

QIBA fMRI Technical Committee Update

Wednesday, October 24, 2012 at 11 AM CT

Call Summary

In attendance

Ted DeYoe, PhD (Co-Chair)

Cathy Elsinger, PhD (Co-Chair)

Paul Carson, PhD

Erich Huang, PhD

Andrew J. Kalnin, MD

Feroze Mohamed, PhD

Jay J. Pillai, MD

James L. Reuss, PhD

David Soltysik, PhD

Daniel C. Sullivan, MD

James T. Voyvodic, PhD

RSNA

Joe Koudelik

Julie Lisiecki

QIBA fMRI Technical Committee Call Agenda, Wednesday, October 24, 2012 (11 AM CT)

1. RSNA Meeting Schedule:

QIBA Technical Committees- Working Meeting

Wednesday, November 28th, 3:00pm – 5:00pm

Chicago, McCormick Place

Room: N136

2. RSNA Poster – Send content to Ted, Ted and Cathy to work on draft for circulation – assistance from Harris.

Hard copy of the poster is due to RSNA by **November 1st**.

Sent to RSNA Headquarters so that staff may coordinate shipment to the McCormick Place Convention Center – who will print?

3. Application for Continued External Funding

- 10/18 SC call Dr. Sullivan reported that additional materials have been sent to and acknowledged by NIBIB. He will follow up with NIBIB staff and provide an update soon.
- Process for selecting projects is under review by SC and is likely to be different – not equal distribution by modality, but tied to scientific priorities – process TBD.

*Proposal discussion at RSNA meeting?

4. Strategic Plan – review of timeline (Attachment A)

- Profile 1.0 – public comment/field testing
- Profile 2.0 – what will be criteria/rationale for V2?

5. Profile Development – SOV focus (Feroze) (Attachment B)

- Cathy editing 10/11 draft - reformatting
 - Continue discussion of most notable sources of variance using 10/18 draft.
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Discussion

fMRI Reproducibility call: Cancelled for October 25th and rescheduled for November 1st at 10 am CT.

1. REMINDER - QIBA meeting at RSNA 2012

- QIBA working meeting on Wednesday, Nov 28th, from 3 pm – 5:30 pm
- Will have time to give progress reports, cover process issues related to field testing, public comment, etc.
 - These topics will be discussed in the plenary session.
 - fMRI Tech Ctte to continue with discussion of sources of variance.

2. Poster for RSNA 2012 Update - due to RSNA by November 1st.

- Draft poster to be finalized by Drs. DeYoe, Elsinger, and Harris – will circulate to the group in the next few days for review
- Final figures or information to be included on the poster to be sent to Drs. DeYoe and Elsinger as soon as possible
- Dr. DeYoe will most likely print – though Dr. Elsinger will follow up with RSNA Staff regarding options

3. Application for Continued External Funding

- Dr. Sullivan reported that additional materials have been sent to and acknowledged by NIBIB.
- The process for selecting projects is under review and may have further input from NIBIB/ NIH staff than in the past. Project focus to remain on sources of variance.

4. Strategic Plan – review of timeline discussed briefly

5. Profile Development

- **Metrology Workshop Update – (Dr. Voyvodic)**
 - Much discussion was held on use of claim language - to make claims similar across QIBA technical committees while addressing Metrology concepts, particularly repeatability and reproducibility
 - In general – “a biomarker should be reliable/ repeatable enough” to make specific measurements within some coefficient of repeatability
 - Dr. Voyvodic indicated that he will email his suggested for adjustments to the claims wording per Metrology insights to all
 - In particular – the biomarker must be related to a compelling context of use, such as pre-surgical planning in the case of fMRI
 - Dr. Elsinger will incorporate these edited claims into the Profile.
- **QIBA Claim Template Updated – (Dr. Sullivan)**
 - Biomarker and what one is actually measuring must take into account 1) bias and 2) precision – within a clinical context.
 - Dr. Voyvodic mentioned that the clinical context should not precede the measurand, and that many of the QIBA claims will need to be reworded and adjusted for this reason.
- **Group continued their discussion of Sources of Variance**
 - This discussion to continue until deemed complete.
 - Need to further identify and prioritize possible sources of variance for discussion at RSNA 2012
 - Motion correction was also suggested as an area requiring a broader literature search

6. Introduction –Erich Huang, PhD – new technical committee member

- Dr. Huang works for the National Cancer Institute and has been actively involved in the QIBA Metrology Group
- His expertise with fMRI will help the group with statistical data analysis
- He is also interested in Image Management, Image Analysis and Workflow

Next Steps:

- Drs. DeYoe, Elsinger, and Harris to circulate draft of the committee poster for review in the next few days.
- Dr. Voyvodic to email his suggestions for adjusting the claims wording per Metrology insights
- Dr. Elsinger to incorporate Dr. Voyvodic’s edited claims into the Profile
- Dr. Elsinger to invite Dr. Kinahan to discuss the multi-institutional R01 grant
- Profile discussion to continue with focus on Sources of Variance

Next Meetings

- Next QIBA fMRI Reproducibility Working Group Call, **Thursday, November 1st, at 10 am CT**
- Next QIBA fMRI Technical Committee, **Wednesday, November 7th, at 11 am CT**