DICOM Change Proposal

STATUS	March 2025 Voting Packet
Date of Last Update	2025-01-21
Person Assigned	David Clunie <dclunie@dclunie.com>
Submitter Name	Jörg Riesmeier <dicom@jriesmeier.com>
Submission Date	2024-11-01

Change Number	CP-2466
Log Summary: Remove footnotes from Relationship Content Constraints tables	
Name of Standard PS3.3	
Rationale for Change: The "Relationship Content Constraints" table for some SR IODs uses footnotes to refer to a certain Note below the table, others do not. Also when a footnote is used, this is not done very consistently throughout DICOM PS3.3 Section A.35: sometimes all occurrences of a particular Value Type are labeled with a footnote and sometimes only one or some of them. It is proposed to remove the footnotes as the explaining Notes are unambiguous, so that it is clear to which row of the table or to which specific Value Type they refer. It is also proposed to add missing Notes on "SOP Classes to which an IMAGE, WAVEFORM or COMPOSITE Value Type may refer to" and to fix other inconsistencies in this context. *Open issues:* • The text that is used for the "HAS CONCEPT MOD relationship" Note is not always identical. Should this be harmonized, too? • For some tables, there is no explaining Note on "HAS CONCEPT MOD relationships", e.g. Table A.35.11-2 or A.35.14-2. Should such a Note be added to *all* "Relationship Content Constraints" tables in PS3.3 Section A.35 that specify a "HAS CONCEPT MOD relationship"?	
Change Wording:	

Modify PS3.3 Section A.35.1.3.1.2 as indicated

5   *(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):*

A.35.1.3.1.2 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed in the by-value mode. See Table C.17.3-8 for Relationship Type definitions.

> Note

10   Relationships by-reference are forbidden. Therefore, Referenced Content Item Identifier (0040,DB73) is not present in any of the Content Items within the SR Document Content Module.

Table A.35.1-2 specifies the relationship constraints of this IOD.

Table A.35.1-2. Relationship Content Constraints for Basic Text SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME, COMPOSITE[4], IMAGE[4], WAVEFORM[4], CONTAINER
CONTAINER	HAS OBS CONTEXT	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME, COMPOSITE[4], CONTAINER
CONTAINER, IMAGE[4], WAVEFORM[4], COMPOSITE[4]	HAS ACQ CONTEXT	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME
any type	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4]
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME
TEXT	INFERRED FROM	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4]

15   Note

1. ~~Which~~**The** SOP Classes ~~the~~**to which an** IMAGE, WAVEFORM or COMPOSITE Value Type may refer to, ~~is~~**are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or
20   to define a post-coordinated concept.

Modify PS3.3 Section A.35.2.3.1.2 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.2.3.1.2 Relationship Constraints

25 Relationships between Content Items in the content of this IOD shall be conveyed in the by-value mode. See Table C.17.3-8 for Relationship Type definitions.

Note

Relationships by-reference are forbidden. Therefore, Referenced Content Item Identifier (0040,DB73) is not present in any of the Content Items within the SR Document Content Module.

30 Table A.35.2-2 specifies the relationship constraints of this IOD.

Table A.35.2-2. Relationship Content Constraints for Enhanced SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, SCOORD, TCOORD, COMPOSITE[4], IMAGE[4], WAVEFORM[4], CONTAINER

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, COMPOSITE[4], CONTAINER
CONTAINER, IMAGE[4], WAVEFORM[4], COMPOSITE[4], NUM	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME
any type	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4], SCOORD, TCOORD
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4], SCOORD, TCOORD
SCOORD	SELECTED FROM	IMAGE[4]
TCOORD	SELECTED FROM	SCOORD, IMAGE[4], WAVEFORM[4]

Note

35

1. **Which**~~The~~ SOP Classes ~~the~~**to which an** IMAGE, WAVEFORM or COMPOSITE Value Type may refer to, ~~is~~**are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

40
> ***Modify PS3.3 Section A.35.3.3.1.2 as indicated***
>
> *(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):*

A.35.3.3.1.2 Relationship Constraints

Relationships between Content Items in the content of this IOD may be conveyed either by-value or by-reference. Table A.35.3-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

45
Table A.35.3-2. Relationship Content Constraints for Comprehensive SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, SCOORD, TCOORD, COMPOSITE[4], IMAGE[4], WAVEFORM[4], CONTAINER (see below)
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, COMPOSITE[4]
CONTAINER	HAS OBS CONTEXT	CONTAINER

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER, IMAGE[4], WAVEFORM[4], COMPOSITE[4], NUM	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4], SCOORD, TCOORD, CONTAINER
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4], SCOORD, TCOORD, CONTAINER
SCOORD	SELECTED FROM	IMAGE[4]
TCOORD	SELECTED FROM	SCOORD, IMAGE[4], WAVEFORM[4]

Note

1. ~~Which~~**The** SOP Classes ~~the~~**to which an** IMAGE, WAVEFORM or COMPOSITE Value Type may refer to, ~~is~~**are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

The HAS CONCEPT MOD and CONTAINS relationships shall not be conveyed by-reference.

Relationships by-reference to ancestor Content Items are forbidden in this IOD to prevent loops.

Modify PS3.3 Section A.35.4.3.1.2 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.4.3.1.2 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed in the by-value mode. See Table C.17.3-8 for Relationship Type definitions.

Note

Relationships by-reference are forbidden. Therefore, Referenced Content Item Identifier (0040,DB73) is not present in any of the Content Items within the SR Document Content Module.

Table A.35.4-2 specifies the relationship constraints of this IOD.

Table A.35.4-2. Relationship Content Constraints for Key Object Selection Document IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, IMAGE, WAVEFORM, COMPOSITE
CONTAINER	HAS OBS CONTEXT	TEXT, CODE, UIDREF, PNAME, CONTAINER

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	HAS CONCEPT MOD	CODE

Note

The SOP Classes to which an IMAGE, WAVEFORM or COMPOSITE Value Type may refer to, are documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

Modify PS3.3 Section A.35.5.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.5.3.1.3 Relationship Constraints

The Mammography CAD SR IOD makes extensive use of by-reference INFERRED FROM, by-reference HAS PROPERTIES and by-reference SELECTED FROM relationships. Other relationships by-reference are forbidden. Table A.35.5-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.5-2. Relationship Content Constraints for Mammography CAD SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	CODE, NUM, SCOORD, IMAGE[1], CONTAINER, TEXT, DATE
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATE, TIME, PNAME, UIDREF, COMPOSITE[1]
CONTAINER	HAS OBS CONTEXT	CONTAINER
IMAGE	HAS ACQ CONTEXT	TEXT, CODE, DATE, TIME, NUM, UIDREF
CONTAINER, CODE, NUM, COMPOSITE	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	CONTAINER, TEXT, CODE, NUM, DATE, IMAGE[1], SCOORD, UIDREF
CODE, NUM	INFERRED FROM	CODE, NUM, SCOORD, CONTAINER, TEXT, IMAGE
SCOORD	SELECTED FROM	IMAGE[1]

Note

1. ~~Which~~**The** SOP Classes ~~the~~**to which an** IMAGE or COMPOSITE Value Type may refer to, ~~is~~**are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

Modify PS3.3 Section A.35.6.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.6.3.1.3 Relationship Constraints

The Chest CAD SR IOD makes use of by-reference INFERRED FROM, by-reference SELECTED FROM, and by-
90   reference HAS PROPERTIES relationships. Other relationships by-reference are forbidden. Table A.35.6-2 specifies
the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.6-2. Relationship Content Constraints for Chest CAD SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	CODE, NUM, IMAGE[1], CONTAINER
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATE, TIME, PNAME, UIDREF, COMPOSITE[1]
CONTAINER	HAS OBS CONTEXT	CONTAINER
IMAGE, WAVEFORM	HAS ACQ CONTEXT	TEXT, CODE, DATE, TIME, NUM
CONTAINER, CODE, COMPOSITE, NUM	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	CONTAINER, TEXT, CODE, NUM, DATE, IMAGE[1], WAVEFORM[1], SCOORD, TCOORD, UIDREF
CODE, NUM	INFERRED FROM	CODE, NUM, IMAGE[1], WAVEFORM[1], SCOORD, TCOORD, CONTAINER, TEXT
SCOORD	SELECTED FROM	IMAGE[1]
TCOORD	SELECTED FROM	SCOORD, IMAGE[1], WAVEFORM[1]

Note

95   1. ~~Which~~**The** SOP Classes ~~the~~**to which an** IMAGE**, WAVEFORM** or COMPOSITE Value Type may refer
to, ~~is~~**are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source
Content Item, for example to provide a more descriptive explanation, a different language translation, or
to define a post-coordinated concept.

100

Modify PS3.3 Section A.35.7.3.1.4 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.7.3.1.4 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed in the by-value mode. See
105   Table C.17.3-8 for Relationship Type definitions.

Note

Relationships by-reference are forbidden. Therefore, Referenced Content Item Identifier (0040,DB73) is not
present in any of the Content Items within the SR Document Content Module.

Table A.35.7-2 specifies the relationship constraints of this IOD.

110   **Table A.35.7-2. Relationship Content Constraints for Procedure Log IOD**

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, PNAME, COMPOSITE, IMAGE, WAVEFORM
any type	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME
CONTAINER	HAS OBS CONTEXT	CONTAINER
CONTAINER, IMAGE, WAVEFORM, COMPOSITE	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME
any type	HAS CONCEPT MOD	TEXT, CODE
any type (except CONTAINER)	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	IMAGE, WAVEFORM, COMPOSITE

Note

1. **The SOP Classes to which an IMAGE, WAVEFORM or COMPOSITE Value Type may refer to, are documented in the Conformance Statement for an application (see PS3.2 and PS3.4).**

115

2. **The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.**

Modify PS3.3 Section A.35.8.3.1.3 as indicated

120 *(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):*

A.35.8.3.1.3 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed by-value. Table A.35.8-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.8-2. Relationship Content Constraints for X-Ray Radiation Dose SR IOD

125

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, IMAGE, COMPOSITE, CONTAINER
CONTAINER	HAS OBS CONTEXT	DATETIME, CODE, TEXT, UIDREF, PNAME, CONTAINER
TEXT, CODE, NUM	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, COMPOSITE
CONTAINER, IMAGE, COMPOSITE	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, IMAGE, COMPOSITE, CONTAINER
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, UIDREF, PNAME

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, UIDREF, IMAGE, COMPOSITE, CONTAINER

Note

1. The SOP Classes to which an IMAGE or COMPOSITE Value Type may refer **to,** are documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

130

2. **The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.**

Modify PS3.3 Section A.35.10.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

---

135 **A.35.10.3.1.3 Relationship Constraints**

The Colon CAD SR IOD makes use of by-reference INFERRED FROM and by-reference HAS ACQ CONTEXT relationships. Other relationships by-reference are forbidden. Table A.35.10-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.10-2. Relationship Content Constraints for Colon CAD SR IOD

140

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	CODE, NUM, IMAGE[4], CONTAINER, UIDREF, DATE, TIME
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATE, TIME, PNAME, UIDREF, COMPOSITE[4]
CONTAINER	HAS OBS CONTEXT	CONTAINER
IMAGE	HAS ACQ CONTEXT	TEXT, CODE, DATE, TIME, NUM, CONTAINER
CONTAINER, CODE, COMPOSITE, NUM	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	CONTAINER, TEXT, CODE, NUM, DATE, IMAGE[4], SCOORD, SCOORD3D, UIDREF
CODE, NUM	INFERRED FROM	CODE, NUM, IMAGE[1], SCOORD, SCOORD3D, CONTAINER, TEXT
SCOORD	SELECTED FROM	IMAGE[4]
TCOORD	SELECTED FROM	SCOORD, SCOORD3D, IMAGE[4], WAVEFORM[4]

Note

1. **WhichThe** SOP Classes **theto which an** IMAGE**, WAVEFORM** or COMPOSITE Value Type may refer to, **isare** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

145

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

150 **A.35.12.3.1.3 Relationship Constraints**

Relationships between Content Items in the content of this IOD may be conveyed by-value. Table A.35.12-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.12-2. Relationship Content Constraints for Implantation Plan SR Document IOD

155

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, UIDREF, COMPOSITE[1], IMAGE[1], CONTAINER
CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATE, UIDREF, PNAME, COMPOSITE[1], CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM, IMAGE, UIDREF, COMPOSITE	HAS PROPERTIES	TEXT, CODE, NUM, UIDREF, IMAGE[1], COMPOSITE[1]

Note

1. **Which****The** SOP Classes **the****to which an** IMAGE or COMPOSITE Value Type may refer to**,** **is****are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

160

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example, to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

165 **A.35.13.3.1.2 Relationship Constraints**

Relationships between Content Items in the content of this IOD may be conveyed either by-value or by-reference. Table A.35.13-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.13-2. Relationship Content Constraints for Comprehensive 3D SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, SCOORD, SCOORD3D, TCOORD, COMPOSITE[1], IMAGE[1], WAVEFORM[1], CONTAINER (see below)
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, COMPOSITE[1]
CONTAINER	HAS OBS CONTEXT	CONTAINER

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER, IMAGE[4], WAVEFORM[4], COMPOSITE[4], NUM	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4], SCOORD, SCOORD3D, TCOORD, CONTAINER
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, TIME, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, DATE, TIME, UIDREF, PNAME, IMAGE[4], WAVEFORM[4], COMPOSITE[4], SCOORD, SCOORD3D, TCOORD, CONTAINER
SCOORD	SELECTED FROM	IMAGE[4]
TCOORD	SELECTED FROM	SCOORD, SCOORD3D, IMAGE[4], WAVEFORM[4]

170   Note

1.   **~~Which~~The** SOP Classes **~~the~~to which an** IMAGE, WAVEFORM or COMPOSITE Value Type may refer to, **~~is~~are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2.   The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source
175   Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

3.   SCOORD3D has no children, since its coordinates are patient rather than image-relative.

The HAS CONCEPT MOD and CONTAINS relationships shall not be conveyed by-reference.

Relationships by-reference to ancestor Content Items are forbidden in this IOD to prevent loops.

180   **Modify PS3.3 Section A.35.16.3.1.2 as indicated**

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.16.3.1.2 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed in the by-value mode. See Table C.17.3-8 for Relationship Type definitions.

185   Note

Relationships by-reference are forbidden. Therefore, Referenced Content Item Identifier (0040,DB73) is not present in any of the Content Items within the SR Document Content Module.

Table A.35.16-2 specifies the relationship constraints of this IOD.

Table A.35.16-2. Relationship Content Constraints for Acquisition Context SR IOD
190

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	CODE, CONTAINER, DATETIME, NUM, PNAME, TEXT, TIME, UIDREF

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	HAS OBS CONTEXT	CODE, DATE, DATETIME, NUM, PNAME, TEXT, TIME, UIDREF, CONTAINER
CODE	HAS OBS CONTEXT	CODE
any type	HAS CONCEPT MOD	CODE, TEXT[1]
CODE	HAS PROPERTIES	CODE, DATETIME, NUM, SCOORD3D, TEXT

Note

[1]. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.

195

Modify PS3.3 Section A.35.17.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.17.3.1.3 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed in the by-value mode. See
200 Table C.17.3-8 for Relationship Type definitions.

Note

Relationships by-reference are forbidden. Therefore, Referenced Content Item Identifier (0040,DB73) is not present in any of the Content Items within the SR Document Content Module.

Table A.35.17-2 specifies the relationship constraints of this IOD.

205 **Table A.35.17-2. Relationship Content Constraints for Simplified Adult Echo SR IOD**

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, CONTAINER
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, CONTAINER
CONTAINER	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	CODE, TEXT
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, CONTAINER
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, UIDREF, CONTAINER, IMAGE, SCOORD, WAVEFORM, TCOORD
SCOORD	SELECTED FROM	IMAGE
TCOORD	SELECTED FROM	WAVEFORM

Note

1. **The SOP Classes to which an IMAGE or WAVEFORM Value Type may refer to, are documented in the Conformance Statement for an application (see PS3.2 and PS3.4).**

2. **The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.**

Modify PS3.3 Section A.35.19.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.19.3.1.3 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed by-value. Table A.35.19-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.19-2. Relationship Content Constraints for Planned Imaging Agent Administration SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, CONTAINER
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME
CONTAINER	HAS OBS CONTEXT	CONTAINER
CONTAINER, NUM	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE[1]
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, CONTAINER
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, CONTAINER

Note

1. The HAS CONCEPT MOD relationship is used to modify the meaning of the concept name of a parent node (or Source Content Item), with a modifier or qualifier in a child (target node) to provide a more descriptive explanation, a different coded language translation, or to define a post-coordinated concept.

Modify PS3.3 Section A.35.20.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.20.3.1.3 Relationship Constraints

Relationships between Content Items in the content of this IOD shall be conveyed by-value. Table A.35.20-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.20-2. Relationship Content Constraints for Performed Imaging Agent Administration SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, COMPOSITE[1], IMAGE[1], WAVEFORM[1], CONTAINER
TEXT, CODE, NUM, CONTAINER	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, COMPOSITE[1]
CONTAINER	HAS OBS CONTEXT	CONTAINER
CONTAINER, IMAGE[1], WAVEFORM[1], COMPOSITE[1], NUM	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE[2]
TEXT, CODE, NUM	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, IMAGE[1], WAVEFORM[1], COMPOSITE[1], CONTAINER
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, DATE, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, DATE, UIDREF, PNAME, IMAGE[1], WAVEFORM[1], COMPOSITE[1], CONTAINER

235   Note

1. The SOP Classes to which an IMAGE**,** ~~or~~ WAVEFORM or COMPOSITE Value Type may refer **to,** ~~is~~**are** documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

2. The HAS CONCEPT MOD relationship is used to modify the meaning of the concept name of a parent node (or Source Content Item), with a modifier or qualifier in a child (==target node==) to provide a more
240   descriptive explanation, a different coded language translation, or to define a post-coordinated concept.

> **Modify PS3.3 Section A.35.22.3.1.3 as indicated**
>
> *(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):*

A.35.22.3.1.3 Relationship Constraints

245   Relationships between Content Items in the content of this IOD shall be conveyed by-value. Table A.35.22-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.22-2. Relationship Content Constraints for Enhanced X-Ray Radiation Dose SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, IMAGE, COMPOSITE, CONTAINER, SCOORD3D, TABLE

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	HAS OBS CONTEXT	DATETIME, CODE, TEXT, UIDREF, PNAME, CONTAINER
TEXT, CODE, NUM, COMPOSITE	HAS OBS CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, COMPOSITE
CONTAINER, IMAGE, COMPOSITE	HAS ACQ CONTEXT	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, CONTAINER
any type	HAS CONCEPT MOD	TEXT, CODE
TEXT, CODE, NUM, COMPOSITE	HAS PROPERTIES	TEXT, CODE, NUM, DATETIME, UIDREF, PNAME, IMAGE, COMPOSITE, CONTAINER
PNAME	HAS PROPERTIES	TEXT, CODE, DATETIME, UIDREF, PNAME
TEXT, CODE, NUM	INFERRED FROM	TEXT, CODE, NUM, DATETIME, UIDREF, IMAGE, COMPOSITE, CONTAINER

250   Note

     1.   The SOP Classes to which an IMAGE or COMPOSITE Value Type may refer **to,** are documented in the Conformance Statement for an application (see PS3.2 and PS3.4).

     2. The HAS CONCEPT MOD relationship is used to modify the meaning of the Concept Name of a
255   **Source Content Item, for example to provide a more descriptive explanation, a different language translation, or to define a post-coordinated concept.**

Modify PS3.3 Section A.35.23.3.1.3 as indicated

(changes to existing text are bold and underlined for additions and bold and struckthrough for removals):

A.35.23.3.1.3 Relationship Constraints

260   The Waveform Annotation SR IOD allows for by-reference INFERRED FROM and by-reference SELECTED FROM relationships. Other relationships in the content of this IOD shall be conveyed by-value. Table A.35.23-2 specifies the relationship constraints of this IOD. See Table C.17.3-8 for Relationship Type definitions.

Table A.35.23-2. Relationship Content Constraints for Waveform Annotation SR IOD

Source Value Type	Relationship Type (Enumerated Values)	Target Value Type
CONTAINER	CONTAINS	TEXT, CODE, NUM, TCOORD, WAVEFORM, CONTAINER
CONTAINER, CODE, NUM, TEXT	HAS OBS CONTEXT	CODE, PNAME, TEXT, UIDREF, DATE, NUM, CONTAINER
CONTAINER, WAVEFORM[1]	HAS ACQ CONTEXT	CODE, DATE, TIME, DATETIME, NUM, UIDREF
CONTAINER, CODE, NUM, TEXT	HAS CONCEPT MOD	TEXT, CODE[2]
CODE, NUM, TEXT	HAS PROPERTIES	CODE, TEXT, NUM
CODE, NUM, TEXT	INFERRED FROM	WAVEFORM, TCOORD
TCOORD	SELECTED FROM	WAVEFORM

265   Note

        1. The SOP Classes to which a~~n~~ WAVEFORM Value Type may refer _to_, ~~is~~_are_ documented in the
            Conformance Statement for an application (see PS3.2 and PS3.4).

        2. The HAS CONCEPT MOD relationship is used to modify the meaning of the concept name of a parent
            node (or Source Content Item), with a modifier or qualifier in a child (==target node==) to provide a more
270   descriptive explanation, a different coded language translation, or to define a post-coordinated concept.