

DICOM Correction Item

Correction Number		CP-740
Log Summary: Evidence sequence references in SR and KOS includes presentation states		
Type of Modification	Name of Standard	
Clarification	PS 3.3 2007	
Rationale for Correction It is the intent of the Current Requested Procedure Evidence Sequence that it contain references to all evidence (SOP Instances) referenced in the content tree of an SR or KOS, but it is not explicitly stated that this includes presentation states and other accompanying instances like real world value maps. Clarify that this is the intent.		
Sections of documents affected PS 3.3 C.17.2, C.17.6.2		
Correction Wording:		

C.17.2 SR Document General Module

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**Table C.17-2
 SR DOCUMENT GENERAL MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
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Current Requested Procedure Evidence Sequence	(0040,A375)	1C	Full set of Composite SOP Instances, of which the creator is aware, which were created to satisfy the current Requested Procedure(s) for which this SR Document is generated or that are referenced in the content tree. One or more Items may be included in this sequence. Required if the creator is aware of Composite Objects acquired in order to satisfy the Requested Procedure(s) for which the SR Document is or if instances are referenced in the content tree. May be present otherwise. See C.17.2.3 for further explanation.
<i>>Include 'SOP Instance Reference Macro' Table C.17-3</i>			
Pertinent Other Evidence Sequence	(0040,A385)	1C	Other Composite SOP Instances that are considered to be pertinent evidence by the creator of this SR Document. This evidence must have been acquired in order to satisfy Requested Procedures other than the one(s) for which this SR Document is generated. One or more Items may be included in this sequence. Required if pertinent evidence from other

			Requested Procedures needs to be recorded. See C.17.2.3 for further explanation.
>Include 'SOP Instance Reference Macro' Table C.17-3			
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C.17.2.3 Current Requested Procedure Evidence Sequence and Pertinent Other Evidence Sequence

The intent of the Current Requested Procedure Evidence Sequence is to reference all evidence created in order to satisfy the current Requested Procedure(s) for this SR Document. This shall include, but is not limited to, all current evidence referenced in the content tree.

For a completed SR Document satisfying (i.e., being the final report for) the current Requested Procedure(s), this sequence shall list the full set of Composite SOP Instances created for the current Requested Procedure(s). For other SOP Instances that include the SR Document General Module, this sequence shall contain at minimum the set of Composite SOP Instances from the current Requested Procedure(s) that are referenced in the content tree.

The Pertinent Other Evidence Sequence attribute is used to reference all other evidence considered pertinent for this SR Document that is not listed in the Current Requested Procedure Evidence Sequence.

This requires that the same SOP Instance shall not be referenced in both of these Sequences.

For the purposes of inclusion in the Current Requested Procedure Evidence Sequence and the Pertinent Other Evidence Sequence, the set of Composite SOP Instances is defined to include not only the images and waveforms referenced in the content tree, but also all presentation states, real world value maps and other accompanying composite instances that are referenced from the content items.

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C.17.6.2 Key Object Document Module

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**Table C.17.6-2
KEY OBJECT DOCUMENT MODULE ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
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Current Requested Procedure Evidence Sequence	(0040,A375)	1	List of all Composite SOP Instances referenced in the Content Sequence (0040,A730), <u>including all presentation states, real world value maps and other accompanying composite instances that are referenced from the content items.</u> One or more Items shall be included in this sequence. Note: In the context of the Key Object Selection, the current evidence is considered to be only the set of instances referenced within the Key

			Object Selection.
>Include 'SOP Instance Reference Macro' Table C.17-3			
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C.18.3 Composite Object Reference Macro

Table C.18.3-1 specifies the Attributes that convey a reference to a DICOM Composite Object that is not a DICOM Image or Waveform (such as an SR Document), or to an HL7 Structured Document.

- Notes:
1. If a Softcopy Presentation State is to be applied to an Image, it should be referenced by an Image Reference Macro.
 2. Other SR Documents may be referenced by this macro, but there is no facility to reference individual Content Items within those reports.
 3. HL7 Structured Documents include, in particular, those conforming to the Clinical Document Architecture (CDA). See Section C.12.1.1.6 for further details about this type of referenced object.

**Table C.18.3-1
COMPOSITE OBJECT REFERENCE MACRO ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
Referenced SOP Sequence	(0008,1199)	1	References to Composite Object SOP Class/SOP Instance pairs. Only a single Item shall be permitted in this Sequence.
>Referenced SOP Class UID	(0008,1150)	1	Uniquely identifies the referenced SOP Class.
>Referenced SOP Instance UID	(0008,1155)	1	Uniquely identifies the referenced SOP Instance.

C.18.4 Image Reference Macro

Table C.18.4-1 specifies the Attributes that convey a reference to a DICOM image.

**Table C.18.4-1
IMAGE REFERENCE MACRO ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
<i>Include 'Composite Object Reference Macro' Table C.18.3-1</i>			
>Referenced Frame Number	(0008,1160)	1C	Identifies the frame numbers within the Referenced SOP Instance to which the reference applies. The first frame shall be denoted as frame number 1. Note: This Attribute may be multi-valued. Required if the Referenced SOP Instance is a multi-frame image and the reference does not apply to all frames, and Referenced Segment Number (0062,000B) is not present.
>Referenced Segment Number	(0062,000B)	1C	Identifies the segments to which the reference applies identified by Segment Number

			(0062,0004). Required if the Referenced SOP Instance is a Segmentation and the reference does not apply to all segments and Referenced Frame Number (0008,1160) is not present.
>Referenced SOP Sequence	(0008,1199)	3	Reference to a Softcopy Presentation State SOP Class/SOP Instance pair. Only a single Item shall be permitted in this sequence.
>>Referenced SOP Class UID	(0008,1150)	1	Uniquely identifies the referenced SOP Class.
>>Referenced SOP Instance UID	(0008,1155)	1	Uniquely identifies the referenced SOP Instance.
>Referenced Real World Value Mapping Instance Sequence	(0008,114B)	3	Reference to a Real World Value Mapping SOP Class/SOP Instance pair. Only a single Item shall be permitted in this sequence.
>>Referenced SOP Class UID	(0008,1150)	1	Uniquely identifies the referenced SOP Class.
>>Referenced SOP Instance UID	(0008,1155)	1	Uniquely identifies the referenced SOP Instance.
>Icon Image Sequence	(0088,0200)	3	This Icon Image is representative of the Image. The Icon Image may be no greater than 128 rows by 128 columns.
>> <i>Include 'Image Pixel Macro' Table C.7-11b</i>			See Section F.7.

C.18.5 Waveform Reference Macro

Table C.18.5-1 specifies the Attributes that convey a reference to a DICOM waveform.

**Table C.18.5-1
WAVEFORM REFERENCE MACRO ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
<i>Include 'Composite Object Reference Macro' Table C.18.3-1</i>			
>Referenced Waveform Channels	(0040,A0B0)	1C	List of channels in Waveform to which the reference applies. See C.18.5.1.1 Required if the Referenced SOP Instance is a Waveform that contains multiple Channels and not all Channels in the Waveform are referenced.