DICOM Correction Item

<table>
<thead>
<tr>
<th>Correction Number</th>
<th>Name of Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP 921</td>
<td>PS 3.3, 3.4 2008</td>
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</tbody>
</table>

**Log Summary:** Pixel Padding Value shall only be present for images

**Type of Modification**
Clarification

**Rationale for Correction**
Pixel Padding Value should not be present if the instance is not an image, since its meaning is only defined for images.

Also, a note is added to clarify that Pixel Padding Value is not encoded in Presentation State instances, and the value in the referenced images is used.

**Sections of documents affected**
- PS 3.3 C.7.5.1
- PS 3.4 N.2.1.1

**Correction Wording:**

**Amend PS 3.3 C.7.5.1:**

**Table C.7-8**

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Tag</th>
<th>Type</th>
<th>Attribute Description</th>
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</thead>
<tbody>
<tr>
<td>…</td>
<td>…</td>
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<tr>
<td>Pixel Padding Value</td>
<td>(0028,0120)</td>
<td>1C</td>
<td>Single pixel value or one limit (inclusive) of a range of pixel values used in an image to pad to rectangular format or to signal background that may be suppressed. See C.7.5.1.1.2 for further explanation. Required if Pixel Padding Range Limit (0028,0121) is present and either Pixel Data (7FE0,0010) or Pixel Data Provider URL (0028,7FE0) is present. May be present otherwise only if Pixel Data (7FE0,0010) or Pixel Data Provider URL (0028,7FE0) is present.</td>
</tr>
</tbody>
</table>

**Notes:**
1. The Value Representation of this Attribute is determined by the value of Pixel Representation (0028,0103).
2. This Attribute is not used in Presentation State Instances; there is no means in a Presentation State to "override" any Pixel Padding.
Pixel Padding Value shall only be present for images

Value specified in the referenced images.

3. This Attribute does apply to RT Dose and Segmentation instances, since they include Pixel Data.

Amend PS 3.4 N.2.1.1:

N.2.1.1 Modality LUT
The Modality LUT operation applies only to grayscale values.

Notes:
1. In some cases, such as the CT Image Storage SOP Class, the same conceptual step as the Modality LUT is specified in another form, for example as Rescale Slope and Rescale Intercept Attributes in the CT Image Module, though the Modality LUT Module is not part of the CT Image IOD.

2. Image pixel values with a value of Pixel Padding Value (0028,0120) in the referenced image, or within the range specified by Pixel Padding Value (0028,0120) and Pixel Padding Range Limit (0028,0121) (if present in the referenced image) shall be accounted for prior to entry to the Modality LUT stage. See the definition of Pixel Padding Value in PS 3.3. Neither Pixel Padding Value (0028,0120) nor Pixel Padding Range Limit (0028,0121) are encoded in the Presentation State Instance.