QIBA Diffusion-Weighted Imaging MR Biomarker Committee (BC) Call

Thursday, February 21, 2019 at 2 PM (CT)
Call Summary

Participants RSNA

Michael Boss, PhD (Co-Chair)Dena Flamini, RTKevin O'Donnell, MAScJoe KoudelikThomas Chenevert, PhD (Co-Chair)Dariya Malyarenko, PhDSavannah Partridge, PhDSusan Stanfa

Ishtiaq Bercha, MSc, MSEE Nancy Obuchowski, PhD Mark Shiroishi, MD Amita Shukla Dave, PhD

Moderator: Dr. Boss

Review of Previous Call Summary

• The notes from January 17, 2019 were approved as presented

Posting of Public Comment/Resolution Spreadsheets

- There will ultimately be two rounds of public comments for the DWI Profile
- The first round of DWI Profile public comments focused on 3 organs/sites and all comments have been fully addressed and resolved
 - Dr. Boss provided an overview of the DWI Public Comment/Resolution spreadsheet v1.0
 - o Mr. O'Donnell was present to provide feedback as requested
 - The spreadsheet will be posted on the new Comment Resolutions QIBA Wiki page (by the March 21st DWI BC call), located at: http://qibawiki.rsna.org/index.php/Comment Resolutions
- Mr. O'Donnell's <u>comment resolution Google Sheet template</u> is posted on the QIBA Wiki at: http://qibawiki.rsna.org/index.php/Public Comment Process; the template will also be linked to the new Comment Resolutions QIBA Wiki page
- Since the DWI comment resolution Excel spreadsheet v1.0 is already complete, comments will not be transferred into the newer Google-based template, but will be modified based on Mr. O'Donnell's feedback before it is submitted to staff for posting
- Using Google Sheets for easy collaboration during the process of addressing comments was recommended
 - Versioning issues are avoided
 - Access is open to simultaneous users at anytime
 - Emailing documents around would not be required
- The format of the posted final resolution spreadsheet to be determined by each BC (e.g., Google Sheets, Excel, Word, etc.)
- The most important factor is that public comment submitters have access to their comments and how they were addressed by the BC
- The DWI BC plans to use the comment resolutions Google Sheet template for comments received during the second round of public comments

DWI Profile Release for 2nd Round of Public Comment Status Update

- The BC vote-to-release was successfully completed on Feb. 12
 - o 10 DWI BC members were eligible to vote based upon the requirements defined by the QIBA Process Cmte
 - A total of 7 votes were received, all "yes"

- MR CC vote-to-release is in progress:
 - o The ballot was sent out to 22 MR CC voting members on Feb. 15, with a deadline of Mar 1
- An overview of changes made to the Profile since the January 17 call was provided
- Drs. Boss, Chenevert & Malyarenko have collaborated on the Profile offline
- Substantial changes were recorded in the Profile change log
 - It was confirmed that references in checklists located in Appendix F refer to appropriate sections in the body of the Profile
 - "Artifact" and "derivatives" all changed to "artefact"
 - "Reconstruction Software" was added as a sixth Actor
 - o All appropriate requirements for each actor have been included
 - Updates to performance specifications were made in Section 3; only necessary information is now included
 - Definition of "acceptable," "target," and "ideal" (with corresponding performance criteria based on supporting literature) currently found in Section 3: Profile Activities, was moved/copied to Section 3.6:
 Protocol Design, where this performance level nomenclature is used, as well as to appropriate checklists
 - o DRO and QIBAPhan software were placed in accessible area of the QIDW
 - Clarification was obtained re: receiver bandwidth, range of rBWx, and multiple b-values to use (>2): Newitt and Sorace used as primary citations; target/acceptable reduced to 3 b-values
- Due to time limitations, discussion of internal comments on the DWI Profile received during the balloting process was tabled until the March 21 BC call
- New material specific to breast (4th organ) was added to Section 3.6: Protocol Design
 - o Text not viewed as finalized; plan to incorporate feedback received from 2nd round of public comment
 - Plan to flesh out and make more useful
- Open issues include: how to address subject repeatability conformance/assessment and formatting issues as well as issues with EndNote
- Discussion regarding the imaging site feasibility checklist/questionnaire
 - Once feedback on the checklist/questionnaire has been provided, the "site opinion" column (which
 requests whether a site does/does not perform a specific task) can be removed
 - Information received during the review process will be incorporated into the next version of the checklist and Profile, therefore what is generally feasible for the majority of sites would no longer need to be learned
 - Recommendation to request feedback on the checklist from those who have not been involved in the Profile-writing process; at least 2- 3 imaging sites/reviewers are needed for the technically-confirmed stage
 - After the 2nd round of public comments have been addressed, a Stage 2: Consensus Profile version will be released
 - Plan to discuss the technically-confirmed version of the Profile by the December 2019 RSNA Annual
 Meeting

Next DWI BC Call: Thursday, March 21, 2019 at 2 PM CT