QIBA fMRI Technical Committee Update

Wednesday, March 14, 2012 at 11 AM CT Call Summary

In attendance RSNA

Cathy Elsinger, PhD (Co-Chair) Feroze Mohamed, PhD David Soltysik, PhD Julie Lisiecki

Paul Carson, PhDJay J. Pillai, MDJames Voyvodic, PhDTed DeYoe, PhDJames L. Reuss, PhDDomenico Zaca, PhDAndrew J. Kalnin, MDLaura Rigolo, MS

QIBA fMRI Technical Committee Call Agenda, March 14, 2012

DICOM working group -

PACS contact for representation defined within current DICOM workflow recommendations

ASFNR Meeting

- Poll was circulated/favorable response
- Collating responses, next steps for collecting more information
- Posting on the WIKI for further circulation

ASFNR face to face meeting

- In attendance (Drs. Petrella, Mohamed, Elsinger, Voyvodic, Reuss, and Jeff McGovern (GE,MN), Mike Fonte (MN), Andrew Kalnin, MD (OSUMC), (Drs. DeYoe, Carson, and Pillai by phone)
- Short review of goals, efforts in progress and funded projects for newcomers
- Plan in place for moving forward on profile (see below)

Current Strategy for Profile development (first draft July 2012, October 30 estimate for public comment)

- Employ a systematic method to investigate and describe reproducibility/variability
 - Assessment (what is achievable and under what conditions) (NIBIB funded projects)
 - o Define sources of variance (avoidable, unavoidable)
 - Develop mitigation strategies where possible
- Profile will be informed by:
 - Currently funded projects
 - Data collected as part of workflow project
 - Consensus/expert opinion
 - Literature as appropriate
- Practical issues: Drs. Elsinger and Mohamed to work on writing as we address each step in Profile and circulate for feedback
- Field testing -> internally, members of the group to work on field testing in parallel to the Public comment efforts

Strategic Plan Discussion (Dr. Carson)

Discussion

NIBIB update report is due on 3/15 with high priority topics in bulleted list format to Dr. Sullivan from co-chairs

DICOM Working Group Update (Dr. Reuss)

Need to find correct working group for defining standards within PACS arena – proper contacts needed for WG16 and WG10

ASFNR meeting update

- The poll was favorably received 9 responses were collected; additional opportunities for data collection were discussed
 - Group may try to collect additional responses by posting to the WIKI (poll may be slightly revised for this purpose)
 - ASFNR agreed to post the poll via their website with a rationale/ explanatory text to be provided by Drs. Elsinger and Reuss

Strategic Planning Discussion at f2f meeting at ASFNR

- Plan now in place to move Profile forward especially regarding workflow/ learning and how to integrate this data
 - o First draft of Profile is projected for end of July 2012
 - Draft 1 for Public Comment phase is projected for end of October 2012; transition into Field Test phase as Public Comment phase is completed

- Group discussed a systematic method to completing the Profile:
 - o 1) assessment of current projects; 2) sources of variance: where they exist and how to mitigate
- Unclear how to "map" potential sources of variance into the Profile; discussions to address each individually
- Will use data collected with consensus, expert opinion, and literature review for support
- Profile field testing among technical committee members was proposed to follow the public comment phase
 - Group would like to reduce the effects of the sources of variance on the data
- Groundwork for identifying technical characteristics of resting state fMRI discussed as possible second Profile
- Another suggested project was a database related to the Open Image Archives effort for fMRI
 - o Dr. Voyvodic emphasized that this is a significant undertaking and will require a step-by-step plan
 - He also suggested clarifying how field testing would be accomplished with a concrete plan, resources, estimated time
 - o fMRI group has a lot of raw, unprocessed patient data available with rare insight into an identical procedure run on one person multiple times

Next Steps

Group to discuss Strategic Plan on next call with focus on Phase I reproducibility and NVU studies

Next Meetings

- QIBA fMRI Technical Committee, Wednesday, March 28th, at 11 am CT
- QIBA fMRI Reproducibility WG, Tuesday, April 17th at 11 am CT
 Reminder: No calls on April 3rd or 4th due to RSNA Staff in-house QIBA Metrology Workshop