

**QIBA Ultrasound Shear Wave Speed (SWS):
System Dependencies and Phantom-System Measurement Testing Task Force**

Friday, August 14, 2015; 11 AM CT

Tracking / Action items

Slide Presentation / Notes provided by Dr. Palmeri

In attendance

Mark Palmeri, MD, PhD (Co-Chair)

Keith Wear, PhD (Co-Chair)

Paul Carson, PhD

Jun Chen, PhD

Shigao Chen, PhD

Brian Garra, MD

Al Gee

Gilles Guenette, RDMS, RDCS, RVT

Zaegyoo (Jay) Hah, PhD, MBA

Tim Hall, PhD

Michael MacDonald, PhD

Stephen McAleavey, PhD

Yasuo Miyajima, MS

Patrick Ploc

Stephen Rosenzweig, PhD

Laurent Sandrin, PhD

Marijean Trew

Matthew Urban, PhD

Michael Wang, PhD, MASc

Hua Xie, PhD

RSNA

Fiona Miller

Julie Lisiecki

Moderator: Dr. Palmeri

Call Focus:

Dr. Palmeri presented slides which were distributed just before the call:

- <http://slides.com/markpalmeri/qiba-2015-08-14>

Other topics:

- Phantom shipping was discussed
- Phase II Data Analysis for Ultrasound digital phantoms
 - Target presentations:
 - ITEC (Dr. Hall)
 - IEEE IUS (Dr. Palmeri)
 - RSNA (TBD)
 - To also consider peer review publication, such as *Radiology*
 - Role of system identification removal
 - Each system and site will be assigned unique ID
 - Each system / site will be told of their unique ID to evaluate how their system compares to others
 - Raw data, once collated, will be posted by unique IDs online for additional analysis beyond target presentations / publications
- Data Analysis questions
 - Set #1 vs. Set #2
 - Analyze both or just set #2?
 - Is one recipe more reproducible / stable?
 - Input from Ted / CIRS?
 - Have / will each site measure both sets?
- No Ground Truth
 - Can we evaluate absolute bias?
 - Across A-C, +/- 10-15% relative to grand median
 - If not bias, then what other metric?
- Multiple Imagers
 - 2-3 imagers performed measurements at certain focal depths
 - Phase I concluded imager should not matter?
 - What should we do with these multiple measures at a given depth?
- Incomplete Data
 - For a given scanner, some sites did not provide data at all focal depths.
 - Exclude incomplete data?
 - Have difference "n" at different depths?
- Same System, Different Sites

- +/- 20% difference of the same system at different sites
- If no imager dependence, then how should this be presented?
- Can system be identified by number of sites?
- How do we designate the non-commercial systems?
 - Duke measurements at different time points
 - Rochester
 - Others?
- QIBA Kiosk posters

Upcoming Calls (Fridays, 11 am CT):

- **August 21:** Clinical Applications Task Force (Dr. Samir)
- **August 28:** **No call**

September:

- **Sept 4:** US SWS Biomarker Ctte (Mr. Milkowski, if available)
- **Sept 11:** **No Call** (Bubble Conference)
- **Sept 18:** System Dependencies & Phantom Task Force (2 hours)- (Dr. Wear, if available)
- **Sept 25:** Clinical Task Force - (Dr. Samir, if available)