IHE-RO Technical Committee Conference Call January 18, 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

David Wikler (IBA) Jill Moton (AAPM) Jim Percy (Elekta) Walter Bosch (Wash U) Harold Beunk (Demcon) Thomas Schwere (Varian) Bob Pekarek (Accuray) Marcus Bergman (Raysearch) Richard Vögele (Brainlab) Christof Schadt (Brainlab) Anthony Waller (Varian) Tucker Meyers (Epic) Bruce Rakes (Mevion) Bruce Curran (VCU) Sanjay Bari (Elekta) Scott Hadley (UMich)

Minutes

- I. Call to Order at 10:34 am EST
- II. Review Agenda
 - a. The order of topics was reviewed and modified to start with topics of interest to all members.
 - b. ACTION 240101: Jill to poll TC members for 1-hour CDEB ad-hoc meeting
- III. Review Minutes
 - a. Minutes from the Dec. 21, 2023 TC Teleconference were reviewed.
 - i. Proposed 2024 Connectathon dates were corrected.
 - ii. Motion by David Wikler to approve as corrected; seconded by Bob Pekarek; approved without objection or abstention.
- IV. Scheduled 2024 meetings [Jill]
 - a. Face-to-Face Technical Meeting in Europe (IBA, Belgium)
 - i. Meeting dates were confirmed for March 18-22, 2024. Individual sessions may accomodate remote individuals, but the main meeting will be *in-person*.
 - ii. ACTION 240102: David to draft preliminary agenda.
 - iii. ACTION 240103: David to send meeting logistics (hotel, ground transportation) to TC members.
 - b. Connectathon week (AAPM HQ, Alexandria)
 - i. Tentative week (Oct 21-25, 2024) may conflict with meetings at AAPM HQ

- ii. Alternative week (Oct 14-18, 2024) was announced.
- V. Updates of RO section of the IHE Wiki [Jim]
 - a. Jim has updated wiki.ihe.net IHE Radiation Oncology Profile page
 - (https://wiki.ihe.net/index.php/Profiles#IHE_Radiation_Oncology_Profiles)
 - i. All profiles with status of Public Comment or later are linked here.
 - ii. Subgroup chairs and Profile authors were asked to review Profile pages.
 - b. RO Domain main page (<u>https://www.ihe.net/ihe_domains/radiation_oncology/</u>) includes link to Radiation Oncology Profiles.
 - c. Working documents and test tools remain in IHERO TC share on Box.com.
 - d. The historical ihe-ro.org wiki now indicates that it is not being updated.
- VI. Review of HDSS Profile and vote for publication as Public Comment [Richard] Please read the latest version of the HDSS TF Supplement <u>HDSS TF Supplement (IHE_RO_HDSS_v1.2.docx)</u> to prepare the discussion.
 - a. Christof reviewed a cleaned up version of the Profile (<u>https://aapm.box.com/s/jm02zb4hzupg64oe7sunuwyxs17ov1a5</u>) in IHERO TC share in Box
 - b. New features (DICOM 2020, 2021) in the RT Structure Set IOD allow contours to be represented on planes other than those of a reference (planning) CT Series. The HDSS Profile specifies how the new features are to be used.
 - c. Open Issues discussed:
 - i. Should all ROI contours retain the original orientation of their source images?
 - ii. Can a Structure Set instance contain both "regular" and "HD" contours?
 - iii. Can an ROI be encoded as both "regular" and "HD" contours? If so, how to indicate they represent the same volume, since each must have its own ROI Number?
 - iv. There are currently no constraints on the number and orientation of source pixel planes. Are any needed?
 - d. Suggestion to add Source Series Sequence and Source Series Information Sequence (CP2296). Their presence is conditional, i.e., required, if known.
 - e. ACTION 240104: Christof to revise HDSS Profile for TC review for Public Comment (Feb 15, 2024).
- VII. Next TC meeting is scheduled Feb 15, 2024 at 10:30 am ET
- VIII. Adjournment at 11:53 am EST