Correction Number CP-1411

Log Summary: Reserved Group for Known Safe Private Elements

Name of Standard
PS3.2, PS3.5, PS3.15 2014b

Rationale for Correction:

Though most do not, private data elements may contain identifying information that needs to be removed during de-identification. Documentation of this is often not readily available.

For new private data elements, it is proposed that those that never contain identifying information be put in a group reserved for the purpose, so that de-identifiers can safely retain all data elements in that group without regard to private creator.

The choice of group E001 is made because no private data elements have ever been observed in this range to date. Only one group is needed since groups otherwise have no semantics attached and the size of the group is sufficient given that different creators can be used.

Correction Wording:
Amend DICOM PS3.5 section 7.8.1 as follows:

### 7.8.1 Private Data Element Tags

It is possible that multiple implementers may define Private Elements with the same (odd) group number. To avoid conflicts, Private Elements shall be assigned Private Data Element Tags according to the following rules.

a. ...

b. ...

c. ...

d. Elements with Tags (0001,xxxx), (0003,xxxx), (0005,xxxx), and (0007,xxxx) shall not be used.

e. **Elements with Tags (E001,xxxx) are reserved for Data Elements that are known by the creator to be safe from identity leakage as defined by PS3.15 E.3.10.**

...  

Amend DICOM PS3.15 section E.3.10 as follows:

### E.3.10 Retain Safe Private Option

By definition, Private Attributes contain proprietary information, in many cases the nature of which is known only to the vendor and not publicly documented.

However, some Private Attributes may be necessary for the desired application. For example, specific technique information such as CT helical span pitch, or pixel value transformation, such as PET SUV rescale factors, may only be available in Private Attributes since the information is either not defined in Standard Attributes, or was added to the DICOM Standard after the acquisition device was manufactured.

When this Option is specified in addition to an Application Level Confidentiality Profile, Private Attributes that are known by the de-identifier to be safe from identity leakage shall be retained, together with the Private Creator IDs that are required to fully define the retained Private Attributes; all other Private Attributes shall be removed.

**Whether or not an Attribute is known to be safe may be determined by:**

- its presence in Group (E001,xxxx), which is reserved for known safe private Attributes (see PS3.5 Section 7.8.1)
- its presence in Table E.3.10-1 Safe Private Attributes
- documentation in the Conformance Statement
- **some other means.**

When this Option is not specified, all Private Attributes shall be removed, as described in Table E.1-1.

...  

Amend DICOM PS3.2 section A.9.2 as follows:

### A.9.2 Data Dictionary of Private Attributes

Any private Attributes should be specified, including VR and VM, should be specified. **Whether or not each private Attribute is known to be safe to retain during de-identification (i.e., safe from identity leakage) should be specified.**

Private SOP Classes and Transfer syntaxes should be listed.