QIBA Multi-parametric Metrology Call

10 February 2020 at 2 PM CT Call Summary

In attendance RSNA

Nancy Obuchowski, PhD (Co-Chair)

Huiman Barnhart, PhD

Andrew Buckler, MS

Patricia Cole, PhD, MD

Nandita deSouza, MD

Tim Hall, PhD

Erich Huang, PhD

Marina Kondratovich,

Tim Hall, PhD Gene Pennello, PhD
Erich Huang, PhD Daniel Sullivan, MD
Marina Kondratovich, PhD Xiaofeng Wang, PhD

Chaya Moskowitz, PhD

Joe Koudelik Julie Lisiecki

Moderators: Dr. Delfino

Jana Delfino, PhD

Approval of 01.28.2020 call summary

The summary was approved as presented

Discussion:

- The call focused on discussion of phenotype classification, Use Case #2
- A phenotype was described as "something a patient is feeling or expressing," and an objectifiable truth
- Phenotypes were also described as polychotomous endpoints
- Histopathology and omics expression from collected tissue samples was also mentioned
- A consensus definition is necessary for Use Case development
- Examples discussed included:
 - o Li, et al., paper classification based on the presence or absence of three receptor types
 - Asthma phenotypes based on clinically measurable characteristics, mediation usage/ effectiveness, and age of onset

Suggested Call Schedule:

Date:	Topic:	Lead:
Tuesday, January 28	Overview paper	Dr. Obuchowski
Monday, Feb 10 (2 pm CT)	Use case 2: Phenotype classification	Dr. Delfino
Wednesday, Feb 26 (10 am CT)	Use case 1: Multi-dimensional descriptor	Dr. Raunig
Monday, March 9 (2 pm CT)	Use case 3: Risk prediction	Dr. Huang
Wednesday, March 25 (10 am CT)	Use case 4: Radiomics	Dr. Wang

Suggestions for organization for future meetings (as previously discussed):

- a. One meeting per use case paper was proposed (rotating through all four use cases every two months)
- b. Have each paper address similar questions/themes common across each use case:
 - i. What do the QIBA Profile claim statements look like
 - ii. What work needs to be done to develop the claim (include literature survey, gap analysis)
 - iii. What studies should be done to test conformance to claims
 - iv. How to properly carry out these methods
 - v. Illustrate methods with an example (include stakeholders' perspective)
 - vi. Challenges unique to this use case
- Poll for use cases is still open if members have not signed up yet: https://doodle.com/poll/bnrx99egs68rnc9q