

Minimum data set in radiotherapy for collection in local applications
Version 1.0

Group of items	Operating objectives	Item n°	Collection status	Item	Item definition	Expected value
LEVEL A Treatment course	Planned or delivered course of treatment (consisting of several phases, then treatment plans)	1.1	Mandatory	Type	Type (planned or delivered).	Character string Planned or delivered
		1.2	Optional	Objective	A code explaining the objective (e.g. curative, palliative, preventive therapy).	Integer (SNOMED CT) Dicom Tag path: RT Plan/RT General Plan/Plan Intent (300A,000A)
		1.3	Optional	Reason for ending	A code explaining the reason for unplanned or premature termination, or normal completion.	Integer (SNOMED CT) Extraction from MOSAIQ/ARIA Record and Verify
		1.4	Mandatory if 1.1 is planned	Number of sessions	Total number of planned fractions.	Integer - Summing from phases
		1.5	Mandatory	Start date	Start date and time.	Date and time Extraction from MOSAIQ/ARIA Record and Verify
		1.6	Mandatory	End date	End date and time.	Date and time Extraction from MOSAIQ/ARIA Record and Verify
LEVEL B Phase	Summary of radiotherapy phases (planned or delivered)	2.1	Mandatory	Type	Phase type (planned or delivered).	Character string Planned or delivered
		2.2	Mandatory	Number of fractions	Number of fractions.	Integer Planned from initial RT Plan: Dicom Tag extraction: RT Plan/RT Fraction Scheme/Fraction Group Sequence/Number Of Fractions Planned (300A,0078) Delivered: Extraction from MOSAIQ/ARIA Record and Verify
		2.3	Mandatory	Start date	Start date and time.	Date and time Extraction from MOSAIQ/ARIA Record and Verify
		2.4	Mandatory	End date	End date and time.	Date and time Extraction from MOSAIQ/ARIA Record and Verify
Level C Plan	Summary of radiotherapy plans (planned or delivered)	3.1	Mandatory	Type	Type of plan (planned or issued).	Character string Planned or delivered
		3.2	Mandatory	Number of fractions	Number of fractions.	Integer Planned: Dicom Tag Extraction: RT Plan/RT Fraction Scheme/Fraction Group Sequence/Number Of Fractions Planned (300A,0078) Delivered: Extraction from MOSAIQ/ARIA Record and Verify
		3.3	Mandatory	Start date	Start date and time.	Date and time Extraction from MOSAIQ/ARIA Record and Verify
		3.4	Mandatory	End date	End date and time.	Date and time Extraction from MOSAIQ/ARIA Record and Verify
		3.5	Optional	Reason for replanning	Reason for replanning.	Integer (SNOMED CT) Extraction from MOSAIQ/ARIA Record and Verify
		3.6	Mandatory	Algorithm	Algorithm name.	Character String

<div> <div></div> <div>Level D</div> <div>Volume</div> </div>	Prescription volume for radiotherapy (concept referenced by levels A, B, C)			name		
		3.7	Optional	UID Image	Series Instance Planning image UID	
		3.8	Optional	UID RTSS	SOP reference Instance RT SS UID	Dicom Tag path: RT Plan/RT General Plan/Referenced Structure Set Sequence (300C,0060)/Referenced SOP Instance UID (0008,1155)
		3.9	Optional	UID RT Dose	SOP Instance RT UID Dose	Dicom Tag path: RT Dose/SOP Common/SOP Instance UID (0008,0018)
		3.10	Mandatory	UID RT Plan	Reference SOP Instance RT Plan UID	Dicom Tag path: RT Dose/RT Dose/Referenced RT Plan Sequence (300C,0002)/Referenced SOP Instance UID (0008,1155)
		4.1	Mandatory	Identifier	Prescription volume identification number	Character string Dicom Tag path: RT Structure Set/Structure Set/Structure Set ROI Sequence/ROI Number Attribute (3006,0022) Or Dicom Tag path: RT Plan/RT General Plan/Treatment Sites Attribute (300A,000B)
		4.2	Mandatory	Location	Codes describing the body locations to which radiotherapy treatments are directed.	Integer (SNOMED CT) ICD10 extraction from MOSAIQ/ARIA Record and Verify
		4.3	Optional	Location codes	Various codes to specify the body location to which radiotherapy treatments are directed.	Integer (SNOMED CT)
		4.4	Optional	Description	Description of the radiotherapy volume that can contain any additional information in addition to SNOMED codes.	Character string
		5.1	Mandatory	Expected dose per fraction	Planned radiation dose per fraction.	Character string The division is 5.3/5.2
<div> <div></div> <div>Dose by volume</div> </div>	Dose parameters (planned or delivered) for a radiotherapy volume. (concept referenced by level D)	5.2	Mandatory	Number of fractions	Number of fractions.	Integer Dicom Tag path: RT Plan/RT Fraction Scheme/Fraction Group Sequence/Number of Fractions Planned (300A, 0078)
		5.3	Mandatory	Total dose	The total amount of radiation delivered to this volume.	Character string Dicom Tag path for the 1 st RT Plan: RT plan: RT Plan/RT Prescription/Dose Reference Sequence/Target Prescription Dose (300A, 0026) Delivered : Record and Verify
<div> <div></div> <div>Modality and Technique</div> </div>	Qualification of the modality and technique of a radiotherapy procedure (Reference Phase, Plan)	6.1	Mandatory	Technique	Radiotherapy procedure technique.	Character string Dicom Tag path: RT Plan/ RT Beams/Beam Type (300A, 00c4) WHERE Treatment Delivery Type='TREATMENT' (300A,00CE) OR Treatment Protocols (300A,0009)
		6.2	Mandatory	Modality	Radiation therapy procedure.	Character string Dicom Tag path: RT Plan/RT Beams/Beam Sequence/Radiation Type (300A, 00C6)

		6.3	Optional	Name of machine used for beam emission	Name of the processing machine used to emit the beam.	Character string RT plan / RT beams / Beam sequence / Name of processing machine (300A, 00B2)0B2)
Energy or isotope	Qualification of radiation energy. The energy spectrum is characterized by the maximum energy, the maximum acceleration voltage or the isotope used. (Reference to Plan / Phase)	7.1	Mandatory	Quantity	Energy spectrum of a ray characterized by a maximum value. For electrons, the maximum energy is given in MeV. For photons, the maximum acceleration voltage is given in MV or kV, although these are not units of energy.	Decimal/Float Dicom Tag path: RT Plan/RT Beams/Beam Sequence/Control Point Sequence/Nominal Beam Energy (300A,0114)
		7.2	Optional	Isotope name	The isotope used in radiotherapy.	Character string