

**IHE-RO Technical Committee
Conference Call
December 20, 2016
11 am – 12:30 pm EST**

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

**IHERO Task Force Co-Chairs
Dick Fraass, Ph.D., FAAPM, FASTRO, FACR
John Buatti, MD**

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.*

In Attendance:

Chris Pauer, Sun Nuclear
Walter Bosch, Wash. U./ATC
Thomas Schwere, Varian
Bruce Rakes, Mevion
Jim Percy, Elekta
Michael Owens, Reflexion
Harold Beunk, ICT
Sven Siekmann, Brainlab
Stefan Boman, Raysearch Labs
Koua Yang, Philips
Sanjay Bari, Elekta
Antonella Patio, ASTRO
Carla Hull, AAPM
David Wikler, IBA
Bob Pekarek, Accuray

Minutes:

- I. Call to Order at 11:10am EST. A quorum was present.
 - a. Review Agenda
 - b. Other broad topics to add

- II. Review of Prescription in RO (RXRO) Profile
 - a. This profile was discussed at the last TC face-to-face meeting. Chris Pauer reviewed version 0.5 of the RXRO Profile draft (includes updates from September 2016 meeting a few minor changes).
 - b. The group discussed the use case in which segmentation is performed outside (prior to) a prescription. RT Structure Set or Segmentation is imported. How is the linkage of anatomic segmentation to conceptual volumes maintained? This may have implications for the content of other objects, e.g., RT Segment Annotation objects.
 - c. RXRO Use Cases discussed:
 - i. **Physician Intent:** Basic prescription: total dose, dose/fraction, # fractions, disease site, treatment technique
 - ii. **Planning Directive:** Add technique specific info, motion mgmt., segmentation directives, margins, non-disease site constraints, mapping of CV to segmentation

iii. Planning Directive with Dosimetric Optimization

iv. Planning result/Plan summary (may be out of scope for Sup 147)

- d. The content requirements for palliative and prophylactic use cases may differ from those for curative treatments. E.g., segmentation may not be used in palliative treatments.
- e. A simple, preliminary request for radiotherapy (request for consult) by a referring (non-radonc) physician is outside the scope of this Profile.
- f. Discussion of mutability of physician intent: Should the Profile support multiple versions of a prescription? How should approval status be maintained? How is the Prescription workflow managed?
- g. Discussion of Prescriptions for multiple, alternative plans, e.g., to compare alternative treatment modalities for a patient: There is currently no support for *alternative* treatments in a single Prescription object instance. Some method is needed to manage versioning and approval status of multiple, alternative prescriptions.
- h. The final revision of the Planning Directive with Dosimetric Optimization (use case 3) may be generated by the TPS to record the actual, realized constraints that were used for optimization.
- i. **ACTION 161201** Chris to post the updated revision of the RXRO Profile with changes from the 12/20/16 TC teleconference.

III. Upcoming meetings or other final items.

- a. Jan 23-27, 2017 meeting at Sun Nuclear in Melbourne, FL. Logistic information has been distributed.

IV. Meeting was adjourned at 12:33 pm EST.