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MINUTES

WORKING GROUP TWENTY-ONE (Computed Tomography)

Version 2

Date & Time: Wednesday, January 19, 2022
12:00-1:30pm US EST

Presiding Officers: Till Hoenig, Co-Chair, Vendor
Shuai Leng, Co-Chair, User
wg21chairs@dicomstandard.org

Secretary: Shayna Knazik, DICOM/MITA

Voting Members Present:	**Represented by:**
AAPM	Kai Yang
AAPM/Mayo Clinic	Shuai Leng
Canon	Kevin O'Donnell
DICOM/MITA	Shayna Knazik
Johns Hopkins University	Mahadevappa Mahesh
Philips	Shlomo Gotman
Siemens Healthineers	Till Hoenig

Voting Members Not Present:	**Represented by:**
*ACR	Paul Armstrong Hill
*GE Healthcare	Hervé Hoehn
*PixelMed Publishing	David Clunie
*United Imaging Healthcare	Adam Chandler

*Not present at two consecutive meetings and therefore not counted for quorum during this tcon

Others (Observers & Alt. Voting) Present:	**Represented by:**
AAPM	Nick Bevins, Observer
GE Healthcare	Steve Nichols, Observer
Philips	Nikhilesh Sonar, Observer

1. **Opening**
   → The teleconference was called to order and a quorum was present.
   → DICOM antitrust and patent guidelines were reviewed.
   → The agenda was reviewed and approved.

→ The minutes from November 17, 2021 were reviewed and approved by the group.

2. WG-21 Correction Proposals (CPs) Status

CP#	Submission Date	Submitter	Affects DICOM Parts	Assignee	Status	Description	Coded status
1196	2011-11-30	D. Clunie	Part 3	D. Clunie	Voting Packet	Add phantom-specific Total DLP Values to allow for Head and Body in same RDSR scope of accumulation	CPack-115
1915	2019-02-16	Hoenig	Part 3	Nolte	Suspended	Adapt definition of FocalSpot (0018,1190) to comply with IEC60336 section 8.3	n/a
2097		Hoenig	Part 3	Nolte		New ImageType(s) for Multi-energy CT Acquisition: ENERGY_VRPROP_WT (formerly treated in CP2010)	Terminate

3. Additional public attribute for CT images, addressing the context "(User selectable) parameter that determines the tube current time product relevant for the image quality"

→Users mentioned that these changes have been needed for a while. Discussions on generic names/descriptions and specific names/implementations from each vendor. Shuai said that AAPM has a Working Group that has developed a CT terminology Lexicon which includes most relevant parameters that this CP aims to include. This could be a starting point collecting parameters for the CP. He also shared the link:

https://www.aapm.org/pubs/CTProtocols/documents/CTTerminologyLexicon.pdf

Kevin mentioned that it is important to note difference between an image quality metric (e.g. MTF, NPS, Detectability etc) versus algorithm/image quality parameters. Group clarified that this CP aims for imaging parameters that affect image quality, not image quality metric. He also shared this link: https://dicom.nema.org/medical/dicom/current/output/chtml/part15/sect_E.3.10.html#table_E.3.10-1

→First thing to do is to expand the rationale section

→Second is to de-populate the CID and populate a working table of vendor info. It would also be helpful to reach out to the MITA CT group, then the group will discuss a strategy.

Till will care for both action items together with Steve Nichols and Kevin.

4. Image Type for MultiEnergy Enhanced CT images - CP from Steve Nichols

→ Steve presented CP-2189 to WG-06 last week. There was some discussion on relaxing the requirements of Image Type which WG-06 didn't like. Steve will look around Part 17 and reach out to Wim for some basis/rationale on what MR has done to help with discussion at the next meeting.

5. New CP: "Table C.11.1.1.2.1-1. Recommended Rescale Type Assignments for Multi-energy CT Image" inconsistent

→Table C.11.1.1.2.1-1, introduced with Sup188, is partly inconsistent and should be re-edited. The group provided feedback on the CP draft (from Till after initial sync with D. Clunie). After some discussion, it was suggested to send it to WG-06 for feedback after some final small adjustments (rationale, use UCUM where possible).

6. **Dose Management: Patient Protocol (Black Image) vs. RDSR**
   →Not discussed. On the next call, group to discuss Kevin's draft Dose Display CP for IHE Rad which describes the "Summary Display Option" and the "EMR Extract Option".

7. **WG-06 requested WG-21 to review technical content of HL7 imaging procedure radiation exposure project**
   https://confluence.hl7.org/display/IMIN/Radiation+Dose+Summary+for+Diagnostic+Procedures+on+FHIR
   →Not discussed. This will be incorporated based on what we come up with for item 6 (Dose Management: Patient Protocol (Black Image) vs. RDSR).

8. **CT IOD for standing imaging from Dan Farber**
   →Not discussed. On the next call, group to discuss with Kevin how to proceed with the draft CP/potential New Work Item Proposal.

9. **Old or New Business**
   →New CP by Siemens CT: "Extend Table E.3.10-1. Safe Private Attributes" – on standby while Siemens consolidates.
   →Dose metrics display in fluoroscopy – on standby

10. **Upcoming meetings:**
    →WG-21 usually meets the 3rd Wednesday of each month from 12-1pm US Eastern. Till can't make the next call scheduled for **February 16, 2022 from 12-1pm US Eastern** so the group determined that February 23rd would work better. We will also make it another 90-minute call.

11. **Adjournment:** the call was adjourned at 1:36pm US EST.

Prepared and submitted by Shayna Knazik
Reviewed by counsel 3/14/22