QIBA fMRI Biomarker Committee (BC) Meeting

Wednesday, April 19, 2023, at 11 a.m. (CT) *Meeting Summary*

In attendance RSNA staff
Feroze Mohamed, PhD (Co-chair) Shruti Agarwal, PhD Judd Storrs, PhD Susan Stanfa

Feroze Mohamed, PhD (Co-chair) Shruti Agarwal, PhD Judd Storrs, PhD Jay Pillai, MD (Co-chair) Cathy Elsinger, PhD James Voyvodic, PhD David Soltysik, PhD (Co-chair) Anthony Liu, PhD Francisco Zamorano, PhD

Review of Previous Meeting Summary:

The 04.05.2023 meeting summary was approved as presented

Topics Discussed:

- White Paper based on standards outlined in the Profile
- How to encourage fMRI Profile adoption
- ROI Identification Section in Appendix A9

Next Steps / Action Items:

- Discussion continued re: drafting a white paper describing standards based on Dr. Voyvodic's reproducibility study data, results, and to publicize the first iteration of the Language Profile
 - Idea originated from Apr. 5 discussion re: laterality index Claim and how to encourage Profile adoption, including following the steps for calculating weighted laterality index
 - To be done in parallel with Profile development vs. waiting until the Profile has been refined based on community feedback and published as Consensus (stage 2)
- A disconnect between published research papers on quantitative laterality indices and clinical practice
 protocol was cited, and a publication supporting a specific, standardized way of computing laterality
 indices may increase the likelihood of widespread clinical adoption of that method
- Published standards may be the impetus for FDA approval of commercial software that would facilitate the computation of laterality indices in the context of routine clinical workflow
- Discussion re: vendor requirements for providing a quantitative laterality index computation tool
 - o Competing priorities and time limitations were cited as barriers
 - Sound methodology for performing a calculation that has been tested, proven functional and can be easily implemented and routinely used, is needed
 - Capabilities within the platform to perform lateralization in a QIBA-endorsed way would be sound rationale for implementing it
- Dr. Voyvodic updated his three-panel alignment figure to include a fourth panel showing the logic of the next step being activation maps, for review and inclusion in ROI Identification section in the Appendix
 - Dr. Storrs to draft text for this section
- Staff to distribute the latest version of the Profile for fMRI BC feedback
- Next steps following completion of the Profile:
 - o Circulation for full BC internal review followed by a vote-to-release for Stage 1: Public Comment
 - MR CC vote-to-release will follow

Next meeting: Wednesday, May 3, 2023, at 11 a.m. CT (1st & 3rd weeks of each month)