence Macro' Table 8.8-1			Baseline Context ID is 82.

C.8.12.2.1 VL Slide Coordinates Attribute Descriptions

C.8.12.2.1.1 Image Center Point Coordinates Sequence

This Section defines the Slide Coordinate System and specifies the Attributes that shall be used to describe the location of the center point of the Image pixel plane (as captured through a microscope) in the Slide Coordinate System Frame of Reference. ~~The Slide Coordinate System shall be defined if and only if the value of Modality (0008,0060) = SM.~~