

**IHE-RO Technical Committee
Conference Call
April 20, 2017
11 am – 12:30 pm EST**

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

**IHERO Task Force Co-Chairs
Bruce Curran, MS, ME, FAAPM, FACMP, FACR, AAPM / VCU Health
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, WashU/ATC
Carla Hull, AAPM
Mauro Zanardini, IHE-ITI/Consortio Arsenal.IT
Rishabh Kapoor, VCU
Bruce Rakes, Mevion
Harold Beunk, ICT
Sven Siekmann, Brainlab
Koua Yang, Philips
Scott Hadley, UMich
Thomas Schwere, Varian
Kari Grano, Varian
Bob Pekarek, Accuray
Rickard Holmberg, RaySearch

Minutes:

- I. Call to Order at 11:03am ET. A quorum was declared.
 - a. Review Agenda
 - b. Minutes of the March 23, 2017 IHE-RO TC Teleconference minutes (with correction to list of attendees to remove duplicate entry) were approved without objection.

- II. Update on Steering Committee Meeting and Planning Committee
 - a. Steering Committee and Planning Committee meetings are scheduled for next week. Vendor participation fees and billing are to be discussed.

- III. Discussion with Mauro Zanardini
 - a. Mauro Zanardini is IHE-ITI co-chair. He is technical specialist for consorzio Arsenal.IT. His activities are focused on workflow management. IHE-ITI provides foundational profiles for use across IHE domains.
 - b. FHIR vs. XDShow are they related, how are they different?
 - i. XDS (Cross-enterprise Document Sharing) is the main profile. Producer actors store documents and meta-data in an XDS infrastructure (repository). Consumers search and

retrieve documents. Actors are grouped in an affinity domain. Agreement is needed on identification of patients, demographics, but is agnostic with regard to document *content*.

- ii. PDQ (Patient Demographic Query) has been implemented in three technologies (two HL7 versions and FHIR)
 - iii. XDW defines a document that tracks a clinical workflow by successive updates. The workflow document has four parts: header, identifiers (date, time, patient, actor), workflow identifier, task list (OASIS WS-HumanTask)
 - iv. Workflows are defined by identifying the main tasks and rules for evolution of the workflow. Two approaches have been taken.
 1. Each Actor adds a Task to the TaskList
 2. Transactional approach used in Radiology – each transaction is defined in terms of trigger events and expected actions.
 - v. BPMN (Business Process Model and Notation) used to represent rules for workflow evolution.
 - vi. Codes are used to classify objects (document type, resource access method)
 - vii. The main use case for XDS is the federation of multiple enterprises (at a regional or national level). It may not be the best approach for sharing of data between systems in a single enterprise.
 - viii. XDS is for document sharing. ITI has extended this approach with the MHD (Mobile Health Documents) profile using FHIR.
- c. How could you integrate DICOM material into XDS documents for XDW profile development?
 - d. Could XDW be used for patient demographic sharing to the RO clinic domain?
 - i. Appointment scheduling?
 - ii. Information requests?

IV. Code for Representing “Shall not be Present” in IHE Profile Authoring.

- a. The TC has encountered situations in which IHE add requirements that an attribute *not* be present.
- b. Discussion of using “X” to indicate that an attribute shall be absent if Type 3. What about Type 2 attributes? This code applies only to the *presence* of an attribute, so it would not apply to Type 2.
- c. What about conditional absence? Is XC needed? No. This situation can be handled by the RC with if-and-only-if condition.
- d. **ACTION 170401** Sven to draft a CP to the BRTO-II DICOM Content tables, incorporating “X” indicator for (Type 3) attributes that shall not be present.

V. Data and Time of Meetings

- a. Doodle poll results for TC teleconference times were reported. The consensus time for TC meetings is 10:30am ET on Mondays (10 votes). The other time with 10 votes (Wed. at 11:00am ET) conflicts with regular AAPM staff meetings.
- b. New meeting time has been set to 3rd Mondays at 10:30am ET.

VI. Upcoming meetings or other final items

- a. Meeting after AAPM has been placed on the meeting agenda (as committee meeting). Meeting days Wednesday through Saturday (AM) confirmed. Room to be assigned.
- b. Carla Hull announced she will be leaving AAPM. She will train her replacement (TBN).
- c. Next IHE-RO TC Teleconference will be held on Monday, May 15, 2017 at 10:30am ET.

VII. Meeting was adjourned at 12:21pm ET.