

QIBA Perfusion, Diffusion and Flow – MRI Biomarker Committee (BC) Update Call

Wednesday, April 27, 2016 at 11 AM (CDT)

Call Summary

Participants

Michael Boss, PhD (Co-Chair)

Mark Rosen, MD, PhD (Co-Chair)

Rajpaul Attariwala, MD, PhD

Mark Brown, PhD

Thomas Chenevert, PhD

Caroline Chung, MD

Timothy Dondlinger

Daniel Gembris, PhD

Jim Gimpel RT (R) (MR)

Edward Jackson, PhD

Chen Lin, PhD

Elizabeth Mirowski, PhD

Nancy Obuchowski, PhD

J. M. (Hans) Peeters, PhD

Walter Schneider, PhD

Jason Stafford, PhD

Ying Tang, PhD

Brian Taylor, PhD

Ona Wu, PhD

Junqian (Gordon) Xu, PhD

Dewen Yang, MD, PhD

Qing Yuan, PhD

RSNA

Joe Koudelik

Susan Weinmann

Moderator: Dr. Boss

Task Force Updates & Sign Ups – Dr. Boss

- **Task Force Updates:**

- Rotating TF updates on PDF BC calls will be re-established
- The goal is to maintain momentum within the TFs
- There will be a fixed agenda for upcoming calls
- RSNA staff to note scheduled TF updates on meeting invitations and reminders
- This practice will commence on the next call on May 25th

- **Task Force Sign-ups**

- Four point-people in each TF will be assigned to specific aspects of Profile development
 - Claim development
 - Literature search
 - Profile Editor (to oversee all writing assignments)
 - Groundwork projects (to oversee progress and results)
- TF leaders were encouraged to motivate volunteers and “semi-officially” delegate responsibilities within their TF to increase efficiency and complete deliverables
- The goal is to distribute work load to avoid strain on one or two individuals

DCE Update (Dr. Chung)

- The DCE TF will soon move on from DCE Profile Version 1 to Version 2
 - The main goal of version 2 is to incorporate 3T and parallel imaging
 - A vendor survey regarding B1 correction was conducted and valuable feedback has been received
 - With multiple Profiles specific to body-site-specific details, the aims are to:
 - Increase the efficiency of Profile development
 - Enable incorporation of body-site-specific issues and possibly adjust Claim language based on body-site-specific literature
 - Increase uptake in users referencing this resource (i.e. shorter, focused document per body site)

- Each body site Profile will be reviewed together, eventually formalizing a 'common template' of section text that will be maintained across parallel Profiles
- Each body site will have a designee to guide Profile writing
- Body sites with which to begin a systematic literature review:
 - **Brain:** Caroline Chung, Jayashree Kalpathy-Cramer
 - **Head & Neck:** Mark Shiroishi, Dave Fuller
 - **Liver:** Hendrik Laue
 - **Prostate:** Uulke van der Heide, Mark Rosen
 - **Breast:** tbd
- There was discussion of pros and cons on developing multiple Profiles or a single Profile with multiple claims
 - If a common, overall procedure addresses multiple body sites,, keeping all body sites within one Profile with multiple Claims may be more efficient
 - There are concerns with multiple conformance procedures if separate Profiles are developed
 - Multiple Profiles may be necessary depending upon degree to which aspects like image acquisition differ
 - TFs were encouraged to involve vendors in the Profile-writing process as early as possible, as perspective on multiple Profiles vs. single multi-claim Profile is crucial
- The DCE TF will begin with a Profile focused on the brain as a test case and will review other organ sites for possible integration
- Tasks for the brain Profile to be divided among TF members on next DCE TF call
- Profile-writing will initially be prioritized over the literature search

DWI Update (Dr. Boss)

- Feedback on Claims received at the QIBA Annual Meeting has been useful
- Discussion continued regarding the cross-sectional and longitudinal Claims being developed within the DWI Profile
- Current available literature is not sufficient for making claims for many of the organs originally included
- The focus of the DWI Profile was narrowed down to three organs, for which quality test-retest studies exist
- For help with Claim language and literature search, TFs were encouraged to reference the Claims Guidance document, which can be found on the QIBA Wiki at: http://qibawiki.rsna.org/index.php/Main_Page
- The DWI Profile will be out for public review in early-to-mid June 2016 (or by June 8 DWI TF call)

Next PDF-MRI Biomarker Committee Call: May 25, 2016 at 11 AM CDT (May 11 call skipped due to ISMRM)