DICOM Correction Item

Correction Number	CP 805

| Log Summary: Primary Fluence Mode | |

Type of Modification	Name of Standard
Addition	PS 3 2007

Rationale for Correction:

There is a new class of radiation therapy treatment machines where advanced delivery techniques are available for selection as part of the treatment beam definition. These techniques represent a different type of beam modification, as they modify the primary radiation fluence. For example, linear accelerators may have a stereotactic radiation delivery mode which allows use of either a special, high dose rate, flattening filter for small fields or a flattening filter free (FFF) mode where no flattening filter is present (fluence non-uniformity being compensated by use of intensity modulation), all for the same nominal beam energy. In order to allow unique identification of these modes, a new attribute is necessary to allow specification of the mode and an identification for the specific fluence-shaping mode used.

Sections of documents affected

PS 3.3

PS 3.6   Section 6

Correction Wording:

In PS 3.3, Section C.8.8.14 (RT Beams Module), Table C.8-50, add the following attribute after >Radiation Type (300A,00C6):

Attribute Name	Tag	Type	Attribute Description
>Radiation Type	(300A,00C6)	2	Particle type of Beam. Defined Terms: PHOTON ELECTRON NEUTRON PROTON
>Primary Fluence Mode Sequence	**(3002,0050)**	**3**	**Sequence defining whether the primary fluence of the treatment beam uses a non-standard fluence-shaping.**
>>Fluence Mode	**(3002,0051)**	**1**	**Describes whether the fluence shaping is the standard mode for the beam or an alternate.** **Enumerated Values:** **STANDARD = Uses standard fluence-shaping** **NON_STANDARD = Uses a non-standard fluence-shaping mode** **Only a single Item shall be permitted in this sequence.**
>>Fluence Mode ID	**(3002,0052)**	**1C**	**Identifier for the specific fluence-shaping mode.** **Required if Fluence Mode (3002,0051) has value NON_STANDARD.**

In PS 3.6, Section 6, add the following new attributes:

Tag	Name	VR	VM
(3002,0050)	**Primary Fluence Mode Sequence**	**SQ**	**1**
(3002,0051)	**Fluence Mode**	**CS**	**1**
(3002,0052)	**Fluence Mode ID**	**SH**	**1**