

DICOM Correction Item

Correction Number		CP-288
Log Summary: Clarify Unlimited Text VR encoding in figure		
Type of Modification	Name of Standard	
Clarification	PS 3.5 2001	
Rationale for Correction		
The figure captions were not updated when UT VR was added.		
Sections of documents affected		
PS 3.5 7.1		
Correction Wording:		

Correct PS 3.5 Figures in section 7.1:

7.1.2 DATA ELEMENT STRUCTURE WITH EXPLICIT VR

When using the Explicit VR structures, the Data Element shall be constructed of four consecutive fields: Data Element Tag, VR, Value Length, and Value. Depending on the VR of the Data Element, the Data Element will be structured in one of two ways:

- for VRs of OB, OW, SQ and UN the 16 bits following the two character VR Field are reserved for use by later versions of the DICOM Standard. These reserved bytes shall be set to 0000H and shall not be used or decoded (Table 7.1-1). The Value Length Field is a 32-bit unsigned integer. If the Value Field has an Explicit Length, then the Value Length Field shall contain a value equal to the length (in bytes) of the Value Field. Otherwise, the Value Field has an Undefined Length and a Sequence Delimitation Item marks the end of the Value Field.
- for VRs of UT the 16 bits following the two character VR Field are reserved for use by later versions of the DICOM Standard. These reserved bytes shall be set to 0000H and shall not be used or decoded. The Value Length Field is a 32-bit unsigned integer. The Value Field is required to have an Explicit Length, that is the Value Length Field shall contain a value equal to the length (in bytes) of the Value Field.
 - Note: VRs of UT may not have an Undefined Length, ie. a Value Length of FFFFFFFFH.
- for all other VRs the Value Length Field is the 16-bit unsigned integer following the two character VR Field (Table 7.1-2). The value of the Value Length Field shall equal the length of the Value Field.

Table 7.1-1
DATA ELEMENT WITH EXPLICIT VR OF OB, OW, SQ, OR UN, OR UT

Tag		VR		Value Length	Value
Group Number (16-bit unsigned integer)	Element Number (16-bit unsigned integer)	VR (2 byte character string) of "OB", "OW", "SQ", or "UN", or UT	Reserved (2 bytes) set to a value of 0000H	32-bit unsigned integer	Even number of bytes containing the Data Element Value(s) encoded according to the VR and negotiated Transfer Syntax. Delimited with Sequence Delimitation Item if of Undefined Length.
2 bytes	2 bytes	2 bytes	2 bytes	4 bytes	'Value Length' bytes if of Explicit Length

Table 7.1-2
DATA ELEMENT WITH EXPLICIT VR OTHER THAN OB, OW, SQ OR UN AS SHOWN IN TABLE 7.1-1

Tag		VR	Value Length	Value
Group Number (16-bit unsigned integer)	Element Number (16-bit unsigned integer)	VR (2 byte character string)	(16-bit unsigned integer)	Even number of bytes containing the Data Element Value(s) encoded according to the VR and negotiated Transfer Syntax.
2 bytes	2 bytes	2 bytes	2 bytes	'Value Length' bytes