

QIBA CT Volumetry Technical Committee (TC) Update Call

17 March 2014 at 11 AM CT (GMT-6)

Call Summary

In attendance:

Samuel G. Armato III, PhD (Co-Chair)

Gregory V. Goldmacher, MD, PhD (Co-Chair)

Ángel Alberich-Bayarri, PhD

Andrew Buckler, MS

Charles Fenimore, PhD

Philip Judy, PhD

Hyun Grace Kim, PhD

James Mulshine, MD

Kevin O'Donnell, MASc

Adele Peskin, PhD

Nicholas Petrick, PhD

Daniel Sullivan, MD

Ying Tang, PhD

RSNA:

Joe Koudelik

Julie Lisiecki

Update from Patient Handling Sub Group:

- This section is complete and ready to include in the Profile

Update from Image Analysis Sub Group:

- Current challenges for the group are:
 - Two different branches for content:
 - Development of a suitable procedure with metrics, stemming from QIBA 3A collaborative effort
 - Determination whether or not the procedure and metrics are compliant
 - Whether or not algorithms can be identified as compliant or not; must decide as a group whether analysis is a combination of the user + the algorithm or if analysis can be done solely via automated algorithm use
 - Related manuscript text in the process of being re-written to a more procedural style
 - Reference data: How it is to be used, curated, procured, etc.

Action items for Image Analysis Sub Group:

- Mr. Buckler to send entire TC an email clarifying the issue regarding the algorithm and user relationship, with a focus on what decisions need to be made to move things forward.
- Technical committee to vote on the issue(s) by a specified deadline

Update from Image Acquisition Sub Group:

- Noise and spatial resolution requirements are still being ironed out; Dr. McNitt-Gray is following up with experiments and looking at an evaluation procedure
- A new QA section of the workflow proposed between reconstruction and analysis
- TC call needed to discuss whether completion of the compliance section hinges on reference data
- Subgroup to decide whether the issue
 - is agreeing on data reference sets or acquiring the data?
 - Mr. O'Donnell believes the answer is somewhere in the middle, and that strategic decisions must be made regarding the role of publicly available test sets.
 - If data is over-used, it ceases to be helpful.
 - Questions also remain as to whether or not QIBA should be managing this data.

Action items for Image Acquisition Sub Group:

- Mr. O'Donnell to draft a summary of the decision needed for reference data; this will be the focus of the technical committee call, moved up to March 31st.
- Latest Profile version to be posted on the Wiki

Other:

- Dr. Judy mentioned that STR will be focusing on long cancer screening for next year's conference, and would like QIBA to be involved in some capacity.
- Focus of the next TC call to be on Round-4 QIBA/NIBIB high-level projects and supporting reference datasets needed

Next calls:

- 1) Monday, March 24, 2014 at 11 am CT: **Image analysis** (both software and human analysts/readers)
- 2) Monday, March 31, 2014 at 11 am CT: **Full Technical Committee**: Discussion on reference data
- 3) Monday, April 7, 2014 at 11 am CT: **Image acquisition hardware and reconstruction software**