### DICOM Correction Item

<table>
<thead>
<tr>
<th>Correction Number</th>
<th>Name of Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-271</td>
<td>PS 3.4 2001</td>
</tr>
</tbody>
</table>

**Log Summary:** Clarify C-Find behavior when there is no match

**Type of Modification**
Correction

**Rationale for Correction**
It is intended, but not explicitly stated, that when there are no matches to be returned during a query, then no Pending responses (with identifiers) are returned and only a final Success response is returned.

It is proposed to add a note clarifying this for general queries as well as worklist queries (modality and general-purpose).

**Sections of documents affected**
- PS 3.4 C.4.1.3
- PS 3.4 K.4.1.3

**Correction Wording:**

Amend the text in Annex C:

### C.4.1.3.1 Baseline behavior of SCP

All C-FIND SCPs shall be capable of processing queries which meet the requirements of the Hierarchical Search.

An SCP conveys the following semantics with a C-FIND response:

- The SCP is requested to perform a match of all the keys specified in the Identifier of the request, against the information it possesses, to the level specified in the request. Attribute matching is performed using the key values specified in the Identifier of the C-FIND request as defined in Section C.2.

- The SCP generates a C-FIND response for each match using the Hierarchical Search method. All such responses shall contain an Identifier whose Attributes contain values from a single match. All such responses shall contain a status of Pending.

- When all matches have been sent, the SCP generates a C-FIND response which contains a status of Success. A status of Success shall indicate that a response has been sent for each match known to the SCP.

**Note:** When there are no matches, then no responses with a status of Pending are sent, only a single response with a status of Success.

- The SCP shall generate a response with a status of Refused or Failed if it is unable to process the request. A Refused or Failed response shall contain no Identifier.

- If the SCP receives C-FIND-CANCEL indication before it has completed the processing of the matches it shall interrupt the matching process and return a status of Canceled.
Amend the text in Annex K:

K.4.1.3 C-FIND SCP Behavior

All C-FIND SCPs shall be capable of processing queries which meet the requirements of the "Worklist" Search (see K.4.1.3.1).

An SCP conveys the following semantics using the C-FIND requests and responses:

- The SCP is requested to perform a match of all the keys specified in the Identifier of the request, against the information it possesses. Attribute matching is performed using the key values specified in the Identifier of the C-FIND request as defined in Section K.2.
- The SCP generates a C-FIND response for each match using the "Worklist" Search method. All such responses shall contain an Identifier whose Attributes contain values from a single match. All such responses shall contain a status of Pending.
- When all matches have been sent, the SCP generates a C-FIND response which contains a status of Success. A status of Success shall indicate that a response has been sent for each match known to the SCP.

Notes:

1. No ID is contained in a response with a status of Success. For a complete definition, see PS 3.7.
2. When there are no matches, then no responses with a status of Pending are sent, only a single response with a status of Success.

- The SCP shall generate a response with a status of Refused or Failed if it is unable to process the request. A Refused or Failed response shall contain no Identifier.
- If the SCP receives C-FIND-CANCEL indication before it has completed the processing of the matches it shall interrupt the matching process and return a status of Cancel.