

## QIBA COPD/Asthma Technical Committee

February 26, 2014 at 2 PM CT

Call Summary

### In attendance

Philip F. Judy, PhD (Chair)

Andrew Buckler, MS

Heather Chen-Mayer, PhD

Matthew Fuld, PhD

David Lynch, MB

Mark Schiebler, MD

Claudio Silva, MD, MSc

Mario Silva, MD

Daniel Sullivan, MD

### RSNA

Joe Koudelik

Julie Lisiecki

### Agenda 2/26/2014:

1. Review Summary of 2/12/2014 Conference Call
2. Lung density profile claims.
  - a. With and without volume correction
  - b. Need bias statement
3. Review status of profile

Chair recommended changes and items for discussion

- a. For bias claim should decide on a reference standard for claim, fraction of lung less than -950 HU using a specific model CT scanner, and using recommended acquisition, reconstruction, and analysis specifications.
- b. Presently, the measure quantities are pixel noise and resolution,
- c. Centering specification is 10 mm. Rather stringent.
- d. The maximum tube current rotation time shall be less than 72 mAs, while it minimum value shall greater than 32 mAs.
- e. Determine spatial resolution using the visual assessment using ACR bar pattern. Volume profile specification – Greater than or equal to 6 lp/cm and consistent with baseline (i.e. within 1 lp/cm)

**Next call:** Wednesday, March 12, 2014 at 2 pm CT

### Discussion topics included:

- Staff to schedule a call for Drs. Chen-Mayer and Fain and others to begin drafting the claim for parenchymal density measurements, focusing on bias, precision, and volume correction issues
- Consideration of addition of clinical context beyond COPD/Asthma
  - Use of volume corrections in longitudinal studies Consideration of terms, such as, “linear,” and “proportional,” for ratio measurements to make simple quantitative statements about bias
  - Profile message for radiologists and pulmonologists is important, particularly with regard to acceptable and useful measurements
- Project ideas requested for Round-4 of the NIBIB contract (2014-2015), particularly groundwork projects for Profile development
- On the 3/12 call, Dr. Judy will request group feedback on his presentation at the QCT seminar

### Action items:

- Drs. Chen-Mayer and Fain to try ad-hoc conference call to discuss wording for a precision claim
- Drs. Coxson and Hoppel to help with clinician, vendor, and phantom work.
- Dr. Judy welcomes feedback from group members regarding Profiles, etc.: [philipfjudy@philipfjudy.com](mailto:philipfjudy@philipfjudy.com).
- RSNA staff to distribute reference displayed to those on the call.

### 2014 QIBA COPD/Asthma Schedule:

QIBA COPD/Asthma Technical Committee WebEx calls, 2:00 PM Central Time Zone (3:00 PM Eastern)

- [3/15/2014 - QIBA/STR Lung QCT Conference \(San Antonio meeting\)](#) - (Click to register.) –
  - The one day program is free for QIBA participants.
- 3/26/2014
- 4/09/2014