## DICOM Correction Item

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<th>Correction Number</th>
<th>CP-285</th>
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<td>Log Summary: Clarify behavior when C-MOVE association lost</td>
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<td>Type of Modification</td>
<td>Clarification</td>
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<tr>
<td>Name of Standard</td>
<td>PS 3.4 2001</td>
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### Rationale for Correction

A C-MOVE operation causes C-STOREs to occur on a separate association, but optional pending responses and a required final response are expected on the original association.

What should the C-MOVE SCP (acting as the C-STORE SCU) do if for some reason the original association is lost (e.g. network failure)? Clearly, it has no way to send further pending responses or a final response, nor to respond to C-MOVE cancel requests. However, should it continue some or all of the outstanding C-STORE operations? Some implementations do and some don’t and the standard is silent on the matter.

It is proposed to highlight that the behavior in such circumstances is undefined by adding a note.

### Sections of documents affected

- PS 3.4 C.4.2.3

### Correction Wording:

**Amend the text in Annex C:**

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### C.4.2.3 C-MOVE SCP Behavior

This section discusses both the baseline and extended behavior of the C-MOVE SCP.

#### C.4.2.3.1 Baseline Behavior of SCP

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

- The SCP shall identify a set of Entities at the level of the transfer based upon the values in the Unique Keys in the Identifier of the C-MOVE request. The SCP shall initiate C-STORE sub-operations for the corresponding storage SOP Instances. These C-STORE sub-operations shall occur on a different Association from the C-MOVE operation. The SCP of the Query/Retrieve Service Class shall serve as an SCU of the Storage Service Class.
- The SCP shall establish a new Association for the C-STORE sub-operations. A sub-operation is considered Failed if the SCP is unable to negotiate an appropriate presentation context for a given stored SOP Instance.
- The SCP shall initiate C-STORE sub-operations over the new Association for all stored SOP Instances related to the Patient ID, List of Study Instance UIDs, List of Series Instance UIDs, or List of SOP Instance UIDs depending on the Query/Retrieve level specified in the C-MOVE request.
- Optionally, the SCP may generate responses to the C-MOVE with status equal to Pending during the processing of the C-STORE sub-operations. These responses shall indicate the Remaining, Successful, Failed, and Warning C-STORE sub-operations.
— When the number of Remaining sub-operations reaches zero, the SCP shall generate a final response with a status equal to Success, Warning, Failed, or Refused. This response shall indicate the number of Successful sub-operations, the number of Failed sub-operations, and the number of sub-operations with Warning Status. The status contained in the C-MOVE response shall contain:

— Successful if all sub-operations were successful
— Warning if one or more sub-operations were successful and one or more sub-operations were unsuccessful or had a warning status
— Warning if all sub-operations had a warning status
— Failed or Refused if all sub-operations were unsuccessful

— The SCP may receive a C-MOVE-CANCEL request at any time during the processing of the C-MOVE. The SCP shall interrupt all C-STORE sub-operation processing and return a status of Canceled in the C-MOVE response. The C-MOVE response with a status of Canceled shall contain the number of Successful, Failed, and Warning C-STORE sub-operations. If present, the Remaining sub-operations count shall contain the number of C-STORE sub-operations which were not initiated due to the C-MOVE-CANCEL request.

Note: If the association on which the C-MOVE operation was issued is abnormally terminated, then it will not be possible to issue any further pending responses nor a final response, nor will C-MOVE-CANCEL requests be received. The behavior of the C-MOVE SCP acting as a C-STORE SCU is undefined in this condition. Specifically, whether or not any uncompleted C-STORE sub-operations continue is undefined.