Correction Number CP-1371

Log Summary: Length of TM permitted is too long

Name of Standard

PS3.5 2014b

Rationale for Correction:

The use of the ACR-NEMA colons between HH and MM and SS in TM VRs has been deemed to be not compliant, but the maximum length has not been reduced to match the required absence of the delimiters.

Correct this, accounting for even padding, since the permitted representation is odd length.

Correction Wording:
Amend DICOM PS3.5 - Data Structures and Encoding as follows:

Table 6.2-1. DICOM Value Representations

<table>
<thead>
<tr>
<th>VR Name</th>
<th>Definition</th>
<th>Character Repertoire</th>
<th>Length of Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM Time</td>
<td>A string of characters of the format HHMMSS.FFFFFF; where HH contains hours (range &quot;00&quot; - &quot;23&quot;), MM contains minutes (range &quot;00&quot; - &quot;59&quot;), SS contains seconds (range &quot;00&quot; - &quot;60&quot;), and FFFFFF contains a fractional part of a second as small as 1 millionth of a second (range &quot;000000&quot; - &quot;999999&quot;). A 24-hour clock is used. Midnight shall be represented by only &quot;0000&quot; since &quot;2400&quot; would violate the hour range. The string may be padded with trailing spaces. Leading and embedded spaces are not allowed.</td>
<td>&quot;0&quot;-.&quot;9&quot;, &quot;;&quot; and the SPACE character of Default Character Repertoire</td>
<td>16 bytes maximum</td>
</tr>
</tbody>
</table>

One or more of the components MM, SS, or FFFFFF may be unspecified as long as every component to the right of an unspecified component is also unspecified, which indicates that the value is not precise to the precision of those unspecified components.

The FFFFFF component, if present, shall contain 1 to 6 digits. If FFFFFF is unspecified the preceding ";" shall not be included.

Examples:

1. "070907.0705 " represents a time of 7 hours, 9 minutes and 7.0705 seconds.
2. "1010" represents a time of 10 hours, and 10 minutes.
3. "021 " is an invalid value.

**Note**

1. The ACR-NEMA Standard 300 (predecessor to DICOM) supported a string of characters of the format HH:MM:SS.frac for this VR. Use of this format is not compliant.
2. See also DT VR in this table.
3. The SS component may have a value of 60 only for a leap second.