

QIBA Perfusion, Diffusion and Flow – MRI Technical Committee Update Call

Wednesday, 31-October-2012 at 11 AM CDT (GMT-5)

Call Summary

Participants

Marko Ivancevic, PhD (Co-chair)
Edward F. Jackson, PhD (Co-chair)
Daniel P. Barboriak, MD
Michael Boss, PhD
Orest B. Boyko, MD
Andrew J. Buckler, MS
Barbara Croft, PhD

James R. Ewing, PhD
Alexander Guimaraes, MD, PhD
Jiachao Liang, PhD
Estanislao Oubel, PhD
David E. Purdy, PhD
Mark Rosen, MD, PhD
Rohit Sood, MD, PhD
Daniel C. Sullivan, MD

Brandon Whitcher, PhD
Ona Wu, PhD
Xiangzhi Zhou, PhD

RSNA

Joe Koudelik
Madeleine McCoy

General Discussion

- Call Summary for 10/17/2012
 - Comments or edits should be submitted to RSNA Staff
- Update on the QIBA PDF-MRI Tech Ctte Poster for the 2012 RSNA Annual Meeting (Dr. Jackson)
 - Dr. Jackson recognized the contributors' efforts to the poster.
 - The poster has been printed and mailed to the RSNA headquarters.
- "Meet the Expert" (MTE) Sessions at the 2012 RSNA Annual Meeting
 - MTE Sessions offer an opportunity for committee members to answer general questions about QIBA and discuss the poster.
 - All ctte members attending RSNA 2012 encouraged to provide their availability via Doodle poll:
<http://doodle.com/qi8fhbm6m3wtzsvv>
- Guest Editor Opportunity
 - Dr. Costas Balas (University Campus – Kounoupidiana, GREECE) is requesting a Guest Editor to coordinate the review process of DCE-MRI manuscripts for the International Journal of Biomedical Imaging.
 - Dr. Ewing may be interested and RSNA Staff will forward more details.
- DRO Project Request for Review-Assessment of Bias (Dr. Barboriak)
 - Dr. Barboriak discussed the results of the DRO software comparisons as detailed on the RSNA 2012 Annual Meeting Poster.
 - The original DRO metrics focused on variance and did not assess bias.
 - One outcome of the recent QIBA Metrology Workshop was to highlight the importance of assessing, when possible, both the variance and the bias for any quantitative imaging biomarker. To address the bias assessment, Dr. Barboriak proposed and discussed several metrics, including bias-median percent taken across all regions, using noiseless and noise-added data, as well as across regions where the software package performed best (within 1%).
 - Following extensive discussion, the group was supportive of the proposed metrics and provided some additional suggestions for consideration.
 - Dr. Barboriak to forward his "spreadsheet of values" to Mr. Buckler to re-plot on Radar plots.
 - Goal of the study report is to provide assessments that will 1) allow software developers to improve their product and, 2) potentially be used in compliance testing of software packages.
- QIBA PDF-MRI Profile Compliance Certification Work Group
 - Dr. Jackson will work with RSNA Staff to coordinate the next t-con.
- DCE-MRI Profile v2.0 (Dr. Guimaraes)

- Dr. Guimaraes is developing a one-page summary outlining the goals of Profile v2 for discussion at the working meeting at the RSNA 2012.
- The work products of the QIBA Metrology Terminology Workgroup and the Algorithm Comparisons Workgroup will be used in v2.
- Once the Metrology Workgroup white papers are completed, they will be shared with the Technical Committee.
- Update on DWI Profile Effort (Dr. Boss)
 - Mr. Buckler and Dr. Boss addressed the issue of bias and variability in relation to the claim language.
 - Dr. Boss to focus on aspects of the claim from acquisition through analysis. Once the draft Claim language is complete, it will be forwarded to the committee for feedback and discussion at RSNA 2012.
 - How to address variability across organ systems requires more discussion.
 - Dr. Rosen to supply prostate literature to Dr. Boss.
- Updates from Phase I and Phase II NIBIB Projects
 - Phase I-Dr. Barboriak discussed the updates from the poster.
 - Phase II-Dr. Rosen and Dr. Jackson to discuss project specific details offline, particularly the “pass criteria” for the QIBA DCE-MRI phantom scans.

Next steps:

- Next call scheduled for Wednesday, November 14, 2012, at 11 AM (CT).
- Dr. Jackson to work with RSNA Staff for the coordination of the next compliance t-con.
- RSNA Staff to forward Dr. Balas’ editor request to Dr. Ewing.
- Dr. Barboriak to send Mr. Buckler requested report data for Radar plot.
- Dr. Boss to circulate the DWI Profile Claim language.
- Dr. Rosen to supply prostate literature to Dr. Boss.
- RSNA 2012 ANNUAL MEETING ACTIVITIES-Chicago, McCormick Place
 - **QIBA Technical Committees Working Meeting**
Wednesday, November 28th at 3:00pm – 5:30pm; Room: N136
 - **Special Interest Session- *What Imaging Measurements are needed in Clinical Practice?***
Monday, November 26th at 4:30pm – 6:00pm; Room: N228

RSNA 2012: The QIBA working meeting is Wednesday, Nov 28th, from 3 pm – 5:30 pm

- Everyone is asked to respond to the **Doodle Poll** regarding attendance at the Nov 28th QIBA working meeting:
<http://www.doodle.com/kssb47q8up4446c6>