

QIBA fMRI Reproducibility Work Group Update

Tuesday, October 25, 2011 at 11 AM CDT

Call Summary

In attendance

James Voyvodic, PhD (Chair)

Harris Ahmad, MD

Paul L. Carson, PhD

Barbara Croft, MD

Ted DeYoe, PhD

Cathy Elsinger, PhD

Jeffrey Petrella, MD

Jay J. Pillai, MD

James L. Reuss, PhD

Laura Rigolo, MS

Daniel Sullivan, MD

Domenico Zaca, PhD

RSNA

Joe Koudelik

Julie Lisiecki

fMRI Tech Ctte Poster Updates for RSNA 2011

- Use case – fMRI as a biomarker of healthy brain tissue for guiding tumor surgery
- More detail on vision mapping suggested with brief mention of paradigm used (key for color-coding)
- Variability of fMRI pattern needs to be shown adjacent to “risk zone”
- Profile development – Claims for quantifiability of fMRI as a clinical biomarker
- Preliminary results of funded reproducibility studies in support of current claims
 - Claims may need to be updated
- Other modifications suggested:
 - Leave the workflow and add additional supporting bullets underneath the headers
 - Add citations for the figures
 - Review title/ authors for accuracy; include only active participants
 - Create a handout in place of References section
- Group review and edits to be complete by Monday, October 31st, 2011.

Recommendations for Open Image Archives

- Discussion centered around the practical implementation of creating an image archive infrastructure
- Perhaps archive could support 2 aims:
 - 1) local version (for data organization within QIBA committee and developing claims)
 - 2) global version (public repository for data to support claims)
- Archive properties
 - Could have automated with evaluation tools to scan datasets for QIBA compliance
 - Datasets could be used for testing and benchmarking
 - User requirements would provide useful feedback regarding which features are most important

Next Steps

- Hard-copy of poster for RSNA 2011 is due to RSNA by November 4th
- Need to prioritize what archive characteristics are most important to fMRI

Next Calls

- QIBA fMRI Technical Committee, Wednesday, November 2, 2011 at 11 am CST
- QIBA fMRI Technical Committee, Wednesday, November 16, 2011 at 11 am CST