QIBA Process Committee Call

Tuesday, November 24, 2020 at 2 pm (CT)

Call Summary

Attendees:			**RSNA Staff:**
Kevin O'Donnell, MASc (Chair)	Alex Guimaraes, MD, PhD	Daniel Sullivan, MD	Joe Koudelik
Michael Boss, PhD (Vice chair)	Nancy Obuchowski, PhD		Susan Stanfa

Coordinating Cmte Criteria

- A formal change proposal documenting all CC-related updates will be sent to the Steering Cmte for approval
- Discrepancies in terminology were identified and will be brought to the Executive Cmte for clarification
    - Metrology Cmte representative vs. Statistician
    - SIG representative
    - NCI/QIB liaison

- Discussion on whether (and how) to make available model-specific image acquisition parameters
    - Sites may have reasons for preferring their own acquisition protocols (parameter sets) and if they test them and find them conformant with the Profile, that is fine with QIBA; regardless, it is useful to have example protocols for reference
    - One approach would be to collect recommended values from vendors and include them in an Appendix in every Profile, but frequent modifications of the Profile document would be required to keep the parameters up to date
    - It may be useful to add text to the Profile template encouraging the Profile authors to indicate more specifically which parameters would be helpful to record
    - If a vendor is unresponsive to BC request for this information, sites could run relevant phantom scans, formulate the same conformity estimate of the scanner, then record and document parameters used
    - Another approach would be to take advantage of the fact that when a vendor claims conformance to a Profile, they must submit/publish a conformance statement; an appendix could be added to the Conformance Statement template where the vendor would record the scanner parameters they used when achieving conformance
        - Following DICOM/IHE patterns would have vendors post conformance statements on their websites alongside other product documentation, and users would find them by browsing or using Google

    - Discussion re: whether QIBA should host conformance statements
    - A third approach would be to have a registry/database on the QIBA wiki/website where the conformance statements and/or protocol parameter sets could be managed and made available to user sites looking for such values for their scanners
    - The example from the IHE Connectathon experience, is that If a site were to fail a conformance test, it may be hesitant to have that information publicized, so only passing test results will be publicly posted
    - Conformance statements from successful test sites would be reported along with information such as protocol settings; other information would be held in a data archive that may or may not be made public
    - A concern was raised that managing a database or a collection of statements would be an administrative load on RSNA staff, but they would help with maintenance efforts and help locating or updating information upon request sent to: qiba@rsna.org
    - In regard to housing and organizing the documents, while it would be helpful to have lists of scanner parameters available for reference, they would not be required for conducting conformance-testing

- Bridge topic – information that should be captured during conformance assessment
    - It may be useful to record the assessed values that were compared to the pass/fail thresholds (e.g. in CT Vol, what noise score was achieved)
    - Another example of information that needs to be captured, reported, or provided as documentation would relate to scan parameters and would have operational value (to help set up conformant protocols elsewhere)
    - Phantom data would be used to audit one's success; they could be directly examined and the assessment metrics could be re-computed to confirm
    - The BC might also consider what data could be applied toward achieving Stage 4 (Claim Confirmation) and ask sites to help collect that data as part of conforming to the Profile

- Section 4: Assessment Procedures in Profile should indicate what needs to be recorded
    - Most current assessment procedures do not require much, if anything, to be recorded
    - A discussion about what might be useful to record, how that data would be submitted/collected, etc. should be planned; new guidance to profile authoring group should be created based on that

- Many current Profile editors develop Profiles with a bias toward performance rigor and correspondingly strict and detailed conformance requirements, however, more focus is needed on practicality and how Profiles are utilized in the clinic
    - Confirming the Technical practicality is the primary purpose of Stage 3 (Technical Confirmation), but it has perhaps not been fully succeeding in that purpose
    - Achieving Technical Confirmation at a site of a major contributor to Profile-writing efforts may not yield as much valuable feedback for determining true readability and practicality of the Profile since the contributor has already taken a position on the practical necessity of the requirements and is familiar with the intended meaning of the profile text
    - An accurate test of usability is if a site <u>unfamiliar</u> with a Profile is able to successfully use it as intended and finds it to be practical (i. e., getting "fresh eyes" is admittedly an ideal situation)

Discussion on Profile Shortening Efforts

- Mr. O'Donnell to draft a proposal for BC Co-chair and Profile editor input on proposed methods
    - Although the Process Cmte will help coordinate the TF call(s), using a Process Cmte call slot may be unnecessary
    - The Spring/Summer QIBA Annual meeting (date TBD) may be too far away and meeting topics are already in place for the Dec. 10 QIBA Working Meeting
    - Mr. O'Donnell to work on slides and text to circulate to BCs to pique interest
    - Dr. Sullivan will coordinate framing the topics with Mr. O'Donnell and Ms. Zahlmann

- In efforts to shorten Profiles and improve usability, it was proposed that the checklist be moved from the end of the document to the beginning, with the activity detail (e.g., sources of variability) to follow
    - The rationale was that the Activity-oriented section 3 is more suited to the Biomarker Committee process of analyzing the sources of variance in each step of the biomarker production chain, however many users just want to know what they specifically have to do, which was the intent of the checklists
        - Since the primary audience of the profile, once it is published, are the users, their convenience should come first
    - This idea was strongly endorsed, as the checklist makes the profile appear to be a more manageable undertaking (activity requirements with their associated background and explanations can be daunting)
    - Newer BCs will be encouraged to develop the checklists (and be sure to keep them in sync subsequently) when they publish the Profile for Public Comment

- Discussion regarding the benefits of instituting a Profile page-limit; there is greater likelihood of publication and implementation of shorter documents
- Note that Appendices are supplementary
- Suggestion to limit Clinical Context section to half of a page and merge it into the Executive Summary
- Mr. O'Donnell to organize information on a Google Doc and circulate it

Next Process Cmte Call: Tuesday, December 15, 2020 at 2 p.m. (CT)