

DICOM Correction Proposal

STATUS	Assigned
Date of Last Update	2019/04/26
Person Assigned	Ulrich Busch (ulrich.busch@varian.com)
Submitter Name	Ulrich Busch (ulrich.busch@varian.com)
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Correction Number	CP1905
Log Summary: Consolidate Category codes for CID 9502	
Name of Standard PS 3.16 2018e	
<p>Rationale for Correction:</p> <p>The RT Segmentation Annotation Module allows to code the referenced segment. The categories used in in Segment Annotation Category Code Sequence (3010,002B) of this module are included in CID 9502 “RT Segment Annotation Categories”.</p> <p>However, for structures being tissue or anatomical, no categories are proposed. For these structures, CID 7150 “Segmentation Property Categories” provides a applicable collection.</p> <p>In this context it was noticed, that the Bolus-type devices, which are important for the RT Segment Annotation IOD, are not covered so far. (A-00004, DCM, “Physical Object”) was included in CID 9502 “RT Segment Annotation Categories” but is also included in CID 7150 “Segmentation Property Categories”.</p> <p>Therefore, the overall guidelines for the changes are as follows:</p> <ol style="list-style-type: none"> 1. In CID 9502 “RT Segment Annotation Categories”, only include RT-Specific categories explicitly. 2. For anything else, refer to CID 7150 “Segmentation Property Categories” <p>The resulting changes are:</p> <ol style="list-style-type: none"> a. Replace the generic code (A-00004, DCM, “Physical Object”) by the specific code (ccc1, DCM, “Patient-Attached Dose Control Object”) in CID 9502 b. Include CID 7150 in CID 9502 c. Add a statement to the category-to-type mapping table in section C.36.8.1.1 RT Segment Annotation Type Code Sequence, that all categories not listed in this table the baseline codes are defined by CID 7150, when codes form that CID are used. d. In section C.36.6.1.2 Conceptual Volume Type Code Sequence, referring to a module in the RT Physician Intent, where (A-00004, DCM, “Physical Object”) is used (and shall stay), synchronize the CID type code for that category with CID 7150. 	
Correction Wording:	

In PS 3.3, make the following changes to Section C.36.6.1.2 Conceptual Volume Type Code Sequence

C.36.6.1.2 Conceptual Volume Type Code Sequence

The Conceptual Volume Type Code Sequence (3010,0069) further specifies the type of the anatomy along the Conceptual Volume Category Code Sequence (3010,0067). The following requirements apply

to the codes permitted in the Conceptual Volume Type Code Sequence (3010,0069), when the code used in the Conceptual Volume Type Code Sequence (3010,0069) is as follows:

**Table C.36.6-3
Anatomy Property Type Codes**

Code Value of Conceptual Volume Category Code Sequence (3010,0067)	Context Groups for Conceptual Volume Type Code Sequence (3010,0069)
(T-D000A, SRT, "Anatomical Structure")	BCID 9514 "Anatomical Structures for Radiotherapy"
(130047, DCM, "External Body Model")	DCID 9507 "External Body Models"
(A-00004, DCM, "Physical Object")	BCID 7157 "Device Segmentation Types", BCID 6040 "Non-lesion Object Type" <u>BCID 7193 "Physical Object Segmentation Property Types"</u>
(130046, DCM, "Non-specific Volume")	DCID 9508 "Nonspecific Volumes"

For code values of the Conceptual Volume Type Code Sequence (3010,0069) not listed above no baseline CID is defined.

In PS 3.3, make the following changes to Section C.36.8.1 RT Segment Annotation Attribute Descriptions

C.36.8.1 RT Segment Annotation Attribute Descriptions

C.36.8.1.1 RT Segment Annotation Type Code Sequence

If the Segment Annotation Category Code Sequence (3010,002B) has the code value specified in the left column below, the CID for Segment Annotation Type Code Sequence (3010,002C) shall be the one specified in the right column below.

**Table C.36.8-2
RT Segment Annotation Type CIDs**

Code Value of Segment Annotation Category Code Sequence (3010,002B)	CID for Segment Annotation Type Code Sequence (3010,002C)
(130041, DCM, "RT Target")	DCID 9534 "Radiotherapy Targets"
(130042, DCM, "RT Dose Calculation Structure")	DCID 9535 "Radiotherapy Dose Calculation Roles"
(130043, DCM, "RT Geometric Information")	DCID 9504 "RT Geometric Information"
(130047, DCM, "External Body Model")	DCID 9507 "External Body Models"
<u>(ccc1, DCM, "Patient-Attached Dose Control Object")</u>	<u>DCID 9516 "Radiotherapy Bolus Device Types"</u>
(130044, DCM, "Fixation or Positioning Device")	DCID 9505 "Fixation or Positioning Devices"
(130045, DCM, "Brachytherapy Device")	DCID 9506 "Brachytherapy Devices"
(A-00004, SRT, "Physical Object")	BCID 7157 "Device Segmentation Types", BCID 6040 "Non-lesion Object Type"
(130046, DCM, "Non-specific Volume")	DCID 9508 "Nonspecific Volumes"

For code values in Segment Annotation Category Code Sequence (3010,002B) that are not present in Table C.36.8-2 RT Segment Annotation Type CIDs, the Baseline CIDs for codes in Segment Annotation Type Code Sequence (3010,002C) are defined in CID 7150 where applicable.

For code values of the Segment Annotation Category Code Sequence (3010,002B) not listed above no baseline CID is defined.

TODO: Example for an anatomical code (Left Lung)

In PS 3.16, Appendix B, change CID 9502 as follows:

CID 9502 RT Segment Annotation Categories

Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML

Type: Extensible

Version: yyyyymmdd

UID: 1.2.840.10008.6.1.1212

Table CID 9502. RT Segment Annotation Categories

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-CT Concept ID	UMLS Concept Unique ID
<i>Include CID 7150 "Segmentation Property Categories"</i>				
DCM	130041	RT Target		
DCM	130042	RT Dose Calculation Structure		
DCM	130043	RT Geometric Information		
DCM	130047	External Body Model		
<u>DCM</u>	<u>ccc1</u>	<u>Patient-Attached Dose Control Object</u>		
DCM	130044	Fixation or Positioning Device		
DCM	130045	Brachytherapy Device		
SRT	A-00004	Physical object	260787004	C0085089
DCM	130046	Non-specific Volume		

In PS 3.16, Appendix D, add the following code:

Table D-1. DICOM Controlled Terminology Definitions (Coding Scheme Designator "DCM" Coding Scheme Version "01")

Code Value	Code Meaning	Definition	Notes
<u>ccc1</u>	<u>Patient-Attached Dose Control Object</u>	<u>An object which is attached to the patient to attenuate the therapeutic dose (such as a Bolus or a lead shield).</u>	

TODO: Fix Snomed CT code of T-D0050 Tissue in CID 9501. Prescription