QIBA CT Volumetry Technical Committee Update Call

23 September 2013 at 11 AM CDT (GMT-5)

Call Summary

In attendance:

Samuel G. Armato III, PhD (Co-Chair) Gregory V. Goldmacher, MD, PhD (Co-Chair) Lawrence Schwartz, MD (Co-Chair)

Rick Avila, MS Hubert Beaumont, PhD Charles Fenimore, PhD Matthew Fuld, PhD David Gustafson, PhD James Mulshine, MD Kevin O'Donnell, MASc Daniel C. Sullivan, MD Ying Tang, PhD Pierre Terve, MS

David Yankelevitz, MD

RSNA: Joe Koudelik Madeleine McCoy

General Discussion

Mr. Avila presented a slide deck focusing on three new technologies being proposed to help QIBA pursue quantitation in CT imaging based on mathematical models

- CT Pocket Phantom Technology
 - o Automated estimation of fundamental, real-world CT properties that produce a CT acquisition model
- First-order CT Simulation
 - Simulate the result of CT scanning of a structural model given fundamental acquisition parameters
- Fundamental CT Performance Database
 - Leverage a large amount of data on the fundamental performance of CT scanners and protocols, including real-world patient data and anthropomorphic phantom scans
- The use of mathematical models (first-order approximations) was proposed to simulate CT images in efforts to study image resolution, noise, edge enhancement and CT linearity to better estimate scanner performance and minimize potential bias
- Combining classical (ie, patient, phantom) studies with mathematical modeling/simulation studies suggested to help move QIBA efforts faster

Next QIBA CT-VOL Tech Ctte t-con, Monday, October 7, 2013 at 11am (CDT).

RSNA 2013 Annual Meeting - QIBA Technical Committees Working Meeting:

- Wednesday, December 4th | 2:30pm 5:00pm | Chicago, McCormick Place | Room: TBD
- Please let us know whether you plan to attend by responding to the following poll: http://www.doodle.com/fwf76ceggb78r75b.
- We appreciate your continued support and look forward to your participation Thank You!