



## MINUTES

### JOINT DICOM WORKING GROUP TWENTY-EIGHT (Physics Strategy) AND WORKING GROUP TWO (Projection Radiography) Version 2

**Date and Time:** Oct 11-13, 2017 | 9:00am to 5:00pm

**S.I.R.M Associazione Italiana di Radiologia Medica**  
**Room: 1<sup>st</sup> Floor, SIRM apartment**  
Via della Signora, 2  
20122 Milano (Italy)

**Presiding Officers:** Francisco Sureda, Chair WG-02  
Annalisa Trianni, Chair WG-28

**Secretary:** Alberto Torresin (EFOMP)  
Shayna Knazik (AAPM)

| <u>Voting Members Present</u> | <u>Represented by</u> |
|-------------------------------|-----------------------|
| AAPM                          | Nick Bevins           |
| EFOMP, ESR                    | Annalisa Trianni      |
| GE Healthcare                 | Francisco Sureda      |
| Philips Healthcare            | R. Karthigai Balan    |
| PACS Health                   | Steve Massey          |

| <u>Voting Members Not Present</u> | <u>Represented by</u>  |
|-----------------------------------|------------------------|
| Siemens Healthcare GmbH           | Heinz Blendinger       |
| AAPM                              | Donald Peck            |
| AAOMR                             | Allan Farman           |
| ADA                               | Veeratrishul Allareddy |
| FDA                               | Yuan Fang              |
| PixelMed                          | David Clunie           |

## 1. Preliminary Events

- Members identified themselves and their employers.
- Members reviewed and rearranged the agenda to accommodate dial-in participants (Peck and Blending). The agenda was approved as such.
- Members reviewed and approved the minutes from the meeting on May 22-24, 2017 in Palma de Mallorca (Spain).
  - Action Item (Shayna Knazik): work with Luiza to ensure the correct document is posted on the coresponding Working Group’s website.

## 2. CP Review

- Members reviewed the advances of the CPs discussed during the last meeting, and continued to review new CPs related to the scope of WG-02 and WG-28.

| Number         | Name   | Submitted                | Assigned     | Coded Status | Comments/Actions for WG-02 and WG-28  |
|----------------|--|--------------------------|--------------|--------------|---|
| <b>CP 1319</b> | Frame Of Reference Reliability   | Francisco Sureda, et al. | Ulrich Busch | Assigned     | To follow up.   |
| <b>CP 1716</b> | Protocol and   | O'Donnell                | O'Donnell    | Assigned     | The group agreed this CP should be reviewed and discussed. Ask Kevin O'Donnell for the last part of the CP document which appears to be missing.  |
| <b>CP 1717</b> | Add WIP Flag to include procedure protocol instances                                     | O'Donnell                | O'Donnell    | Assigned     | The group felt this CP would be interesting to discuss related to the scope of WG-02 & WG-28.   |
| <b>CP 1718</b> | Encoding protocol dependence on device options   | O'Donnell                | O'Donnell    | Assigned     | The group felt this CP would be interesting to discuss related to the scope of WG-02 & WG-28.   |
| <b>CP 1742</b> | Performed protocol code sequence   | Clunie                   | Clunie       | Assigned     | The group discussed how it is interesting that this CP matches with the group’s new supplement for XA protocol. Francisco will look into this more.                                       |
| <b>NEW</b>     | Add Radiation Dose units to CID 7181 to be used with Dose Quantities in Parametric Maps. |                          |              |              | Members prepared and completed a CP to add a new CID with Radiation Units (Coding Scheme Designators- Code Value and Code Meaning). To be submitted at the WG-06 meeting in January 2018. |
| <b>NEW</b>     | Correct PS3.17 Figure FFF.2.3-1: “Example of Usage of Photometric Interpretation”        |                          |              |              | See item #4 of these Minutes. To be submitted at the WG-06 meeting in January   |

## 3. Review Current Work Items and Supplements

- Members discussed and finished the review of WG-21 Supplement 188 on Multi-energy (ME) CT scanners, particularly for any implications on the CT-RDSR and Extended RDSR.

- Comments will be sent to WG-21.
- Members should follow up with WG-21 on the need of a CP to define new dose attributes (see CLOSED ISSUES #9 of the Supplement), and also to understand if it has an impact on the the new supplement *Radiation Dose Structured Reporting for Cone Beam CT*.

#### 4. [XA Protocol Storage \(new supplement\)](#)

- Members reviewed and discussed the draft of the new supplement for **XA Protocol Storage** (DICOM Work Item 2006-04-E) to ensure consistency with the Sup121 Final Text. Voting Member Heinz Blendinger participated in this XA Protocol Storage discussion via GotoMeeting/conference call.
- The work in progress includes: (a) definition of the use cases related to the X-Ray Angiographic procedures, (b) description of the set of parameters and associated details of the angio protocols, (c) mapping between IT related items (Modality Worklist), Imaging settings and Protocol Storage.
- Members discussed the need to have modality-agnostic descriptions of some modules and/or attributes that are intended to all modalities and for which the current description is too CT-oriented. The new supplement will propose changes to some existing descriptions.
- Members reviewed the Acquisition and Reconstruction Protocol Elements proposed by the XA manufacturers and defined standard attributes.
- A new version “Draft 09” of the supplement was created, together with PowerPoint and Excel files that contain additional information.
- Members decided that a new CP is needed to correct PS3.17 Figure FFF.2.3-1: “Example of Usage of Photometric Interpretation”. Indeed, this figure does not reflect the original figure of the Supplement 139 Figure Z.2.3-1.

#### 5. [RDSR Informative Annex \(new supplement\)](#)

- Members did not discuss the work-in-progress supplement to replace the Annex AA of Part 17. (This supplement includes guidelines to encode the RDSR object on the different equipment configurations (Angio, Mammography, surgical mobile, CR/DR). It will cover various clinical scenarios (e.g. repeat/reject analysis) and data flows.)

## 6. Radiation Dose Structured Reporting for Cone Beam CT (new supplement)

- Members reviewed the work-in-progress of the new supplement pursuant to DICOM Work Item 2015-12-D (Cone Beam CT-RDSR). This new supplement considers an Extended RDSR with the possibility to include CBCT and other modalities as well as further information that the equipment could provide.
- Members discussed and prepared a PowerPoint presentation to present to the other DICOM Working Groups at RSNA 2017 with the goals of explaining the motivation of this new supplement and the necessity of the new integration connected with the P-RDSR document where all the dosimetric info should be integrated.

## 7. Follow –Up Topics

- [IHE MAP Profile](#): Members continue to track development of the new IHE Profile for Management of Acquisition Protocols (MAP). A new version of IHE Map is not available. This topic was tabled for a future meeting.
- [Sup 164: Substance Admin Report SR](#): Members continue to watch out for updates of Supplement 164 to ensure that the XA acquisition modality actor can query the contrast SR during the exam, after the injection has been performed. No new updates are currently available. This topic was tabled for a future meeting.
- [IHE REM Profile](#): Members discussed the current CPs related to the IHE Profile for Radiation Exposure Monitoring (REM). There were no new updates so this topic was tabled for future discussion.

[ftp://ftp.ihe.net/Radiology/TF\\_Maintenance/](ftp://ftp.ihe.net/Radiology/TF_Maintenance/)

## 8. Reports from liaisons with other groups and organizations

- No report was provided on the MITA X-Ray Interventional activities and on the IEC Interventional activities related to radiation dose reporting.
- No report was provided on FDA activities.

## 9. New Work Items

- Members discussed the need to complete the drafts of the new supplements for Cone Beam CT and for XA Protocol Storage in order to present them to WG-06 in the first half of 2018.
  - Action Item (Francisco Sureda): contact WG-06 to ask for 2 slots in their June meeting, and where that meeting is scheduled to take place.

## 10. Planned Meeting Dates in 2018

Members continued to define the calendar for 2018 meetings:

- **February 19-21, 2018 or March 5-7, 2018** joint WG-02/28 meeting.
  - Location and dates to be confirmed by the end of October 2017.
  - February 19-21 in US (Hawaii or Miami) or March 5-7 in Vienna.
- **June 3-9, 2018** joint WG-02/28 meeting in Prague, Czech Republic.
  - Exact dates to be determined based on availability of meeting space.
- **September 17-19, 2018** joint WG-02/28 meeting in Europe.
  - Potential locations: Stockholm or Helsinki. To be determined.

## 11. New Business

- There was no new business to discuss.

## 12. Adjourn

- The meeting was adjourned on October 13, 2017 at 5:00pm.

Submitted by Luiza Kowalczyk, Secretary

Reviewed by Legal Consul, Clark Silcox