

DICOM Correction Item

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|---|---|
| Correction Number CP-487 | |
| Log Summary: RT Fixation Devices | |
| Type of Modification Omission | Name of Standard PS 3.3, PS 3.6 2004 |
| <p>Rationale for Correction:</p> <p>New defined terms are needed for Whole Body Pods and Rectal Balloon fixation devices. These devices are currently used in Ion Therapy and will likely be used in conventional therapy as well. In addition, pitch and roll angle attributes have been introduced for specifying and recording the pitch angle and roll angle of the device as manual established by the operator.</p> | |
| <p>Sections of documents affected</p> <p>PS 3.3, C.8.8 (Radiotherapy modules)</p> <p>PS 3.6 Section 6 (Registry of DICOM Data Elements)</p> | |
| Correction Wording: | |

In PS 3.3, C.8-48 (RT Patient Setup Module Attributes) add the following defined terms (bold) to the Fixation Device Type (300A,0192) attribute:

| Attribute Name | Tag | Type | Attribute Description |
|---------------------------|-------------|------|--|
| >Fixation Device Sequence | (300A,0190) | 3 | Introduces a sequence of Fixation Devices used in Patient Setup. One or more items may appear in this sequence. |
| ... | | | |
| >>Fixation Device Type | (300A,0192) | 1C | <p>Type of Fixation Device used during Patient Setup. Required if Fixation Device Sequence (300A,0190) is sent.</p> <p>Defined Terms:</p> <p>BITEBLOCK</p> <p>HEADFRAME</p> <p>MASK</p> <p>MOLD</p> <p>CAST</p> <p>HEADREST</p> <p>BREAST_BOARD</p> <p>BODY_FRAME</p> <p>VACUUM_MOLD</p> <p>WHOLE BODY POD</p> <p>RECTAL BALLOON</p> |

In PS 3.3, C.8-48 (RT Patient Setup Module Attributes), add the following attribute after the Fixation Device Position (300A,0198) attribute:

| Attribute Name | Tag | Type | Attribute Description |
|--|--------------------|----------|---|
| >Fixation Device Sequence | (300A,0190) | 3 | Introduces a sequence of Fixation Devices used in Patient Setup. One or more items may appear in this sequence. |
| ... | | | |
| >>Fixation Device Pitch Angle | (300A,0199) | 3 | The Fixation Device Pitch Angle, i.e. orientation of PITCHED FIXATION DEVICE coordinate system with respect to IEC PATIENT SUPPORT coordinate system (degrees). Pitching is the rotation around IEC PATIENT SUPPORT X-axis. |
| >>Fixation Device Roll Angle | (300A,019A) | 3 | The Fixation Device Roll Angle, i.e. orientation of ROLLED FIXATION DEVICE coordinate system with respect to IEC PITCHED FIXATION DEVICE coordinate system (degrees). Rolling is the rotation around IEC PATIENT SUPPORT Y-axis. |

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

| Tag | Name | VR | VM |
|--------------------|------------------------------------|-----------|----------|
| (300A,0199) | Fixation Device Pitch Angle | FL | 1 |
| (300A019A) | Fixation Device Roll Angle | FL | 1 |