DICOM WG-28 meeting feedback: 10th/11th March 2021

- About half the meeting was spent on reviewing any change proposals or supplements that were being considered by other task groups, to see if there was a need to monitor developments or actively feed into them.
- The other half was discussing how to create the part 17 explanatory information for the new Enhanced Radiation Dose Structured Report (supplement 214).

Recent work of WG-28:

- XA Protocol
 - Supplement 212
 - When implemented, will allow export of protocols in a standard way, and link to protocols in RDSRs etc.
 - Stage: Final text, published in release 2020e
 - Creates XA Defined Procedure Protocol and XA Performed Procedure Protocol objects, similar to previous CT ones (Supplement 121)
 - Description and links: <u>DICOM News: Sup212</u>
- Enhanced Radiation Dose Structured Reports
 - Supplement 214 "Cone-beam CT Radiation Dose SR"
 - New RDSR with flexibility to address cone-beam CT, but also applicable to CT, planar, mammo, XA etc
 - Stage: In letter ballot, ie being voted/commented on by DICOM standards members
 - Description and links: DICOM News: Sup214

If the XA protocol and CT protocol objects become supported by the CT and XA vendors, then this will make a big change for imaging in my opinion:

- Comparison of protocols before and after services, software reloads, intentional changes – currently very difficult for most vendors and therefore a risk for the operator
- Comparison of protocols between similar units currently very difficult for most vendors and therefore an impediment to optimisation
- Information about what the settings actually were, mA and kV modulation strategies etc – essential for effective optimisation work – are usually hard to establish

The enhanced radiation dose structured reports, if they are adopted in place of the traditional ones, will start to give us more information to attempt to model the dose distribution better from what I know so far, as well as being able to capture the information for cone-beam CT systems.

Other DICOM Working Groups

WG-18 Physics normally meets with WG-02 Projection Radiography and Angiography, but we can input to any of the work of the other TGs as necessary.

- WG-03 Nuclear Medicine don't seem to be very active currently?
- WG-07 Radiotherapy meet most months it seems, looking at the attendees list it is mainly industry plus AAPM. Last meeting was in February, I can't see when the next one is. If you'd like to sit in on the next meeting, let me know and I can ask the secretary to give you details.
- WG-12 Ultrasound seem pretty active, doesn't look like they have many Physics people attending though. Meetings on the second Monday of the month, next one <u>12th April at 3pm</u>. Meets with WG-01 Cardiac and Vascular Information
- WG-15 Mammography and CAD is currently dormant, with change proposals handled by email
- WG-16 Magnetic Resonance are meeting a few times a year, some AAPM involvement, otherwise industry. I can't see the next meeting, if you'd like to sit in let me know and I'll find out for you.
- WG-21 Computed Tomography meet most months with AAPM and industry representatives, didn't notice any European physicists at the last few meetings (from the minutes). Next meeting <u>31st March at 5pm</u>.
- Details of other working groups can be found at <u>https://www.dicomstandard.org/activity/wgs</u>

Ed McDonagh

IPEM and BIR representative on DICOM Working Group 28 – Physics.

Email: ed.mcdonagh@rmh.nhs.uk