QIBA fMRI Committee  
Wednesday, December 16, 2009  
9 AM CST  

Call Summary

In attendance:  
Gudrun Zahlmann, PhD  
Travis Allen  
Andrew Buckler, MS  
Geoffrey Clarke, PhD  
Edgar DeYoe, PhD  
Cathy Elsinger, PhD  
Edward Jackson, PhD  
Daniel C. Sullivan, MD  
Douglas M. Tucker, PhD, MBA  
RSNA  
Fiona Miller  
Susan Anderson, MLS  
Joe Koudelik

Introduction (Drs Sullivan and Zahlmann)  

- Dr Sullivan introduced himself as a radiologist at Duke University and the RSNA Science Advisor  
- Discussion of criteria for adding new biomarkers to QIBA efforts; fMRI has advantage of maturity and track record as well as dedicated volunteers  
- QIBA has activities at all levels of maturity on path through development and optimization to application in studies to validation, qualification, acceptance and reimbursement in clinical practice  
- Goal is to establish a valuable biomarker which will benefit clinical care and push the imaging field forward; fMRIs clinical studies will be useful  
- QIBA needs to know fMRI group’s plans for the future to better apply the QIBA processes (e.g. experience, established framework, etc)

Introduction (Dr Elsinger)  

- Dr Elsinger has explored fMRI in context of assessment of CNS diseases and assessing feasibility of using fMRI as an outcome measure in clinical trials  
- At NordicNeuroLab, exploring growth in pre-surgical mapping as clinical application for fMRI; developed clinical stimulation paradigm used for pre-operative evaluation with results exported to neuronavigation suite  
- Vendors supply clinical stimulation paradigms for use with different scanner platforms and stimulus presentation hardware; there is also variability in timing parameters and stimuli used  
- No best-practice standards or guidelines have emerged; goal is to developed a process/criteria to evaluate and validate integrity of stimulation paradigms  
- Once process/criteria is developed, can be applied outside pre-surgical mapping to other paradigms, e.g. clinical trials, evaluation and diagnosis of disease, better patient care in general

QIBA process  

- QIBA has worked on an open membership format with anyone interested encouraged to participate; would like to have representation from a variety of stakeholders such as ASNR, Human Brain Mapping, BIRN, clinicians, physicists and basic scientists  
- RSNA staff provides administrative support; Dr Sullivan provides continuity and is liaison to RSNA Board of Directors  
- Interested participants may contact Joe Koudelik, RSNA, directly (jkoudelik@rsna.org)  
- Steps:  
  o Identify 2-3 co-chairs; Dr Elsinger will take lead as primary co-chair  
  o QIBA wiki (http://qibawiki.rsna.org/) is used to post and review work  
  o Consider bi-weekly call schedule, alternating with DCE-MRI committee  
- Profile activities:  
  o Step 1: Claims/set clinical context; consider drafting an initial sentence to articulate Claims  
  o Step 2: understand performance measures and how to know when goal is achieved (may be technological, financial, etc)  
  o Step 3: define experimental groundwork to prove performance specified to realized the Claim  
  o Some groups need to characterize performance first; other groups have base of work and proceed to optimization (a tech and engineering activity)
Identify gaps in performance and level of optimization
Stakeholders can articulate their interests, e.g. regulatory, reimbursement, standard of clinical care

Next Steps:
- Identify co-chairs; Dr Elsinger will take lead as primary co-chair
- Interested participants may contact Joe Koudelik, RSNA (jkoudelik@rsna.org)
- Drs Zahlmann and Barboriak will send contact names to Dr Elsinger
- Next call: January 13th, 2010 at 11 am CST