QIBA fMRI Biomarker Committee (BC) Meeting

Wednesday, August 2, 2023, at 11 a.m. (CT) Meeting Summary

In attendance

Feroze Mohamed, PhD (Co-chair) Jay Pillai, MD (Co-chair) David Soltysik, PhD (Co-chair) Shruti Agarwal, PhD Michael Boss, PhD Andrew Kalnin, MD Anthony Liu, PhD Nancy Obuchowski, PhD Judd Storrs, PhD Kiran Talekar, MD James Voyvodic, PhD Gudrun Zahlmann, PhD Yuxiang Zhou, PhD, DABR **RSNA staff** Susan Stanfa

Review of Previous Meeting Summary:

• The 07.19.2023 meeting summary was approved as presented

Topics Discussed:

• QIBA fMRI Special Report (White paper) based on Profile and publication

Action Items:

- Special report outline development and discussion of paper's goals continued
- To be explained that fMRI can generate quantitative results, specifically, location of clusters and laterality index in a reproducible way; steps for achieving this to be specified
- Quantitative recommendations supported by data include requirements for quantitative location (language clusters) and for quantitative laterality (measure BOLD signal within language ROIs and identify ROIs)
- Each actor to be discussed in terms of improvements that need to be made and how to perform the steps
 - o Analysis software developer to register EPI to anatomic images and register atlas to patient
 - o MR tech, fMRI specialist, and radiologist to focus on quality control criteria during scanning
 - Scanner manufacturer to be informed about the importance of near/real-time fMRI maps
 - Products for performing essential functions to be listed
- Journal targets include *Radiology, AJNR*; meeting with *Radiology* Editor-in-Chief for guidance on planned paper submission to be considered once goals of paper are finalized
- Publication examples include: AJNR, Journal of Nuclear Medicine
- RSNA to provide DOIs for each QIBA Profile, which will facilitate citation

Next Steps

- Dr. Zahlmann to request feedback from *Radiology* over the coming weeks re: coordinated cross-modality paper
- Final internal section-by-section review of Profile needed before a BC vote-to-release for public comment can be initiated (followed by an MR CC vote)
- Initiate and complete Public Comment stage 1 Profile well before December:
 - Work on special report in parallel
 - o Circulate for full BC internal review followed by a BC vote-to-release for Stage 1: Public Comment
 - MR CC vote-to-release to follow
 - o Disseminate for public comment
- Special report based on the Profile with a focus on Claims and reproducibility data to be submitted to *Radiology* for publication by December 2023
- Next meeting: August 16, 2023, at 11 a.m. CT (1st & 3rd Wednesday of each month)