IHE-RO Technical Committee Conference Call August 17, 2023 10:30 am – 11:50 pm ET

Technical Committee Chairs: Scott Hadley, PhD, University of Michigan Jon Treffert, RaySearch

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

Jon Treffert (Raysearch) Walter Bosch (Wash U) Harold Beunk (Demcon) Bob Pekarek (Accuray) Bruce Curran (VCU) Bruce Rakes (Mevion) Sanjay Bari (Elekta) David Wikler (IBA) Jim Percy (Elekta) Dan Pawlak (Epic) Martin von Siebenthal (Varian) Tucker Meyers (Epic) Richard Vögele (Brainlab) Thomas Schwere (Varian) Shane Ikner (Leo Cancer Care) Scott Hadley (UMich)

Minutes

- I. Call to Order at 10:32 am EDT
- II. Review Agenda
- III. Review Minutes
 - a. Minutes from the July 20, 2023 TC Teleconference were reviewed. Motion to approve by Bruce Rakes; seconded by Jim Percy; approved without objection or abstention.
- IV. Vote to move XRTS to Trial Implementation
 - Martin von Siebenthal reviewed the XRTS Profile document with the group. (In preparation, TC members were asked to read text in the IHE-RO Box Drive: IHERO TC Share\XRTS \iXRTS_Rev1.x_prep_for_Trial_Implementation.docx.)
 - b. Pre-condistions for Trial Implementation External dependencies have been met: FHIR (R4 (4.0.1), US CORE (STU4 (4.0.0)), mCODE (3/21/23), CodeX (7/28/23)
 - c. Changes to this revision include: changes to Transaction names, removed sub-transactions, Clarified IHE-RO requirement (R**), Revied dateTime requirements, Clarified number of fractions in Treated Phase, and minor editorial corrections.
 - d. **DECISION**: Motion by Scott Hadley to promote XRTS to Trial Implementation status; seconded by Jim Percy; approved without objection or abstention.
 - e. ACTION: Martin von Siebenthal to update Profile text in Box; Jon Treffert to forward to Mary Junger.

V. Review TDW-III draft

- a. David Wikler reviewed the Profile text with the group. (In preparation, TC members were asked to read text in the IHE-RO Box Drive: IHERO TC Share\TDW-III\ihe_ro_supp_tdw-iii_0.1.docx.)
- b. TDW-III is an extension of TDW-II. It is a new Profile rather than an Option to TDW-II.
 - i. A single workitem code is used for both positioning and delivery procedures. A new workitem code for "RT Treatment with Patient Positioning and Internal Verification" is needed.
 - ii. The Process Flow does not constrain the order of imaging, positioning, and delivery.
 - iii. A "Selection of Treatment Session Workitem" workflow step at the TDD has been added to allow multiple workitems to be returned in the Worklist Query.
- c. Two new Transactions are defined with requirements for their use.
- d. The Profile supports Series-level retrieval of objects referenced in the Input Information Sequence. Use of Series-level reference is dependent on a DICOM CP-RT227 (adds Input Information Series Sequence to the UPS), currently in development.). CT Images must be retrieved at the Series level.
- e. Additional parameters in the Scheduled Processing Parameters Sequence are not excluded.
- f. ACTION: David will upload rev. 0.2 for review at the next TC meeting.

VI. Review Active Profile Status

- a. Tracking/Communication vehicle Wiki or other mechanism? [e.g. spreadsheet in IHE-RO Box Drive]
- b. Jim Percy has replicated Profile Status information from the ihe-ro.org wiki in a spreadsheet in Box: IHERO TC Share\IHE-RO Profile Status List.xlsx. Profile documents (in ihe-ro.org) are linked in this spreadsheet. This spreadsheet allows flexible ordering and filtering of Profiles.
- c. Alternatives for public access to Profile documents was discussed. The IHE wiki (wiki.ihe.net) may be a better alternative for public access. However, this site has not been updated recently. Several comments that the ihe-ro.org wiki is difficult to edit.
- d. A subject specific meeting was proposed to work on tracking/communication of Profile documents.
- VII. Fall Virtual F-F Discussion was deferred.
- VIII. Adjournment at 12:09 pm EDT.