### Rationale for Correction

One of the common “problems” with the query SOP classes is that the standard specifies that all matching of keys is case sensitive. It is often desirable to have case insensitive matches available especially for person name fields and since user interfaces commonly allow both upper and lower case input for the SCU and it is unknown in what case the SCP has data stored.

### Sections of documents affected

PS 3.4 – 1999 Sections C.2, C.4, C.5, C.6

### Correction Wording:

Amend PS 3.4-1999 Section C.2.2.2.1 and C.2.2.2.4 to change case sensitive rules for PN attributes.

### C.2.2.2.1 Single Value Matching

If the value specified for a Key Attribute in a request is non-zero length and if it is:

- a) not a date or time, contains no wild card characters
- b) a date or time, contains a single date or time with no "-"

then single value matching shall be performed. Only entities with values which match exactly the value specified in the request shall match. This matching is case-sensitive, except for Attributes with an PN Value Representation (e.g., Patient Name (0010,0010)) in which case it is implementation dependent and shall be specified in the conformance statement.

...  

### C.2.2.2.4 Wild Card Matching

If the Attribute is not a date, time, signed long, signed short, unsigned short, unsigned long, floating point single, floating point double, other byte string, other word string, unknown, attribute tag, decimal string, integer string, age string or UID and the value specified in the request contains any occurrence of an "*" or a "?", then "*" shall match any sequence of characters (including a zero length value) and "?" shall match any single character. This matching is case sensitive, except for Attributes with an PN Value Representation (e.g., Patient Name (0010,0010)) in which case it is implementation dependent and shall be specified in the conformance statement. See PS 3.5 for Value Representations.

Notes: 1. Wild card matching on a value of "*" is equivalent to universal matching.
2. The wild card matching method specified by DICOM might not be supported by some non-DICOM multi-byte character text processors.

Amend PS 3.4-1999 Section C.6.1.2.2.1 to add case-insensitive matching conformance requirements.

C.6.1.2.2.1 C-FIND SCP Conformance
An implementation which conforms to one of the SOP Classes of the Patient Root SOP Class Group shall support queries against the Query/Retrieve Information Model described in Section C.6.1.1 using the C-FIND SCP Behavior described in Section C.4.1.3.

An implementation which conforms to one of the SOP Classes of the Patient Root SOP Class Group as an SCP shall state in its Conformance Statement whether it supports Optional Keys. If it supports Optional Keys, then it shall list the Optional Keys which it supports.

An implementation which conforms to one of the SOP Classes of the Patient Root SOP Class Group as an SCP shall state in its Conformance Statement whether it supports Relational-queries. If it supports Relational-queries, then it shall also support extended negotiation.

An implementation which conforms to one of the SOP Classes of the Patient Root SOP Class Group as an SCP shall state in its Conformance Statement whether it supports case-insensitive matching for PN VR attributes and list attributes for which this applies.

Amend PS 3.4-1999 Section C.6.2.2.2.1 to add case-insensitive matching conformance requirements.

C.6.2.2.2.1 C-FIND SCP Conformance
An implementation which conforms to one of the SOP Classes of the Study Root SOP Class Group shall support queries against the Query/Retrieve Information Model described in Section C.6.2.1 using the C-FIND SCP behavior described in Section C.4.1.3.

An implementation which conforms to one of the SOP Classes of the Study Root SOP Class Group as an SCP shall state in its Conformance Statement whether it supports Optional Keys. If it supports Optional Keys, then it shall list the Optional Keys which it supports.

An implementation which conforms to one of the SOP Classes of the Study Root SOP Class Group as an SCP shall state in its Conformance Statement whether it supports Relational Search. If it supports Relational Search, then it shall also support extended negotiation.

An implementation which conforms to one of the SOP Classes of the Study Root SOP Class Group as an SCP shall state in its Conformance Statement whether it supports case-insensitive matching for PN VR attributes and list attributes for which this applies.

Amend PS 3.4-1999 Section C.6.3.2.2.1 to add case-insensitive matching conformance requirements.
C.6.3.2.2.1 C-FIND SCP Conformance

An implementation which conforms to one of the SOP Classes of the Patient/Study Only SOP Class Group shall support queries against the Query/Retrieve Information Model described in Section C.6.3.1 using the C-FIND Behavior described in Section C.4.1.3.

An implementation which conforms to one of the SOP Classes of the Patient/Study Only SOP Class Group as an SCP shall state in its Conformance Statement whether it supports Optional Keys. If it supports Optional Keys, then it shall list the Optional Keys which are supported.

An implementation which conforms to one of the SOP Classes of the Patient/Study Only SOP Class Group as an SCP shall state in its Conformance Statement whether it supports Relational Search. If it supports Relational Search, then it shall also support extended negotiation.

**An implementation which conforms to one of the SOP Classes of the Patient/Study Only SOP Class Group as an SCP shall state in its Conformance Statement whether it supports case-insensitive matching for PN VR attributes and list attributes for which this applies.**

Amend PS 3.4-1999 Section K.6.1.1.3.2 to add case-insensitive matching conformance requirements.

K.6.1.3.2 SCP Conformance

An implementation which conforms to the Modality Worklist SOP Class shall support queries against the Worklist Information Model described in Section K.6.2.1 of this Annex using the C-FIND SCP Behavior described in Section K.4.1.3 of this Part.

An implementation which conforms to the Modality Worklist SOP Class as an SCP shall state in its Conformance Statement whether it supports matching on Optional Matching Key Attributes. If it supports Type 3 Return Key Attributes, then it shall list the Optional Return Key Attributes which it supports.

**An implementation which conforms to the Modality Worklist SOP Class as an SCP shall state in its Conformance Statement whether it supports case-insensitive matching for PN VR attributes and list attributes for which this applies.**