

## DICOM Correction Proposal Form

Tracking Information - Administration Use Only	
Correction Proposal Number	CP-1046
STATUS	Assigned
Date of Last Update	2010/01/27
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Submission date	2010/01/27

Correction Number	CP-1046
Log Summary: RT Beams Delivery Instruction Continuation Metersets	
Type of Modification	Name of Standard
Addition	DICOM Supplement 74 (Utilization of Worklist in Radiotherapy Treatment Delivery)
<p>Rationale for Correction:</p> <p>When a previous scheduled UPS was canceled with partial completion, then the subsequent CONTINUATION treatment UPS must contain information as to where the treatment is to resume. Although this could be inferred from the contents of one or more RT Treatment Record instances characterizing the previous interrupted delivery or deliveries, it is considered more logical, less confusing, and potentially safer to specify this information directly in the RT Beams Delivery Instruction described in DICOM Supplement 74. This CP adds such capability to that IOD, and also the capability of specifying an end Meterset in cases when the continuation is filling in a 'treatment gap'. In cases where Meterset information may not be sufficient to fully specify a resumption point, exchange of treatment records can be used to reconstruct the exact nature of previous deliveries.</p>	
<p>Sections of documents affected</p> <p>DICOM Supplement 74 Frozen Draft, PS 3.3 and 3.6</p>	
Correction Wording:	

*In DICOM Supplement 74, PS 3.3, Annex C, Section C.8.8.aa (RT Beams Delivery Instruction Module), Table C.8.8.aa-1, add the following attribute after Applicator Description (300A,00CA):*

Attribute Name	Tag	Type	Attribute Description
Beam Task Sequence	(0074,1020)	1C	Sequence of items identifying the beams to be delivered and/or verified. Required if beams are to be delivered or verified in this treatment session. One or more items may be included in this sequence.
>Beam Task Type	(0074,1022)	1	Indication whether beam is to be verified, treated (delivered), or both. Enumerated Values: VERIFY = Beam verification only TREAT = Beam treatment only VERIFY_AND_TREAT = Beam verification and treatment
>Treatment Delivery Type	(300A,00CE)	1	Delivery Type of treatment. See Note 1. Enumerated Values: TREATMENT = normal patient treatment CONTINUATION = continuation of interrupted treatment
<b>&gt;Primary Dosimeter Unit</b>	<b>(300A,00B3)</b>	<b>1C</b>	<b>Measurement unit of machine dosimeter.</b> <b>Enumerated Values:</b> <b>MU = Monitor Unit</b> <b>MINUTE = minute</b> <b>NP = Number of Particles</b> <b>Required if Delivery Type (300A,00CE) is CONTINUATION, shall not be present otherwise</b>
<b>&gt;Continuation Start Meterset</b>	<b>(30xx,0120)</b>	<b>1C</b>	<b>Meterset within Beam referenced by Referenced Beam Number (300C,0006) at which treatment delivery starts, in units specified by Primary Dosimeter Unit (300A,00B3). Required if Delivery Type (300A,00CE) is CONTINUATION, shall not be present otherwise.</b>
<b>&gt;Continuation End Meterset</b>	<b>(30xx,0121)</b>	<b>1C</b>	<b>Meterset within Beam referenced by Referenced Beam Number (300C,0006) at which treatment delivery ends, in units specified by Primary Dosimeter Unit (300A,00B3). Required if Delivery Type (300A,00CE) is CONTINUATION, shall not be present otherwise.</b>
>Referenced RT Plan Sequence	(300C,0002)	1	Reference to a single RT Plan SOP Instance (whose UID is also supplied in the Input Information Sequence – see PS3.4) containing all the Beams and the Fraction Group referenced in this SOP Instance.
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*In DICOM Supplement 74, PS 3.6, Section 6, add the following new attributes:*

Tag	Name	VR	VM
<b>(30xx,0120)</b>	<b>Continuation Start Meterset</b>	<b>DS</b>	<b>1</b>
<b>(30xx,0121)</b>	<b>Continuation End Meterset</b>	<b>DS</b>	<b>1</b>

CP-1046  
RT Beams Delivery Instruction Continuation Metersets

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