

**IHE-RO Technical Committee  
Conference Call  
January 21, 2021  
10:30 am – 12:00 pm EST**

**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.*

**Attendees**

Jon Treffert (Raysearch)  
Walter Bosch (Wash U)  
Jill Moton (AAPM)  
John Stamm (Epic)  
Stefan Boman (Raysearch)  
Tucker Meyers (Epic)  
Chris Pauer (Sun Nuclear)  
Thomas Schwere (Varian)  
Bruce Rakes (Mevion)  
David Wikler (IBA)  
Scott Hadley (U Mich)  
Naveen Lakshmana (Phillips)  
Sanjay Bari (Elekta)  
Bruce Curran (VA/VCU)  
Bob Pekarek (Accuray)  
Richard Vogele (Brainlab)  
Harold Beunk (DEMCON)  
Jim Percy (Elekta)

**Minutes**

- I. Call to Order at 10:36am ET
- II. Review Agenda – several items were added.
- III. Minutes Review – minutes of the December 17, 2020 TC teleconference were approved without objection.
- IV. AAPM – TC members were reminded to update their AAPM Conflict of Interest statement (aapm.org)
- V. Other committee updates.
  - a. PC and WG
    - i. Scheduling a follow-up meeting on XRTS
      1. Status and Next Steps
        - a. Profile development is in progress. Dialog is ongoing.
        - b. Martin Seybold to give presentation to FHIR group.
      - ii. Recommendation of next profile to review with PC
        1. Options discussed
          - a. SA-ROSSI has requested input regarding RO prescriptions. Could present RXRO.
          - b. Could present list of Profiles in active testing (BRTO-II, MMRO-III, TPPC, TDW-II)
          - c. Consider new Clinical Impact Statements, e.g., CT setup, Scanning tank, etc.
        2. **ACTION 210101**: Jon to circulate a summary of Profile priority list from Dec 2019 discussion (Hayward).

- b. IHE Domain Committee
    - i. ACTION 201202: Product Registry Categories
      - 1. RO Domain products are lacking in the registry.
      - 2. Need to define RO product categories.
      - 3. ACTION 210102: Jon to draft an initial set of RO product categories for review by the TC.
- VI. Can we subdivide work on profiles to show progress in a more granular fashion?
- a. ACTION 201002: Review profile progress assessments.
  - b. Metric for tracking profile status? Percent progress?
    - i. Progress in definition, editing, informal testing, formal testing?
    - ii. Track velocity of development?
    - iii. Active development? Number of vendors implementing? Number of products expected to be tested in the next year? ... in two years?
    - iv. Trending metric
  - c. ACTION 210103: Jon to add discussion of Profile Tracking to March 2021 TC meeting agenda.
- VII. Update on Test Tools and virtual Connectathon – Walter reported
- a. Tool Maintenance
    - i. Test tool maintenance contract in progress – expected to be finalized soon.
    - ii. Hand-off of source code and documents
  - b. Connectathon judges
  - c. Connectathon Timeline
    - i. 2021 Connectathon request was approved by IHE International Board on Jan 14, 2021
    - ii. Registration due Feb 1, 2021 – includes (a) signed Participation Agreement, (b) Connectathon Registration spreadsheet, and (c) VPN Accounts Form
    - iii. Test datasets loaded into Archive – Feb 7
    - iv. Test Tool instructions distributed – Feb 7
    - v. Planning instructions for Connectathon distributed – Feb 15
    - vi. Test Tool results due – Feb 19
  - d. Connectathon Schedule
    - i. Prep meeting Feb 26, 10am-1pm ET
      - 1. Judges orientation 10am-11am ET
      - 2. Vendor connectivity check 11am-1pm ET
    - ii. Daily all-hands meeting (GTM) 8:30am ET
    - iii. Test session daily 9:00am – 3:00pm ET
      - 1. Mar 1-3 (M-W)
      - 2. Mar 10-12 (W-F)
    - iv. Review session – TC meeting agenda, week of Mar 15-19
  - e. BRTO-II Actor – is media file transport (no DIMSE support) acceptable?
    - i. Discussion points
      - 1. Content profiles are agnostic re transport (push, Q/R), but testing has generally assumed DIMSE transport in some form, but this has not been verified, as long as objects are transferred without error.
      - 2. Media file transport may fail due to non-conformance of headers.
      - 3. DIMSE transfers may also be subject to failure depending on SCP configuration.
      - 4. Content Validator uses media files for testing. DICOM Conformance is checked.
    - ii. DECISION: Allow testing of Content Profile Actors that use media file transport only. Approved without objection or abstention.
    - iii. Reminder that testing requires use of transport utility that is available to clinical users.
    - iv. ACTION 210104: Jon to include further discussion of DICOM transport in Mar 2021 TC agenda.
- VIII. TDIC
- a. ACTION 201204 Review profile
  - b. David reported on revision of the Profile to include an option to support creation of DRRs during a treatment session. Requirements for RT Image used for DRR and portal images in both planning and treatment delivery contexts were discussed.
  - c. David will continue editing and present at the next TC meeting.
- IX. Other agenda Items deferred to Mar 2021 agenda
- a. ROTH
    - i. ACTION 201205 Manifest design

- ii. Present BQAW manifest as potential example for ROTH Use Case
- b. Committee Goals for 2021
- c. Support for discrete device vendors (DPDW)?
- d. Any issues to bring back to clinicians / Planning Committee

X. Meeting was adjourned at 12:04pm ET