

DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2024/03/21
Person Assigned	Christof Schadt
Submitter Name	Kari Jyrkkälä <kari.jyrkkala@varian.com>
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Correction Number	CP-2378
Log Summary:	Add RT Treatment Technique Code to Beam Sequence
Name of Standard	PS3.3, PS3.6, PS3.16
Rationale for Correction:	C-Arm Photon-Electron Radiation IOD introduced the RT Treatment Technique Code Sequence (3010,0080) which describes the treatment technique of the radiation beam. Even if this technique is not a prescriptive delivery parameter, this information helps the user to prepare for the delivery. RT Treatment Technique Code Sequence (3010,0080) is added to Beam Sequence (300A,00B0) to have this information available in the RT Plan IOD.
Correction Wording:	

PS3.3, update C.8.8.14 RT Beams Module

C.8.8.14 RT Beams Module

The RT Beams Module contains information defining equipment parameters for delivery of external radiation beams.

Table C.8-50. RT Beams Module Attributes

Attribute Name	Tag	Type	Attribute Description
Beam Sequence	(300A,00B0)	1	Sequence of treatment beams for current RT Plan. One or more Items shall be included in this Sequence.
>Beam Number	(300A,00C0)	1	Identification number of the Beam. The value of Beam Number (300A,00C0) shall be unique within the RT Plan in which it is created. See Note 1.
...			
>Beam Type	(300A,00C4)	1	Motion characteristic of Beam. See Note 5. Enumerated Values: STATIC All Control Point Sequence (300A,0111) Attributes remain unchanged between consecutive pairs of control points with changing Cumulative Meterset Weight (300A,0134).

Attribute Name	Tag	Type	Attribute Description
			DYNAMIC One or more Control Point Sequence (300A,0111) Attributes change between one or more consecutive pairs of control points with changing Cumulative Meterset Weight (300A,0134).
...			
>High-Dose Technique Type	(300A,00C7)	1C	Type of high-dose treatment technique. Defined Terms: TBI Total Body Irradiation HDR High Dose Rate Required if treatment technique requires a dose that would normally require overriding of treatment machine safety controls.
<u>>RT Treatment Technique Code Sequence</u>	<u>(3010,0080)</u>	<u>3</u>	<u>Type of treatment technique.</u> <u>Only a single Item is permitted in this Sequence.</u>
<u>>>Include Table 8.8-1 "Code Sequence Macro Attributes"</u>			<u>BCID XXXX "RT Plan Radiotherapy Procedure Technique"</u>
>Treatment Machine Name	(300A,00B2)	2	User-defined name identifying treatment machine to be used for beam delivery. See Note 2.

Add to PS 3.6, Annex A

**Table A-3
CONTEXT GROUP UID VALUES**

Context UID	Context Identifier	Context Group Name
<u>1.2.840.10008.6.1.CC1</u>	<u>CCCC</u>	<u>RT Plan Radiotherapy Procedure Technique</u>

CID CCCC RT Plan Radiotherapy Procedure Technique

Resources: [HTML](#) | [FHIR JSON](#) | [FHIR XML](#) | [IHE SVS XML](#)
Keyword: RTPlanRadiotherapyProcedureTechnique
FHIR Keyword: dicom-cid-CCCC-RTPlanRadiotherapyProcedureTechnique
Type: Extensible
Version: YYYYMMDD
UID: 1.2.840.10008.6.1.CC1

Table CID CCCC. RT Plan Radiotherapy Procedure Technique

Coding Scheme Designator	Code Value	Code Meaning	SNOMED-RT ID	UMLS Concept Unique ID
<i>Include CID 9511 "General External Radiotherapy Procedure Technique"</i>				
<i>Include CID 9512 "Tomotherapeutic Radiotherapy Procedure Technique"</i>				