Peer Review at PCORI

August 26, 2013
Application Submission and Merit Review Process Overview

1. Letter of Intent (LOI) is submitted through PCORI Online.
2. Application is submitted through PCORI Online.
3. PCORI performs internal quality control of the applications.

1. Each application is assigned to Scientific, Patient, and Stakeholder reviewers in 2:1:1 ratio.
2. Applications are reviewed and ranked.

1. Top scoring applications from the Online review are identified.
2. Panels are convened.

1. Top scoring applications from the Panel are reviewed by the Board of Governors.
2. Applications are funded and announced through PCORI’s website.
PCORI believes that combining patients’ individual experiences and passion for improving healthcare quality with the expertise of researchers results in research that better meets the needs of the entire healthcare community.
PCORI created **three categories of reviewers** to bring various perspectives to the review process. The reviewer committee will adhere to a **2:1:1** ratio meaning 2 scientists, 1 patient, and 1 stakeholder will be represented in each group.
Score Distributions

- Reviewers should consider the full range of the scoring scale and spread their scores to better distinguish between applications.
- Scores of 1 and 9 should occur far less frequently than mid-range scores (of 4-6).
Supporting PCORI Reviewers

Mentors
- Experienced patient and stakeholder reviewers who undergo additional training
- Assist reviewers with applying PCORI criteria to proposal
- Assist reviewers with the in-panel discussion

PSROs
- Support all patient and stakeholder reviewers
- Provide extensive training to the patient and stakeholder reviewers and review each of their critiques

SROs
- Recruit and vet reviewers with scientific expertise
- Work with the scientific reviewers throughout the merit review process to ensure all critiques are completed on time

Chairs
- Ensure the discussion is substantive, relevant, and stays on schedule.
- Create an atmosphere that encourages dialogue and interaction between the scientists and stakeholders
- Provide guidance on scoring when the entire range of scores is not being utilized
Learning from Reviewers

Post-review surveys

- Training
- In-person meeting dynamics
- Use of criteria
- Suggestions for improvement

Post-review small group discussions
Historically 8 criteria were used to evaluate proposals:

1. Impact of the condition on the health of individuals and populations
2. Potential for improving care and outcomes
3. Effects on healthcare delivery
4. Patient-centeredness
5. Rigorous research methods
6. Inclusiveness of different populations
7. Research team and environment
8. Efficient use of research resources

From this 5 new criteria emerged—based on feedback!

1. Impact of the condition on the health of individuals and populations
2. Potential for the study to improve health care and outcomes
3. Technical merit
4. Patient-centeredness
5. Patient and stakeholder engagement

For the CDRN funding announcement: 14 criteria
Improving Methods PFA- 5 criteria:

1. Impact on the field of PCOR methods
2. Potential for the study to improve PCOR methods
3. Technical merit
4. Patient-centeredness
5. Patient and stakeholder engagement
Merit Review
Feedback from Reviewers

Patient-Centered Outcomes Research Institute
I understood the meaning of the criteria for evaluating research proposals: *Patient-centeredness*

**Cycle III**

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<thead>
<tr>
<th>Scientific Reviewer</th>
<th>Stakeholder Reviewer</th>
<th>Patient Reviewer</th>
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<tbody>
<tr>
<td>Strongly disagree</td>
<td>Strongly disagree</td>
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<td>Somewhat disagree</td>
<td>Neither agree nor disagree</td>
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<td>Neither agree nor disagree</td>
<td>Strongly agree</td>
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<tr>
<td>Somewhat agree</td>
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<td>Patient agree</td>
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<tr>
<td>Strongly agree</td>
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1% 1% 6% 21% 71% 2% 2% 20% 76% 3% 3% 9% Strongly agree
How many proposals would you recommend PCORI assign to each reviewer?

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<tr>
<th>Scientific Reviewer</th>
<th>Stakeholder Reviewer</th>
<th>Patient Reviewer</th>
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<tbody>
<tr>
<td>1 to 3 proposals</td>
<td>1 to 3 proposals</td>
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<td>4 to 6 proposals</td>
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<td>proposals</td>
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- **Scientific Reviewer**
  - 1 to 3 proposals: 9%
  - 4 to 6 proposals: 51%
  - 7 to 9 proposals: 38%
  - More than 10 proposals: 1%

- **Stakeholder Reviewer**
  - 1 to 3 proposals: 4%
  - 4 to 6 proposals: 59%
  - 7 to 9 proposals: 35%
  - More than 10 proposals: 2%

- **Patient Reviewer**
  - 1 to 3 proposals: 6%
  - 4 to 6 proposals: 37%
  - 7 to 9 proposals: 49%
  - More than 10 proposals: 9%
Overall, scientific reviewers were receptive to input from patient and stakeholder reviewers.
... Overall, patient and stakeholder reviewers were receptive to input from scientific reviewers

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<tr>
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<th>Scientific Reviewer</th>
<th>Stakeholder Reviewer</th>
<th>Patient Reviewer</th>
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<tbody>
<tr>
<td>Strongly disagree</td>
<td>6%</td>
<td>2%</td>
<td>6%</td>
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<tr>
<td>Somewhat disagree</td>
<td>6%</td>
<td>14%</td>
<td>3%</td>
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<tr>
<td>Neither agree nor</td>
<td>7%</td>
<td>Strongly agree</td>
<td>Somewhat agree</td>
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<td>agree</td>
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<td>Strongly agree</td>
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<tr>
<td>Somewhat agree</td>
<td>23%</td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>58%</td>
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<td>80%</td>
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Standing Panels

- Starting with the November 2013 cycle, some reviewers are invited to be standing panelists.
- Panels will also include new reviewers.
- New reviewers continue to be needed for both broad and targeted funding announcements.
Recent Process Revisions

- Changes to merit review criteria
- Changes to critique construction
- Changes to online system
- Collection of more detailed information about reviewers to improve reviewer/application matching
- Revised training
Are you interested in participating as a PCORI reviewer again in the future?

- **Scientific Reviewer**: 98% Yes, 2% No
- **Stakeholder Reviewer**: 95% Yes, 5% No
- **Patient Reviewer**: 94% Yes, 6% No
PCORI’s CER Infrastructure Program

National Patient-Centered Clinical research Network (NCRN)

**Goal:** Empower the United States to become a learning healthcare system, which would allow for large-scale research to be conducted with enhanced accuracy and efficiency

**Action:** Create a large, highly representative, national patient-centered clinical research network for conducting clinical outcomes research that will promote

- a more comprehensive, complete, longitudinal data infrastructure
- broader participation of patients, clinicians, health systems, and payers in the research process
- improvements in analytic methods for both observational and experimental CER
Clinical Data Research Networks

- System-based networks (such as hospital systems) that have the potential to become an ideal electronic network

Patient Powered Research Networks

- Groups of patients interested in forming a research network and in participating in research
National Patient-Centered Clinical Research Network

Rigorous Research Practices

Active Patient and Clinician Engagement

Efficient Exchange of Information

Ideal Data Infrastructure for Patient-Centered Outcomes Research (PCOR)
PCORI Cooperative Agreement Funding Announcement: CDRN
Rigorous Research Practices

Ideal Data Infrastructure for PCOR

- Allows for complete capture of longitudinal data
- Capacity for collecting patient reported outcomes
- Covers large, diverse, defined populations from usual care settings
- Capable of randomization—at individual and cluster levels
Ideal Data Infrastructure for PCOR

Capacity for patients to share their own data

Active patient and clinician engagement in governance of data use

Ideal Data Infrastructure for PCOR

PCORI Cooperative Agreement Funding Announcement: CDRN
Active patient and clinician engagement
Ideal Data Infrastructure for PCOR

- Has standardized data and is interoperable
- Is efficient in terms of costs for data acquisition, storage, analysis
- Linkages to health systems for rapid dissemination of findings

PCORI Cooperative Agreement Funding Announcement: CDRN
Efficient Exchange of Information
Competitive LOI and full application timeline

Cooperative Agreement Announcement:
Release Date: April 23, 2013

- PCORI Online System Opens for LOIs: May 15, 2013
- Pre-LOI Informational Webinars CDRN: June 4, 2013
- LOI Due* 5:00PM (ET): June 19, 2013
- Applicants Notified of LOI Approval Status: July 17, 2013
- PCORI Online System Opens for Applications: July 17, 2013
- Applicant Town Hall CDRN: 2:30 PM (ET) Tuesday, September 3, 2013
- Application Deadline 5:00PM (ET) Friday, September 27, 2013
- Merit Review November 2013
- Awards Announced December 2013

* LOI must be approved to submit an application
Overview of the 14 CDRN Review Criteria

CDRN applicants’ current state may be anywhere on this continuum; however all CDRN must at least achieve the minimum expectations by end of 18 months. More mature CDRNs will be expected to exceed minimum expectations.

**The 14 Merit Review Criteria**

1. Network Components
2. Data Standards and Interoperability
3. Longitudinal Data Capture Capability
4. Patient and Clinician Network Governance
5. System Leadership Network Governance
6. Patient Identification/Cohort Recruitment
7. Willingness to Share Data/Infrastructure
8. Network Patient Communication Ability
9. CER Trial Support Capacity
10. IRB Capability
11. Data Privacy and Security
12. Biorepository Capabilities
13. Centralized Oversight Process
14. Efficient Use of Resources
Upcoming PCORI Webinar

**Promising Practices of Meaningful Engagement in the Conduct of Research**

- **Date:**
  Thursday September 19, 2013
  1:00 PM (ET) – 2:00 PM (ET)

- **Register:**

- **Objectives:**
  - To feature successful practices of patient and stakeholder engagement in PCORI funded projects.
  - To explore approaches to engaging patients and stakeholder partners in all stages of the research process, from helping craft the research question to ensuring dissemination of the research results.