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DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2024/01/14
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Correction Number	CP-2313
Log Summary:	Correct Condition in Row 34e of TID 10003
Name of Standard	PS3.16
Rationale for Correction:	<p>CP 1881 moved the term, (113981, DCM, "Water Equivalent Diameter Representative Value") from CID 10023 to CID 10024.</p> <p>This breaks the condition in Row 34e of TID 10013.</p>
Correction Wording:	

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4 *Update PS16 A. Structured Reporting Templates, TID 100013 as follows*

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Table TID 10013. CT Irradiation Event Data

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
...								
31	>>>	HAS CONCEPT MOD	CODE	EV (370129005, SCT, "Measurement Method")	1	M		DCID 10023 "Size Specific Dose Estimation Method for CT"
32	>>>	INFERRED FROM	NUM	EV (113931, DCM, "Measured Lateral Dimension")	1	MC	IF value of Row 31 = (113934, DCM, "AAPM 204 Lateral Dimension") or (113936, DCM, "AAPM 204 Sum of Lateral and AP Dimension")	UNITS = EV (mm, UCUM, "mm")
33	>>>	INFERRED FROM	NUM	EV (113932, DCM, "Measured AP Dimension")	1	MC	IF value of Row 31 = (113935, DCM, "AAPM 204 AP Dimension") or (113936, DCM, "AAPM 204 Sum of Lateral and AP Dimension")	UNITS = EV (mm, UCUM, "mm")

34	>>>	INFERRED FROM	NUM	EV (113933, DCM, "Derived Effective Diameter")	1	MC	IF value of Row 31 = (113934, DCM, "AAPM 204 Lateral Dimension") or (113935, DCM, "AAPM 204 AP Dimension") or (113936, DCM, "AAPM 204 Sum of Lateral and AP Dimension") or (113937, DCM, "AAPM 204 Effective Diameter Estimated From Patient Age")	UNITS = EV (mm, UCUM, "mm")
34a	>>>	INFERRED FROM	NUM	EV (113991, DCM, "Dw Conversion Factor Coefficients")	2	UC	IFF value of Row 31 = (113988, DCM, "Estimated from Water Equivalent Diameter") or (113989, DCM, "Arithmetic Average of SSDE(z)")	UNITS = EV (mm, UCUM, "mm")
34b	>>>	INFERRED FROM	UIDREF	EV (113985, DCM, "Series or Instance used for Water Equivalent Diameter estimation")	1-n	U		
34c	>>>	INFERRED FROM	NUM	EV (113980, DCM, "Water Equivalent Diameter")	1	MC	IF value of Row 31 = (113988, DCM, "Estimated from Water Equivalent Diameter") or (113989, DCM, "Arithmetic Average of SSDE(z)")	UNITS = EV (mm, UCUM, "mm")
34d	>>>>	HAS CONCEPT MOD	CODE	EV EV (370129005, SCT, "Measurement Method")	1	M		DCID 10024 "Water Equivalent Diameter Method"
34e	>>>>	INFERRED FROM	NUM	EV (113994, DCM, "Longitudinal Position Z")	1	MC	IF value of Row 3134d = (113981, DCM, "Water Equivalent Diameter Representative Value")	UNITS = EV (mm, UCUM, "mm")
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Content Item Descriptions

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Row 31	Methods including [AAPM Report 204] and [IEC 62985] are listed in CID 10023 "Size Specific Dose Estimation Method for CT"; other methods may be used. The phantom size (16cm or 32cm) used for the calculation is available from the phantom type defined in Row 23.
Row 32	The condition specifies inclusion of the Measured Lateral Dimension if it was used in the calculation.
Row 33	The condition specifies inclusion of the Measured AP Dimension if it was used in the calculation.
Row 34	The Derived Effective Diameter is conditionally included, whether it was derived from measurements or estimated from age, but may not be used for other (non-AAPM Report 204) methods.

Row 34a	The conversion factor described by the coefficients is used both for the SSDE(z) values in Row 34f and, if Row 31 is (113988, DCM, "Estimated from Water Equivalent Diameter"), for the SSDE value in Row 30.
Row 34b	If the Water Equivalent Diameter was computed from raw views rather than reconstructed images, then the Raw Data may be referenced.
Row 34c	<p>A single value for Water Equivalent Diameter is encoded.</p> <p>If Row 31 is (113988, DCM, "Estimated from Water Equivalent Diameter"), this value is used to generate Row 30.</p> <p>If Row 31 is (113989, DCM, "Arithmetic Average of SSDE(z)"), this value is not used directly to generate Row 30, but is still present and represents Dw, the Arithmetic Average of the Dw(z) values in Row 34h as described in [IEC 62985].</p>
Row 34e	This z position is patient (not table or gantry) relative, to allow it to be defined in the Patient Coordinate System and hence related to the Image Position (Patient) in the reconstructed images (see TID 10014 "Scanning Length" , included at Row 9). It is required if the method uses a representative slice, but may also be present if the method used a Localizer or Raw Data at a single location rather than the entire scan range.
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