Description of QIBA Process

QIBA Mission:

Improve the value and practicality of quantitative imaging biomarkers by reducing variability across devices, patients and time.

Steps of the QIBA Process

I. Define the clinical question and proposed biomarker to be addressed.

A. Proposal submitted to Steering Committee by a Coordinating Committee.
B. Obtain Approval by Steering Committee. Key selection criteria are outlined in [1].
C. Establish Biomarker Committee and participants. See QIBA Committee Procedures Document [2].
D. Identify a hierarchy of potentially achievable accomplishments.
E. Publish and publicize the effort and goals
    1. *Encourage participation by others*
    2. *Allow for change of direction at an early stage*

II. Production of Profile and UPICT Protocol

A. Establish provisional specific goals and workplan.
    1. *Identify an Editor (or team) to work with Biomarker Committee members to set straw-man claims and identify key issues.*
    2. *Biomarker Committee establishes Task Forces (groundwork groups) as needed to explore the issues. See [3, 4] for groundwork activities that may be needed.*
    3. *Identify and determine procedures to control sources of error and variation in quantitative results from imaging methods.*
B. Produce QIBA Profile and, if appropriate, QIBA UPICT Protocol.
    1. *Editor (or team) drafts QIBA Profile and UPICT Protocol*. See Definitions of QIBA Protocols and Profiles [5]
    2. *Specify Potential Solutions.* Stakeholders identify potential strategies and infrastructure for error mitigation and collaborate on development of hardware, software, and image acquisition solutions. See specifics of Profile Development [3] and related groundwork activities.
C. Profile and Protocol Review.
    1. Profile review, trials implementation and publication criteria are described in [6].
    2. Editing Team and Biomarker Committee each review. After approval, refer to next level.
    3. Public Comment [7]
    4. Resolve Public Comment Issues and Approve
    5. Publish

III. Profile Validation, Promulgation and Maintenance

A. *Test Solutions.* Vendors and researchers, with the aid of QIBA Task Forces, implement QIBA solutions to assess their feasibility and efficacy. See [8]

B. *Promulgate Solutions.* Validated solutions are disseminated and implemented through:

   1. Vendor Adoption
   2. Research Integration
   3. Clinical and Other Stakeholder Education

C. *Maintain Profile [9] and Review for Retirement [10]*

References:

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4. QIBA, Proposed Categories for QIBA Project Proposal Submissions, Chicago, Aug 4 2010
5. QIBA, Definitions of Protocols and Profiles
6. QIBA. Review Process. [cited; Available from: http://qibawiki.rsna.org/index.php?title=Review_Process.
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10. QIBA, "QIBA Retirement Process," http://qibawiki.rsna.org/index.php?title=Retirement_Process.