

QIBA CT Volumetry Technical Committee (TC) Update Call

03 February 2014 at 11 AM CT (GMT-6)

Call Summary

In attendance:

Gregory V. Goldmacher, MD, PhD (Co-Chair)
Hubert Beaumont, PhD
Andrew Buckler, MS
Heang-Ping Chan, PhD
Charles Fenimore, PhD
Paul Garrett, MD

Lubomir Hadjiiski, PhD
Rudresh Jarecha, MBBS
Philip Judy, PhD
Michael McNitt-Gray, PhD
James Mulshine, MD
Reginald Munden, MD

Kevin O'Donnell, MASc
Eric Perlman, MD
Adele Peskin, PhD
Ying Tang, PhD
Pierre Terve, MS

RSNA:

Joe Koudelik
Julie Lisiecki

Update from Image Acquisition Sub Group:

- The group had reviewed the Compliance section of the Profile.
 - Checklist needed no modifications.
- Suggestions for section 3.3.2 included:
 - Clarification re performance specification details, e.g., the voxel noise metric may need slight adjustment
 - Consider two evaluation procedures:
 - one that is mandated for vendors
 - a lightweight procedure for sites to follow

Update from Image Analysis Sub Group:

- The group is discussing what would be needed to focus on tumor volume change assessment.
 - Suggestions included:
 - Reader assessment using a semi-automated tool
 - Performance appraisal of a given tool with a range of readers
- Patient handling procedures may be sent to the whole tech ctte for review and comment
- More data beyond the liver is needed; clinical data would be helpful

Profile Template Changes (v2.2)

- Mr. O'Donnell to add an extra column for 'actors' in the specification tables within the Master Profile template on the [QIBA wiki](#)
- Mr. O'Donnell will communicate this template change to the other QIBA TCs

Future CT Volumetry Groundwork Projects

- Due to the amount of time needed to get projects rolling, it was suggested that TC members start considering potential groundwork projects for 2015

Interest in Cross-Modality Volumetry

- Suggested collaboration of current QIBA subcommittees across modalities to look at metrics for volumetric analysis, e.g., with MR.
- An ad hoc group of workstation manufacturers was suggested to discuss segmentation analysis relevant to multiple TCs; a break-out session at the QIBA Annual Meeting in May was proposed
- Following up on density measures within CT Volumetry, and looking more closely at COPD/Asthma's efforts was also proposed, especially with respect to soft tissue

- Mr. O'Donnell made the following request for the next meeting of the CT Volumetry Technical Committee on Monday, February 24th:

“As we continue our work on the performance procedures for the CT Lung profile, we will (hopefully) soon reach the stage where we can apply those procedures in our Technical Confirmation step for the profile. The idea of that stage is to bring together examples of each actor of the profile, demonstrate that each is in compliance with the profile (i.e., has met all the section 3 checklists) and (hopefully) demonstrate that the profile claim is achieved. To do this will likely require some volunteer actors and test data. We might want to start coordinating that now. Such volunteers will be well motivated to pay close attention to the finalization of our performance procedure details.”

Next calls:

- 1) **Monday, February 10, 2013 at 11 am CT:** Image analysis (both software and human analysts/readers)
- 2) **Monday, February 17, 2013 at 11 am CT:** Image acquisition hardware and reconstruction software
- 3) **Monday, February 24, 2013 at 11 am CT:** Full Technical Committee call