### Audio Sample Data Value Representation clarification

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<th>CP-144</th>
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<td>Type of Modification</td>
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#### Rationale for Correction

Audio Sample Data (50xx,200C) is specified in PS 3.6 to have a VR of OW/OB.

Audio Sample Data (50xx,200C) is specified in PS 3.3 C.10.3 to contain 8 or 16 bit two's complement values as specified in Audio Sample Format (50xx,2002).

It is not specified which VR to use under what circumstances. There are no rules in PS 3.5 as there are for curves, overlays and pixel data.

The proposed changes here specify that the VR shall depend on Audio Sample Format (50xx,2002), and be OB if 8 bit values and OW if 16 bit.

Since the only Implicit VR Transfer Syntax available is Little Endian this has the same effect whether one considers a 2 byte integer is encoded as OB or whether it is written as a little endian OW, i.e. the least significant byte is encoded first in the stream.

#### Sections of documents affected

PS 3.5 A.1,A.2,A.3,A.4

#### Correction Wording:
Amend PS 3.5-1998 Section A to add new rules for (50xx,200C) VR.

A.1 DICOM IMPLICIT VR LITTLE ENDIAN TRANSFER SYNTAX

... Data Element (50xx,200C) Audio Sample Data has the Value Representation OB when AudioSample Format (50xx,2002) specifies 8-bit values, and OW encoded in Little Endian when 16 bit values are specified. See the specification of the Audio Module in PS 3.3.

A.2 DICOM LITTLE ENDIAN TRANSFER SYNTAX (EXPLICIT VR)

... Data Element (50xx,200C) Audio Sample Data has the Value Representation OB when AudioSample Format (50xx,2002) specifies 8-bit values, and OW encoded in Little Endian when 16 bit values are specified. See the specification of the Audio Module in PS 3.3.

A.3 DICOM BIG ENDIAN TRANSFER SYNTAX (EXPLICIT VR)

... Data Element (50xx,200C) Audio Sample Data has the Value Representation OB when AudioSample Format (50xx,2002) specifies 8-bit values, and OW encoded in Big Endian when 16 bit values are specified. See the specification of the Audio Module in PS 3.3.

A.4 TRANSFER SYNTAXES FOR ENCAPSULATION OF ENCODED PIXEL DATA

... Data Element (50xx,200C) Audio Sample Data has the Value Representation OB when AudioSample Format (50xx,2002) specifies 8-bit values, and OW encoded in Little Endian when 16 bit values are specified. See the specification of the Audio Module in PS 3.3.