

# DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2018/11/11
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Submission Date	2018/03/13

Correction Number	CP-1803
Log Summary: Add "Source of Data" details for Corneal Size measurement values used in Intraocular Lens Calculations IOD (IOL)	
Name of Standard PS3.3, PS3.6, PS3.16 2018d	
<p>Rationale for Correction:</p> <p>Intraocular Lens Calculations IOD (IOL) defines several attributes for those ophthalmic measurement values which has been used as input data for IOL calculation (Corneal Size, Anterior Chamber Depth, Lens Thickness, Axial Length, Keratometry, Refractive State).</p> <p>However, while most of these values (Anterior Chamber Depth, Lens Thickness, Axial Length, Refractive State) can be supplied with a "Source of Data" attribute the Corneal Size measurement cannot. Due to the fact, that it might be important for a consumer of the IOL IOD to know where these source data values originate from, the "Source of Data" information shall be added to the measurement value. For this purpose it will be necessary to move the value attribute Corneal Size (0046,0046) one level below its current position and into respective sequences.</p> <p>The scope of this proposal is to add "Source of Data" attribute definitions for Corneal Size values used for IOL calculations.</p>	
Correction Wording:	

*In PS3.3, section C.8.25.16.2 Intraocular Lens Calculations Macro add following attributes*

## C.8.25.16.2 Intraocular Lens Calculations Macro

**Table C.8.25.16-2. Intraocular Lens Calculations Macro Attributes**

Attribute Name	Tag	Type	Attribute Description
...			
<b>Corneal Size</b>	<b>(0046,0046)</b>	<b>3</b>	<b>The horizontal diameter measurement of the cornea, in mm.</b>
<b>Corneal Size Sequence</b>	<b>(0046,0047)</b>	<b>3</b>	<b>Corneal Size value and source.</b> <b>Only a single Item is permitted in this Sequence.</b>
<b>&gt;Corneal Size</b>	<b>(0046,0046)</b>	<b>1</b>	<b>The horizontal diameter measurement of the cornea, in mm.</b>
<b>&gt;Source of Corneal Size Data Code Sequence</b>	<b>(0022,1036)</b>	<b>1</b>	<b>Source of the value of Corneal Size (0046,0046).</b> <b>Only a single Item shall be included in this</b>

			<b>Sequence.</b>
<b>&gt;&gt;Include Table 8.8-1 “Code Sequence Macro Attributes”</b>			<b>Defined CID 4240 “Ophthalmic Measurement or Calculation Data Source”</b>
<b>&gt;Referenced SOP Sequence</b>	<b>(0008,1199)</b>	<b>1C</b>	<b>SOP Instance that is relevant to the interpretation of this SOP Instance.</b>  <b>Only a single Item shall be included in this Sequence.</b>  <b>See Section C.8.25.16.1.1 for further explanation.</b>  <b>Required if Source of Corneal Size Data Code Sequence (0022,1036) contains an item with the value (111784, DCM, "Autorefracton Measurements SOP Instance").</b>
<b>&gt;&gt;Include Table 10-11 “SOP Instance Reference Macro Attributes”</b>			

*In PS 3.6, Section 6 add following attributes to Table 6-1. Registry of DICOM Data Elements*

Tag	Name	Keyword	VR	VM
<b>(0046,0047)</b>	<b>Corneal Size Sequence</b>	<b>CornealSizeSequence</b>	<b>SQ</b>	<b>1</b>
<b>(0022,1036)</b>	<b>Source of Corneal Size Data Code Sequence</b>	<b>SourceOfCornealSizeDataCodeSequence</b>	<b>SQ</b>	<b>1</b>

*In PS3.16, Annex B.1 add codes for Autorefracton Measurements to CID 4240*

### **CID 4240 Ophthalmic Measurement or Calculation Data Source**

**Resources:**

HTML | FHIR JSON | FHIR XML | IHE SVS XML

**Type:**

Extensible

**Version:**

**2010062320181111**

**UID:**

1.2.840.10008.6.1.886

**Table CID 4240. Ophthalmic Measurement or Calculation Data Source**

Coding Scheme Designator	Code Value	Code Meaning
DCM	111780	Measurement From This Device
DCM	113857	Manual Entry

DCM	111781	External Data Source
DCM	111782	Axial Measurements SOP Instance
DCM	111783	Refractive Measurements SOP Instance
<b>DCM</b>	<b>111784</b>	<b>Autorefractive Measurements SOP Instance</b>

*In PS 3.16, Annex D add to Table D-1*

Code Value	Code Meaning	Definition	Notes
111783	Refractive Measurements SOP Instance	Refractive Measurements DICOM SOP Instance.	
<b>111784</b>	<b><u>Autorefractive Measurements SOP Instance</u></b>	<b><u>Autorefractive Measurements DICOM SOP Instance.</u></b>	