

QIBA fMRI Reproducibility Work Group Update

Tuesday, September 13, 2011 at 11 AM CDT

Draft Call Summary

In attendance

James Voyvodic, PhD (Chair)

Andrew Buckler, MS

Paul L. Carson, PhD

Ted DeYoe, PhD

Cathy Elsinger, PhD

Jay J. Pillai, MD

Laura Rigolo, MS

Daniel Sullivan, MD

Domenico Zaca, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Discussion regarding requirements and recommendations for Open Image Archives

- Discussion centered around the practical implementation of creating an image archive infrastructure
 - How would this be accomplished? What will the long-term costs be?
 - How will security be handled? What about maintenance? Storage?
 - What about standardization of DICOM format for raw image data?
 - What type of form/ protocol/ ftp site/ software tool, etc. would be used?
 - Some of these specifications and uses may be difficult to articulate in advance
 - Reconcile technical aspects of “how to” create the archive with the practical aspects of how easy it will be for people to use; ease-of-use is critical to be a benefit to the radiology community
- Dr. Voyvodic mentioned that he is currently working with 3 datasets that would be candidates for inclusion in a QIBA open image archive:
 - Approximately 450 existing clinical fMRI cases at Duke
 - fBIRN project – public domain datasets
 - Dr. DeYoe’s data on fMRI mapping/ reproducibility
- Consider what the incentive is for individuals to participate
 - Would be useful for fMRI TC members to be able to share groundwork data more easily to facilitate broader collaboration
 - Inclusion of metadata would be useful
- Some suggestions:
 - Development of a software “tool” to anonymize and standardize raw data
 - A standard submission/ upload form for data background information
 - Access-controlled collaborative resources, similar to a DropBox system with enhanced security
 - www.dropbox.com = Shared folders allow people to work together on the same projects and documents.

Next Steps

- Group to consider what they are willing to do to forward this initiative – what is practical for the group, including long-term costs, security, maintenance, etc.

Next Call

- QIBA fMRI Technical Committee, Wednesday, September 21st, 2011 at 11 am CDT