

QIBA CT Volumetry Technical Committee Update Call

December 19, 2011 at 11 AM CST

Call Summary

In attendance:

P. David Mozley, MD (Co-chair)

Lawrence Schwartz, MD (Co-chair)

Andrew Buckler, MS

Paul L. Carson, PhD

David A. Clunie, MBBS

Alden Dima, MS

Paul R. Garrett, MD

David Gustafson, PhD

Howard Higley, PhD

Luna Hilaire, PhD

James Mulshine, MD

Kevin O'Donnell, MASC

Guillaume Orioux

Estanislao Oubel, PhD

Nicholas Petrick, PhD

Daniel C. Sullivan, MD

RSNA:

Joe Koudelik

Madeleine McCoy

QIBA 3A Challenge Update

- Mr. Buckler provided a brief update of the 3A Challenge Pilot Study
 - Application to participate and data submission deadlines have been extended due to the holidays
 - Application to participate: January 20, 2012
 - Data submission: February 29, 2012
 - If people are interested in participating, please contact RSNA staff or Mr. Buckler for Challenge details
 - Dr. Gustafson would like to participate in the Pivotal project, though he is not able to join the Pilot
 - Dr. Orioux is interested in the Pilot program and plans to submit an application
- To gain a better understanding of the 3A Challenge project scope, potential participants are encouraged to download the image data for reference; registration will be required only to prevent site hacking
- Download the QIBA 3A Volumetric CT Pilot Data and use the indicated lesion as desired for algorithm optimization (training). Participants are asked not to use the remaining lesions in the Pilot Data for algorithm optimization. Instructions for downloading the data can be found at:
 1. http://www.qi-bench.org/wiki/index.php?title=Manually_access_data or
 2. <http://tinyurl.com/QIBA3APilotData>

QIBA Vol-CT AdvDisease v2 Public Comment Profile Feedback (led by Mr. O'Donnell)

- #165 (line #258): Addressing Profile Claim and Lesion Quantification
 - Highest priority is to satisfy the Profile Claim, then address Best Practices in the future
 - Lesion change measurement is the goal, not absolute lesion size
 - Sequential vs. randomized reads discussed
 - Action: the Profile Editor will suggest revisions as indicated.
- #134 (line #258): Recording of software and operator
 - Depending on Claim needs, public comment suggested that documenting the software version and operator would be useful for verifying compliance with QA procedures
 - Committee agreed that the profile needs to clarify the language on what constitutes a "pass"; the current Profile language may be too broad
 - Action: the Profile Editor will suggest revisions as indicated.
- #162 (line #258): Multiple Lesions: Public comment suggested that a lesion identifier is required
 - Committee agreed, but concluded that standardizing the way lesions are identified is outside the scope of the current design specifications
 - Dr. Clunie observed that multiple solutions could be compliant with the Profile
 - DICOM SR Tools will likely lead, not QIBA
 - Issue closed. No further action indicated at this time.
- #163 (line #258): Lesion Volume Change
 - "Specify variability less than 15%" – more group discussion required to sketch this out
 - Action tabled.

- #164 (line #258): Performance Scoring
 - Public comment suggested that performance scoring should take into account the “difficulty” of measuring some tumors types; the reviewer proposed classifying tumors by expert consensus/opinion
 - Consensus was not supportive
 - QIBA will select a reference dataset that will contain a variety of tumors (hard and easy)
 - Profile to address a variety of tumors based on measurement difficulty (ie, from hard-to-easy)
 - Issue closed. No further action indicated at this time.

Next steps:

- Mr. O’Donnell to allocate tasks for specific committee members to divide and conquer
- Next call scheduled in 3 weeks for Monday, Jan 9th at 11 am CST (no calls on Dec 26 or Jan 2)