

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

Wednesday, November 9, 2022; 2 PM CT

(minutes highlighted)

### Ongoing items:

- **Updates on Clinical Feasibility (Stage 3) feedback, participating sites (DF)**
  - Sites:
    - Medical physicist at UT Southwestern Medical Center – Philips, GE, and Siemens
    - University of Rochester / Rochester area (NY)? – *No updates (GE-predominant)*
    - Dr. Ozturk to reach out to network colleagues in Boston
    - *M Robbin to talk to UAB physics team - Philips*
    - Note that we should indeed obtain sonographer, QA manager
      - *Section 4 – Review details/meaning with regards to sonographer’s qualifications and implications for site*
      - *Discuss with other BC to see how they approached sites for feasibility testing*
      - *Need enough sites that offer a variety of manufacturers*
      - *Ask manufacturers to recommend sites*
  - Resolve feedback items:
    1. Protocol for weighing phantom, and measuring temperature
      - *Include that each site should create and maintain their own protocol? Review Section 4. Maybe difference between manufacturer level versus site level*
        - *Are tolerances realistic?*
        - *What are reasonable requirements. Info from Ted re: temp dependence.*
    2. Finalize decision regarding what is meant by “system” (i.e., scanner “box”, software version, transducer, sonographer, etc.).
      - Too many possible combinations
        - Last consensus: 1 representative “device” from each manufacturer that may perform elastography *(including each transducer may be used for liver Elasto)*
        - *How do we define “site”? Physical location?*
          - Should site conformance be similar to ACR accreditation, where a site would submit representative studies that reflect their usual study quality (along with completed checklist)?
            - *Single organization (with same sonographers, protocols, radiologists, and QA program)? – Consensus; Section 3.5*
      - BC to clarify what is meant by pre-delivery, delivery, and install, as it relates to an ultrasound system, hardware/software upgrades, and/or even new transducers

- BC to add explicit transducer requirements – perhaps not the same actual physical transducer, but the same type, e.g., 5C1 for each use
- Public comment resolution document (SM)
  - Dr. McAleavey is compiling resolution comments and will submit a [Public Comment Resolution document](#) for wiki posting soon
- Manufacturer attestation
  - "How do we get the manufacturers to commit to a self-attestation?"
    - 2 parallel paths that we need to pursue at the same time:
      - 1) make it easy for manufacturers
        - Develop Template – ACTION ITEM (AO)
        - Mirror DICOM, IHE integration conformance statements
        - *Websites of each company (searchable and accessible)*
          - *Not maintained centrally*
        - Include recommended system settings/modes, transducers, software rev. etc.
      - 2) get sites to request the self-attestation statement from manufacturers.
        - Can/should we push vendors to publish?
        - Discuss at AIUM UltraCon what conformance statements would mean to public?
          - Could recommend attendees to go to their respective companies and request said conformance statements
  - **Contacts: QIBA Process Committee Leaders:** [Kevin O'Donnell, MASc](#) (Chair) | [Michael Boss, PhD](#) (Co-Chair)
- Manuscript on the SWS Profile
  - *Ideas: How we got here. How to implement profile. How to become QIBA conformant.*
  - *Co-chairs to discuss*

### **New Items:**

- Discuss concerns raised by Ted Lynch re: phantom specifications
  - Initial comparison to MRI (Phase 1) included 2 large phantoms
  - Phase II studies leveraged currently available elasticity phantoms
    - *Agreed to update based on Ted's recommendations of minimum dimensions*

- Update **QIBA Dashboard**:  
[https://docs.google.com/spreadsheets/d/1A7\\_uieyw0uu2DKbP6Vkzd37JuBEb2zmm-yqfXJtV-p4/edit#gid=1800295569](https://docs.google.com/spreadsheets/d/1A7_uieyw0uu2DKbP6Vkzd37JuBEb2zmm-yqfXJtV-p4/edit#gid=1800295569)

Upcoming meetings: RSNA 2022. **QIBA Symposium**, 2-3:30pm (E253B), following by breakout sessions, if 3:30-5:30, 1 hour each

*Back-to-back BC breakout sessions?*

*3:30 SWS -> 4:30 PEQUS;*

*3:30 Volume Flow -> 4:30 CEUS*

Next Biomarker Call: Dec 14<sup>th</sup>