

DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2017/06/21
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Submission Date	2016/05/31

Correction Number	CP-1644
Log Summary: Correct conditions for Selected Segmental Ophthalmic Axial Length Sequence	
Name of Standard	PS 3 2017b
<p>Rationale for Correction:</p> <p>Ophthalmic Axial Measurements IOD defines the requirement to document the Axial Measurements generated by a device and of those measurements the Axial Measurement selected by a physician for IOL calculations.</p> <p>There are various ways the Axial Measurements are generated by devices, such as:</p> <p>TOTAL LENGTH = the total axial length was taken with one measurement</p> <p>LENGTH SUMMATION = a summation of segmental lengths that determine the total axial length</p> <p>SEGMENTAL LENGTH = a segmental axial length calculation the Total Length</p> <p>This information is captured for all of the generated device measurements in attribute Ophthalmic Axial Length Measurements Type (0022,1010). When providing the “selected” Axial Measurement, this attribute is not part of the sequence however there are two attributes which use this attribute’s Enumerated Values for 1C conditions.</p> <p>In order to correct his problem, we propose to add a new attribute in the “selected” sequences (Ophthalmic Axial Length Measurements Type (0022,1010)). To ensure backward compatibility with existing implementation this attribute shall be of Type 3 and the dependent conditions shall be re-phrased to “if Ophthalmic Axial Length Measurements Type (0022,1010) exists and is of ...”</p>	
Correction Wording:	

Change conditions for attribute Selected Segmental Ophthalmic Axial Length Sequence (0022,1257)

**Table C.8.25.14-5
OPHTHALMIC AXIAL MEASUREMENTS SELECTED MACRO**

Attribute Name	Tag	Type	Attribute Description
Ultrasound Selected Ophthalmic Axial Length Sequence	(0022,1230)	1C	<p>Information related to the selected axial length measurement of the patient's eye when acquired on an ultrasound device.</p> <p>Only a single Item shall be included in this Sequence.</p> <p>Required if Ophthalmic Axial Measurements</p>

Attribute Name	Tag	Type	Attribute Description
			Device Type (0022,1009) is ULTRASOUND.
>Ophthalmic Axial Length Measurements Type	(0022,1010)	3	<p>Identifies whether measuring the total axial length of the patient's eye or a segment of the eye for which a discrete measurement was obtained.</p> <p>Enumerated Values:</p> <p>TOTAL LENGTH the total axial length was taken with one measurement</p> <p>LENGTH SUMMATION a summation of segmental lengths that determine the total axial length</p>
>Ophthalmic Axial Length	(0022,1019)	1	<p>The axial length measurement, in mm.</p> <p>The type of measurement is specified in the Ophthalmic Axial Length Measurements Type (0022,1010).</p> <p>See Section C.8.25.14.1.1.4 for further explanation.</p>
>Ophthalmic Axial Length Selection Method Code Sequence	(0022,1250)	1	<p>Method used to derive the value recorded in Ophthalmic Axial Length (0022,1019).</p> <p>Only a single Item shall be included in this Sequence.</p>
<i>>>Include Table 8.8-1 "Code Sequence Macro Attributes". Defined CID 4241 "Ophthalmic Axial Length Selection Method".</i>			
>Referenced Ophthalmic Axial Length Measurement QC Image Sequence	(0022,1330)	1	<p>References to the quality control image associated with this measurement.</p> <p>Only a single Item shall be included in this Sequence.</p> <p>See Section C.8.25.14.1.1.6 for further explanation.</p>
<i>>>Include Table C.8.25.16-6 "Ophthalmic Axial Measurements Quality Image SOP Instance Reference Macro Attributes"</i>			
>Ophthalmic Axial Length Quality Metric Sequence	(0022,1262)	1	<p>Information about the quality metric applied to Ophthalmic Axial Length (0022,1019).</p> <p>Only a single Item shall be included in this Sequence.</p>
<i>>>Include Table C.8.25.14-6 "Ophthalmic Axial Length Quality Metric Macro Attributes"</i>			
>Selected Segmental Ophthalmic Axial Length Sequence	(0022,1257)	1C	<p>Segmental axial length measurements of a patient's eye that are summed to derive a total axial length for the eye.</p> <p>One or more Items shall be included in this Sequence.</p>

Attribute Name	Tag	Type	Attribute Description
			Required if the value of Ophthalmic Axial Length Measurements Type (0022,1010) is present and is LENGTH SUMMATION. May be present otherwise.
>>Ophthalmic Axial Length	(0022,1019)	1	The axial length measurement, in mm. The type of measurement is specified in the Ophthalmic Axial Length Measurements Type (0022,1010). See Section C.8.25.14.1.1.3 and Section C.8.25.14.1.1.4 for further explanation.
>>Ophthalmic Axial Length Measurements Segment Name Code Sequence	(0022,1101)	1	Name of the segment measured. See Section C.8.25.14.1.1.4 for further explanation. Only a single Item shall be included in this Sequence.
>>>Include Table 8.8-1 "Code Sequence Macro Attributes"			Defined CID 4233 "Ophthalmic Axial Length Measurements Segment Names"
Optical Selected Ophthalmic Axial Length Sequence	(0022,1255)	1C	Information related to the selected axial length measurement(s) of the patient's eye when acquired on an optical device. One or more Items shall be included in this Sequence. Required if Ophthalmic Axial Measurements Device Type (0022,1009) is OPTICAL.
<u>>Ophthalmic Axial Length Measurements Type</u>	<u>(0022,1010)</u>	<u>3</u>	<u>Identifies whether measuring the total axial length of the patient's eye or a segment of the eye for which a discrete measurement was obtained.</u> <u>Enumerated Values:</u> <u>TOTAL LENGTH</u> <u>the total axial length was taken with one measurement</u> <u>LENGTH SUMMATION</u> <u>a summation of segmental lengths that determine the total axial length</u> <u>SEGMENTAL LENGTH</u> <u>a segmental axial length</u>
>Selected Total Ophthalmic Axial Length Sequence	(0022,1260)	1C	Total axial length measurement selected for the patient's eye. <u>Only a single Item shall be included in this Sequence.</u> Required if the value of Ophthalmic Axial Length Measurements Type (0022,1010) is present and is either TOTAL LENGTH or LENGTH SUMMATION. May be present otherwise. <u>Only a single Item shall be included in this Sequence.</u>

Attribute Name	Tag	Type	Attribute Description
			<p>Note</p> <p><u>In case of Ophthalmic Axial Length Measurements Type (0022,1010) has the value LENGTH SUMMATION both the Selected Total Ophthalmic Axial Length Sequence (0022,1260) and Selected Segmental Ophthalmic Axial Length Sequence (0022,1257) are used.</u></p>
>>Ophthalmic Axial Length	(0022,1019)	1	<p>The axial length measurement, in mm.</p> <p>The type of measurement is specified in the Ophthalmic Axial Length Measurements Type (0022,1010).</p> <p>See Section C.8.25.14.1.1.3 and Section C.8.25.14.1.1.4 for further explanation.</p>
>>Referenced Ophthalmic Axial Length Measurement QC Image Sequence	(0022,1330)	1	<p>Reference to the quality control image associated with this measurement.</p> <p>Only a single Item shall be included in this Sequence.</p> <p>See Section C.8.25.14.1.1.6 for further explanation.</p>
>>>Include Table C.8.25.16-6 "Ophthalmic Axial Measurements Quality Image SOP Instance Reference Macro Attributes"			
>>Ophthalmic Axial Length Quality Metric Sequence	(0022,1262)	1	<p>Information about the quality metric applied to Ophthalmic Axial Length (0022,1019).</p> <p>Only a single Item shall be included in this Sequence.</p>
>>>Include Table C.8.25.14-6 "Ophthalmic Axial Length Quality Metric Macro Attributes"			
>Selected Segmental Ophthalmic Axial Length Sequence	(0022,1257)	1C	<p>Segmental axial length measurement(s) selected for the patient's eye.</p> <p>One or more Items shall be included in this Sequence.</p> <p>Required if the value of Ophthalmic Axial Length Measurements Type (0022,1010) is present and is either SEGMENTAL LENGTH or LENGTH SUMMATION. May be present otherwise.</p> <p>Note</p> <p><u>In case of Ophthalmic Axial Length Measurements Type (0022,1010) has the value LENGTH SUMMATION both the Selected Total Ophthalmic Axial Length Sequence (0022,1260) and Selected Segmental Ophthalmic Axial Length Sequence (0022,1257) are used.</u></p>

Attribute Name	Tag	Type	Attribute Description
>>Ophthalmic Axial Length Measurements Segment Name Code Sequence	(0022,1101)	1	Name of the segment measured. See Section C.8.25.14.1.1.4 for further explanation. Only a single Item shall be included in this Sequence.
>>>Include Table 8.8-1 "Code Sequence Macro Attributes"			Defined CID 4233 "Ophthalmic Axial Length Measurements Segment Names"
>>Ophthalmic Axial Length	(0022,1019)	1	The axial length measurement, in mm. The type of measurement is specified in the Ophthalmic Axial Length Measurements Type (0022,1010). See Section C.8.25.14.1.1.3 and Section C.8.25.14.1.1.4 for further explanation.
>>Referenced Ophthalmic Axial Length Measurement QC Image Sequence	(0022,1330)	3	Reference to the quality control image associated with this measurement. Only a single Item is permitted in this Sequence. See Section C.8.25.14.1.1.6 for further explanation.
>>>Include Table C.8.25.16-6 "Ophthalmic Axial Measurements Quality Image SOP Instance Reference Macro Attributes"			
>>Ophthalmic Axial Length Quality Metric Sequence	(0022,1262)	3	Information about the quality metric applied to Ophthalmic Axial Length (0022,1019). Only a single Item is permitted in this Sequence.
>>>Include Table C.8.25.14-6 "Ophthalmic Axial Length Quality Metric Macro Attributes"			