

Minutes

DICOM WORKING GROUP TWENTY EIGHT (Physics)

Date Wednesday, August 1, 2012

Place: At AAPM Annual Mtg.
 Westin Charlotte , Charlotte, NC - USA

Presiding Officers Donald Peck – Co Chair/AAPM

Secretary Lynne Fairobent (AAPM)

Members Present

AAPM (Henry Ford Health System)
 GE Healthcare
 JIRA

Represented by

Donald Peck
 William J. O’Connell
 for Jennifer Esposito
 Makoto Suzuki

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Members Not Present

American Academy of Oral and
 Maxillofacial Radiology (AAOMR)
 CEFLA Dentale
 CoreLab Partners
 European Federation of Organizations
 for Medical Physics
 Philips Healthcare

Voting Representative

Allan Farman/WG-22
 Roberto Molteni
 David Clunie
 Annalisa Trianni
 Mark Pepelea/WG-07

Alternate Voting Representatives, Observers, or Guests Present:

Arbique, Gary
 Boon, Sjirk
 Busch, Ulrich
 Cardan, Rex
 Cialdea, James
 Curran, Bruce

UT SW Med Center, Dallas, TX
 Philips Healthcare, Interventional XR
 Varian/WG-07 Chair/IHERO
 University of Alabama Birmingham
 Aware Inc
 Rhode Island Hospital/WG-07/IHERO

Dooley, John	UNC
Fairobent, Lynn	AAPM
Flynn, Michael	AAPM/ACR/Henry Ford Hospital
Gingold, Eric	T. Jefferson Hospital, Philadelphia
Hasse, Richard	Emory University
Jones, Kyle	MD Anderson
Junck, Kevin	Univ of Alabama Birmingham,
Kuhls-Gilcrist, Andrew	Toshiba Medical Systems
Langer, Steve	Mayo Rochester
Nilsson, Elisabeth	RTI
Pavlicek, W.	Mayo, Arizona
Schadt, Christof	Brainlab/WG-07 Vice Chair/IHERO
Shephard, Jeff	MD Anderson
Supinach, Mark	Henry Ford Health System
Uzenoff, Robert	Fujifilm Medical Systems, USA
Vastagh, Stephen	General Secretary DICOM/MITA

1. Preliminary Events

- a. Call to order – 09.00
- b. Self-introduction by participants
- c. Reviewed the agenda – no revisions made
- d. Reviewed the minutes from the previous meetings in Vienna, Austria and Udine, Italy. It was noted that the Udine minutes have not been submitted to NEMA for approval to date.
- e. An overview of how the DICOM Standard is developed was presented.
- f. Stephen Vastagh reviewed the DICOM anti-trust and other rules with the participants.

2. Determination of tissue dose for diagnostic radiology procedures

- a. Review methods to do patient dose estimations – Previous discussion: Skin is an organ and will initially be treated the same as another organ. When the work item is approved, skin might be separated out. It was noted by some that for skin we calculate peak skin dose vs. average dose over the organ. It was also discussed that how to present organ dose may depend on the biological impact – i.e. whether it is stochastic or deterministic. If we are going to look at only deterministic than skin and eye may have to be handled separately.
- b. Discussed the current concept of estimating dose.
- c. Working Group 7 already has an object to determine a patient dose; it is a 3-D array of dose at certain points registered to the patient frame of reference. The image space is acquired from a CT image set from a treatment simulator study. This is not practical for determining dose for many diagnostic studies.
 - i. It was discussed that representatives from WG-07 should be involved with this activity at all WG-28 meetings to assist in the development of this IOD.

- d. Reviewed the list of desired “data” needed for estimating patient dose. Some modifications were included in the list developed in Udine.
 - i. It was noted at this time for CT we are not talking large field of view, e.g. cone beam CT, but this will need to be considered.
- e. Development of a Patient Dose SR (PDSR) Work Item Proposal should be done for the RSNA
- f. It was discussed that there needs to be a review all IOD and determine extensions that may be necessary for Organ Dose estimation, e.g.:
 - i. CT
 - ii. CR/DX
 - iii. XA/RF
 - iv. Mammography
 - v. Nuclear Medicine

3. Discussion concerning development of the concept for an Operator Dose SR Work Item

There was a brief discussion concerning this request.

4. Reports from Liaisons with other groups or organizations

Did not discuss due to lack of time

5. ACTION Items:

Need physics representatives on all DICOM WG and these should also be members or observers of WG28.

6. Future Meetings – time and place

- a. Next Meeting: Tuesday, November 27, 2012 Room TBD all day.
- b. ECR 2013 March 2012

7. Adjourned at 11:00 AM EDT.

Reported By:

**Lynne Fairbent, AAPM
Secretary
2012-08-10**

Reviewed by: CRS 2012-08-16