DICOM Correction Proposal

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Correction Number	CP-1812
Log Summary: Add calculation comments for intraocular lens calculations to Intraocular Lens Calculations IOD	
Name of Standard PS3.3, 3.6 2018a	
Rationale for Correction: The Intraocular Lens Calculations IOD is used to encode calculation results for intraocular lenses (IOLs). In some cases, the selected calculation formula in combination with selected intraocular lens and input data raises specific remarks, hints or even warnings to be shown to and considered by the surgeon at the time of implantation. With the current definition of Intraocular Lens Calculations IOD there're no attributes defined to save this information for later attention, and especially to distinguish between informational messages and important hints and warnings. The scope of this proposal is to add attribute definitions for comments and warnings generated for IOL calculations.	
Correction Wording:	

In PS3.3, section C.8.25.16.5 Calculated IOL Macro add following attributes

C.8.25.16.5 Calculated IOL Macro

Table C.8.25.16-5. Calculated IOL Macro Attributes

Attribute Name	Tag	Type	Attribute Description
IOL Manufacturer	(0022,1093)	1	Name of the manufacturer that produced the lens.
Implant Name	(0022,1095)	1	The (product) name of the lens.
Lens Constant Sequence	(0022,1092)	1	Constants used in calculation of intraocular lens power. These constants are a characteristic of the model of intraocular lens being considered for use in cataract surgery. One or more Items shall be included in this Sequence.
>Concept Name Code Sequence	(0040,A043)	1	Constant type used in calculation of intraocular lens power. Only a single Item shall be included in this Sequence.

>>Include Table 8.8-1 "Code Sequence Macro Attributes"			Defined CID 4237 "Lens Constant Type"
>Numeric Value	(0040,A30A)	1	The value of the constant used.
IOL Power Sequence	(0022,1090)	1	Information needed to select the intraocular lens power for cataract surgery. One or more Items shall be included in this Sequence.
>IOL Power	(0022,1053)	1	The intraocular lens power, in diopters.
>Predicted Refractive Error	(0022,1054)	1	The predicted postoperative refractive error (i.e., amount of near or far sightedness), in diopters.
>Implant Part Number	(0022,1097)	2	The (product) identifier of the lens.
IOL Power for Exact Emmetropia	(0022,1121)	2	The IOL power that would be required to achieve exact emmetropia, or no need for glasses at distance after surgery, in diopters.
IOL Power for Exact Target Refraction	(0022,1122)	2	The IOL power that would be required to exactly achieve Target Refraction (0022,1037), in diopters.
Calculation Comment Sequence	**(aaaa,aaaa)**	**3**	**Comment, hints or warnings related to the intraocular lens calculation.** **One or more Items are permitted in this Sequence.** **See Section C.8.25.16.5.1.1.**
>Calculation Comment Type	**(bbbb,bbbb)**	**1**	**The type of the calculation comment.** **Defined Terms:** **INFORMATIVE** **WARNING**
>Calculation Comment	**(cccc,cccc)**	**1**	**Comment related to the intraocular lens calculation.**

C.8.25.16.5.1 Calculated IOL Macro Attributes

C.8.25.16.5.1.1 Calculation Comment Sequence

Specific behaviors associated with Calculation Comment Type (bbbb,bbbb) are left to implementations to define. For example, the user might be expected to be notified about a comment with a type of WARNING whereas they might have to seek out comments with a type of INFORMATIVE. However, since this is an optional Attribute, and one that was added to this Module after its original definition, and there are no SOP Class specific constraints on display behavior, the sender cannot be guaranteed that a receiving system or user will not ignore or discard the comments.

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

Tag	Name	Keyword	VR	VM
(aaaa,aaaa)	**Calculation Comment**	**CalculationCommentSequence**	**SQ**	**1**

	Sequence			
(bbbb,bbbb)	**Calculation Comment Type**	**CalculationCommentType**	**CS**	**1**
(cccc,cccc)	**Calculation Comment**	**CalculationComment**	**LT**	**1**