# **DICOM Correction Proposal**

STATUS	Voting Packet June 2018
Date of Last Update	2018/03/13
Person Assigned	Ulrich Busch (ulrich.busch@varian.com)
Submitter Name	Christof Schadt (christof.schadt@brainlab.com)
Submission Date	2017/05/23

Correction Number CP1719

Log Summary: Extend Referenced Image Purposes of Reference

Name of Standard

PS 3.16, 2018a

#### Rationale for Correction:

With the current structure of the 1st Generation DICOM RT SOP Class definitions, it is usually the case that only the primary reference data set that was used for dose calculation is referenced within the RT Structure Set (that is referenced by the actual DICOM RT Plan). But normally there are more image data sets involved in treatment planning. Although such data sets can be "linked" by the Spatial Registration this only represents a weak link as it is unclear what the semantics of the registration was.

Therefore, it is proposed to extend the list of Referenced Image Purposes of Reference in CID 7201 along with purposes for corresponding instance references to Spatial Registrations in CID 7022.

**Correction Wording:** 

Add to PS 3.16 Annex B

#### CID 7201 Referenced Image Purposes of Reference

#### Context ID 7201

### **Referenced Image Purposes of Reference**

Type: Extensible Version: yyyymmdd

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121311	Localizer
DCM	121312	Biopsy localizer
DCM	121313	Other partial views
DCM	121314	Other image of biplane pair
DCM	121315	Other image of stereoscopic pair
DCM	121316	Images related to standalone object
DCM	121317	Spectroscopy
DCM	121338	Anatomic image
DCM	121339	Functional image
DCM	121340	Spectral filtered image

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121341	Device localizer
DCM	121346	Acquisition frames corresponding to volume
DCM	121347	Volume corresponding to spatially-related acquisition frames
DCM	121348	Temporal Predecessor
DCM	121349	Temporal Successor
<u>DCM</u>	NNN001	Image used for Treatment Planning
<u>DCM</u>	NNN002	Image used for Dose Calculation
<u>DCM</u>	NNN003	Image Acquired during Treatment
DCM	NNN004	Image used as Reference Image for Treatment

## CID 7022 Radiotherapy Purposes of Reference

## Context ID 7022

### **Radiotherapy Purposes of Reference**

Type: Extensible Version: yyyymmdd

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121310	RT treatment plan for the position being verified
<u>DCM</u>	NNN010	Registration used in Planning
DCM	NNN011	Registration created during Treatment

Add the following to the table in PS3.16, Annex D

# ANNEX D DICOM CONTROLLED TERMINOLOGY DEFINITIONS (NORMATIVE)

Code Value	Code Meaning	Definition	Notes
NNN001	Image used for Treatment Planning	Images which have been used in the treatment planning process.	
<u>NNN002</u>	Image used for Dose Calculation	Images which have been used for dose calculation in the treatment planning process.	
<u>NNN003</u>	Image Acquired during Treatment	Images which have been acquired during a treatment session.	
<u>NNN004</u>	Image used as Reference Image for Treatment	Images which are used in a treatment session as reference images to position the patient.	
NNN010	Registration used in Planning	Registrations, which have been used in the treatment planning process	
<u>NNN011</u>	Registration created during Treatment Session	Registrations, which have been created in the execution of a treatment session	