QIBA fMRI Biomarker Committee (BC) Call

Wednesday, March 22, 2017 at 11 AM CT Call Summary

In attendance RSNA

Ted DeYoe, PhD (Co-Chair) Feroze Mohamed, PhD David Soltysik, PhD Joe Koudelik

Cathy Elsinger, PhD Nancy Obuchowski, PhD James Voyvodic, PhD Susan Weinmann

Andrew Kalnin, MD

Review of Previous Call Summary

• The 3.08.2017 call summary was approved as presented

Announcements

- Status of future NIBIB funding (Dr. Elsinger)
 - Due to uncertain NIH funding and other NIBIB funding obligations, NIBIB announced that the QIBA
 Contract will not be re-competed
 - No funding will be available for new QIBA projects
 - RSNA remains supportive of the QIBA efforts and plans to continue support the administration of calls and scaled-down f2f meetings
 - The revitalized Sustainability Task Force to address alternative funding strategies under the leadership of Dr. Annette Schmid
 - Those who have ideas on funding options or collaborations to explore were encouraged to contact MR
 CC Chairs
- QIBA Annual Meeting
 - o The 2017 meeting to proceed as planned
 - o The 2018 QIBA Annual Meeting will likely be held in May, near RSNA Headquarters in Oak Brook, Illinois
 - Details regarding the size and scope of the meeting is yet to be determined

fMRI Profile v1.0 draft (All)

- To support concurrent access and editing, the fMRI Profile v1.0 is on Google docs at: https://docs.google.com/document/d/1M8XywlKVYSI9 SXfmvkPzVdnunVTXHwc3CdnqFTrsCw/edit?usp=sharing
- Vote-to-release e-ballot, sent out to eight fMRI BC eligible voters, closed with 6 "Yes" and 1 "No", thus approving Profile release
- Next step is the MR CC e-ballot vote-to-release process
- 4.1 Assessment Procedure: fMRI center-of-mass reproducibility (Claim)
 - Dr. Elsinger to coordinate with Drs. Obuchowski, Voyvodic, et al. to organize data and the required specification of the Claim measurement, then modify section 4.1 and Appendix G according to "Actor"
 - Need to clarify the "Actor" roles better, e.g. who is responsible for individual assessment procedures
 - Manufacturers, Technicians, and imaging sites will be Actors and have specific assessment criteria

- Discussion on arriving at 3.84 in the procedure step: "Compute the mean variance over all the subjects.
 Compare the result with the Profile Claim. A mean variance ≤3.84 demonstrates conformance with this requirement."
- A collection of DROs is being provided for users to test that equipment meets fMRI Profile QA requirements
- 3.7.2 Specification Table
 - o The discussion of head motion as a source of variation was revisited
 - o Differences between random and task-correlated head motion were discussed
 - o DRO head motion data to be reviewed in Appendix H
 - o Dr. Soltysik's measurements regarding pitch, yaw and roll to be cited in Profile after his paper is published
- Methodology for assessing head motion to be added; Profile users to be provided a well-defined way to compute and use the data; if this is not possible, then head motion detail to be removed from Profile

Next calls:

- QIBA fMRI Bias TF call Tuesday, April 11 at 10am CT
- QIBA fMRI Biomarker Committee call Wednesday, April 5 at 11am CT