QIBA and FDG-PET/CT Biomarker Committee (BC)

04 October 2021 at 2 PM CT Call Summary

RSNA

In attendance:

| in attendance. | | | NJINA |
|------------------------------------|-----------------------------|-------------------------|----------------|
| Nathan C. Hall, MD, PhD (Co-Chair) | Adriaan Lammertsma, PhD | Fabien Ricard, MD, MS | Joe Koudelik |
| John Sunderland, PhD (Co-Chair) | Martin Lodge, PhD | Ying Tang, PhD | Julie Lisiecki |
| Jeffrey T. Yap, PhD (Co-Chair) | Dawn C. Matthews, MS, MBA | Pierre Tervé, MS | |
| Evren Asma, MS, PhD | Jonathan McConathy, MD, PhD | Timothy Turkington, PhD | |
| Spencer Behr, MD | Robert Miyaoka, PhD | Richard Wahl, MD, FACR | |
| Janice Campbell, PhD | Jayant Narang, MD | Scott Wollenweber, PhD | |
| Clara Ferreira | Nancy Obuchowski, PhD | John Wolodzko, PhD | |
| Timothy J. Hall, PhD | Eric Perlman, MD | Gudrun Zahlmann, PhD | |
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Moderator: Dr. Yap

Update on FDG-PET activities (Dr. Zahlmann)

- Dr. Zahlmann thanked Drs. Sunderland, Yap, and Nathan Hall for their support of the QIBA/EARL pilot
- Future plans include:
 - o additional collaboration between QIBA and EARL for the betterment of the nuclear imaging community
 - working with accreditation bodies
 - o QIBA Profile conformant software and QIBA Profile certification services
- EARL is interested in inviting additional sites for a second pilot, or extension, including private practices and community clinics
- A memorandum of understanding (MOU) between QIBA and RadSite has been signed for a similar pilot with five to ten sites, integrating the QIBA FDG-PET Profile into RadSite's accreditation programs
 - An online checklist form to facilitate this process is available
 - o Changes are anticipated to incorporate Dr. Yap's modifications to the scoring system
- Some QIBA primer material may be needed for RadSite sites explaining the conformance process and benefits
 - Volunteer reviewers from the FDG-PET BC are also needed for both RadSite and EARL pilots
 - Further discussion will be needed on upcoming BC calls

FDG-PET Checklist / Scoring System (Dr. Yap)

- The protocol and Profile were literature based, utilizing best practices when the documents were written
- Over time, the focus of the Profile has changed to minimizing measurement variance
- A checklist was created with required critical aspects for review by Drs. Boellaard, Lodge, and Turkington
- The current checklist scoring system for Profile partial conformance incorporated the work previously done by BC contributors
 - Additional BC review was requested
- Approximately 40 checklist items were reviewed with a scoring system based on actors
 - Twenty of these items were "must-haves" (would impact the claim), and the other 20 were graded based on their perceived impact on the claim (nice to have but not required)
 - Points were deducted if a site was deficient for a particular response
 - A 4-point penalty was assigned if sites chose not to implement criteria that were required, thereby not achieving conformance
- Justification for the points penalty system may be needed, and examination of data in the literature is underway
- Dr. Sunderland would like to add a sentence or two of rationale per each checklist item based on criteria and justification from the literature
- Streamlining the requirements is another goal

Discussion (All)

- Dr. Turkington would like to better understand how and why the partnership with RadSite was selected
- Dr. Turkington noted that accreditation bodies only tell sites if they are performing something correctly and was uncertain if a partnership would have the desired learning outcomes
- Dr. Zahlmann explained that a smaller group / pilot would be more manageable and would provide a good learning experience to see if QIBA would consider future collaborations with accreditation bodies

Next steps

- Development of database and decision logic (criteria) to collate site data and analyze/score responses; this QIBA scientific review process requires SME input and is still under development
- Prepare explanatory text (rationale) for relevant checklist items to better engage imaging sites
- Work with BC to provide literature-based evidence to the checklist items to assess potential impact on Profile claim

Action items

- FDG-PET leadership would like to invite BC members as additional contributors for a potential RadSite Pilot
- A future call TBD via doodle poll

Parties interested in joining the QIBA LinkedIn page for QIBA updates should visit: <u>https://www.linkedin.com/company/rsna-qiba</u>
