

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2013/10/10
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Correction Number	CP-1301
Log Summary: Clarify Distance Source to Patient in Mammo and CR	
Name of Standard	PS 3.3 2011
Rationale for Correction:	The concept of Distance Source to Patient and the use of the term "isocenter" have evolved over time and some of the older descriptions in some modules are no longer appropriate, or are confusing (e.g., with respect to the new Isocenter Coordinate System in Enhanced XA/XRF).
Correction Wording:	

Amend PS 3.3:

C.8.1.2 CR Image Module

Table C.8-2 contains IOD Attributes that describe computed radiography images.

**Table C.8-2
CR IMAGE MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
...
Distance Source to Detector	(0018,1110)	3	Distance in mm from source to detector center. Note: This value is traditionally referred to as Source Image Receptor Distance (SID).
Distance Source to Patient	(0018,1111)	3	Distance in mm from source to isocenter (center of field of view). Note: This value is traditionally referred to as Source Object Distance (SOD).
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C.8.7.5 XA Positioner Module

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**Table C.8-30
XA POSITIONER MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
Distance Source to Patient	(0018,1111)	3	Distance in mm from source to isocenter (center of field of view). Notes: <u>1.</u> This value is traditionally

			referred to as Source Object Distance (SOD). <u>2. For cardiovascular image equipment the SOD value typically is the distance from source to isocenter.</u>
Distance Source to Detector	(0018,1110)	3	Distance in mm from source to detector center. Note: This value is traditionally referred to as Source Image Receptor Distance (SID).
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C.8.7.6 XRF Positioner Module

Table C.8-31
XRF POSITIONER MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Distance Source to Detector	(0018,1110)	3	Distance in mm from source to detector center. Note: This value is traditionally referred to as Source Image Receptor Distance (SID).
Distance Source to Patient	(0018,1111)	3	Distance in mm from source to isocenter (center of field of view). Note: This value is traditionally referred to as Source Object Distance (SOD).
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C.8.7.8 X-Ray Acquisition Dose Module

Table C.8-33
X-RAY ACQUISITION DOSE MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
...
Distance Source to Detector	(0018,1110)	3	Distance in mm from source to detector center. Note: This value is traditionally referred to as Source Image Receptor Distance (SID).
Distance Source to Patient	(0018,1111)	3	Distance in mm from source to the table, support or bucky side that is closest to the Imaging Subject, as measured along the central ray of the X-Ray beam. Note: 1. This definition is less useful in terms of estimating geometric magnification than a measurement to a defined point within the Imaging Subject, but accounts for what is realistically measurable in an automated fashion in a clinical setting. 2. This measurement does not take into account any air gap

			<p>between the Imaging Subject and the “front” of the table or bucky.</p> <p>3. If the detector is not mounted in a table or bucky, then the actual position relative to the patient is implementation or operator defined.</p> <p>4. This value is traditionally referred to as Source Object Distance (SOD).</p>
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C.8.11.5 DX Positioning Module

Table C.8-72
DX POSITIONING MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
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>Include 'Code Sequence Macro' Table 8.8-1.		Baseline Context ID 4012	
Distance Source to Patient	(0018,1111)	3	<p>Distance in mm from source to the table, support or bucky side that is closest to the Imaging Subject, as measured along the central ray of the X-Ray beam.</p> <p>Note:</p> <ol style="list-style-type: none"> 1. This definition is less useful in terms of estimating geometric magnification than a measurement to a defined point within the Imaging Subject, but accounts for what is realistically measurable in an automated fashion in a clinical setting. 2. This measurement does not take into account any air gap between the Imaging Subject and the “front” of the table or bucky. 3. If the detector is not mounted in a table or bucky, then the actual position relative to the patient is implementation or operator defined. 4. This value is traditionally referred to as Source Object Distance (SOD). <p>See C.8.11.7 Mammography Image Module for explanation if Positioner Type (0018,1508) is MAMMOGRAPHIC.</p>
Distance Source to Detector	(0018,1110)	3	<p>Distance in mm from source to detector center.</p> <p>Note: This value is traditionally referred to as Source Image Receptor Distance (SID).</p> <p>See C.8.11.7 Mammography Image Module for explanation if Positioner Type (0018,1508) is MAMMOGRAPHIC.</p>
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C.8.11.7 Mammography Image Module

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Table C.8-74
MAMMOGRAPHY IMAGE MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
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Distance Source to Detector	(0018,1110)	3	Distance in mm from source to detector center on the chest wall line Notes: 1. This value is traditionally referred to as Source Image Distance (SID). 2. See C.8.11.7.1.1.
Distance Source to Patient	(0018,1111)	3	Distance in mm from source to the ucky breast support side that is closest to the Imaging Subject, as measured along the X-Ray beam vector. Notes: 1. This value is traditionally referred to as Source Object Distance (SOD). 2. See notes for this attribute in C.8.11.5 DX Positioning Module. 3. See C.8.11.7.1.1 for description of X-Ray beam vector.
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C.8.21.3.4 Breast Tomosynthesis Acquisition Module

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Table C.8.21.3.4-1
BREAST TOMOSYNTHESIS ACQUISITION MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
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>Distance Source to Detector	(0018,1110)	1	Distance in mm from source to detector center on the chest wall line. Notes: 1. This value is traditionally referred to as Source Image Distance (SID). 2. See C.8.11.7.1.1.
>Distance Source to Patient	(0018,1111)	1	Distance in mm from source to the ucky breast support side that is closest to the Imaging Subject, as measured along the X-Ray beam vector. Notes: 1. This value is traditionally referred to as Source Object Distance (SOD). 2. See notes for this attribute in C.8.11.5 DX Positioning Module. 3. See C.8.11.7.1.1 for description of X-Ray beam vector.
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