

### DICOM Correction Proposal Form

Tracking Information - Administration Use Only	
Correction Proposal Number	CP-294
STATUS	Voting Packet
Date of Last Update	2003/03/27
Person Assigned	David Clunie <a href="mailto:dclunie@dclunie.com">dclunie@dclunie.com</a>
Submitter Name	Fred Behlen <a href="mailto:fbehlen@laitek.com">fbehlen@laitek.com</a>
Submission date	2001/12/28

Correction Number	CP-294
Log Summary: Clarify SR Container Referenced Content Item	
Type of Modification	Name of Standard
Clarification	PS 3.3 2003
<p>Rationale for Correction</p> <p>CP 215 amended the description of CONTAINS relationships across by-reference relationships in the IODs to allow for the relationship except when the target Content Item was a CONTAINER, but did not amend the condition of the Referenced Content Item Identifier attribute.</p> <p>This CP removes the restriction in the SR Document Module, and relies on the IOD definitions to require the constraint.</p>	
<p>Sections of documents affected</p> <p>PS 3 C.17</p>	
Correction Wording:	

*FYI ... the CP 215 amended content of PS 3.3 A.35.3.3.1:*

**A.35.3.3.1 Comprehensive SR IOD Content Constraints**

...  
**A.35.3.3.1.2 Relationship Constraints**

...  
 For relationships conveyed by-reference, Content Items with a Value Type of CONTAINER shall only be the target of relationships other than CONTAINS. That is, CONTAINS relationships with CONTAINERS may not span by-reference links; containment of directly nested CONTAINERS shall only be conveyed by value.

Note: 1. It is legal to have a CONTAINS relationship by-reference to a target that is not a CONTAINER, such as a TEXT or CODE, which itself has immediate or distant descendants that are

CONTAINERS, which may then subsequently have CONTAINS relationships by value with CONTAINERS.

2. The intent of this constraint is to prevent the need arising to follow by-reference links to build up a strict CONTAINS hierarchy of CONTAINERS that are used as headings and subheadings of an outline. Otherwise the outline hierarchy could become a more general graph than a tree, which would be awkward to render. The intent is not to prohibit by-reference relationships to other parts of the tree that may be part of an outline, which is why only the CONTAINS relationship is forbidden in this constraint.
3. These constraints only apply to by-reference relationships. There is no intent to prohibit CONTAINERS from being the target value types of by-value relationships other than CONTAINS. That is why CONTAINERS are indicated as valid target value types of HAS PROPERTIES, INFERRED FROM and HAS ACQ CONTEXT in Table A.35.3-2.

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

*Correct PS 3.3 Table C.17-6:*

**Table C.17.3-4  
DOCUMENT RELATIONSHIP MACRO ATTRIBUTES**

Attribute Name	Tag	Type	Attribute Description
...			
>Referenced Content Item Identifier	(0040,DB73)	1C	<p>An ordered set of one or more integers that uniquely identifies the Target Content Item of the relationship.</p> <p>The root Content Item is referenced by a single value of 1.</p> <p>Each subsequent integer represents an ordinal position of a Content Item in the Content Sequence (0040,A730) in which it belongs. The Referenced Content Item Identifier is the set of these ordinal positions along the by-value relationship path. The number of values in this Multi-Value Attribute is exactly the number of relationships traversed in the SR content tree plus one.</p> <p>Note: 1. See example in note below table. 2. Content Items are ordered in a Content Sequence starting from 1 as defined in VR of SQ (See PS 3.5).</p> <p>Required if the Target Content Item is denoted by-reference, i.e. the Document Relationship Macro and Document Content Macro are not included.</p> <p><b>Shall not be present if Relationship Type (0040,A010) is CONTAINS.</b></p>