

QIBA PDF-MRI Technical Committee Update Call

02 May 2012 at 11 AM CDT (GMT-6)

Call Summary

In attendance

Gudrun Zahlmann, PhD (Co-chair)
Edward F. Jackson, PhD (Co-chair)
Sandeep N. Gupta, PhD (Co-chair)
Michael Boss, PhD
Martin Buechert, PhD
Paul L. Carson, PhD
Thomas L. Chenevert, PhD

Barbara Croft, PhD
Daniel Gembris, PhD
Alexander Guimaraes, MD, PhD
Marko Ivancevic, PhD
Gregory Karczmar, PhD
Jiachao Liang, PhD
David E. Purdy, PhD

Annette Schmid, PhD
Daniel Sullivan, MD

RSNA

Joe Koudelik
Madeleine McCoy

Final discussion beta test of VS software to analyze DCE-MRI Phantom V2 image data

- Software bugs were reported during beta testing
 - a. Failure to read multiple flip angles with data stored in a single directory
 - b. Software expects Little Endian (Windows format); may cause issues with Big Endian format
 - c. Software based on 32 bit systems and may cause issues with to 64 bit systems; needs to be addressed
- Dr. Jackson discussed 4 additional issues to be resolved, originally reported by email on 2/15/2012, which will be resubmitted to Dr. Ashton :
 - d. Logistic issues such as returning to the same directory for each series
 - e. Goodness-of-fit for each measurement requested
 - f. Software version number to be assigned
 - g. M0 measurements are "0" for all VTR and IR series
- Tech Ctte did not consider current status of software to be complete; outstanding issues to be addressed
- Dr. Jackson to draft a letter-of-requirements for co-chair review, then formal Tech Ctte review/discussion, then staff will forward the final version to VirtualScopics for official submission
- Dr. Jackson to forward software user manual to Dr. Gupta for reference

Prepare for May QIBA F2F meeting discussions:

- DCE-MRI profile v2.0 discussion and questions to be addressed:
 - Is a new or adjusted Claim needed?
 - What needs to be in DCE-MRI Profile v2.0?
 - What do we need to get there?
 - Drs. Guimaraes and Rosen to draft a "problem point" outline to extend Profile v1 into v2.
- Claim development of the DWI Profile to begin
 - Prioritization of Profiles: v1 of the DWI Profile was deemed higher priority than v2 of the DCE-MRI Profile.
 - Drs. Guimaraes and Boss will develop the preliminary DWI Profile Claim before the QIBA f2f in May; an outline is to be presented on the next Tech Ctte update t-con on May 16th.
- Breakout groups and sequence of discussion
 - It was decided to keep the group together to maximize expertise
 - Dr. Boss will develop the agenda and lead the DWI discussion during the Wednesday breakout session
 - Proposed PDF-MRI breakout session topics
 - Tuesday: Funded project updates, test/retest update, Profile v2 update
 - Wednesday: DWI Profile outline and preliminary Claim

NIBIB Update:

- Dr. Sullivan informed the group that there may be a possible 6-month delay in funding. An informational e-mail will be sent in the near future.

Next Steps

- Dr. Jackson to prioritize the outstanding software issues, draft a letter-of-requirements for co-chair review, then Tech Ctte review, and finally present to VirtualScopics
- Dr. Jackson to forward the VirtualScopic software user manual to Dr. Gupta
- Dr. Ivancevic to test the VirtualScopics software with Philips data for any Philips signal intensity scaling issues
- Drs. Guimaraes and Rosen to follow up offline to draft a "problem point" outline to extend DCE Profile v1 into v2.
- **Next call:** Perfusion, Diffusion and Flow – MRI (PDF-MRI), Wednesday, May 16, 2012, 11am CT