QIBA Ultrasound Shear Wave Speed (SWS) Biomarker Committee (BC)

Monday, October 30, 2023; 1 PM CT Call Summary

In attendanceRSNADavid Fetzer, MD (Co-Chair)Paul Carson, PhDMichelle L. Robbin, MDJoe KoudelikStephen McAleavey, PhD (Co-Chair)J. Brian Fowlkes, PhDMichael Wang, PhD, MAScJulie LisieckiJeff Bamber, PhDNancy Obuchowski, PhDKeith Wear, PhDRichard Barr, MD, PhDMark Palmeri, MD, PhD

Moderator: Dr. Fetzer

Agenda items:

- Updates on achieving Stage 3 Clinical Feasibility
- Achieving Stage 4 Next Steps
- Sunsetting QIBA SWS BC Committee, society support
- QIDW data

Work toward Stage 3 - ongoing

- Site feedback has been completed at UT-Southwestern (UTSW) by Dr. Fetzer and his team
- Three manufacturers have provided attestation statements: Siemens Philips, and GE
- Site feedback is still expected from Dr. Robbin and her team at UAB, using Philips scanners, and possibly from Dr.
 Ozturk at MGH
- At UTSW, Dr. Fetzer's technical supervisor reviewed 3 exams on 2 different systems, which were found to be in conformance, with only slight deviations in breath hold and ROI size
 - The tests have successfully proven that the steps are achievable, clinically relevant, and not burdensome
- Dr. McAleavey and his team at U-Rochester completed a total of 9 scans by 5 different sonographers (all GE)
- Total of 2 sites and 3 different manufacturers (one additional site needed)
- The checklist that is currently posted (2022-04-25, version 5) will be updated
- Dr. Fetzer to share the final version of the checklist with volunteers and RSNA staff for wiki posting
- Dr. Fetzer to email his modified checklists to Dr. Robbin
 - It was determined that phantom scanning is <u>not</u> required, though a 3-patient minimum would be preferred
 - o Philips systems will be used to expedite the process, because the BC has their attestation statement
- Plans are to achieve Stage 3 (Clinically Feasible) before admin support ends (December 22nd)
 - BC vote (if all sites have completed testing) to occur before Thanksgiving with an accelerated timeline of one week.
 - It is hoped that materials for the US Coordinating Committee level vote can be distributed prior to the RSNA Annual Meeting to allow time for US CC members to review, with a timeline of one week.
- BC and CC level votes will be required
- A Clinically Feasible Comment Resolution Tracker (formerly Technical Confirmation) needed for wiki posting
- For reference on procedures: https://qibawiki.rsna.org/index.php/Committee_Procedures

Profile Legacy Plans / Future Plans

- Drs. Palmeri and Peter Edmonds have transcribed the technical sections of the Profile into <u>International</u> <u>Electrotechnical Commission (IEC)</u> layout, though some fine points of translation may be needed
- Clinicians will need to take responsibility for the clinical practice segments, as clinical detail has been removed from the technical standards document
- Collaborations with the <u>American Institute of Ultrasound in Medicine (AIUM)</u> and the <u>Society of Radiologists in Ultrasound (SRU)</u> are also under consideration
- Dr. Fetzer reported that the SRU has voted to change its by-laws to include sonographers and scientist members that are associated with radiology departments
 - o This focus on the science of ultrasound within the field of radiology is an effort to grow the field

QIDW and Data Archives

- The Quantitative Imaging Data Warehouse (QIDW) will no longer be supported by RSNA after December 15, 2023
- Dr. Palmeri noted that QIBA SWS data are publicly available via the Duke library and GitHub
- Drs. McAleavey and Palmeri to do a final check for SWS data on the QIDW and ensure data have been removed and/or archived elsewhere
- Joe to make certain that Drs. McAleavey and Palmeri have access to the QIDW

Next Steps

- To prepare for Stage 3 voting, Dr. Fetzer and co-chairs to provide:
 - 1. Updated Profile (if any update are needed)
 - 2. Updated modified checklist (for wiki posting)
 - 3. Clinically Feasible Excel Spreadsheet of site responses (formerly Technically Confirmed) for wiki posting
- Voting at BC level (if ready) to be completed before Thanksgiving
- Voting at CC level to be initiated before RSNA 2023 and completed after RSNA 2023
- No November call work to occur via email
- Work to continue on checklist implementation at UAB, and possibly MGH
- AIUM or SRU deemed appropriate to coordinate both clinical and technical activities of this BC after 2023

Next call - TBD

o Work collating Stage 3 Checklist Feedback to continue offline.

11/08	SWS BC @ 2 pm CT—no call
12/13	Q4 US Coordinating Ctte, 1 pm CT
12/13	SWS BC @ 2 pm CT – if needed

QI Sessions and Activities at RSNA 2023:

- Building a Quantitative Imaging Research Study, Tuesday, Nov. 28, 2023, from 11 a.m. to noon CT at McCormick Place, Room S405 (South Bldg).
- 2023 QI Symposium Sponsored by QIBA: Quantitative Imaging in the Era of Artificial Intelligence: Opportunities and Needs, Wednesday, Nov. 29, 2023, from 2 to 4 p.m. CT at McCormick Place, Room <u>E253AB</u> (East Bldg, Lakeside).