

Release Notes for DICOM PS 3 – 2008.

2008/01/23

The following changes have been made relative to the published PS 3 2007 standard, by incorporating the changes specified in the supplements and correction items.

The Final Text of all applied Supplements and Correction Proposals is available at:

<ftp://ftp.nema.org/medical/dicom/final/>

Changes to Parts

Part 1

- Add PS 3.17 and PS 3.18 to section 6.1

Part 2

- Sup 107 – done
- Sup 110 – done
- Sup 114 – done
- Sup 116 – done
-
- CP 658 – done
- CP 708 – done
- CP 784 – done

Part 3

- A.1.4 Overview of the Composite IOD Module Content – delete redundant rows with no content left over from previous retirements
- Fixed incorrect Concatenation UID element number
- Fixed incorrect Patient ID tag number
- Fixed incorrect Compensator Type tag number
- Fixed section reference in Table C.8-26 for Referenced Image Sequence (0008,1140) from C.8.7.1.1.12 to C.8.7.1.1.13
- Fix inconsistent name of (0018,5020) ... one place Preprocessing Function (US) and another Processing Function (NM) – use the latter, as it is in Part 6, and as was intended by Sup 7 changes
- Remove redundant qualifier “repeating” in “sequence of repeating items” wherever it occurs
- Changed prohibition on inclusion to “Softcopy” Presentation LUT Module in A.33.3.2 and A.33.4.2
- Fix table reference in C.10.9.1.5
- Fix incorrect tags in C.7.1.2.1 for Specimen Accession Number and Specimen Identifier

- In C.23.4.2 Hanging Protocol Selector Attribute Value Macro, the LT, ST and UT selector value attributes can only have a single value, by definition of the VR (anticipate CP 813)
- Fixed reference to image pixel module rather than macro in Spectroscopy and Raw data directory records in Table F-27 and F-28
- Make capitalization of “X-Ray” consistent
- Make capitalization of “DateTime” in element names consistent
-
- Sup 107 – done
- Sup 110 – done (NB. Ophthalmic Frame Location Macro is not referenced in functional group macros table)
- Sup 114 – done
- Sup 116 – done
- Sup 127 – done
-
- Fix missing General Series ‘M’ for Spatial Registration and Fiducials in Table A.1-2 to match A.39.1-1 and A.40.1-1 and Sup 73 (Note that Deformable Registration IOD does not include the General Series Module).
- CP 617 – done
- CP 666 – done
- CP 668 – done
- CP 682 – done
- CP 683 – done
- CP 684 – done
- CP 685 – done
- CP 688 – done
- CP 690 – done
- CP 692 – done
- CP 693 – done
- CP 695 – already done by CP 666
- CP 697 – done
- CP 699 – done
- CP 700 – done (and also applied SOP Instance Reference Macro everywhere else appropriate)
- CP 701 – done
- CP 702 – done
- CP 703 – done
- CP 704 – done
- CP 705 – done
- CP 706 – done (except for Metabolite Map Code Sequence – conflicts with CP 690 – use the CP 690 choice; also, this puts Purpose of Reference Code Sequence in X-Ray Image Module back from Type 2 to Type 3, as it was supposed to be per CP 424)
- CP 710 – done
- CP 711 – done
- CP 713 – done
- CP 714 – done

- CP 715 – done
- CP 716 – done
- CP 717 – done
- CP 718 – done
- CP 719 – done
- CP 720 – done
- CP 721 – done (also included General Accessory Sequence in RT Ion Beams Session Record; did not add it to RT Image Module).
- CP 722 – done
- CP 723 – done
- CP 727 – done
- CP 730 – done
- CP 731 – done
- CP 734 – done
- CP 737 – done
- CP 740 – done
- CP 741 – done
- CP 742 – done
- CP 744 – done
- CP 746 – done
- CP 747 – done
- CP 748 – done
- CP 749 – done
- CP 751 – done
- CP 754 – done
- CP 755 – done
- CP 761 – done
- CP 762 – done
- CP 763 – done
- CP 764 – done
- CP 765 – done (update incorrect tags for focal spot and filter type)
- CP 766 – done
- CP 770 – done (and also removed various redundant instances of “required if a sequence item is present)
- CP 771 – done
- CP 772 – done (left the new macro in section C.17.2.1 rather than moving to section 10, otherwise the visibility of the other deltas to this table from other CPs would be lost)
- CP 773 – done
- CP 774 – done
- CP 775 – done
- CP 776 – done
- CP 777 – done
- CP 778 – done
- CP 779 – done
- CP 780 – done

- CP 783 – done
- CP 784 – done
- CP 785 – done
- CP 788 – done
- CP 790 – done
- CP 791 – done
- CP 792 – done
- CP 793 – done
- CP 794 – done
- CP 795 – done
- CP 796 – done

Part 4

- Make capitalization of “DateTime” in element names consistent
-
- Sup 107 – done
- Sup 110 – done
- Sup 114 – done
- Sup 116 – done
-
- CP 692 – done
- CP 684 – done
- CP 696 – done
- CP 705 – done
- CP 715 – done (used “not allowed” for N-SET in F.11.2-1)
- CP 730 – done
- CP 748 – done
- CP 784 – done

Part 5

- CP 707 – done
- CP 714 – done
- CP 726 – done
- CP 745 – done
- CP 758 – done

Part 6

- Add retired (0028,0020) ... no such standard data element but allegedly (mis)used by some vendor, so mark as retired so as not to assign it in future
- Mark (0018,9096) as retired – was typo in Sup 49 that is in reality (0018,9069) – better to never re-use it
- Mark data elements as retired if no longer used because of retirement of IODs/Modules/Services (or if they were never used at all and included in supplements erroneously)
- Selector LT, ST and UT VM must be 1, by definition of the VR (anticipate CP 813)

- Rename (0004,0000) from generic “Group Length” to “File Meta Information Group Length”
- Include all trial and retired data elements so as to prevent inadvertent reuse, and make consistent the naming of such elements, distinct from the names of unretired elements.
- Make capitalization of “X-Ray” consistent
- Make capitalization of “DateTime” in element names consistent
- Make capitalization of “n” in VM column consistent (always lower case)
-
- Sup 107 – done
- Sup 110 – done
- Sup 114 – done
- Sup 116 – done
-
- CP 666 – done
- CP 684 – done
- CP 692 – done
- CP 698 – done
- CP 699 – done
- CP 715 – done
- CP 721 – done
- CP 727 – done
- CP 744 – done
- CP 747 – done
- CP 748 – done
- CP 762 – done
- CP 763 – done
- CP 764 – done
- CP 765 – done
- CP 784 – done
- CP 792 – done
- CP 793 – done
- CP 796 – done

Part 7

- Rename (0000,0000) from generic “Group Length” to “Command Group Length”
-
- CP 691 - done

Part 8

- Unchanged

Part 10

- Rename (0004,0000) from generic “Group Length” to “File Meta Information Group Length”
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- Sup 114 – done
-
- CP 732 – done
- CP 745 – done

Part 11

- CP 686 – done

Part 12

- Unchanged

Part 14

- Unchanged

Part 15

- Sup 114 – done
- Sup 116 – done

Part 16

- Make capitalization of “DateTime” in element names and code meanings consistent
-
- Sup 107 – done
- Sup 110 – done
- Sup 116 – done
- Sup 127 – done
-
- CP 622 – done
- CP 623 – done
- CP 637 – done
- CP 679 – done
- CP 687 – done (and make sure that old rows in TID 10002 are removed)
- CP 689 – done
- CP 712 – done
- CP 713 – done
- CP 722 – done
- CP 724 – done
- CP 728 – done
- CP 730 – done
- CP 736 – done
- CP 738 – done
- CP 751 – done
- CP 752 – done
- CP 756 – done
- CP 759 – done
- CP 782 – done
- CP 786 – done

- CP 787 – done
- CP 798 – done

Part 17

- Make capitalization of “DateTime” in element names consistent
-
- Sup 107 – done
- Sup 110 – done
- Sup 127 – done
-
- CP 668 – done
- CP 679 – done
- CP 694 – already done
- CP 730 – done

Part 18

- Unchanged

Supplements Incorporated

Sup 107 – Substance Administration Information Services

Sup 110 – Ophthalmic Tomography Image Storage SOP Class

Sup 114 – DICOM Encapsulation of CDA

Sup 116 – X-Ray 3D Storage SOP Class

Sup 127 – CT Radiation Dose Reporting (Dose SR)

Correction Items Incorporated

CP 617 – Support for Patient Positioner Pitch and Roll Angles

CP 622 – Additional isotopes and radiopharmaceuticals for NM

CP 623 – Additional isotopes and radiopharmaceuticals for PET

CP 637 – Additions to Anatomical Terms and Projections

CP 658 – Conformance Statement Introduction Improvements

CP 666 – Gated Cardiac and Respiratory synchronization in enhanced IODs

CP 668 – Use transverse not axial for cross-sectional images

CP 679 – Corrections and Additions to CT/MR Cardiovascular SR

CP 682 – Align description annotation attribute enhanced XA/XRF

CP 683 – Dimension Label incorrect place in Table C.7.6.17-1

CP 684 – Archive flag for MPPS

CP 685 – Consistent defined term for elliptical Coverage of k-Space

CP 686 – Remove existing references to media interchange option

CP 687 – Dose Reporting for Mammography

CP 688 – Specify Sequence contents for DICOMDIR records

CP 689 – Additional terms for CID 4033

CP 690 – Define number of items in Metabolite Map Code Sequence

CP 691 – Clarify Additional Command Elements
CP 692 – Add Pixel Padding Value Range Limit attribute
CP 693 – Border Density Correction
CP 694 – Wrong references in PS 3.17 Annex J
CP 695 – Respiratory Interval Time Type is wrong
CP 696 – Undefined Query keys on Study Level C-FIND / G-GET
CP 697 – Frame Increment Pointer for single-frame images
CP 698 – Image Type VM should be two or more
CP 699 – PS2 compression data elements reused for calibration
CP 700 – Rename SOP Instance Reference Macros that have different content
CP 701 – Person Identification macro conditions
CP 702 – Author Observer Sequence multiplicity
CP 703 – Include Series Description, Date, Time in SR IODs
CP 704 – Use Request Attributes macro and add Performed Procedure Step Summary macro
CP 705 – ICC profiles for Basic Color Print
CP 706 – Specify number of sequence items when missing
CP 707 – Retire group lengths
CP 708 – Remove Patient/Study Only from conformance example
CP 710 – Make Specimen Identification conditional for microscopy
CP 711 – Editorial change for figure in C.7.2.1
CP 712 – Update reference for CID 3717
CP 713 – Add Bone Densitometry Modality codes
CP 714 – Clarify DT value representation
CP 715 – Add Service Episode ID
CP 716 – Stereometric Relationship Series Information Missing
CP 717 – RT Clarification of Compensator Rows and Columns
CP 718 – Correction of description of tag (300A,00F7) in RT Ion Beam module
CP 719 – Leaf Jaw Positions
CP 720 – RT Typo in Tag for Compensator Type
CP 721 – Addition of General Accessory Sequence to RT Plan
CP 722 – Add cross-reference between Body Part Examined and Anatomic Region
CP 723 – Internationalize special needs description
CP 724 – Add Terms to Calculated Value & Methods CIDs
CP 726 – Allow leading spaces in PN VR components
CP 727 – Correct duplicate responsible organization definition
CP 728 – Add cardiology report titles to CID 7000
CP 730 – Clarify SNOMED coding scheme designators
CP 731 – Clarify use of MPPS Referenced Image Sequence
CP 732 – Clarify allowed use of file links
CP 733 – Modify Hemodynamic Measurement Group template
CP 734 – Additional Treatment Positions for Ion Therapy
CP 736 – TID 4023, CID 6048 updates
CP 737 – Revise EPS sampling parameters
CP 738 – Add Context Group for type of multiframe subset
CP 740 – Evidence sequence references in SR and KOS includes presentation states

CP 741 – Correct Table F.4-1 references
CP 742 – Clarification of Slice Location attributes
CP 744 – Add diffusion b matrix
CP 745 – Transfer Syntax UID not allowed outside file meta information
CP 746 – Conditions under which Pixel Spacing may be zero
CP 747 – Add clinical trial series identifier and description
CP 748 – Rename Image Position to Image Box Position
CP 749 – Modality for reports, requests and other documents
CP 751 – Add coding scheme designator for RadLex
CP 752 – Update reference to HL7 OID registry for coding schemes
CP 753 – Correct Concatenation UID element number
CP 754 – Add Display Shutter Module to CR IOD
CP 755 – Correct Patient ID tag
CP 756 – Add general area and volume calculation methods to SR templates
CP 758 – Clarify encoding rules for Private Sequences
CP 759 – Update Cardiovascular Patient History
CP 761 – Clarify Pixel Spacing attribute condition within Basic Pixel Spacing Calibration Macro
CP 762 – Add Waveform Presentation attributes
CP 763 – CT Calibration Factors for the Mass Score of the Calcium Scoring evaluation
CP 764 – CT Phantom for CTDI Dose Measurement
CP 765 – CT system with multiple X-Ray sources (update incorrect tags for focal spot and filter type)
CP 766 – CT Isocenter
CP 770 – Remove redundant sequence attribute condition example
CP 771 – Clarify rendering of window values present in images
CP 772 – Archive flag for GP-PPS
CP 773 – C-arm Positioner Tabletop Relationship Enumerated Values
CP 774 – Correct Presentation State frame reference condition
CP 775 – Clarify Pixel Padding Value and Range Limit Conditions
CP 776 – Remove redundant conditions within sequences
CP 777 – Specify which attributes with unsatisfied conditions may be present otherwise
CP 778 – Correct conditions on Pixel Aspect Ratio
CP 779 – Correct conditions on Dimension Organization UID
CP 780 – Correct conditions in Palette Color Lookup Table Module
CP 782 – Add Device as Observation Subject
CP 783 – Typos and Clarifications in Digital Signature
CP 784 – Change Contrast Allergies to simply Allergies
CP 785 – Make Modality and VOI LUTs Conditional in BSPS
CP 786 – Typo in TID 5014
CP 787 – Add Procedure Phase to Arterial Analysis
CP 788 – Wrong reference in PS3.3 section C9.3.1.1
CP 790 – Unscheduled Reason for Requested Procedure for Mammography
CP 791 – RT Block/Compensator Transmission and Thickness
CP 792 – RT Brachy Source Direction Vector
CP 793 – RT Compensator Description

CP 794 – Clarification of Ion Control Point Sequence

CP 795 – RT Leaf Position Note

CP 796 – RT ROI Materials Description

CP 798 – Typo in CID 3472