IHE-RO Technical Committee Conference Call August 29, 2024 10:30 am – 11:50 pm ET

Technical Committee Chairs: Scott Hadley, PhD, University of Michigan David Wikler, IBA

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

Bruce Curran (VA) Harold Beunk (Demcon) Jim Percy (Elekta) Thomas Schwere (Varian) Christof Schadt (Brainlab) Sanjay Bari (Elekta) Tucker Meyers (Epic) Bob Pekarek (Accuray) Richard Vögele (Brainlab) Jingjie Zhou (United Imaging) Wayne Keranen (Radformation) David Holst (Raysearch) Adam Manoli (Therapanacea) Yili Luo (United Imaging) David Wikler (IBA) Walter Bosch (WashU) Jill Moton (AAPM)

Minutes

- I. Call to Order at 10:32 am EDT
- II. Tribute to Chris Pauer
- III. Review Agenda meeting agenda was reviewed and approved
- IV. Review Minutes
 - a. Minutes from the July 18, 2024 TC teleconference were reviewed.
 - Motion to approve by Jim Percy; seconded by Bob Pekarek; approved without objection or abstention.
- V. Administrative topics
 - a. New members presentation
 - i. Wayne Keranen (Radformation)
 - ii. Adam Manoli (Therapanacea)
 - iii. ACTION: David to post document with links to IHE-RO Profiles and related product categories; Jill to distribute with TC minutes.
 - b. Connectathon
 - i. Participation and registration

- 1. Participation agreements, registrations, and VPN account requests are due Sept. 9, 2024
- 2. Pre-testing instructions to be sent out by Sept. 16, 2024.
- 3. Test tool results are due Sept. 30, 2024.
- ii. Test Server
 - 1. Brainlab to install DICOMweb on Test Server
 - 2. Walter to install Orthanc Archive on Test Server
- iii. Participation by non-commercial / non-profit / open-source products
 - 1. Some concerns were raised and would need to be addressed:
 - a. How to make the difference with commercial, pre-commercial products with certainty (proposal to use licensing information)
 - b. Changes required to participation agreements
 - c. Availability of judges. Need to prioritize the clinical products.
 - 2. Some benefits were raised
 - a. Such products may be opportunities to speed up informal testing
 - b. Such products may be opportunities to reach enough products for testing
 - 3. Addressing these concerns for the 2024 connectation is unlikely but observers participation (informal) happened in the past and is still an option. ACTION: David to discuss non-commercial participation with AAPM DICOM-WG
- iv. Shall IHE Connectathon SEAL mechanism be available?
 - 1. Dependence on IHE test tools infrastructure.
 - a. ACTION: Walter to investigate import of IHE-RO test results in IHE test tools
- v. Request for informal IHE-ITI ATNA testing
 - 1. Transactions include node authentication and audit logs
 - 2. ACTION: Walter to investigate access to IHE-ITI test tools and test methods for ATNA
- c. CP process
 - i. David is working to organize and document the CP development and approval process.
 - ii. The IHE FTP site has been retired. Legacy documents have been migrated to Google drive "IHE Documents > Radiation Oncology".
 - iii. Need to decide where to maintain CP Tracking document: Box or Google Drive.
 - iv. Consensus that CPs ballot process should be handled within IHE-RO TC meetings or mailing list.
 - v. Consensus that approved CPs incorporate in updated TI Supplements should be published by IHE.
 - vi. ACTION: David to update https://wiki.ihe.net/index.php/RO Change Proposals

VI. Subcommittees reports

- a. TSWF focus on TDW-II CPs and TDW-III
 - i. Thomas reported on discussion of DICOM UPS vs FHIRcast for workflow management.
 - ii. Handling of timezones for procedure steps was considered. Decision to report local time with time
 - iii. The TSWF subgroup is waiting for AAPM survey results regarding priority of use cases.
- b. HDSS Structure Sets and multiple orientations option
 - i. Richard reported on status of the HDSS Profile. Constraints on the orientation of (high-definition) contours were discussed. The group has decided on a "base" mode in which all contours are oriented with the image planes and an "advanced" option to support multiple contour orientations.
 - ii. ACTION: Richard to invite David, Jim, Christof, and Walter to meet to discuss how to specify content requirements for these options in the Profile.

VII. Profiles Maintenance

- a. BRTO-II CP for (CLOSEPLANAR XOR)
 - i. Pre-read IHE_Change_Proposal-add CLOSEDPLANAR_XOR option for BRTO-II v3.docx in Box /IHERO TC share/BRTO-II (Add COPLANAR XOR as CP)
 - ii. Jim presented CP to add optional Transactions or optional content requirements in existing Transactions.
 - iii. Changes are needed for both BRTO-II and MMRO-III.

- iv. Adding transactions and content requirements was proposed. Further discussion is required to confirm this approach.
- VIII. Profiles Development and Testing (not discussed)
 - a. SMRT Sequence Diagram
 - i. Pre-read SMRT Sequence Diagram.drawio v2.svg in Box /IHERO TC share/SMRT (Shared Management of RT
- IX. Meeting was adjourned at 12:05 pm EDT
- X. Next meeting: Sept. 19, 2024 at 10:30am ET (regular monthly teleconference)