

Minutes of DICOM WG24 “DICOM in Surgery” Meeting #18 (Chicago)

Wednesday, 30 Nov. 2011, 3:00 p.m. to 5 p.m.

McCormick Place, during RSNA, Chicago, USA

Attendees:

Leonard Berliner, New York Methodist Hospital
Philipp Liebmann, University of Leipzig
Heinz U. Lemke, ISCAS
Paul Morgan, FujiFilm
Roland Bernabè, GE
Britton Marsden, Medtronic ST
Sven Flossmann, Brainlab
Conrad Menz, Straumann GmbH
Stephen, Vastagh, MITA

Agenda

1. Approval of minutes of the previous WG24 meeting # 17 (Berlin)
2. Report on the proposal for IHE in surgery (H. Lemke)
3. Optical Surface Scanner (P. Liebmann)
4. Coordinate systems (L. Berliner)
5. nD-Presentation State (P. Morgan, FujiFilm)
6. Surgery's solution for Radiation Dose Structured Report (R. Bernabe, GE)
7. Standardization in the prosthetics value chain (C. Menz , Straumann)
8. Trajectories and Points in DICOM (S. Flossmann, BrainLab)
9. Frame of Reference issues (S. Flossmann, BrainLab)
10. Next activities and meeting dates
11. Miscellaneous

1. Approval of minutes of the previous WG24 meeting # 17 (Berlin)

Fully approved with zero Objections and zero Abstentions.

2. Report on the proposal for IHE in surgery

Heinz Lemke gave a brief report on the efforts to establish an IHE Domain “Surgery”. He participated in the RSNA meetings of the IHE Radiology and IHE International Committees where the question came up whether or not “Surgery” is a good name for the Domain.

It was discussed and decided to stay with the IHE domain name Surgery.

Leonard Berliner will write a letter to the SIR (Society of Interventional Radiology) to get their opinion.

3. Optical Surface Scanner

Philipp Liebmann gave a brief introduction on the ongoing standardization efforts regarding Supplement 154 (Optical Surface Scanner).

After the DICOM standardization process is completed a corresponding IHE Profile should be written, to cover this topic in IHE.

4. Coordinate systems

Leonard Berliner introduced the problem of having a wide variety of coordinate systems in therapeutic situations that are implicitly understood, and be in clinical use to some extent. Some of them are not defined by the DICOM standard and for those who are there is no description to transform one into the other. He proposed the development of a universal coordinate system in DICOM.

The goal of a universal coordinate system should be:

- To serve as a reference which will allow consistent transformations to be calculated and applied between any and all possible coordinate system.
- Serve as a starting point for the development of future systems

Tasks:

1. Continue to recruit members to contribute to this proposed Work Item
2. Determine specific goals and tasks
 1. Delineate features of a Universal Coordinate System
 2. Create a list of IODs to be written
3. Complete request for a Work Item with a minimum of two use-cases
4. Schedule meetings
5. Assign Tasks
6. Establish Timeline

5. nD-Presentation State

Paul Morgan gave a presentation of the intent of the nD Presentation States efforts. Chaired by the Chairs of WG11 the work is accompanied by WG02, WG07, WG12, WG15, WG16, WG17, WG21, WG22 and WG24.

WG11 had the first read at the WG06 meeting (26.Oct. 2011)

Paul Morgan makes a list of requirements and will send this to Heinz Lemke. The next meeting of WG11 will be held on 17th February 2011 at the SPIE Medical Imaging Conference. H.U. Lemke is expected to attend.

6. Surgery's solution for Radiation Dose Structured Report

Roland Bernabè gave a presentation on Radiation Dose Structured Report for Surgery C-Arm and the problem of required report data which is not derivable. There was a discussion of some solution approaches. The problem can only be solved in a fully standardized digital OR environment.

7. Standardization in the prosthetics value chain

Conrad Menz gave a presentation on the activities of WG22 regarding the standardization in the prosthetics value chain.

Conrad Menz will get in contact with Philipp Liebmann from WG24 and explore synergies from the work on the supplement 154 (Optical Surface Scanner).

8. Trajectories and Points in DICOM

Sven Flossmann presented the Change Proposal from Brainlab and Siemens regarding the possibility to describe trajectories and points with the Surface Segmentation IOD. It was pointed out that the Surface Segmentation IOD was not designed for this context but nevertheless, the Change Proposal will be supported by the WG24.

9. Frame of Reference issues

Sven Flossmann pointed out the issue that there is no common understanding on how the Frame of Reference will be used. E.g. Radiology uses the Frame of Reference for synchronized scrolling in contrast to Surgery or Radiotherapy where the Frame of Reference is used for the treatment plan. This means there are different requirements on accuracy to the Frame of Reference. For viewing images via synchronized scrolling minor inaccuracies are acceptable. For treatment planning minor inaccuracies are unacceptable.

The participants of the meeting will explore this issue with the developers in their companies and get in contact with Sven Flossmann for further discussion.

10. Next activities and meeting dates

The next meeting will take place at CARS in Pisa on Sat. 30. June 2012, 3pm to 5pm

11. Miscellaneous

No further issues were raised

Heinz U. Lemke
General Chair
14th December, 2011