QIBA fMRI Biomarker Committee (BC) Call

Wednesday, January 25, 2017 at 11 AM CT

Call Summary

In attendance			**RSNA**
Ted DeYoe (Co-Chair)	Peter Hardy, PhD	David Soltysik, PhD	Susan Weinmann
James Reuss, PhD (Co-Chair)	Ping Hou, PhD	James Voyvodic, PhD	
Christopher Benjamin, PhD	Nancy Obuchowski, PhD	Zhiyue Jerry Wang, PhD	
Thomas Chenevert, PhD	Jay Pillai, MD		

Review of Previous Call Summary

- The 1.11.2017 call summary was approved as presented

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/1M8XywlKVYSl9_SXfmvkPzVdnunVTXHwc3CdnqFTrsCw/edit?usp=sharing**
- Anyone with the above link can submit comments, while only a small group has editing privileges
- Comments submitted through Google doc fMRI Profile v1.0 were reviewed
- "Open Issues" were rephrased as questions
- About 50% of Profile comments from fMRI BC members have been addressed
- Actions taken in response to comments to be entered into "Change Log"
- Conformance statement to be completed for review

fMRI DROs for Profile v1.0 conformance (Dr. Voyvodic)

- Discussion on what kind of DROs to generate and how to use them to test conformance
- If someone downloads and performs analysis, they will have access to activation method
    - Most software not designed to create center of mass activation numbers
    - For good dataset, user would get an answer within the range specified in the Profile
    - Out of spec studies (e.g. patient didn't behave properly) must be identifiable
    - Datasets to be generated
    - Discussion on to what extent conformance can be achieved in the presence of noise
    - Discussion on the amount of noise that noise would disqualify datasets

- DRO goal is to find out if performance plan is feasible
- Suggested to create a DRO that has 20-30 cases based on fMRI BC specifications (as opposed to user trying to differentiate bad & good ones)
- Datasets that are known to achieve Claim to be used
- Step-by-step assessment/procedure to be written
- Generate a range of DROs where fMRI will get the desirable center of mass (every DRO should be a good subject)
- fMRI Profile to determine whether methods are good or bad, not whether data is good or bad
- Conformance to quality control methods needed

- Set of DROs to be provided for users to test their system conformance
- To provide QA tests to allow user to determine whether dataset is adequate
- Motion parameters regarding NVU have been provided
- Factors that would disrupt ability to meet Claim to be identified

Next calls:

- QIBA fMRI Bias TF call - Tuesday, January 31 at 10am CT
- QIBA fMRI Biomarker Committee call – Wednesday, February 8 at 11am CT