Minutes

Discrete Positioning and Delivery Workflow (DPDW)

Conference Call

October 27, 2020
10:30am – 12:00pm EST

DPDW Subgroup Chair:
Thomas Schwere, Varian Medical Systems
(thomas.schwere@varian.com)

IHERO Task Force Co-Chairs
Bruce Curran, MEng, FAAPM, FACMP, FACR
Bridget Koontz, MD

Mission Statement: *The American Society for Radiology Oncology (ASTRO) has formed a multi-society Task Force to undertake an initiative to promote the Integration of the Healthcare Enterprise (IHE) – Radiation Oncology (RO), fostering seamless connectivity and integration of radiotherapy equipment and the patient health information systems. The Task Force will include members from ASTRO, RSNA, American Association of Physicists in Medicine (AAPM), the American College of Radiology (ACR) and the Medical Imaging and Technology Alliance (MITA). In addition, members of the International community have also been invited to participate in IHE-RO. The IHE-RO Task Force, in close collaboration with radiotherapy product manufacturers, will develop appropriate integration profiles for radiation therapy and setup a demonstration of seamless communication among the full array of radiotherapy products.*

In Attendance:
   Jill Moton (AAPM)
   Rickard Holmberg (RaySearch)
   Gergely Parditka (Brainlab)
   Jon Treffert (RaySearch)
   Harold Beunk (ICT)
   David Wikler (IBA)
   Istvan Matyas (Siemens Healthineers)
   Sanjay Bari (Elekta)
   Bob Pekarek (Accuray)
   Thomas Schwere (Varian)

1 Call to Order

The meeting was started at 10:30am EST.

2 TDW Offline Recording

2.1. New "Session Validation" use case

- New "Session Validation" use case brought up during the Oct IHE-RO TC meeting. This use case is about validation/processing of the treatment artifacts on the TMS. Strictly following the definition of the OST actor in the TDW-II profile, there is no guarantee that the TMS is actually able to process the treatment artifacts. The OST is only supposed to persistently store the artifacts w/o any validation.
- Discussion of sequence diagram for session validation
    - Validation of the artifacts is rather a processing of the artifacts (validation would be more an adherence check of the records to the TDRC profile).
    - Action Item: Thomas to change "Validation" to "Processing".
    - This use case could also be seen as kind of a Record & Verify (R&V) where a dedicated actor (separate from the TMS) is responsible for the R&V part of the treatment session. The first event would tell the TDD that the R&V is ready for the recording.
    - Can we do the verification with a simple Storage Commitment? Doing so, the verification would turn into a verification of the persistent storage only (excluding any verification of the content itself).
    - This use case is independent from the offline use cases we started (it applies to online as well). It may even require new actors.
    - Action Item: Thomas to follow up with Planning Committee about the importance of that use case.

2.2. Offline Recording use cases in TDOR profile Rev 0.1

- Draft profile available on http://ihe-ro.org/lib/exe/fetch.php?media=doc:profiles:tdor:ihe_ro_tdor_0.1.docx
- The group discussed the two offline use cases which resulted in below action items.
- Treating in disconnected mode from local cache: The profile should not promote this use case as a regular use case. This is really an exception and shall only be used if the treatment session has initially been retrieved along TDW-II transactions and the connection to TMS is down at the time of opening/starting the session at the TDD. At this point in time the TDD shall check connectivity to the TMS and provide the option to treat from the local cache only if the connection to the TMS is down (this is already stated like that in the description of the use case, nevertheless it should be emphasized even more). At time of session recording, the TMS should verify that the session being recorded was initially scheduled in this TMS by verifying consistency of the Treatment Session UID passed along with the Record Session UPS.

- Is there a need for a separate UPS for the recording of the treatment session or can this be done on the original Treatment UPS? This mainly depends on whether or not the treatment UPS should be finalized in the deferred recording use case. A treatment session can be split into two parts 1) Delivery and 2) Recording. Should a treatment session/UPS be considered as done even if the recording was not (yet) done? Should there be an indication in the TMS, showing this session as "performed but recording deferred"? If so, the treatment UPS should probably be finalized. In the complete offline use case, the session could be recorded from the TDD to the TMS by "playing back" the steps (N-ACTION, N-SET, N-ACTION) on the original treatment UPS. Discussion about this will be continued in the next call.
- <mark>Action Item</mark>: Thomas to remove
  - TDD specific activities (like cleanup or user notification) at the completion of the "Record" UPS.
  - "Retrieve Treatment Record" transaction between TMS and OST (this isn't included in TDW-II main flow either).

3 <u>Adjournment</u>

The meeting was adjourned at 12:00pm EST.

Appendix A: Administration and Process Information

Documents are published at the following locations. If you have problems in accessing the document, please contact the Chair (thomas.schwere@varian.com).

Process of Authoring:

Steps:

1. Download a local copy of the document from locations below
2. Open this copy and remove all change bars
3. Ensure, that Changes Bars are switched on
4. **Make your changes**
5. Provide the updated version to the Chair

Location of Documents:

DPDW Subgroup Minutes

http://wiki.ihe.net/index.php?title=RO_DPDW_WorkingGroup

DPDW Profile

The DPDW Profile is an IHE-RO document.

The current version is available in the IHE-RO Org Wiki:

http://www.ihe-ro.org/

Please find the current document under this page:

http://www.ihe-ro.org/doku.php?id=doc:profiles

Supp 160

DICOM Supplement 160 (Patient Positioning and Workflow) in s DICOM WG-07 document.

The current version is available at the DICOM ftp server:

ftp://d9-workgrps:goimagego@medical.nema.org/MEDICAL/Private/Dicom/WORKGRPS/WG07/Sup/Sup160_PatientPositioningAndWorkflow

Mailing List:

The mailing list for the DPDW subgroup is:

2020.iherodpdw@aapm.org