

DICOM Correction Proposal

STATUS	Letter Ballot
Date of Last Update	2023/11/13
Person Assigned	David Clunie
Submitter Name	Krister Valtonen (krister.valtonen@sectra.com)
Submission Date	2023/04/27

Correction Number	CP-2304
Log Summary:	Use the Group Number term correctly
Name of Standard	PS3.5
Rationale for Correction:	Several parts of chapter 5 mention Group Numbers but specifies them using Data Element Tags. This is confusing as it mixes the concepts of Group Number and Data Element Tag. Several other places in chapter 5 refers to Group Numbers correctly.
Correction Wording:	

In PS 3.5, modify 3.10 DICOM Data Structures and Encoding Definitions

Repeating Group Standard Data Elements within a particular range of Group Numbers where Data Elements that have identical Element Numbers have the same meaning within each Group (and the same VR, VM, and Data Element Type). Repeating Groups shall only exist for Curves and Overlay Planes (Group Numbers {50xx,eeee} and {60xx,eeee}, respectively and are a remnant of older versions of this Standard.

In PS 3.5, modify 7.1 Data Elements

- Standard Data Elements have an even Group Number that is not ~~(0000,eeee), (0002,eeee), (0004,eeee), or (0006,eeee)~~ **0000, 0002, 0004 or 0006**.
- Private Data Elements have an odd Group Number that is not ~~(0001,eeee), (0003,eeee), (0005,eeee), (0007,eeee), or (FFFF,eeee)~~ **0001, 0003, 0005, 0007 or FFFF**. Private Data Elements are discussed further in Section 7.8.

In PS 3.5, modify 7.6 Repeating Groups

Multiple Overlay Planes and Curves are often associated with a single Image (see PS3.3). Standard Data Elements with even Group Numbers ~~(5000-501E,eeee)~~ **5000-501E** represent Curves, while Data Elements with even Group Numbers ~~(6000-601E,eeee)~~ **6000-601E** represent Overlay Planes. Both of these ranges of Group numbers are known as Repeating Groups. This use of group numbers is a remnant of older versions of this Standard, which associated a semantic meaning with particular Groups.

In each of these ranges of Group Numbers, Standard Data Elements that have identical Element Numbers have the same meaning within each Group (and the same VR, VM, and Data Element Type).

The notation (50xx,eeee) and (60xx,eeee) are used for the Group Number in Data Element Tags when referring to a common Data Element across these groups (see PS3.6). Groups ~~(50xx,eeee)~~**50xx** and ~~(60xx,eeee)~~**60xx** are called Repeating Groups because of these characteristics.

Repeating Groups shall only be allowed in the even Groups ~~(6000-601E,eeee)~~**6000-601E** and even Groups ~~(5000-501E,eeee)~~**5000-501E** cases. In the future, Data Elements with VRs of SQ shall be used to serve a similar purpose.

Note

Private Groups in the odd Groups ~~(5001-501F,eeee)~~**5001-501F** and ~~(6001-601F,eeee)~~**6001-601F** may still be used, but there is no implication of repeating semantics, nor any implied shadowing of the standard repeating groups.