IHE-RO Technical Committee Conference Call March 21, 2019 10:30 am – 12:00 pm EST

Technical Committee Chairs: Scott Hadley, PhD, University of Michigan Chris Pauer, Sun Nuclear

Mission Statement: The American Society for Radiology Oncology (ASTRO) has formed 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, American Association of Physicists in Medicine (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:

Chris Pauer, Sun Nuclear Jill Moton, AAPM Walter Bosch, WashU/ATC Thomas Schwere, Varian Bruce Rakes, Mevion Johannes Stahl, Luis Maldonado, IMED Specialists Neelu Soni, Mercy Hospital, Springfield Richard Voegele, Brainlab Stina Svensson, RaySearch Koua Yang, Philips Tucker Meyers, Epic Harold Beunk, ICT Stefan Pall Boman, Raysearch Jon Treffert, Raysearch David Wikler, IBA Christof Schadt, Brainlab Sanjay Bari, Elekta Bob Pekarek, Accuray Bruce Curran, VCU Scott Hadley, UMich

Minutes:

- I. Call to Order at 10:33am ET a quorum was declared
 - a. The meeting agenda was reviewed and updated.
- II. Minutes Review
 - a. February 21, 2019 IHE-RO TC teleconference minutes were reviewed and approved without objection.
- III. Other committee updates.

- a. PC and SC The Planning Committee is waiting for the TC to catch up on development of existing before moving forward with new Profiles / Use Cases.
- b. IHE Domain Committee
 - 1. Final Text Profiles The BRTO-II, MMRO-III, TPPC Profiles are being incorporated into the latest revision of the RO Technical Framework.
 - 2. The RO Domain Annual Report is in preparation.

IV. Treatment Delivery – Record Content

- I. Chris reviewed updates to the TDRC Profile draft (rev. 0.11), in preparation for Trial Implementation.
- II. Clean up of Actor names (dropped "Content").
- III. Conditions for requiring the presence of Referenced Treatment Record Sequence (3008,0030) were discussed. This attribute is Type 3 in DICOM (references "significantly related" Treatment Record instances. The Use Case for which such a reference could be required is the resumption of a partially delivered fraction, where the resumption is based on the treatment record from the partial. Only referenced if the treatment record if actually used in delivery.
- IV. IOD Definition Table is present in the Profile.
- V. The order of Control Point Sequence Items in the Treatment Record was discussed:
 - I. The DICOM standard does *not* guarantee that the order of sequence items is preserved.
 - II. The Control Point Sequences includes a Control Point Index to explicitly order Control Points.
 - III. The relationship between Plan CPs and Record CPs was discussed. For resumptions, e.g., it is not clear in the DICOM standard what Control Point should be included in the Control Point Sequence. I.e., should the previously treated CPs (without meterset) be included, or just the ones in resumed portion of the beam? The Planned and Recorded CPs may not correspond exactly.

V. Connectathon Survey

- I. Seven participants have responded as of 3/21/19.
- II. Outstanding submissions should be forwarded to Jill Moton (jill@aapm.org) and Walter Bosch (wbosch@wustl.edu) as soon as possible.

VI. Plan Content for TDW-II

- I. Chris reviewed some changes in TDW-II (rev.16). The language identifying Cross-Profile Issues has been changed from "Requirement" to "Expectation" of adherence to CDEB requirements for RT Plan and RT Ion Plan IODs.
- II. David Wikler identified several wording issues in the Profile text and suggested improvements.
- III. Consistency of Patient identifiers among RT (Ion) Plan instances, Beam Delivery Instruction (BDI) instances and UPS was discussed. The BDI contains the most up-to-date content for Patient demographics.
- IV. Chris will continue updating the Profile and send to Thomas Schwere.
- V. Further discussion of TDW-II issues is on the agenda for the April 2019 F2F TC meeting.

VII. Profile Format Discussion

- I. Content Profiles that involve simple Producer and Consumer Actors can be simplified to avoid redundant "interaction" sections.
- VIII. IHE-RO TC Face-to-Face meeting April 2-5, 2019 in Kissimmee, FL starts at 2pm on April 2.
- VII. Meeting was adjourned at 12:00pm ET.