QIBA CT Volumetry Biomarker Ctte (BC) Call

31 August 2015 at 11 AM CT Call Summary

In attendance: RSNA:

Samuel G. Armato, III, PhD (Co-Chair) Rudresh Jarecha, MBBS, DNB, DMRE Adele Peskin, PhD Fiona Miller Jenifer Siegelman, MD, MPH (Co-Chair) John Lu, PhD Nicholas Petrick, PhD Julie Lisiecki

Maria Athelogou, PhDJames Mulshine, MDEhsan Samei, PhDHubert Beaumont, PhDNancy Obuchowski, PhDYing Tang, PhDAndrew Buckler, MSMichael O'Connor, PhDPierre Tervé, MS

David Gustafson, PhD Eric Perlman, MD

Profile Question Re: Conformance Recommendation

- Question: Level at which to set the "QIBA bar" for conformance
 - o "Easier" initial conformance, with requirements increasing in complexity over time? or
 - "More difficult" achievement of the initial conformance standard so that it is more meaningful?

Group Discussion:

- It was determined that low-performing data should not be part of the claim
- A good number of responses were in the moderate range.
- In general:
 - o Clinicians indicated willingness to sacrifice some precision in favor of moving this Profile effort forward
 - o Scientists would prefer to aim for the higher numbers, if possible

Starting point

- Due to its unique position with its convergence of claims rooted in scientific data, it was suggested that the small nodule group for lung cancer screening would be the natural leader for the effort with a small nodule use case for CT Volumetry
- o Dr. Obuchowski is interested in more information from Mr. Avila regarding the type of data that was used to develop the claim for small nodule vs. the data for the advanced disease Profile
 - Small nodule used a 'model-based' approach
 - Advanced disease used a 'coefficient of variation' approach
 - The two methods are not directly comparable
 - The model-based approach for small nodule more closely aligns with the middle group
 - The tighter the claim is, the better the clinical utility will be

Next Steps:

- Co-chairs and Dr. Obuchowski to plug in middle-number ranges to determine claim numbers
- Dr. Siegelman to anonymize and forward responses to conformance question for distribution

Action items

- CT Volumetry Leadership Recommendation re: conformance requirements (Drs. Siegelman, Armato, Goldmacher)
- Revised vendor physics assessment procedure (Drs. Boedeker and Samei, Mr. O'Donnell)
- Invite project PIs for upcoming presentations to the BC (Dr. Goldmacher)

Next Call:

- Sept 21st: Continuation of CT Volumetry Conformance Recommendation
- Other topics: Progress / future planning for the Profile, RSNA 2015 QIBA poster, BC topics for the fall