Limited PCORI Funding Announcement:
Obesity Observational Research Initiative

Published February 25, 2015
Revised March 18, 2015

This limited PCORI Funding Announcement (PFA) applies to the Obesity Observational Research Initiative that closes on May 27, 2015, at 5:00 p.m. (ET). Funding announcements, templates, and other resources are available at
About PCORI

Patient-Centered Outcomes Research Institute (PCORI) is committed to transparency and a rigorous stakeholder-driven process that emphasizes patient engagement. PCORI uses a variety of forums and public comment periods to obtain public input in order to enhance its work. PCORI helps people make informed healthcare decisions and improves healthcare delivery and outcomes by producing and promoting high-integrity, evidence-based information that comes from research guided by patients, caregivers, and the broader healthcare community.

PCORI was authorized by the Patient Protection and Affordable Care Act of 2010 as a nonprofit, nongovernmental organization. PCORI’s purpose, as defined by the act, is to help patients, clinicians, purchasers, and policy makers make better-informed health decisions by “advancing the quality and relevance of evidence about how to prevent, diagnose, treat, monitor, and manage diseases, disorders, and other health conditions.”

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Limited PCORI Funding Announcement: Obesity
## Overview

**Published**
February 25, 2015

**Summary**
The goal of PCORI’s National Patient-Centered Clinical Research Network (PCORnet) is to create a large, highly representative, national network for conducting comparative effectiveness research (CER). PCORI will fund up to two awards under this limited PFA. The studies will investigate the following special interest topics: (1) Short- and Long-Term Outcomes related to Bariatric Surgery, and (2) Long-Term Effects of Antibiotics on Childhood Growth. There are three objectives:

1. Support research on important unanswered clinical questions faced by patients and their clinicians using PCORnet’s Distributed Data Research Network (DRN) and associated processes and programs.
2. Formally test and evaluate the capacity of PCORnet’s data infrastructure and the functionalities of the Distributed DRN, and report on the readiness of PCORnet’s data infrastructure for observational research.
3. Provide an early opportunity for clinical data research network (CDRN) and patient-powered research network (PPRN) investigators, patients, and stakeholders to organize and collaborate in a multisite study and develop an efficient, collaborative processes for doing so.

**Applicant Resources**

**Key Dates**

<table>
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<th>Event</th>
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<tr>
<td>Online System Opens</td>
<td>February 25, 2015</td>
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<tr>
<td>Application Deadline</td>
<td>May 27, 2015, by 5:00 p.m. (ET)</td>
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<td>Merit Review</td>
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**Maximum Project Budget (Total Costs)**
$4.5 million

**Funds Available up to**
$9 million

**Maximum Project Period**
2 years

**Eligibility**
Applications may be submitted only by CDRNs and PPRNs that are currently funded by PCORI and the PCORnet Coordinating Center. The Internal Revenue Service must recognize all applicant organizations.

**Review Criteria**

1. Technical merit
2. Patient-centeredness
3. Patient and stakeholder engagement
4. Infrastructure testing and evaluation plan
| Contact Us | For programmatic questions, please email (sciencequestions@pcori.org), phone (202-627-1884), or contact us online (http://www.pcori.org/PFA/inquiry). PCORI will provide a response within three business days. However, PCORI cannot guarantee that all questions will be addressed three business days before an application deadline. Please email (pfa@pcori.org) for any administrative, financial, or technical questions. PCORI will provide a response within two business days. Please note that during the week of the application deadline, response times may exceed two business days. Applicants may call the Helpdesk (202-627-1885) before the deadline for technical or administrative support. Applicants are asked to plan accordingly. It is the applicant’s responsibility to submit the application on or before the application deadline. |
| Other | Deadlines are at 5:00 p.m. (ET). If deadlines fall on a weekend or a federal holiday, the deadline will be the following Monday or the next day after the federal holiday, respectively. |
Limited PCORI Funding Announcement: Obesity
I. Introduction

Summary of Program

The goal of PCORnet is to create a large national “network of networks” that is linked by interoperable data using a common data model (CDM) and prepared to conduct clinical comparative effectiveness research (CER). This network will improve the nation’s capacity to conduct CER efficiently and will learn from the healthcare experiences of millions of Americans by embedding research within the clinical care setting.

The long-term vision is for PCORnet to provide a sustainable national research infrastructure that embeds research in everyday practice across multiple healthcare systems, drawing from the rich clinical data available in electronic health records and claims data, as well as patient-generated data sources. Phase I began in early 2014 as an 18-month investment for initial infrastructure development. By the end of Phase I, it is envisioned that PCORnet will function as a collaborative community that ensures the engagement of all stakeholders, facilitates sharing of analysis-ready standardized data with strong privacy protections using a CDM, and supports timely research that is trusted by the larger research community and the public. As part of Phase I, clinical data research networks (CDRNs) were required to create an obesity or weight-specific cohort with the expectation of using this cross-network population to conduct research using the PCORnet infrastructure. Obesity has also been named a priority area by PCORI’s Board of Governors. For these reasons, it was decided that research in obesity-related issues would represent a promising area for PCORnet’s first observational demonstration project. PCORI is issuing this limited funding opportunity to the PCORnet community that includes CDRNs, patient-powered research networks (PPRNs), and the PCORnet Coordinating Center (CC), and it will award up to two projects that include use of PCORnet’s CDM and Distributed Data Research Network (DRN) as its foundational infrastructure. These awards are intended to (1) address important patient-centered questions relevant to obesity using PCORnet’s DRN; (2) test, evaluate, and report on PCORnet’s emerging data infrastructure as it prepares to support an increasing volume of observational research in Phase II; and (3) provide an early opportunity for the PCORnet community to organize efficiently and collaboratively in observational multisite studies.

Research Topic Selection

A topic generation and prioritization process was coordinated through the PCORnet Obesity Task Force throughout 2014. The topic selection process was inclusive of members of the PCORnet community, patients and stakeholders in the target population, outside experts, obesity experts, and observational researchers. Two study topics were prioritized by the task force and submitted for PCORI’s consideration: (1) comparative effectiveness of bariatric surgery interventions and (2) comparative effectiveness of alternative antibiotics on weight outcomes in pediatric populations. The topic briefs1 were reviewed by the standing Advisory Panel on Disparities, who provided feedback to PCORI on elements of the proposed future studies. On January 27, 2015, PCORI’s Board of Governors approved


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the development of a limited PCORI Funding Announcement (PFA) to fund up to two awards addressing these topics as the first demonstration projects to test an observational study design using PCORnet.

**The Obesity Topics**

For this limited PFA, PCORI is soliciting applications from the PCORnet community to design and conduct observational research and CER, using PCORnet’s CDM and Distributed DRN, on the two following topics:

1. **What is the comparative effectiveness of different bariatric surgical procedures (Roux-en-Y gastric bypass, sleeve gastrectomy, and adjustable gastric banding) with respect to initial weight loss; weight regain; and the occurrence of obesity-related outcomes including the resolution of prevalent type 2 diabetes, or incidence or recurrence of type 2 diabetes?**

2. **What are the comparative effects of alternative antibiotics used during the first 2 years of life on body mass index and risk of being overweight or obese during the 3rd to 5th years of life?**

**Demonstration Project Objectives**

The demonstration projects have three main objectives:

1. Support research on important unanswered clinical questions of obesity faced by patients and their clinicians using PCORnet’s DRN and associated processes and programs.

2. Formally test and evaluate the capacity of PCORnet’s data infrastructure and the functionalities of the DRN, and report on the readiness of PCORnet’s data infrastructure for observational research.

3. Provide an early opportunity for investigators, patients, and stakeholders from the PCORnet community to organize and collaborate in a multisite study and develop efficient, collaborative processes for doing so.

**PCORnet Capacity Building**

PCORI will fund up to two awards under this limited PFA, one in each topic of interest. Investigators from CDRNs, PPRNs, and the CC are expected to collaborate on the development of the research plan and submit one cohesive proposal, per topic, to PCORI. Applications may be submitted only by Phase I PCORnet CDRNs, PPRNs, or the CC. Collaboration between CDRNs, PPRNs, and the CC is strongly encouraged. Each proposal should include a full study protocol, a list of participating institutions, and a plan for testing and evaluating the functionality of the PCORnet infrastructure. Please see the section below on the selection of the Principal Investigators (PIs).

The awardee institution(s) is responsible for each study, including oversight and dispersion of funds to any and all necessary subcontracts including institutions from the CDRNs, PPRNs, and the CC. Additional details for developing the research plan can be found in the Application Guidelines.

Applications should reflect careful attention to the selection of the CDRNs and PPRNs that will participate in the research project, guided by a careful analysis of preliminary data provided by all CDRNs and PPRNs using the PCORnet CDM; by the comprehensiveness of the CDM and completeness of the data at each network relative to the data elements necessary to conduct the study; by the level of
interest in the network; and by the current readiness of the network to participate effectively, efficiently, and within the scope of the available funds.

II. Guidance for Proposing Research

The application must include a detailed research protocol, an infrastructure testing and evaluation plan, a staffing plan, and a budget. Please see the Research Plan Template and Application Guidelines for more detailed instructions on how to include these elements in the proposal.

Guidance on the Research Protocol

Generally, comparative effectiveness studies should:

- Compare at least two alternative clinical interventions or approaches.
- Evaluate the benefits and harms of each intervention as delivered in typical clinical and community settings.
- Ensure that the health outcomes studied are meaningful to the patient population under study; in selected instances, surrogate physiological measurements may be sufficiently linked to final health outcomes of interest, but they may not be the sole study outcome.

More specifically, the protocol should:

- Describe the data sources, study design, follow-up period, study endpoints, statistical analyses, and possible anticipated limitations.
- Describe the data sources and the extent of data completeness at each participating site (i.e., the extent to which all relevant data within and outside the participating institutions for each patient are available). An important goal of this work is to understand the need for external claims data to supplement the participating network’s own information, and to develop, test, and refine policies and standard operating procedures for performing patient-level linkages between the networks and claims-data holders, particularly Centers for Medicare & Medicaid Services (CMS) and Sentinel health plans.
- Confirm the participating network’s ability and willingness to participate in an initiative supported and led by the CC to enable patient-level linkages with CMS and Sentinel health plans where needed.
- Use CDM Version 2.1. The protocol should list any additional data elements not currently captured by CDM Version 2.1 that will be necessary for each research study (this additional work may be budgeted for under this award). Describe the data characterization processes on the source data, and the quality checks that will be performed.
- Use the PCORnet DRN and its associated querying capabilities. Queries and other necessary programs will be developed and validated by the CC. To ensure a standard approach to data extraction and analyses, all participating sites should run SAS® software programs provided by the CC without modification. The CC will provide technical assistance to participating sites.
• Address confounding issues associated with the observational design and discuss the appropriateness of the analytical models proposed.

• Discuss potential limitations to the study and how they will be addressed.

Additional information:

• PCORI will consider up to one additional secondary research aim per study that engages patients from the PPRN communities through surveys, interviews, focus groups, or other appropriate methods to (1) elicit patient preferences around the risks and benefits of the study treatments, and/or (2) collect relevant patient-reported outcomes (PROs) meaningful to patients living with obesity. Only PPRNs whose patient communities are interested in this area should apply. PPRNs are not required to participate. Funding requests for additional research activities should be budgeted and clearly delineated in the budget justification from core observational study activities and the infrastructure testing and evaluation activities, which remain the priority aims of these first demonstration projects.

• Applicants will be provided with the feedback from the PCORI Advisory Panel on Disparities, which has taken a particular interest in overseeing obesity-related CER at PCORI. This feedback will be provided via the forthcoming Obesity PFA Applicant FAQs and should be addressed in the application.

• PCORI is requiring the use of a single Institutional Review Board (IRB) of record for each study. PCORI will consider exceptions if an institution has a compelling reason that prevents it from using a single IRB.

• Applicants should provide a detailed plan for data sharing (see the below section on the replication and reproducibility of research and data-sharing plan).

**Guidance on PCORnet Infrastructure Testing and Evaluation Component**

A significant aim of these demonstration projects is to test, evaluate, and report on the readiness of PCORnet’s data infrastructure and the use of the DRN. The CC should lead the testing and evaluation activities, report on the solutions implemented to resolve technical issues, and lead the evaluation of the functionality of the network. The proposal should include a detailed work plan and timeline describing these testing and evaluation activities with a final report to PCORI. The report will also be made available to CDRN and PPRN PIs and other interested parties through posting on the PCORI website.

The application should include:

• Descriptions of the operational processes required in all multisite studies, including coordination and collaboration of the CC with participating CDRNs and PPRNs, and the functionality of current governance policies—both PCORnet policies and those in place at each participating institution—noting conflicts or impediments to efficient and successful participation in such studies

• A report on the roles and activities of patients and stakeholders engaged at participating sites,
their involvement in approving the CDRN or PPRN’s participation in the study, and their subsequent involvement in overseeing the study

- A report on the processes related to contracting and IRB approval, evaluating their efficiency and timeliness and noting any barriers to efficient processes
- A report on the readiness of participating sites’ data sets as stored in CDM Version 2.1, data characterization, and data quality processes; evaluate readiness of the data sets at the participating sites; list all issues encountered at participating sites, solutions deployed, time to resolution, and subsequent limitations to the study
- An evaluation of the utility and efficiency of the DRN and the capacity of sites to address research questions executing unmodified programs in SAS
- A formal evaluation plan to be delivered at month two, and interim reports to be delivered every four months thereafter
- An overall evaluation of the functionality of PCORnet and its research readiness at the end of the project; list outstanding issues and propose detailed solutions and timeframes to address them
- Budgeting for an in-person kick off and in-person presentation of final results of the infrastructure testing and evaluation activities

Selection of the Principal Investigators

PCORnet’s Executive Steering Committee will be responsible for selecting up to three PIs for each study from nominations submitted by members of a PPRN, CDRN, or the PCORnet CC. For a description of the PI selection process, please click here.2

Each project will have up to three PIs, with one designated as the lead, who must be affiliated with a CDRN, PPRN, or the CC. A researcher external to any CDRN or PPRN may be nominated by a network and would then be considered “affiliated” with that network.

(1) Two PIs representing researchers or clinicians

At least one PI should have content expertise in the topic area and at least one should have expertise in conducting health services research using observational data. These two PIs will have expertise or experience in the areas described below:

- Research expertise in the content area of the proposal
- Epidemiology and/or health services research, with a focus on large-scale observational studies
- Research in DRNs; in addition, familiarity and expertise in working with data from their host institution should be highlighted

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• Track record of collaboratively leading multisite studies
• Willingness to work closely with the CC and Data Standards, Security, and Network Infrastructure (DSSNI) Task Force, participating networks, and the patient partners on the study team

Significant participation in the development of the topic brief and in the Obesity Task Force will also be considered in the selection.

(2) One Patient PI representing patients or caregivers

This PI will have expertise or experience in a combination of the areas described below (research experience is not required):

• Ability to meaningfully represent participant perspectives as a patient or caregiver
• Ability to work collaboratively with researchers and willingness to work closely with the CC and DSSNI Task Force and participating networks

Significant participation in the development of the topic brief and in the Obesity Task Force will also be considered in the selection.

Nonresponsiveness

Applications will be considered nonresponsive to this PFA if the proposed research:

• Tests efficacy (or comparative efficacy) within a tightly protocol-controlled research setting (as opposed to a more real-world, pragmatic CER)
• Does not make use of PCORnet’s DRN
• Conducts a formal cost-effectiveness analysis in the form of dollar-cost per quality-adjusted life year to compare two or more alternatives
• Directly compares the costs of care between two or more alternative approaches

PCORI does have an interest, however, in studies of conditions that lead to high costs to the individual or to society. PCORI is also interested in studies that examine differentials in healthcare resources or costs as a determinant of—or barrier to—good outcomes. Examples include ways in which out-of-pocket costs may constitute barriers to care.

Further, PCORI considers it important for applicants to discuss cost-related issues, such as the resources needed to implement, replicate, or disseminate a successful intervention. PCORI is interested in the evaluation of interventions intended to reduce health-system waste or increase health-system efficiency. Proposals that include studies of these issues without using a formal cost-effectiveness analysis or comparing the costs of alternatives are considered responsive.

PCORI discourages proposals that include studies of the natural history of disease, instrument development, pharmacodynamics, and fundamental science or study of biological mechanisms. It is not the intended purpose of this funding announcement to seek studies aimed at developing and evaluating new decision aids or clinical prognostication tools.
Features of Patient-Centered Outcomes Research

Patient-Centered Outcomes Research (PCOR) helps people and their caregivers communicate and make informed healthcare decisions, allowing their voices to be heard in assessing the value of healthcare options. This research:

• Assesses the benefits and harms of preventive, diagnostic, therapeutic, palliative, or health-delivery-system features to inform decision making, highlighting the choices that matter to people
• Is inclusive of an individual’s preferences, autonomy, and needs, focusing on outcomes that people notice and care about, such as survival, functioning, symptoms, and health-related quality of life
• Incorporates a wide variety of settings and diversity of participants to address individual differences and barriers to implementation and dissemination
• Directly compares clinical interventions that are generally available in settings where people access health care

Preliminary Data and Use of Accepted Measures

PCORI encourages investigators to design their research using valid patient-centered outcome (PCO) measures and to include preliminary data that support the proposed measures. Investigators are encouraged to consider those measures described in the Patient-Reported Outcomes Measurement Information System.

Justification of Assumptions

PCORI specifically seeks studies that are sufficiently powered to detect clinically meaningful effects. To that end, applicants must justify the proposed sample sizes by explaining the assumptions used in all study power calculations. The application should clearly state all the necessary assumptions (i.e., the primary outcome measure, estimated difference in the mean value of this measure between study arms, standard deviation of the measure, type I error rate, and any other assumptions). All such estimates must be justified by referring to prior published research or preliminary data.

Adherence to Methodology Standards

Regardless of study design, proposals must adhere to all relevant PCORI Methodology Standards. These include 47 individual standards that fall into 11 categories. The first five categories are cross-cutting and relevant to most PCOR studies. Researchers should refer to all of these standards when planning and conducting their research projects. These categories are:

• Standards for Formulating Research Questions
• Standards Associated with Patient-Centeredness
• Standards on Data Integrity and Rigorous Analyses
• Standards for Preventing and Handling Missing Data
• Standards for Heterogeneity of Treatment Effect

Five other categories of standards will be applicable to particular study designs and methods and should
be used for guidance when relevant. These categories are:

- Standards for Data Registries
- Standards for Data Networks as Research-Facilitating Infrastructures
- Standards for Causal Inference Methods
- Standards for Adaptive and Bayesian Trial Designs
- Standards for Studies of Diagnostic Tests

These standards should be considered minimal standards. Additional best practices—including guidelines for the conduct of clinical trials developed by other organizations—should be addressed in the application.

Patient and Stakeholder Engagement

PCORI encourages all applicants to clearly describe the patient and stakeholder engagement in their research proposals. PCORI understands that patient and stakeholder engagement in research can take many forms; it is not seeking one particular type or method of engagement. Rather, applicants should communicate how patients (those with lived experience), family members, caregivers, and the organizations that represent them, as well as any other relevant stakeholders, will be involved in study activities. Because this type of engagement in research is a relatively new concept, PCORI has developed the Engagement Rubric to guide both applicants and merit reviewers. Additionally, studies are expected to adhere to PCORI’s Methodology Standards Associated with Patient-Centeredness and to the PCOR Engagement Principles found within the rubric. These and additional resources are available in PCORI’s Funding Center.

Protection of Human Subjects

This component (up to five pages) is included in the Research Plan Template. Describe the protection of human subjects involved in your research. PCORI follows the Federal Policy for the Protection of Human Subjects (45 CFR part 46), including the Common Rule. For more detailed information, please see the Section 5 “Human Subjects Research Policy” from the Supplemental Grant Application Instructions for All Competing Applications and Progress Reports,3 issued by the U.S. Department of Health and Human Services. PCORI does not require that applicants comply with sections of this policy that refer to requirements for federalwide assurance, or that refer to standards for inclusion of women, minorities, and children. PCORI does require applicants proposing clinical trials to consider including a data and safety monitoring plan. Awardees must also comply with appropriate state, local, and institutional regulations and guidelines pertaining to the use of human subjects in research.

PCORI merit reviewers will examine plans for the protection of human subjects in all applications and may provide comments regarding the plans (see How to Evaluate Human Subjects Protections4). Reviewers’ comments on human-subjects research are not reflected in the overall application score but may be used by PCORI staff during any potential funding negotiations. Final determinations about

adequacy of human subject protections rest with the IRB or IRBs that have jurisdiction for the study. The awardee institution or organization bears ultimate responsibility for safeguarding the rights and welfare of human subjects in PCORI-supported activities.

**Required Education of Key Personnel on the Protection of Human Subject Participants**

PCORI requires all applicants to adhere to the National Institutes of Health (NIH) policy on education in the protection of human subject participants in the conduct of research. This applies to all personnel listed in the application as key personnel. The policy and FAQs are available from the NIH website.5

**Replication and Reproducibility of Research and Data-Sharing Plan**

PCORI is committed to maximizing the utility and usability of data collected in its funded projects. This is essential to building confidence in the accuracy of these findings. PCORI supports policies to promote the sharing of study documentation (e.g., study protocol, programming code, data definitions reproducibility plan, and associated budget) so that other researchers may replicate the findings in other populations. Please propose a method for sharing data and appropriate documentation on request. The study team should plan to post the initial and final study protocols at the conclusion of the study or contract, on both PCORI.org and another stable URL. Awardees should also propose a plan that will allow them to respond to requests for sharing data and/or reproduction. A budget for these activities can be proposed.

**Budget and Project Duration**

The maximum budget for each study in this PFA is $4.5 million total costs. Up to $9 million in total costs will be awarded under this PFA for up to two awards, no more than one award per special topic. The maximum period of performance is 2 years. There will not be a consideration of exceptions to the budget and period of performance limits. If you submit an application that exceeds the $4.5 million total cost cap or the 2-year period of performance, your application will be removed for noncompliance. The budget for the research activities should be clearly delineated in the budget justification from the budget for the testing and evaluation activities.

### III. How to Submit a Proposal

**Submission Dates**

Applications must be submitted in accordance with the published dates and times listed in the overview of this PFA and in the PCORI Funding Center.

**PCORI Online System**

To submit a proposal, you must register with the PCORI Online System and submit an application for each cycle in which you are applying.

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IV. Merit Review

PCORI Merit Review is a multiphase process that includes:

- Preliminary review of full applications by review panels (particular attention will be paid to including eligible reviewers either from the Methodology Committee or from the Methods Consultation)
- In-person panel discussion of a subset of full applications (identified by PCORI’s Research Priority Area Program staff and based on the preliminary review and program priorities)
- Selection Committee recommendation of applications for funding
- Board of Governors award approval (expected to be no later than August/September 2015)

Preliminary Review

PCORI conducts a rigorous merit review of the full applications it receives. Applications may be eliminated from the review process for administrative or scientific reasons (e.g., nonresponsiveness). An application may be administratively withdrawn if it is incomplete or submitted past the stated due date and time, or if it does not meet the administrative or formatting criteria outlined in the Application Guidelines, in the PCORI templates, and in the PCORI Online System. An application may be scientifically withdrawn if it is not responsive to the guidelines as described in this PFA, describes research that is not comparative, includes a cost-effectiveness analysis, or otherwise does not meet PCORI programmatic requirements.

A single merit review panel recruited by PCORI Merit Review Officers (MROs) will review administratively and scientifically responsive applications. The review panel is composed of a chairperson, scientist reviewers who are obesity experts, methodological and statistical experts familiar with observational studies and large database analyses, patient representatives trained in the review of scientific proposals, and representatives of other stakeholder groups.

The following are PCORI’s merit review criteria for this announcement. These four criteria are used by the review panel during the preliminary and in-person phases to score and evaluate all submitted applications.

Criterion 1. Technical merit

The proposal has sufficient technical merit in the research design to ensure that the study goals will be met. It addresses the following questions:
• Is there a clear research plan with rigorous methods that adhere to PCORI’s Methodology Standards and prevailing accepted best practices?
• Are the study outcomes appropriately recorded, measured, and validated for the study objectives? Are they identified equally for treatment and control groups?
• Are important covariates and known confounders or effect modifiers adequately captured, recorded, and accounted for in the analysis?
• Is there evidence that the outcome measures are sufficiently sensitive to identify differences between groups?
• Are treatment and control groups appropriately specified (including usual care) and justified as appropriate to achieve the study objectives?
• Are the prespecified subgroups reasonable given the proposed interventions and condition? Are the subgroups sufficiently large to allow a rigorous and valid comparative analysis?
• Is there a clear and adequate justification for the study design choices in the proposed trial?
• Is the analytical strategy clearly described and justified as appropriate to achieve the study objectives? Are key assumptions of the analysis described and explained? Does the project include a realistic timeline that includes clear and specific scientific and engagement milestones?
• Is the PCORnet data infrastructure, including the use of the CDM and central querying system, described in a clear and efficient way?
• Are the methods for ensuring data quality, security, and privacy described in an efficient way?
• Does the research team have the necessary expertise and prior experience conducting large-scale observational studies using a DRN and an appropriate organizational structure to successfully complete the study?
• Is the research environment well resourced and highly supportive of the proposed study?
• Does the study approach capitalize on the existing PCORnet data infrastructure to implement the study protocol?

Criterion 2. Patient-centeredness

The proposal demonstrates patient-centeredness at every stage of the research. It addresses the following questions:
• Do the research question and comparators reflect a choice or choices faced by patients, their caregivers, or clinicians?
• Does the study protocol include health outcomes, including validated PROs if appropriate, that are relevant to patients?
• Is there an adequate plan to protect human subjects participating in this study?
  o Does the project use efficient methods to obtain participant consent while still meeting ethical and legal requirements?
  o Does the application adequately describe how potential risks to subjects appear reasonable in relation to anticipated benefits?

Criterion 3. Patient and stakeholder engagement

The proposal demonstrates that people representing the population of interest and other relevant stakeholders are engaged in ways that are appropriate and necessary in a given research context. It
addresses the following questions:

- Are patients and other stakeholders (including professional and patient organizations) engaged in:
  - Designing the study?
  - Defining essential characteristics of study participants, comparators, and outcomes?
  - Identifying and selecting outcomes that the population of interest notices and cares about (e.g., survival, function, symptoms, health-related quality of life) and that inform decision making relevant to the research topic?
  - Monitoring study conduct and progress?
  - Designing/suggesting plans for dissemination and implementation activities?

- Are the roles and the decision-making authority of all research partners clearly stated?

- Does the proposal demonstrate the principles of reciprocal relationships, co-learning, partnership, trust, transparency, and honesty?

Criterion 4. Testing and evaluation of PCORNet data infrastructure

- Does the proposal describe a robust approach to testing and evaluating the data infrastructure, and for implementing solutions as the project develops? Does the proposal address all the areas described in the PFA?
- Does the proposal include a work plan and timeline for testing and evaluating the functionality of the network?
- Does the study team have the appropriate project management and scientific expertise to plan and implement robust testing and evaluation activities?

Panel Discussion

After the preliminary review is complete, reviewers meet in person for a panel discussion and further review. During the panel discussion, panelists further clarify the merits of the proposed research and study protocol and identify areas for improvement. Additionally, applications are rescored based on the discussion. The chair and a PCORI MRO lead the in-person panel meeting and ensure that all applications receive a fair and thorough review informed by the standards outlined in the PFA.

Post-Panel Review

After the panel discussion, PCORI program staff review meritorious applications’ merit review scores and comments and consider the fit of applications within the programmatic vision. Up to one application per special interest topic will then be recommended to a selection committee that includes members of PCORI’s Board of Governors. The selection committee will discuss this recommendation and work with staff to approve or reject a recommendation of funding based on merit review scores, programmatic balance and fit, and PCORI’s strategic priorities. In this case, no more than two studies, and no more than one for each topic outlined above, will be proposed to PCORI’s Board of Governors for its consideration and final approval.

Funding Recommendations

This announcement will fund up to two awards. Applications that fit the programmatic needs and
satisfactorily address reviewers’ critiques, while adhering to PCORI’s Methodology Standards, will be considered for funding by the PCORI Board of Governors. It is expected that applicants will receive notification of their application’s funding status no later than August/September 2015.

Protocol Refinement

After notice of funding status, applicants will begin refining the submitted protocol with a special group of experts created for protocol refinement inclusive of PCORI Methodology Committee members and participants from the Merit Review, as appropriate.

Contract Execution and Activation

PCORI will issue a contract to the selected awardee institution for each study once it conducts a thorough programmatic and administrative review and the awardee accepts PCORI’s contract terms and conditions, which will be based on PCORI’s research funding contract terms and conditions with additional provisions appropriate for the use of the PCORnet infrastructure and the specific research project. Among the expected contractual terms is a fully agreed-upon study protocol as evaluated by the group outlined above. The study will commence only after PCORI and the awardee institution execute the applicable contract and agree on the final protocol content.