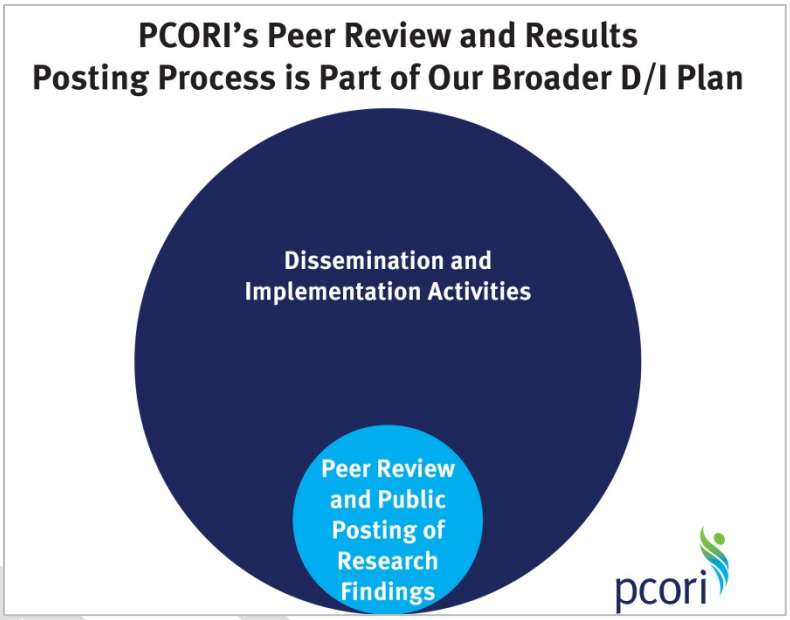
Getting the Word Out: PCORI's Proposal for Peer Review of Primary Research and Public Release of Research Findings

Draft as of Monday, September 15, 2014

PCORI's Proposed Research Peer-Review and Results-Posting Process: A Key Part of Our Broad Dissemination and Implementation Plan

This draft document outlines PCORI's proposed process for fulfilling its statutory mandate to develop and implement a process for peer-reviewing its primary research and making research findings publicly available in a form and format useful to patients, clinicians, and others. This process is envisioned as one element within a far more extensive and integrated effort to disseminate the results of PCORI-funded research to stakeholders across the healthcare community.



We plan to do this in close collaboration with the Agency for Healthcare Research and Quality (AHRQ), as outlined in our authorizing legislation, as well as through the community of healthcare stakeholders, both individuals and organizations, with whom we and our funded investigators have been engaged since early in PCORI's existence. We view these stakeholders, who have served as reviewers, advisory panel members, and on funded research teams, as key partners in ensuring that the evidence produced in our studies is effectively disseminated and used by those who need it most.

The Authorizing Legislation

PCORI's obligations under its authorizing law relating to peer review of primary research and making research findings publicly available are specified in several sections:

PROVIDING FOR A PEER-REVIEW PROCESS FOR PRIMARY RESEARCH
-- (A) IN GENERAL.—The Institute shall ensure that there is a process for peer-review of primary research described in subparagraph (A)(ii) of paragraph (2) that is conducted under such paragraph. Under such process— ''(i) evidence from such primary research shall be reviewed to assess scientific integrity and adherence to methodological standards…." 42 U.S.C. § 1320e(d)(7)(A).

''RELEASE OF RESEARCH FINDINGS
— (A) IN GENERAL.—The Institute shall, not later than 90 days after the conduct or receipt of research findings under this part, make such research findings available to clinicians, patients, and the general public. The Institute shall ensure that the research findings:

— (i) convey the findings of research in a manner that is comprehensible and useful to patients and providers in making health care decisions;

— (ii) discuss considerations specific to certain sub-populations, risk factors, and

comorbidities, as appropriate;
— (iii) include limitations of the research and what further research may be needed as appropriate…" 42 U.S.C. § 1320e(d)(8)(A).

ENSURING TRANSPARENCY, CREDIBILITY, AND ACCESS

(3) PUBLIC AVAILABILITY

The Institute shall make available to the public and disclose through the official public Internet website of the Institute the following:

(A) Information contained in research findings as specified in [the law].

(B) The process and methods for the conduct of research, including the identity of the entity and the investigators conduc[t]ing such research and any conflicts of interests of such parties, any direct or indirect links the entity has to industry, and research protocols, including measures taken, methods of research and analysis, research results, and such other information the Institute determines appropriate concurrent with the release of research findings. "42 U.S.C. § 1320e(h)(3).

This proposal focuses on the process for meeting requirements of PCORI's authorizing legislation. We recognize, however, that some of our awardees may be subject to additional legislative requirements. We intend to work cooperatively with these awardees to align fulfillment of these other legislative requirements with fulfilling our requirements. We will not interpret our process as being a barrier to an awardee meeting any other legislative requirements.

Shaping PCORI's Processes for Peer Review of Primary Research and Making Research Findings Publicly Available

PCORI's authorizing law's mandates for peer review of primary research and making research findings publicly available within a specific timeframe are not directly linked in the legislation and pose challenges that must be resolved if PCORI is to comply with both requirements. This proposal has been drafted by PCORI for public comment as required by law and is intended to address these dual challenges of ensuring timely release of research results while protecting the interests of patients and other stakeholders and of our awardees. It also recognizes the crucial role of peer-review journals in disseminating new evidence.

The mandate for peer review underscores the importance of ensuring that primary research funded by PCORI be critically appraised for scientific integrity as well as for adherence to PCORI's Methodological Standards before results are released. Such a peer-review process adds to the credibility, authority, and trustworthiness of PCORI-funded research findings.

Both the public and the medical profession have traditionally relied on medical and scientific journals, through a rigorous peer-review process, to vet research findings. Journals have also served as a critical pathway for disseminating validated findings to clinicians, policymakers, and, more recently, through the news media, to patients and the general public. Journal publication is typically a crucial prerequisite to professional acceptance of research findings for adoption in practice. Accordingly, investigators and

their institutions insist on the freedom to publish the results of research, and researchers value the opportunity to publish in top-flight journals. PCORI strongly supports these goals.

PCORI's authorizing law says PCORI may make use of the peer-review processes employed by appropriate journals (or peer-review processes employed by entities with which it contracts to conduct or manage research) to fulfill its mandate to peer-review its primary research findings. However, the procedures and criteria currently used by peer-reviewed journals will not typically or reliably address the law's requirement that such a review process address adherence to PCORI's Methodology Standards and may conflict with the law's requirement that PCORI make all research findings available in a timely fashion.

The authorizing law requires that PCORI make research findings available no longer than 90 days "after the conduct or receipt of research findings." Typical processes for preparing manuscripts for publication and peer review can be relatively lengthy. Although many journals can and do publish major manuscripts fairly quickly, PCORI could not rely on such an accelerated timeline in all cases.

PCORI is mandated to peer-review primary research and make publicly available the results of all of its supported research; however, it cannot rely solely on publishing in a journal because some studies will not succeed in having a manuscript accepted. PCORI must pursue additional, appropriate avenues for dissemination that are accessible by a broad audience.

In drafting its process, PCORI also is mindful of the fact that many journals often will decline to consider manuscripts resulting from research projects where detailed results previously have been made available publicly. Such "prior publication" could limit many investigators' options for publishing papers in leading journals of their choosing. This challenge has arisen before, however, and has led to PCORI's plan to include within its proposed process an approach developed by the National Institutes of Health to implement the Food and Drug Administration Amendments Act (FDAAA) through the National Library of Medicine's clinical trials registry (ClinicalTrials.gov), one that journal editors generally accept as not constituting prior publication.

Proposed Processes for Peer Review of Primary Research and Making Research Findings Publicly Available

Peer Review of Primary Research

1. **Registration**. Registration is a step in making the public aware of the study and the anticipated questions addressed by the study. PCORI research projects must register at the site appropriate to the study design. To the extent the research project meets the eligibility requirements for registration, clinical trials or observational comparative effectiveness studies shall be registered by the Awardee Institution at ClinicalTrials.gov. Clinical trials must be registered *prior* to enrollment of the first patient. Clinical registries shall be registered at the Registry of Patient Registries (RoPR), a repository of information about patient registries designed and deployed by the Agency for Healthcare Research and Quality (AHRQ) to complement ClinicalTrials.gov (https://patientregistry.ahrq.gov). Evidence synthesis studies shall be registered at PROSPERO, a comprehensive international database of prospectively registered systematic reviews (http://www.crd.york.ac.uk/PROSPERO/). Awardee Institutions shall ensure that registration is

completed as appropriate and use the following naming convention (or similar convention as directed by the site): "PCORI-PCORI application number" (e.g., PCORI-XXXX-XXXXX).[1]

2. **Draft Final Report**. The Awardee Institution must submit a draft final report to PCORI within three months of the completion of data analysis specified in the study protocol. This date will be recorded as a project milestone. This draft final report is submitted for peer review. Following peer review and acceptable revision, the report will be accepted as the final report by PCORI. The draft final report must include:

   - Description of the main study results with the following sections:
     a. Complete methods section that provides a rationale for why specific procedures were chosen. The methods section should justify the research design and protocol, explain how the results were analyzed, and describe any potential deviations from the PCORI Methodology Standards.
     b. Results section with tables to support presentation of the key findings of the study.
     c. Discussion section that discusses the findings, limitations of the findings, considerations specific to certain sub-populations, risk factors, and comorbidities, as appropriate.
     d. Conclusion section that presents the investigators' considered conclusions as well as limitations of the research and what further research may be needed as appropriate.

   - A 500-word abstract for medical professionals that describes each of the sections in the description of the main results of the study as described above. Specifically, the abstract must "discuss considerations specific to certain sub-populations, risk factors, and comorbidities, as appropriate" and "include limitations of the research and what further research may be needed as appropriate…."

   - A standalone results table to support presentation of the key findings of the study. This table shall meet requirements of ClinicalTrials.gov for submission, and it will also be posted along with the 500-word abstract on PCORI's website as a separate standalone document.

   - An ancillary information section that will include the following information required by the authorizing law, to be made publicly available as part of the research findings that have not already been addressed in the abstract or results table:

     - The identity of the entity and the investigators conducting the research
     - Any conflicts of interest of the entity and investigators conducting the research
     - Any direct or indirect links the entity has to industry

3. **PCORI Peer Review**. PCORI will conduct a peer review of the draft final report to determine whether the evidence and analyses support the conclusions of the report (content review for scientific integrity), and if the study methods adhere to PCORI's Methodology Standards. The following section describes this process as it would be carried out by a PCORI-managed team.

[1] Throughout this Proposal, references to "ClinicalTrials.gov" shall be interpreted to include "RoPR" for purposes of clinical registries and to include "PROSPERO" for purposes of systematic reviews.

PCORI would have the option of engaging a qualified vendor to perform the peer review of draft final reports. However, the review process and expertise of the review team would be the same as if PCORI performed the peer review.

a. **Submitting the draft final report.** The study is assigned to a PCORI Program Officer (PO). The Program Officer will oversee communications between PCORI and the Awardee Institution's Principal Investigator to adjudicate any issues identified in peer review. Responsibility for communicating the acceptance of the final report rests with the Program Officer. The Principal Investigator is not constrained from submitting a manuscript to a journal during PCORI's peer-review process. Parallel peer review is acceptable.

b. **Review team.** Methodological review will be performed by a methodologist selected by PCORI from among nationally recognized experts in this field. Content review of scientific integrity will be performed by content experts sourced by PCORI and also from those suggested by the study Principal Investigator (usually external to PCORI). PCORI will require peer reviewers to disclose their conflicts of interest, consistent with the requirements of the authorizing law. If a reviewer has a disqualifying conflict, PCORI will ask the reviewer to recommend a content expert who does not have a disqualifying relationship. As required by law, PCORI will list all peer reviewers of its primary research in its Annual Report, although no individual reviewer will be associated with any particular project.

c. **Review conference.** The draft final report will be discussed at a review conference attended by the PO and the methodologist.

d. **Review summary.** The PO will summarize the main issues identified in the review conference and recommend changes in writing to the Awardee's Principal Investigator within 60 days of receiving the draft final report.

e. **Revisions to the draft final report.** Upon receipt of the review summary for the draft final report, the Principal Investigator will make revisions and submit to the PCORI Program Officer within 45 working days a revised draft final report. More time would be allowed on a case-by-case basis if PCORI required the Principal Investigator to perform extensive re-analyses of the study data. More than one cycle of comments and revisions may be required before PCORI will accept the final report.

f. **Formal acceptance.** PCORI's notification of receipt and formal acceptance of the final report is provided to the Awardee Institution and the Principal Investigator in writing. If PCORI judges that the study failed to adhere to one or more of these standards or has other methodological flaws, the Principal Investigator may have to revise the conclusions or other aspects of the research report so that it reflects the flaws.

g. **Begin the 90-day period.** In accordance with the enabling law, the 90-day period for making research findings publicly available begins on the date that the notification of acceptance of the final report is provided to the Awardee Institution and its Principal Investigator.

Making Research Findings Publicly Available

1. **Translation for patients and the general public.** Following the formal acceptance of the final report, PCORI will review and edit the medical professionals' abstract, results table, and ancillary information for patients and general public with readability at the 8th-grade level, which will be reviewed and approved by the Awardee. Creating and posting the 500-word (lay) abstract for patients, consumers, and the general public addresses the following specific provision of the law's section ''Release of Research Findings":

   "...(i) convey the findings of research in a manner that is comprehensible and useful to patients and providers in making health care decisions..."

2. **Public Posting to PCORI.org and Submission to ClinicalTrials.gov.** As soon as the translations are complete and approved by the Awardee Institution, and no longer than 90 days after PCORI's acceptance of the final report:
   a. PCORI will post on its website the 500-word (lay) abstract, the 500-word medical abstract, a standalone table, and ancillary information.
   b. The Awardee Institution will ensure that the results table is submitted to ClinicalTrials.gov. Additionally, the Awardee Institution will ensure that links to the abstracts posted on the PCORI website are provided in the study's profile on ClinicalTrials.gov.

Posting of Full Final Reports

- PCORI will keep final reports on file, but will not post them immediately, since doing so might disqualify future manuscripts from being considered for publication by a journal.

- PCORI will make the final report of each study publicly available on the PCORI website no later than 12 months after the final report is accepted. By mutual agreement with the Awardee Institution, PCORI may delay posting beyond 12 months to coordinate posting with publication of a peer-reviewed journal version of study findings.

Information about Journal Publications

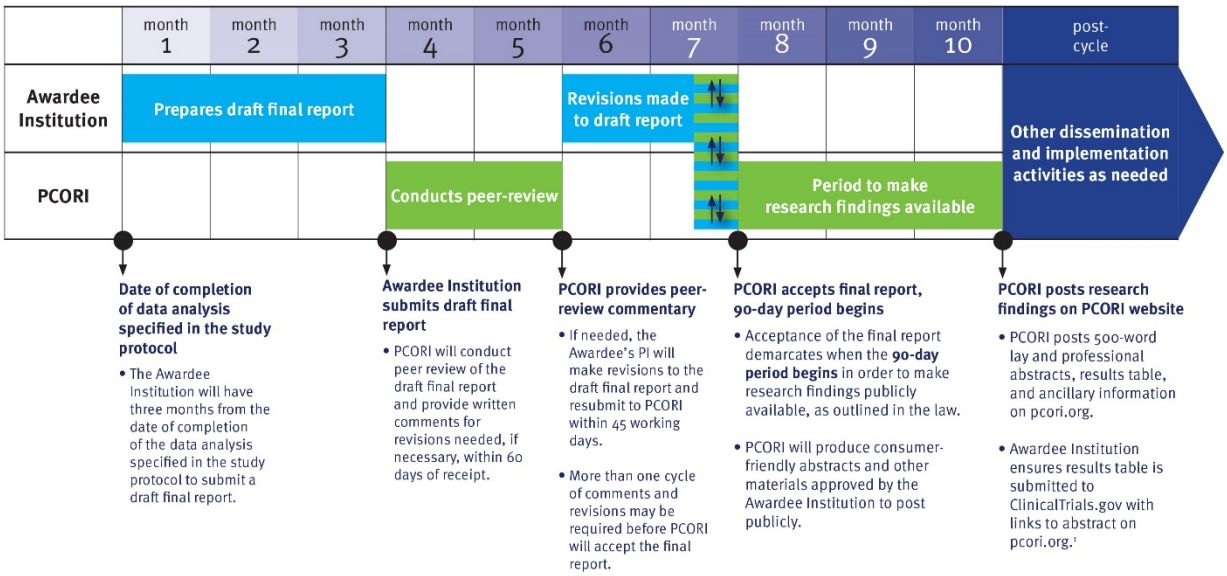
- The Awardee Institution will be required to notify PCORI of manuscripts submitted to journals for publication and of publication dates when manuscripts are accepted for publication.

- When a journal has published a manuscript, PCORI will post a link to the published work.

Timeline

PCORI Peer-Review Process

This timetable assumes the maximum amount for each phase. The timetable may expand for revisions to the peer review or may contract if research is completed before the allotted time.



Date of completion of data analysis specified in the study protocol

- The Awardee Institution will have three months from the date of completion of the data analysis specified in the study protocol to submit a draft final report.

Awardee Institution submits draft final report

- PCORI will conduct peer review of the draft final report and provide written comments for revisions needed, if necessary, within 60 days of receipt.

PCORI provides peer-review commentary

- If needed, the Awardee's PI will make revisions to the draft final report and resubmit to PCORI within 45 working days.
- More than one cycle of comments and revisions may be required before PCORI will accept the final report.

PCORI accepts final report, 90-day period begins

- Acceptance of the final report demarcates when the **90-day period begins** in order to make research findings publicly available, as outlined in the law.
- PCORI will produce consumer-friendly abstracts and other materials approved by the Awardee Institution to post publicly.

PCORI posts research findings on PCORI website

- PCORI posts 500-word lay and professional abstracts, results table, and ancillary information on pcori.org.
- Awardee Institution ensures results table is submitted to ClinicalTrials.gov with links to abstract on pcori.org.[1]

[1] *Results relating to clinical registries shall be posted to RoPR and to PROSPERO for systematic reviews, with links to pcori.org*

Components of the Final Report

Item	Authorizing law requirement	Where posted	Who is responsible
500-word abstract for medical professionals	Yes: helps summarize a technically written report for "clinicians" and is the basis for developing the lay translation.	PCORI website; provide link on ClinicalTrials.gov[2]	Awardee Institution
500-word lay abstract for patients and the general public	Yes: developed from the abstract for medical professionals and fulfills requirement to make results public for "patients and the general public." This is subject to approval by the Awardee Institution.	PCORI website; provide link on ClinicalTrials.gov	PCORI, with approval of the Awardee Institution
Results table	Yes: fulfills requirement to make research findings publicly available.	PCORI website; generate from the structured table entry from ClinicalTrials.gov	Awardee Institution
Ancillary information	Yes: includes any information required by the authorizing law to be made publicly available as part of the research findings that have not already been addressed in the abstract or results table	PCORI website; link from ClinicalTrials.gov	Awardee Institution
Detailed final report on main study results	No. The law does not specify	The full final report is posted on the PCORI website no later than 12 months after the final report is accepted.	Awardee Institution

[2] References to "ClinicalTrials.gov" shall be interpreted to include "RoPR" for purposes of clinical registries and to include "PROSPERO" for purposes of systematic reviews.