QIBA fMRI Committee WebEx Update Wednesday, June 30, 2010 11 AM CDT

Call Summary

In attendance

Cathy Elsinger, PhD (Chair) Ted DeYoe, PhD James L. Reuss, PhD Daniel C. Sullivan, MD James T. Voyvodic, PhD Domenico Zaca, PhD

RSNAFiona Miller
Joe Koudelik

Standard Processing Protocols (workflows) and Repeatability

- Workflow to be standardized for common process/procedures, focusing on reproducibility;
 agreement still needed for data analysis, e.g., statistical analysis in post processing segment
- Industry workflow descriptions needed to apply to existing datasets, examine commonalities between workflows; i.e. common themes and possible gaps
- Dr Voyvodic and Tucker's workflows to be discussed; best means to analyze existing data sets needed
- Profile Claims for examining sources of variability need further development
- How best measure reproducibility needs further discussion; data to be collected for comparison
- Dr DeYoe to pull 'repeated' datasets to examine similar datasets from multiple acquisition sites
- Datasets that may be accessible:
 - o fBIRN
 - Dr Voyvodic clinical fMRI datasets from Duke
 - Dr Voyvodic to provide repeated datasets found at Duke with a presentation of what's achievable to begin the reproducibility discussion
 - o Dr Hirsch Columbia
 - o Dr Buchbinder Harvard
- Literature search needed for test-retest issues in fMRI
 - o Dr Voyvodic to forward related papers to Dr Elsinger for circulation
- Profile Claim based on RISK
 - New Profile Claim based on RISK needed
 - o RISK to be quantitated and considered as a potential biomarker
 - Questions:
 - Is RISK quantifiable?
 - Is RISK to be a goal for fMRI Subctte?
 - Dr Reuss welcomes all feedback for further discussion

Next Steps:

- Next Call- Examine commonalities between workflows common themes and possible gaps
- Dr Voyvodic to forward related papers to Dr Elsinger for circulation
- Dr DeYoe to pull 'repeated' datasets to examine similar datasets from multiple acquisition sites
- Next call scheduled for July 14, 2010 at 11 an CDT

UPICT protocol templates posted to Wiki for reference at: http://upictwiki.ctsa-imaging.org/index.php?title=UPICT_Template

Working (editable) fMRI Profile document on Wiki also at: http://qibawiki.rsna.org/index.php?title=Profile_Development