DICOM Correction Item

Correction Number	CP-660
Log Summary: Addition of Ophthalmology Modality codes	

Type of Modification	Name of Standard
Correction	PS 3.3 2004

Rationale for Correction

This is a proposal to add ophthalmic modality codes to the DICOM standard, prior to the introduction of IOD's for those modalities. This proposal came out of the IHE Eye Care technical committee meeting held January 25-26, 2006. Previously, DICOM WG9 (Ophthalmology) had identified and categorized remaining ophthalmic modalities for which new IODs need to be developed. Since most of these IODs are not yet available, IHE Eye Care is planning to develop the initial Eye Care Scheduled Workflow integration profile using Encapsulated PDF objects for not-yet-supported modalities. This strategy is planned even for those modalities for which DICOM work items are currently in progress (ophthalmic tomography and refractive exam reports), simply for scheduling reasons. The IHE Eye Care effort will later shepherd the conversion to the new ophthalmic IODs as they are approved in DICOM, to replace these interim solutions. Interim solutions using SC were demonstrated at HIMSS, VEHU and AAO IHE showcases in 2005, and there is a consensus that they will provide significant clinical utility. Support for a very full range of ophthalmic instruments in the IHE Eye Care Scheduled Workflow integration profile is seen as critical to its success in the market.

There are two principal advantages to adding the ophthalmic modality codes, rather than relying on OT ("other"):

1. Improved support for broad queries in the Modality Worklist service. This will allow worklist queries in an ophthalmic setting to return just those items scheduled for the selected modality.
2. More specific classification of the image objects created by the modalities. This will allow for more specific and efficient query / retrieve operations, and enhanced display of images by ophthalmic display solutions (for example grouping images more appropriately in a tiled or tabbed display).

Sections of documents affected

PS 3.3 Section C.7.3.1.1.1 and PS 3.16 CID 29

Correction Wording:

Add to:

C.7.3.1.1.1 Modality

Defined Terms for the Modality (0008,0060) are:

OCT	= Optical Coherence Tomography	OPR	= Ophthalmic Refraction
OPV	= Ophthalmic Visual Field	OPM	= Ophthalmic Mapping

Add modalities to Acquisition Modality Context table

Context ID 29
Acquisition Modality
Type: Extensible Version: ~~20040921~~20061023

Coding Scheme Designator	Code Value	Code Meaning
…	…	…
DCM	**OCT**	**Optical Coherence Tomography**
DCM	**OPV**	**Ophthalmic Visual Field**
DCM	**OPR**	**Ophthalmic Refraction**
DCM	**OPM**	**Ophthalmic Mapping**

Add modalities definitions to Annex D table

Code Value	Code Meaning	Definition	Notes
OCT	**Optical Coherence Tomography**	**Modality device that uses an interferometric, non-invasive optical tomographic technique to image 2D slices and 3D volumes of tissue using visible and near visible frequencies.**	
OPV	**Ophthalmic Visual Field**	**Modality device that measures visual fields and perform visual perimetry**	
OPR	**Ophthalmic Refraction**	**Modality device that measures the refractive characteristics of the eye.**	
OPM	**Ophthalmic Mapping**	**Modality device that measures corneal topography, corneal or retinal thickness, and other similar parameters that are typically displayed as maps.**	