

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2023/01/21
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Correction Number	CP-2247
Log Summary: Add Long Label to Ion Beam	
Name of Standard PS3.3 2022e	
Rationale for Correction: The Attribute Entity Long Label (3010,0038) was recently added to the RT Plan IOD in CP-2155 and should also be added to the RT Ion Plan for the same reason. Actual implementations of the RT Ion Plan require an additional field to convey all information that is used to identify a beam. Currently the Beam Name is utilized as the primary identifier of a treatment field, whereas a textual description of the field is stored in the Beam Description. It is therefore proposed to add the Entity Long Label attribute to the Beam Sequence in order to not lose the treatment field note which can currently not be conveyed. Since the RT Ion Treatment Record also includes the same beam identifying information as the RT Ion Plan, it should also be updated to include the Entity Long Label for symmetry. As CP 2155 missed adding the Entity Long Label to the RT Beams Session Record, it is also added there.	
Correction Wording:	

Update in PS3.3, C8.8.25 RT Ion Beams Module

C.8.8.25 RT Ion Beams Module

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

Table C.8.8.25-1. RT Ion Beams Module Attributes

Attribute Name	Tag	Type	Attribute Description
Ion Beam Sequence	(300A,03A2)	1	Sequence of setup and/or treatment beams for current RT Ion 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 Ion Plan in which it is created. See Section C.8.8.25.1.

Attribute Name	Tag	Type	Attribute Description
>Beam Name	(300A,00C2)	1	User-defined name for Beam. See Section C.8.8.25.1.
<u>>Entity Long Label</u>	<u>(3010,0038)</u>	<u>3</u>	<u>User-defined label for Beam. See Section C.8.8.25.1</u>
>Beam Description	(300A,00C3)	3	User-defined description for Beam. See Section C.8.8.25.1.
>Beam Type	(300A,00C4)	1	Motion characteristic of Beam. Enumerated Values: STATIC All Ion Control Point Sequence (300A,03A8) Attributes remain unchanged between consecutive pairs of control points with changing Cumulative Meterset Weight (300A,0134). DYNAMIC One or more Ion Control Point Sequence (300A,03A8) Attributes change between one or more consecutive pairs of control points with changing Cumulative Meterset Weight (300A,0134).
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C.8.8.25.1 Beam Identifying Information

~~Beam Number (300A,00C0) is provided to link related information across Modules, and its value has no real-world interpretation. Beam Name (300A,00C2), a Type 1 Attribute, is intended to store the primary beam identifier (often referred to as "Field ID"). Beam Description (300A,00C3), a Type 3 Attribute, is intended to store additional beam identifying information (often referred to as "Field Name").~~

Beam Number (300A,00C0) is provided to link related information across Modules, and its value is not required to have any real-world interpretation. Beam Name (300A,00C2), a Type 1 Attribute, is intended to store the primary beam identifier (often referred to as "field identifier"). Entity Long Label (3010,0038), a Type 3 Attribute, is intended to store additional beam identifying information (often referred to as "field name"). Beam Description (300A,00C3), a Type 3 Attribute, is intended to store beam summary information (often referred to as "field note"). The Conformance Statement shall document how these Attributes are populated.

Update in PS3.3, C8.8.26 RT Ion Beams Session Record Module

C.8.8.26 RT Ion Beams Session Record Module

[Table C.8.8.26-1](#) specifies the Attributes that describe the measured and recorded settings acquired during Ion Radiation Treatments.

Table C.8.8.26-1. RT Ion Beams Session Record Module Attributes

Attribute Name	Tag	Type	Attribute Description
Treatment Session Ion Beam Sequence	(3008,0021)	1	Sequence of setup and/or treatment beams administered during treatment session.

Attribute Name	Tag	Type	Attribute Description
			One or more Items shall be included in this Sequence.
>Referenced Beam Number	(300C,0006)	1	References Beam specified by Beam Number (300A,00C0) in Ion Beam Sequence (300A,03A2) in RT Ion Beams Module within the referenced RT Ion Plan.
>Beam Name	(300A,00C2)	1	User-defined name for Beam. See Section C.8.8.25.1.
<u>>Entity Long Label</u>	<u>(3010,0038)</u>	<u>3</u>	<u>User-defined label for Beam.</u> <u>See C.8.8.25.1.</u>
>Beam Description	(300A,00C3)	3	User-defined description for Beam. See Section C.8.8.25.1.
>Beam Type	(300A,00C4)	1	Motion characteristic of Beam. Enumerated Values: STATIC All Ion Control Point Sequence (300A,03A8) Attributes remain unchanged between consecutive pairs of control points with changing Cumulative Meterset Weight (300A,0134). DYNAMIC One or more Ion Control Point Sequence (300A,03A8) Attributes change between one or more consecutive pairs of control points with changing Cumulative Meterset Weight (300A,0134).

Update in PS3.3, C8.8.21 RT Beams Session Record Module

C.8.8.21 RT Beams Session Record Module

Table C.8-57. RT Beams Session Record Module Attributes

Attribute Name	Tag	Type	Attribute Description
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>Referenced Beam Number	(300C,0006)	1	References Beam specified by Beam Number (300A,00C0) in Beam Sequence (300A,00B0) in RT Beams Module within referenced RT Plan.
>Beam Name	(300A,00C2)	1	User-defined name for delivered Beam.
<u>>Entity Long Label</u>	<u>(3010,0038)</u>	<u>3</u>	<u>User-defined label for delivered Beam.</u>
>Beam Description	(300A,00C3)	3	User-defined description for delivered Beam.
...			