DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2025/03/30
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Correction Number CP-2427

Log Summary: Add RT specific plan approvals

Name of Standard

PS3.3, PS3.6, PS3.16

Rationale for Correction:

A recent voluntary standard from the RT industry, AAMI RT2:2017 Radiation therapy readiness check [https://array.aami.org/doi/book/10.2345/9781570206603], is requiring treatment delivery devices to verify at a minimum, two separate approvals to allow irradiation, one provided by a physician that the treatment plan meets the intended course of treatment and the other provided by a medical physicist that plan QA checks were performed. The current generic approval module only supports one approval. This correction proposal adds an RT-specific Assertions Sequence in the General Plan Module and a new Context Group specifying codes for plan approvals assertions.

Correction Wording:

In PS 3.3, section C.8.8.9 RT General Plan Module, perform the following modifications

Table C.8-45. RT General Plan Module Attributes

Attribute Name	Tag	Туре	Attribute Description
RT Plan Label	(300A,0002)	1	User-defined label for treatment plan.
RT Plan Time	(300A,0007)	2	Time treatment plan was last modified.
RT Assertions Sequence	(gggg,eeee)	<u>3</u>	Assertions made for this instance.
			One or more Items shall be included in this Sequence.
>Include Table 10.30-1 "Assertion Macro Attributes"		To make assertions about Approval Status (300E,0002), use Assertion Code Sequence (0044,0101) BCID CCC1 "Plan Approval Assertion"	
Treatment Protocols	(300A,0009)	3	Planned treatment protocols.

Table A-3 CONTEXT GROUP UID VALUES

Context UID	Context Identifier	Context Group Name
1.2.840.10008.6.1.uuu1	CCC1	Plan Approval Assertion

In PS 3.6, section 6. Registry of DICOM Data Elements, add the following

Table 6-1. Registry of DICOM Data Elements

Tag	Name	Keyword		VM	
(gggg,eeee)	RT Assertions Sequence	RTAssertionsSequence	SQ	1	

In PS 3.16 Add to section B.1

CID CCC1 Plan Approval Assertion

Resources: <u>HTML | FHIR JSON | FHIR XML | IHE SVS XML</u>

Keyword: PlanApprovalAssertion

FHIR Keyword: dicom-cid-CCC-PlanApprovalAssertion

Type: Extensible Version: yyyymmdd

UID: 1.2.840.10008.6.1.uuu1

Table CID CCC1. Plan Approval Assertion

Coding Scheme Designator	Code Value	Code Meaning
DCM	AAA1	Plan meets prescription
DCM	AAA2	Plan QA completed

In PS 3.16, section D DICOM Controlled Terminology Definitions (Normative) Add the following to the table in PS3.16, Annex D:

Annex D DICOM Controlled Terminology Definitions (Normative)

Code Value	Code Meaning	Definition	Notes
AAA1	Plan meets prescription	The plan meets the intended course of treatment as prescribed.	
AAA2	Plan QA passed	The plan has passed quality assurance checks.	