Governance Principles for PCORI Research-Related Conference Support for Planning of Individual Participant-Level Data Meta-Analyses (RRCS-IPD MA)

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These governance principles apply to PCORI Research-Related Conference Support for Planning of IPD MA PCORI Funding Announcement (PFA). Funding announcement, templates, and other resources are available at http://www.pcori.org/funding-opportunities.
Governance Principles for the Conduct of PCORI Individual Participant-Level Data Meta-Analyses (IPD MA)

You can think of an IPD MA as a next-generation product that takes the systematic evidence review as its foundation. The 2011 Institute of Medicine (IOM) standards for systematic reviews of comparative clinical effectiveness research (CER)¹ not only included guidance for conducting the review itself, but also established key standards addressing the composition of the review team and key protections regarding potential financial and intellectual conflicts of interest that could threaten the project’s integrity. The Patient-Centered Outcomes Research Institute (PCORI) views one of the potential outcomes of this initiative to be the uptake and use of the IPD MAs in external guideline development processes; therefore, it is important that PCORI’s principles also meet those of relevant guideline development groups (e.g., the World Health Organization² and the U.S. Preventive Services Task Force).

When undertaking an IPD MA, the team responsible for conducting the analyses should have appropriate expertise in the IPD MA methods. Any individuals with a financial conflict or whose professional or intellectual bias could diminish the review’s credibility in the eyes of the intended users should be excluded from directly serving as team members (see IOM Standards 2.1 and 2.2; WHO Table 6.1). Although relevant stakeholders and collaborators (such as the individual trial investigators that agree to share the IPD to be analyzed) must be actively engaged in the work throughout the IPD MA development process, the IPD MA research team’s independence should be ensured to make final decisions about the IPD MA design, analysis, and reporting (see IOM Standard 2.3). These principles are meant to minimize the risk of bias and increase scientific rigor, user trust and buy-in, and the IPD MA’s overall credibility.

PCORI believes that one effective model for conducting rigorous, objective, and relevant IPD MAs involves a three-pronged participatory structure. This structure includes (1) the “universe” of investigators who have performed trials meeting inclusion criteria for a given IPD MA; (2) a Secretariat or representative group of stakeholders (including select trial investigators, patient representatives, and PCORI representatives, in addition to other funders or partnering organizations, if applicable); and (3) an IPD MA Research Center” or group of researchers with established expertise in the underlying methods and conduct of high-quality, rigorous, and objective IPD MAs who must meet the relevant criteria (previously referenced) regarding financial and intellectual conflicts of interest.

For example, although an IPD MA Research Center needs clinical expertise in the topic area being explored, researchers who have led or participated in trials that would meet the IPD MA inclusion criteria would be considered to have an intellectual conflict of interest and could not serve directly on the IPD MA Research Center team. However, these individuals could serve on the Secretariat.

These three entities all actively contribute to and participate throughout the development and conduct of an IPD MA, but each plays a different role.
How the Groups Function Together: The PCORI IPD MA Process

Pre-protocol
- The Secretariat develops the scope for the IPD MA (key questions, prior subpopulations, and other potential effect modifiers).

Protocol
- The IPD MA Research Center develops draft protocol based on scoping by the Secretariat.
- The IPD MA Research Center finalizes protocol based on additional feedback from the Secretariat and trial investigators.
- The final protocol is published online at PROSPERO for transparency.

Data Collection
- The IPD MA Research Center gathers IPD from trial investigators and performs data queries, cleaning, and validation.
- The IPD MA Research Center establishes a website and other means to facilitate regular updates and communications with trial investigators regarding study progress.

Data Analysis
- The IPD MA Research Center performs data analysis as indicated by final protocol, interacting with the Secretariat as needed for clarification purposes.

Discuss Draft Findings
- The IPD MA Research Center, Secretariat, and trial investigators discuss initial analysis findings.

Technical Report
- The IPD MA Research Center authors a draft technical report describing the findings as dictated by protocol. The report undergoes (1) peer review (managed by PCORI), in which trial investigators may be invited to participate; and (2) a public comment period.
- The IPD MA Research Center finalizes the technical report. First, the comments are summarized and changes are captured. Then, the findings are put in context with prior research, but the report does not make clinical practice recommendations. Finally, the report is posted on the PCORI website (free access).

Peer-Reviewed Manuscripts
- The manuscripts are collaboratively authored by representatives from all three entities (trial investigators, the Secretariat, and the IPD MA Research Center).
- They are published concurrently with the final technical report.
- They may discuss implications for clinical practice.