

QIBA fMRI Biomarker Committee (BC) Call

Wednesday, February 8, 2017 at 11 AM CT
Call Summary

In attendance

Ted DeYoe (Co-Chair)

James Reuss, PhD (Co-Chair)

Andrew Kalnin, MD

Feroze Mohamed, PhD

Jay Pillai, MD

David Soltysik, PhD

James Voyvodic, PhD

Zhiyue Jerry Wang, PhD

Kirk Welker, MD

RSNA

Susan Weinmann

Review of Previous Call Summary

- The 1.25.2017 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/1M8XywlKVYSI9_SXfmvkPzVdnunVTXHwc3CdnqFTsCw/edit?usp=sharing
- Anyone with the above link can submit comments, while only a small group has editing privileges
- Discussion focused on specification table in Section 3.3: Periodic QA
- Deliberated specifically on Temporal SNR (tSNR) Parameter: “Prior to starting the clinical fMRI practice shall confirm the $tSNR \geq 0.71 \times \text{average SNR of the phantom.}”$
 - fMRI BC members commented on practices at their institutions
 - Dr. Welker: a daily ACR QC is performed as well as a weekly, detailed fMRI QC
 - Dr. Wang: ACR and fMRI QC performed weekly
 - Drs. Welker & Pillai execute a breath hold with many patients, which provides another QC check. In addition, raw EPIs are checked for distortions.
 - No one on call in clinical practice is doing temporal SNR with phantoms on a regular basis
 - Dr. Soltysik to locate a reference for the 0.71 factor
 - Any other open issues to remain open in this Profile version 1.0

Profile 2.0 Proposed on Language Mapping

- Profile v1.0 to be used as a template for the next proposed Profile
- In addition to center of mass, language lateralization will be included; spatial extent measure may be included
- Likely need claims for multiple language centers (separate COM) and use of multiple paradigms
- Profile 2.0 writing volunteers to be requested in April (after 1.0 has been completed)
- Dr. Pillai volunteered to serve on the fMRI Profile 2.0 Writing TF
- ASFNR efforts to be used for v.2.0 Profile
 - [ASFNR standards project](#) – goal is to progress toward standardization by converging clinical practice on [standard language paradigms](#)

Next calls:

- QIBA fMRI Bias TF call - Tuesday, February 14 at 10am CT
- QIBA fMRI Biomarker Committee call – Wednesday, March 8 at 11am CT (February 22 call re-allocated to Q1 MR Coordinating Committee Call)