# **IHE-RO DPDW Call**

Tuesday, August 22, 2023 10:30am Eastern Time

### **Attendees:**

Harold Beunk (Demcon)
Bruce Rakes (Mevion)
David Wikler (IBA)
Sanjay Bari (Elekta)
Suny Jang (Penn State Medical and Cancer Center)
John Hayes (Leo Cancer Care)
Thomas Schwere (Varian)
Jill Moton (AAPM)

#### **Minutes:**

- I. Call to Order at 10:30am ET
- II. Renaming of IHE-RO DPDW subgroup
  - a. People in the call preferred to use "Treatment Session Workflow" instead of "Treatment Session Management" as noted in the IHE-RO TC minutes (2023-07-20).
  - b. Until the EOY 2023 the group will still run as DPDW and will only be changed as of beginning of 2024.

### III. Common SGRT Use Cases in the Treatment Room

- a. Workflow vs. Content (e.g. exchange of patient surface)
  - Feedback from the IHE-RO Use Case Survey 2021 is mainly about missing workflow integration between TDD and the SGRT actor in the treatment room (see also IHE-RO\_PC\_SGRT\_20230718.pptx). Context exchange starts from as simple as knowing the patient and going as detailed as knowing what beam has been selected/started.
  - ii. Bruce mentioned a use case where users want to do statistics about the origin of couch corrections (e.g. IGRT vs. SGRT etc.). This could also be covered by a new couch modification result IOD. This is currently being discussed in DICOM WG-07.
  - iii. There is value in defining a new standard for very simple workflow integration. Later this can grow into more complex scenarios.
  - iv. Different options for workflow integration have been discussed:
    - Use UPS Event service on the worklist on the TMS. Notifications about UPS changes (e.g. start and progress) are sent to actors in the treatment room.
       ACTION: David to draft a sequence diagram for this approach (context to be exchanged: Patient, Treatment Session UID)
    - Use context exchange hub local to the treatment room only. This can be based on DICOM Worklist (Unified or Modality) or FHIRcast or anything else.
       ACTION: Thomas to draft a sequence diagram for this approach based on FHIRcast (context to be exchanged: Patient, Treatment Session UID)
    - 3. DICOM Modality Worklist between the actor driving the session and companion actors. There are already implementations around for this (Mevion/Leo Cancer Care), including exchange of BDIs to convey beam level details. Note that Treatment Session UID got added to the Scheduled Procedure Step of DICOM Modality Worklist in the DICOM standard as well.
  - v. Key for any workflow integration is to exchange the Treatment Session UID so the artefacts can be annotated with that UID allowing downstream systems to group artefacts into sessions.

### IV. TDW/TDOR:

a. David discussed the changes to re-use transactions RO-58, RO-60 and RO-64 in other profiles. As part of that it has been discussed if the private IHE-RO codes in the Scheduled Processing Parameters

Sequence should be replaced with the official codes from DICOM (they got added to the standard in the meantime). This needs to be done in a backward compatible way (e.g. by retiring the old codes and adding the new ones in addition allowing implementations to gradually move to the new codes).

**ACTION**: David to draft a proposal how to introduce the new codes.

ACTION: Thomas to replace the Treatment Session UID in the Scheduled Processing Parameter Sequence of TDOR with the dedicated attribute from the UPS (see open issue #2 in TDOR).

- V. Next Meeting
  - a. Next DPDW Committee September 26, 2023 at 10:30am ET
- VI. Meeting adjourned at 12:00am ET

# **Open action items from previous meetings:**

ACTION: Thomas to present the patient identity verification use case using FHIR/FHIRcast.

Update 2023-08-23: This will be covered by above action item about exchanging context using FHIRcast.