

DICOM Correction Item

Correction Number		CP-397
Log Summary: Query Key for SOP Classes in Study		
Type of Modification	Name of Standard	
Enhancement	PS 3.4,6 2003	
Rationale for Correction		
<p>Typically a remote browser will show information to the user at the Patient or Study level of the DICOM information model, which they then use to selectively query for and retrieve further information.</p> <p>The original Query models supported the Modality key at the Series level, and since a single Study may contain Series from different modalities, this required an SCU to recurse down to the Series level in order to gather enough information to summarize the contents of a Study. Consequently, in CP 71, an optional Modalities in Study attribute was added to the Study level of the Patient Root and Study Root to alleviate this problem. This importance of this attribute is demonstrated by the requirement for its support in the IHE Query Images transaction.</p> <p>The Modality and Modalities in Study attribute values have never been a terribly good indication of what kind of objects are present in the Series or Study however. There is not a 1:1 correspondence between Modality and SOP Class. In many cases it may be important to know before trying to retrieve an entire study precisely which SOP Classes are contained therein. As the variety of composite objects has expanded to include non-image objects such as reports, waveforms and presentation states, and there are different "generations" of objects for the same modality (e.g. the original and enhanced MR objects), knowing the SOP Class has become increasingly important in distinguishing the types of instances found, with greater granularity than can be determined by the Modality attribute.</p> <p>There is indeed no mandatory SOP Class key in the Query models even at the instance level, but CP 284 added SOP Class UID at the Image (Instance) level, and this attribute is also required in the IHE Query Images transaction.</p> <p>Accordingly, this correction item adds a new optional attribute, SOP Classes in Study, analogous to Modalities in Study. Though it is too late to make SOP Classes in Study mandatory, it is proposed to highlight that it is an optional key.</p>		
Sections of documents affected		
PS 3.4 C.3.4, C.6.1.1.3		
PS 3.6 Section 6		
Correction Wording:		

Add new key to PS 3.4 C.3.4:

C.3.4 Additional Query/Retrieve Attributes

Some optional attributes which may be used in Query/Retrieve Information Models that are not Attributes of an Information Object Definition and, therefore, are not defined in PS 3.3. These attributes are defined in Table C.3-1.

**Table C.3-1
 ADDITIONAL QUERY/RETRIEVE ATTRIBUTES**

Attribute Name	Tag	Attribute Description
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SOP Classes in Study	(0008,0062)	The SOP Classes contained in the Study.

Add new key to PS 3.4 C.6.1.1.3:

C.6.1.1.3 Study Level

Table C.6-2 defines the keys at the Study Information level of the Patient Root Query/Retrieve Information Model.

- Notes:
1. A description of the attributes of this Information Model is contained in Section C.3 of this Part.
 2. Although the Patient ID may not be globally unique, the Study Instance UID is globally unique ensuring that no two studies may be mis-identified.

**Table C.6-2
 STUDY LEVEL KEYS FOR THE PATIENT ROOT
 QUERY/RETRIEVE INFORMATION MODEL**

Description	Tag	Type
Study Date	(0008,0020)	R
Study Time	(0008,0030)	R
Accession Number	(0008,0050)	R
Study ID	(0020,0010)	R
Study Instance UID	(0020,000D)	U
Modalities in Study	(0008,0061)	O
SOP Classes in Study	(0008,0062)	O
Referring Physician's Name	(0008,0090)	O
Study Description	(0008,1030)	O
Procedure Code Sequence	(0008,1032)	O
>Code Value	(0008,0100)	O
>Coding Scheme Designator	(0008,0102)	O
>Coding Scheme Version	(0008,0103)	O
>Code Meaning	(0008,0104)	O
Name of Physician(s) Reading Study	(0008,1060)	O
Admitting Diagnoses Description	(0008,1080)	O

Referenced Study Sequence	(0008,1110)	O
>Referenced SOP Class UID	(0008,1150)	O
>Referenced SOP Instance UID	(0008,1155)	O
Patient's Age	(0010,1010)	O
Patient's Size	(0010,1020)	O
Patient's Weight	(0010,1030)	O
Occupation	(0010,2180)	O
Additional Patient History	(0010,21B0)	O
Other Study Numbers	(0020,1070)	O
Number of Study Related Series	(0020,1206)	O
Number of Study Related Instances	(0020,1208)	O
Interpretation Author	(4008,010C)	O
All other Attributes at Study Level		O

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C.6.2.1.2 Study level

Table C.6-5 defines the keys at the Study Information level of the Study Root Query/Retrieve Information Model.

- Notes: 1. A description of the attributes of this Information Model is contained in Section C.3.
 2. Although the Patient ID may not be globally unique, the Study Instance UID is globally unique ensuring that no two studies may be mis-identified.

**Table C.6-5
 STUDY LEVEL KEYS FOR THE STUDY
 ROOT QUERY/RETRIEVE INFORMATION MODEL**

Description	Tag	Type
Study Date	(0008,0020)	R
Study Time	(0008,0030)	R
Accession Number	(0008,0050)	R
Patient's Name	(0010,0010)	R
Patient ID	(0010,0020)	R
Study ID	(0020,0010)	R
Study Instance UID	(0020,000D)	U
Modalities in Study	(0008,0061)	O
SOP Classes in Study	(0008,0062)	O
Referring Physician's Name	(0008,0090)	O
Study Description	(0008,1030)	O
Procedure Code Sequence	(0008,1032)	O
>Code Value	(0008,0100)	O

>Coding Scheme Designator	(0008,0102)	O
>Coding Scheme Version	(0008,0103)	O
>Code Meaning	(0008,0104)	O
Name of Physician(s) Reading Study	(0008,1060)	O
Admitting Diagnoses Description	(0008,1080)	O
Referenced Study Sequence	(0008,1110)	O
>Referenced SOP Class UID	(0008,1150)	O
>Referenced SOP Instance UID	(0008,1155)	O
Referenced Patient Sequence	(0008,1120)	O
>Referenced SOP Class UID	(0008,1150)	O
>Referenced SOP Instance UID	(0008,1155)	O
Patient's Birth Date	(0010,0030)	O
Patient's Birth Time	(0010,0032)	O
Patient's Sex	(0010,0040)	O
Other Patient Ids	(0010,1000)	O
Other Patient Names	(0010,1001)	O
Patient's Age	(0010,1010)	O
Patient's Size	(0010,1020)	O
Patient's Weight	(0010,1030)	O
Ethnic Group	(0010,2160)	O
Occupation	(0010,2180)	O
Additional Patient History	(0010,21B0)	O
Patient Comments	(0010,4000)	O
Other Study Numbers	(0020,1070)	O
Number of Patient Related Studies	(0020,1200)	O
Number of Patient Related Series	(0020,1202)	O
Number of Patient Related Instances	(0020,1204)	O
Number of Study Related Series	(0020,1206)	O
Number of Study Related Instances	(0020,1208)	O
Interpretation Author	(4008,010C)	O
All other Attributes at Study Level		O

Add new attribute to PS 3.6 Section 6:

(0008,0062) SOP Classes in Study

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