PCORI Methodology Committee Research Recommendations

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PCORI's Methodology Committee presented the followed revised set of research recommendations to PCORI's Board of Governors on November 19, 2012. The previous draft recommendations, with revisions noted, may be found here. The Board, which is not required by PCORI's authorizing legislation to act on the recommendations, took them under advisement.

Topic	Research Recommendations
Patient Centeredness	• Support and facilitate research on patient engagement by systematically collecting and funding the analysis of information about patient engagement methods from PCORI-sponsored studies. • Support and facilitate research on methods for, and impacts of, engaging people representing the population of interest during design and conduct of PCOR. • Disseminate findings from these research activities to improve patient engagement in PCOR. • Support research to improve the patient-reported outcomes (PRO) evidence base, including research on methods for assessing measurement properties (based on qualitative and quantitative evaluations), score interpretability, meaningfulness of score changes, and strategies for minimizing and interpreting missing PRO data in PCOR.
Dissemination	• Support and facilitate research on research dissemination by systematically collecting and funding the analysis of data measuring the impacts and effectiveness of PCORI/AHRQ dissemination activities. • Support health-related dissemination and implementation research to better understand barriers, facilitators and effective strategies for disseminating and facilitating the implementation of PCOR and CER, including dissemination and implementation by consumers and patients, clinicians and other healthcare and public health professionals and organizations, policy and regulatory agencies, and other stakeholders. • Disseminate findings from these research activities to improve PCOR and CER dissemination and implementation effectiveness.
Research Prioritization	• Encourage intra- and extramural research in the development and practical application of VOI methods for PCOR, including through studies that examine the contribution of VOI methods to research prioritization when used in conjunction with other approaches to research prioritization. • Support empirical research to assess and improve research prioritization methods for use by PCORI. • Support extra- and/or intramural research to establish a best practice approach to consultative and collaborative patient engagement in topic

generation that is suitable for the heterogeneity of the US patient population.

- Study the employment of research gap analysis to continue to develop the empirical evidence on its use.
- Encourage studies, ideally with experimental designs, that assess different methods for engaging patients with diverse views and preferences and funneling their input into the peer review process in a consultative manner.

Crosscutting and Design-specific Methods

- Fund research on innovative ways to identify and recruit new users of treatment for research studies.
- Fund research on ways to identify and include reasonable treatment alternative comparators.
- Further develop and disseminate templates for describing who is in each analysis and the potential sources of selection bias.
- Develop and disseminate methods for adequate analysis of data in cases where the treatment/exposure varies over time and it is not possible to adhere to these standards.
- Incorporate evolving new technology, such as the use of cloud and mobile technology, into ongoing work in the design of data networks.
- Fund research on the best way to harmonize data elements across sources.
- Evaluate the impact of the IOM standards, (endorsed by the Methodology Committee) on the resources needed to conduct systematic reviews and on review quality.
- Develop methods guidance for HTE analyses in observational studies and comparative effectiveness trials.
- Develop methods guidance on the use of Bayesian methods in HTE analyses and appropriate outcome scale for HTE analysis (e.g., risk difference, risk ratio, log of odds-ratio).
- Support the development of both analytic approaches and guidance for predictive approaches and applications of modeling to HTE with a focus on their use for PCOR.
- Develop analytic techniques for addressing measured and unmeasured confounding.
- Develop analytic techniques for handling missing data when linking multiple sources such as EMRs, claims and survey
- Develop improved strategies for linking data while maintaining privacy protections and assuring that link data do not lead to re-identification in de-identified data.

- Develop innovative ways to reduce loss to follow-up as registries encompass longer time periods.
- Encourage the development of a variety of research methods, including designs other than randomized trials, that can be used in assessing clinical outcomes resulting from diagnostic testing