

DICOM Correction Item

Correction Number	CP-106
Log Summary: Clarify Media Conformance Requirements	
Type of Modification Clarification by addition of items	Name of Standard PS 3.2 - 1996
<p>Rationale for Correction</p> <p>The clear intent of Media Conformance as specified in PS 3.2 1996 is to allow devices that conform to different profiles to write to, update or read from the same piece of media. For this reason conformance to profiles is defined in terms of device conformance, not media conformance, and there is no record on the media as to what “profile” was used to write or update it.</p> <p>Accordingly PS 3.2 1996, section 7.2 states:</p> <p style="text-align: center;">7.2 DICOM MEDIA INTERCHANGE CONFORMANCE REQUIREMENTS</p> <p>An implementation claiming DICOM Media Interchange conformance shall:</p> <p>...</p> <ul style="list-style-type: none">- be able to gracefully ignore any Standard, Standard Extended, Specialized or Private SOP Classes which may be present on Storage Medium but are not defined in any of the Application Profiles to which conformance is claimed. <p style="text-align: center;">Note: There may be more than one Application profile used to create or read a File-set on a single physical medium (eg. a medium may have a File-set created with Standard and Augmented Application Profiles).</p> <p>...</p> <p>However, this statement alone is not sufficient to cover the situation in which different profiles might write the same SOP Class but with different Transfer Syntaxes, or where instances of the a SOP Class may be restricted in some way by one Profile beyond the restrictions in the IOD. For example, an XA instance might be written with the Basic Cardiac Angio profile and be restricted to a 512 matrix and in JPEG Lossless compressed TS, whereas an XA instance written with the General Purpose CD-R profile could be written uncompressed and with an arbitrary matrix size.</p>	
<p>These possibilities should be explicitly permitted or forbidden to ensure interoperability. It is proposed that they be explicitly permitted, as this is more in keeping with the intent of the standard and existing practice.</p>	
<p>Sections of document affected</p> <p>7.2.</p>	

Correction Wording:

Add to section 7.2 the bold underlined text:

- be able to gracefully ignore any Standard, Standard Extended, Specialized or Private SOP Classes which may be present on Storage Medium but are not defined in any of the Application Profiles to which conformance is claimed.

Note: There may be more than one Application profile used to create or read a File-set on a single physical medium (eg. a medium may have a File-set created with Standard and Augmented Application Profiles).

- be able to gracefully ignore SOP Classes which may be present on Storage Medium but are recorded in a Transfer Syntax not defined in any of the Application Profiles to which conformance is claimed.

Note: For example, a SOP Class recorded in an uncompressed Transfer Syntax would be ignored by an implementation claiming conformance to an Application Profile that defined the same SOP Class in a JPEG Compressed Transfer Syntax. The Transfer Syntax is recorded in the Basic Directory Information object in the mandatory Attribute (0004,1512) Referenced Transfer Syntax UID in File.

- be able to gracefully ignore SOP Classes which may be present on Storage Medium but are recorded with attribute values that do not comply with restrictions defined in any of the Application Profiles to which conformance is claimed.

Note: For example, a SOP Class recorded with a matrix size of 1024 would be ignored by an implementation claiming conformance to an Application Profile that defined the same SOP restricted to matrix sizes of 512. Such Attributes may or may not be recorded in the Basic Directory Information object, and hence parsing of the file containing the SOP Class instance may be required.