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Minutes

DICOM WORKING GROUP TWENTY EIGHT (Physics Strategy)

Date: May 12 and 13, 2014

Place: Pre-SIIM
Courtyard Long Beach Downtown 500
East First Street, California 90802 USA

Presiding Officers: Annalisa Trianni Co-Chair
Donald Peck Co-Chair

Secretary: Lynne Fairobent

May 12th: Meeting called to order: 9:00 AM adjourned: 5:00 PM WG-28 only.
May 13th: Meeting called to order: 9:00 AM adjourned: 5:00 PM Joint WG-28 & WG-02 .

Voting Members Represented:

AAPM – Donald Peck
ACR – Bill Pavlicek
EFOMP – Annalisa Trianni
GE Healthcare - Francisco Sureda
JIRA(Toshiba) – Makato Suzuki – only May 13th
Siemens Healthcare - Heinz Blendinger

Voting Members Not Represented:

Philips Healthcare - Mark Pepelea

Alternate Voters, Observers, Guests Present

PACSHealth – Steve Massey
Emory University – Ioannis Sechopoulos
PACSHealth – Daniel Tuffelmire

Preliminary Events

- Identify participants.

- Review the agenda and revise as needed
- Review MITA anti-trust rules
- Review minutes from the meeting at ESR on March 5, 2014

1. Review progress on joint AAPM/EFOMP TG246 White Paper on Patient Dose determination from radiation exposures during diagnostic and interventional studies

Bill Pavlicek reviewed the progress of TG-246. First draft to be completed in July at the AAPM annual meeting. The data from this TG Report will be used to validate/enhance the work done on the Patient Radiation Dose Structured Report.

2. Develop Patient Radiation Dose Structured Report (PRDSR)

Worked on the following templates:

- Organ dose
- Patient model template
- Procedure
- Template outline

Current templates have the basic items needed. All members will review the templates developed at this meeting and add description of the item, dependence on other items and add any items/data missing. It is planned that at the fall meeting a more detailed version of the Supplement will be developed from the comments to allow submission to Working Group 6 in the next 6 months.

Action Items: The idea for the output of skin dose mapping needs to be investigated. This was discussed briefly with WG11 member at adjacent meeting and current presentation State work will not include surface segmentation objects. It was suggested the PRDSR may need to include an IOD for the storage of the dose mapping.

Action Item: Donald Peck to combine templates into structured report work item before next meeting to make review and develop of the Supplement easier to complete.

3. WG-02 Projection X-Ray joint discussion

- Review progress of AAPM TG (61, 180, 238) working on the 3D-C Arms with Volumetric Capability and explore the impact on the RDSR. – No change
- Eurados, AAPM and EFOMP are working in common area of projection X-Ray; more coordination is desirable, but no further information available at the time of this meeting.
- New CP to update the Annex AA of Part 17 (owner: WG-02) and a more general White Paper for on implementing DICOM RDSR for CR and/or DR Sec. note: See also WG02 minutes from May 14, 2014

- New CP to clarify Organ Dose in Mammography (owner: WG-28) - Table C.8.33 was assigned to Ioannis Sechopoulos to clarify the meaning and add any new attributes. Need to send an email to WG-15 on what is planned and ask for input.

4. Review Dose SR extensions and potential requirements for Patient Dose SR

Postponed until further work on the Patient Radiation Dose Structured Report is completed.

5. Operator Dose SR Work Item

- Review any additional requests for an Operator Dose SR: some companies propose Operator Dose Structured Reports in their system – No change or input from interested parties. Will keep on agenda for future meetings.

6. Supplements and CP Review

Assigned members to review current progress and to follow progress of the following Work items.

Work Items

Number	Group	Topic	Status	Product	WG28 follow	Member Assigned
2006-04-E	WG-06	Modality Protocol Storage	Work	Sup121	X	AT
2007-06-B	WG-07	Second Generation RT Objects	Work	Sup147	Leave for WG07	
2008-04-C	WG-11	Volumetric Presentation State	Work	Sup156	X	All
2010-04-A	WG-03	Enhanced Nuclear Medicine, is this Enhanced PET?	Work	Sup117?	X	?
2010-04-B	WG-03	Dose Reporting for Nuclear Medicine and PET	Work	Sup159	X	
2010-04-E	WG-16	Functional MR Imaging (fMRI)	Work		X	Hearshen
2011-04-A	WG-2, WG-16 & WG-21	Injector Record / Contrast Media Dose SR	Work	Sup164	WG02 Following Progress	
2011-04-C	WG-26	Multispectral Image Presentation	Work			
2011-12-A	WG-07	RT Positioning Workflow	Work	Sup160	Leave for WG07	
2012-04-B	WG-22	RadDoseSR Dentistry	Work		X	DeForest
2012-06-B	WG-15	Breast Projection X-Ray image	Work	Sup165	X	
2012-11-C	WG-28	Patient Radiation Dose Structured Report	Work		X	DP/AT
2013-08-A	WG-21	Multi-energy CT Storage	Work		X	Cody/Yu

Discussed WG28 involvement needed for each CP listed. Will continue to monitor and provide input when necessary.

CP's

CP#	Affects DICOM Parts	Status	Description	Coded status	Comments
235	Part 3	Assigned	Clarify NM detector start angle usage. Referred to WG3	Assigned	
757	Part 3, 6, 16	Assigned	Add RTSS and Segmentation ROI Feature UID	Assigned	
812	Part 3	Assigned	Clarification that Pixel Padding Value is the raw value before and transformations	Assigned	
1013	Part 3	Assigned	RT Ion Beams Recording Clarifications	Assigned	
1115	Part 16	Assigned	Add Dose Reference Point codes for CR/DR	Assigned	Needs to be completed
1127	Part 16	Assigned	Add fields for Organ Dose to Dose SR	Assigned	Already under review
1189	Part 3	Assigned	Add usage of Temporal Position Time Offset to Per Frame content Macro as needed for Enhanced MR and Enhanced CT objects.	Assigned	
1196	Part 16	Assigned	Add phantom-specific Total DLP Values to allow for Head and Body in same RDSR scope of accumulation	Assigned	
1394	Part 3	Assigned	Add Radioactive Source Model ID to RT Brachy Application Setups Module	Assigned	New April 2014: cp_RT52_SourceModelID_05
1395	Part 3	Assigned	Extend RT Structure Set ROI Color	Assigned	New April 2014: CP_RT53_ExtendRTstructureSetROIColor_01
1396	Part 3	Assigned	Clarify Dose Value units for DVH in RT Dose	Assigned	New April 2014: cp_RT54_ClarifyDoseValueUnitsForDVHinRTDose_01
1398	Part 3	Assigned	Add FOR Module to RTSS IOD	Assigned	New April 2014: CP_RT57_AddFORModuleToRTSSIOD_02
1399	Part 3, 6	Assigned	Add Effective Wedge Angle	Assigned	New April 2014: cp_RT58_AddEffectiveWedgeAngle_02
1401	Part 3	Assigned	Clarify meaning of PARTIAL in X-Ray RDSR	Assigned	New April 2014: cp_WG02_clarify_meaning_PARTIAL_in_X-Ray_RDSR_01
1032	Part3	Voting Package June 2014	Fix Position angle sign inconsistency in Mammography	Voting Package	
1227	Part 3	Voting Package June 2014	Fix Estimated Dose Saving attribute	Voting Package	
1278	Part 3	Voting Package June 2014	Additional cardiac image types for enhanced CT	Voting Package	
1342	Part 3	Voting Package June 2014	Extend Image Type for Breast X-Ray Image IODs	Voting Package	
1354	Part 3	Voting Package June 2014	Move requirement use isocenter 3D-Xray	Voting Package	
1355	Part 16	Voting Package June 2014	Make X-Ray RDSR event level device conditional	Voting Package	
1203	Part 3	CPACK 76 (Apr 2014)	PDR Pulse Details in RT Brachy Session Record	Letter Ballot	
1331	Part 3	CPACK 76 (Apr 2014)	Treatment Time in RT Plan	Letter Ballot	
1332	Part 3	CPACK 76 (Apr 2014)	Standardization of DIXON Image and Frame Types	Letter Ballot	
1337	Part 3	CPACK 76 (Apr 2014)	Add Isocenter Position to MR/PET/Enhanced CT/MR/PET and RT Equipment Correlation to Enhanced CT	Letter Ballot	

1338	Part 16	CPACK 76 (Apr 2014)	Move Body Substance from Type to Category for Segmentation	Letter Ballot	
1346	Part 3	CPACK 76 (Apr 2014)	Add Table Information to X-Ray 3D IODs	Letter Ballot	

7. Reports from liaisons with other groups and organizations

- AAPM activities. – reviewed TG246 progress (see above)
- MITA Interventional group activities.
 - AAPM TG246 and TG150 Digital Testing Methods have made requests to MITA for options to enhance the TG information.
 - Initiating work on Patient Radiation Dose Structured Report, will need to interact with MITA to assist in getting this done effectively.
- DICOM liaison group inside EFOMP. EFOMP members are working with AAPM TG246, no other updates .

8. Planned Next Meeting Dates in 2014

- September 29, 30 and October 1, 2014 in Erlangen, Germany. Meeting rooms at IMP
- December 2nd at RSNA.

9. Adjournment

May 12th: Meeting called to order: 9:00 AM; Meeting adjourned: 5:00 PM.

May 13th: Meeting called to order: 9:00 AM; Meeting adjourned: 5:00 PM.

Reported by Lynne Fairobent, Secretary

Reviewed by NEMA Legal counsel Clark Silcox