Minutes

Discrete Positioning and Delivery Workflow (DPDW)

Conference Call

January 27, 2015

11:00am – 12:30pm EST

DPDW Subgroup Chair:

Thomas Schwere, Varian Medical Systems  
([thomas.schwere@varian.com](mailto:thomas.schwere@varian.com))

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:**

Crystal Carter (ASTRO)

Luiza Kowalczyk (Medical Imaging)

Ulrich Busch (Varian)

Thomas Schwere (Varian)

Sanjay Bari (Elekta)

Harold Beunk (ICT)

Chris Pauer (Accuray)

# Call to Order

The meeting was started at 11:00 EST.

# Transactions

T. Schwere went through transaction RO-DPD-219:

* After the context of RO-DPD-219 was introduced, T. Schwere asked the group about the reason of issuing a new Treatment UPS/BDI for the continuation of the interrupted treatment as this would require the TSM to load Tx Records to calculate the BDI. Is this really something we should do within TSM?
  + Chris argued that reviewing is much easier if there is a new Treatment UPS. The simple existence of multiple treatment UPS indicates that there was an interruption.
  + The TSM could request the calculation of the BDI from the TMS.
  + Sanjay mentioned that the TMS might get confused about the new Treatment UPS.
  + The group discussed how imaging is re-performed. This is much simpler as the original UPS and acquisition instruction can just be copied (assigning new instance UIDs).
  + Re-positioning should always be possible within a session, even if the original UPS is already in final state.
* The group decided on the following:
  + Treatment interruptions that can be easily resolved within the same treatment session (i.e. patient remains on the couch) shall be completed on the original Treatment UPS (which is left in IN PROGRESS state after the interruption).
  + In case of interruptions that cannot be resolved (e.g. because of machine failure), the treatment session shall be terminated (Treatment UPS 🡪 CANCELED) and the continuation of the treatment shall be done on a new session as for regular partial treatment scenarios.
  + The decision about how to proceed shall happen at TDD.
* T. Schwere will update the sequence diagrams accordingly.

The group assigned the next transactions to be worked out:

* RO-DPD-219 "Create Treat UPS and Radiation Delivery Instruction for Continuation": T. Schwere (ongoing)
* RO-DPD-202 "Request RT Patient Position Correction": M. Vonach
* RO-DPD-224 "External Verification": Sanjay Bari
* RO-DPD-214 "UPS Final Update at Session Termination": Thomas Schwere/Sanjay Bari
* RO-DPD-215 "UPS Completed / Cancelled at Session Termination": Thomas Schwere/Sanjay Bari

# General Design Topics

## New Workflow Notification Service

H. Beunk is still working on an alternative proposal. He will distribute a memo prior to the next meeting. The memo will be discussed in the next call.

# Face-to-Face Meeting

There are six confirmed participants so far (Thomas Schwere, Matt Daniels, Ulrich Busch, Christof Schadt, Martin Vonach, David Wikler). Chris, Harold and Sanjay are still waiting for their management approval.

Uli mentioned that we should consider to directly contacting other participants as well. A similar number of participants as we had in the last Brussels meeting would be great.

If we go with the March meeting we should have at least the core people available. Therefore the group decided to make the final call in the next TCon.

If the March is not going to fly we should consider having the meeting in Europe as the majority of the participants is located in Europe anyhow. Most participants of the Brussels meeting were located in Europe as well.

# Other Business

## Next DPDW TCon

The chair asked if the February TCon could be moved from Feb 24 to Feb 17. The group agreed on that.

* Tuesday, February 17, 2015  
  11:00am – 12:30pm EST.

## Changed Mailing List

The mailing list of the IHE-RO DPDW subgroup changed to [iherodpdw2015@aapm.org](mailto:iherodpdw2015@aapm.org).

# Adjournment

The meeting was adjourned at 12:30 EST.

Appendix A: Administration and Process Information

Documents are published at the following locations. If you have problems in accessing the document, please contact the Chair ([ulrich.busch@varian.com](mailto:ulrich.busch@varian.com)).

## Process of Authoring:

Steps:

1. Download a local copy of the document from locations below
2. Open this copy and remove all change bars
3. Ensure, that Changes Bars are switched on
4. **Make your changes**
5. Provide the updated version to the Chair

## Location of Documents:

DPDW Subgroup Minutes

<http://wiki.ihe.net/index.php?title=RO_DPDW_WorkingGroup>

DPDW Profile

The DPDW Profile is an IHE-RO document.

The current version is available in the IHE-RO Org Wiki:

<http://www.ihe-ro.org/>

Please find the current document under this page:

<http://www.ihe-ro.org/doku.php?id=doc:profiles>

Supp 160

DICOM Supplement 160 (Patient Positioning and Workflow) in s DICOM WG-07 document.

The current version is available at the DICOM ftp server:

<ftp://d9-workgrps:goimagego@medical.nema.org/MEDICAL/Private/Dicom/WORKGRPS/WG07/Supp160>

## Mailing List:

The mailing list for the DPDW subgroup is:

[iherodpdw2015@aapm.org](mailto:iherodpdw2015@aapm.org)

Appendix B: Task Assignments

Per end this TCon (2015-01-27).

| **No** | **TX / Area** | **Old Number** | **Title** | **Group** | **Owner** |
| --- | --- | --- | --- | --- | --- |
| 1 | ./. | ./. | Use Case Delivery-Device Independent Imaging |  | David Wikler |
| 2 | RO-DPD-200 | RO-DPD-01 | Worklist Query for Positioning Acquisition | Acquisition | Martin Vonach |
| 3 | RO-DPD-201 | RO-DPD-02 | Retrieve Device Position Information | Acquisition | Martin Vonach |
| 4 | RO-DPD-202 | RO-DPD-03 | Request RT Patient Position Correction | Correction | Martin Vonach |
| 5 | RO-DPD-203 | RO-DPD-04 | Store RT Patient Position Modification Instruction | Correction | Martin Vonach |
| 6 | RO-DPD-204 | RO-DPD-05 | Store RT Repositioning Results to Object Storage | Correction | Martin Vonach |
| 7 | RO-DPD-205 | RO-DPD-06 | Worklist Query for Repositioning | Correction | Martin Vonach |
| 8 | RO-DPD-206 | RO-DPD-07 | Notify on Radiation Delivery Status Change | Delivery | Thomas Schwere, Sanjay Bari |
| 9 | RO-DPD-207 | RO-DPD-08 | Retrieve RT Patient Position Correction Instruction | Correction | Martin Vonach |
| 10 | RO-DPD-208 | RO-DPD-09 | Subscribe/Unsubscribe to Treat UPS Status | UPS Notification | Thomas Schwere |
| 11 | RO-DPD-209 | RO-DPD-10 | Notify on Radiation State | Delivery | Thomas Schwere, Sanjay Bari |
| 12 | RO-DPD-210 | RO-DPD-11 | Retrieve Positioning Acquisition Results | Registration | Chris Pauers |
| 13 | RO-DPD-211 | RO-DPD-12 | Worklist Query for Positioning Registration | Registration | Chris Pauers |
| 14 | RO-DPD-212 | RO-DPD-13 | Worklist Query for Position Monitoring | Monitoring | Stephen Phillips |
| 15 | RO-DPD-213 | RO-DPD-16 | Store Monitoring Results to Object Storage | Monitoring | Stephen Phillips |
| 16 | RO-DPD-214 | RO-DPD-17 | UPS Final Update at Session Termination | Framework | Thomas Schwere, Sanjay Bari |
| 17 | RO-DPD-215 | RO-DPD-18 | UPS Completed / Cancelled at Session Termination | Framework | Thomas Schwere, Sanjay Bari |
| 18 | RO-DPD-216 | RO-DPD-19 | Indicate Ready for Monitoring | Monitoring | Stephen Phillips |
| 19 | RO-DPD-217 | RO-DPD-20 | Notify Device to start UPS | UPS Notification | Thomas Schwere, Sanjay Bari |
| 20 | RO-DPD-218 | RO-DPD-21 | Create Positioning Acquisition and Positioning Registration UPS | Workflow | Thomas Schwere |
| 21 | RO-DPD-219 | RO-DPD-22 | Create Treat UPS and Radiation Delivery Instruction for Continuation | Workflow | Thomas Schwere |
| 22 | RO-DPD-220 | RO-DPD-23 | Notify Treatment Session Actors on Starting Session | UPS Notification | Thomas Schwere, Sanjay Bari |
| 23 | RO-DPD-221 | RO-DPD-24 | Notify Device to stop UPS | UPS Notification | Thomas Schwere, Sanjay Bari |
| 24 | RO-DPD-222 | RO-DPD-25 | UPS Progress Update for Discrete non-Treatment Steps | UPS Notification | Thomas Schwere, Sanjay Bari |
| 25 | RO-DPD-223 | RO-DPD-26 | Worklist Query for Positioning Correction Reconciliation | Registration | Chris Pauers |
| 26 | RO-DPD-224 | RO-DPD-27 | External Verification | External Verification | Sanjay Bari |
| 27 | RO-DPD-225 | ./. | Notify Device to resume UPS | Monitoring | Stephen Phillips |
| 28 | RO-DPD-226 | ./. | Create new Positioning UPS | Monitoring | Stephen Phillips |
| 29 | RO-DPD-227 | ./. | UPS Final Update after Positioning Information Acquisition | Workflow |  |
| 30 | RO-DPD-228 | ./. | UPS Final Update after Treatment Interruption | Workflow | Thomas Schwere |