IHE-RO Technical Committee Conference Call Oct. 19, 2023 10:30 am – 11:50 pm ET

Technical Committee Chairs: Scott Hadley, PhD, University of Michigan David Wikler, IBA (acting chair)

Mission Statement: The American Association of Physicists in Medicine American Society for Radiology Oncology (AAPM) supports 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, 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.

Attendance

Jim Percy (Elekta)
Bruce Rakes (Mevion)
Harold Beunk (Demcon)
Richard Vögele (Brainlab)
Thomas Schwere (Varian)
Dan Pawlak (Epic)
David Holst (Raysearch)
Scott Hadley (UMich)
David Wikler (IBA)
Walter Bosch (Wash U)
Jill Moton (AAPM)

Minutes

- I. Call to Order at 10:35am ET
- II. Review Agenda
- III. Review Minutes
 - a. Minutes from the Oct 10, 2023 TC Teleconference were reviewed. Motion to approve by Jim Percy; seconded by David Wikler; approved without objection or abstention.
 - b. Minutes from the Nov 9, 2023 Connectathon Wrapup Teleconference were reviewed. Motion to approve by David Wikler; seconded by Scott Hadley; approved without objection or abstention.
- IV. Co-chair Election
 - a. Voting closes Nov 20, 2023.
- V. Connectathon Summary
 - a. Analysis of unit tests of data in Archive and pre-testing results is ongoing.
 - b. Walter to present Connectathon report to IHE Testing and Tools Cmte (Dec 2023), IHE Int'l Board (Jan 2024)
 - c. Profile clarifications and corrections to be discussed at the next TC meeting.
 - i. BRTO-II: clarify representation of "Inner" contours
 - ii. MMRO-III: clarify requirements for including instances in Referenced Image Sequence
 - iii. TPPC: specify effective wedge angle calculation method (motorized wedge, virtual wedge)
- VI. Test Tool Update
 - a. XRTS Validator was re-issued on Nov 16, 2023 with an extended expiration, pointer to CodeX 1.0.0, adjusted timeout for FHIR downloads, and updated Java engine.

- VII. Next steps for recently published profiles (deadline for public comments is Dec 11, 2023) TC members were reminded to share Profile documents within their companies for review:
 - a. Treatment Delivery Record Content Brachy (TDRC-Brachy)
 - b. Treatment Delivery Record Content for Ion (TDRC-ION)
 - c. Treatment Planning Plan Content Brachy (TPPC-Brachy)

Profile approved for trial implementation

a. Exchange of Radiotherapy Treatment Summary (XRTS)

ACTION: Jim to draft executive summary of newly approved (Public Comment and Trial Implementation) Profiles; to be reviewed by Bruce, Jill, David; distribution via social and ASTRO newsletter.

- VIII. MMRO-III RAD-8 (Modality Images Stored) transaction issue review
 - a. Discussion of whether this Transaction is the appropriate one for BRTO-II
 - b. It is not clear that the requirements of RAD-8 are being tested.
 - c. ACTION: David to review the requirements of RAD-8 further.
 - IX. MMRO-III treatment imaging use cases
 - a. Discussion of the applicability of the MMRO-III Registrator for an IGRT system. The IGRT Registrator implements RAD-8 to retrieve images and MMRO-III-1 to store Spatial Registrations.
 - b. Integration of IGRT registration with registered displays is relevant for off-line review and online adaptive treatment use cases. Inclusion of an off-line use case in the MMRO-III Profile was discussed.
 - c. Discussion of testing products for adherence to IHE Profiles within their intended use.
 - X. Items for future discussion
 - a. Would a Machine QA workitem code be useful?
 - b. TDW-II next steps before publication in TF
 - c. TDW-III draft
 - d. BRTO-II correction/clarification
- XI. Next TC meeting is scheduled for Dec. 21, 2023 at 10:30am ET.
- XII. Adjournment at 12:00pm ET