

Board of Governors Meeting via Teleconference/Webinar

October 31, 2016

9:00 am - 5:15 pm ET



PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

Welcome and Introductions

Gray Norquist, MD, MSPH

Chairperson, Board of Governors

Joe Selby, MD, MPH

Executive Director



Agenda

Time	Agenda Item
9:00 am	Welcome, Call to Order and Roll Call Consider for Approval: Minutes of September 27, 2016 Board Meeting
9:00-9:45	Executive Director's Report and Q3 Dashboard Review
9:45-10:45	PCORnet Governance
10:45-11:00	Break
11:00-11:30	Methodology Committee Update
11:30-12:30	Anniversary Panel with Eugene Washington and Steve Lipstein
12:30-1:30	Break
1:30-2:30	Stakeholder Panel: Employers
2:30-3:00	Evaluation Update: Engagement in Research
3:00-3:30	Report on Research Synthesis
3:30-3:45	Break
3:45-4:15	Consider for Approval: Open Science Policy for Public Comment
4:15-4:45	Consider for Approval: Topic for Sequential Targeted PFAs – Back Pain
4:45-5:15	Public Comment
5:15	Wrap-up and Adjourn Meeting of the Board

Board Vote

Call for a Motion to:

- **Approve** the minutes of the September 27, 2016 Board meeting

Call for the Motion to Be Seconded:

- **Second** the Motion
 - If further discussion, may propose an **Amendment** to the Motion or an **Alternative Motion**

Voice Vote:

- Vote to **Approve** the **Final** Motion
- Ask for votes in favor, opposed, and abstentions



Executive Director's Report

Joe Selby, MD, MPH

Executive Director



Welcome to PCORI's Newest Board Members

- We are honored to welcome two new Board members
 - Russell Howerton, MD, Chief Medical Officer and Vice President of Clinical Operations at Wake Forest Baptist Medical Center
 - Kathleen Troeger, MPH, Director of Outcomes Research at Hologic, Inc., a global healthcare and diagnostics company



Farewell and Thank You, Steve and Harlan!



Steve Lipstein, MHA

*Vice Chairperson, Board of Governors
Science Oversight Committee*



Harlan Weisman, MD, SM

*Board of Governors,
Research Transformation Committee*



Our Newly Reappointed Board Members



Christine Goertz, DC, PhD



Sharon Levine, MD



Gray Norquist, MD, MSPH



Ellen Sigal, PhD



Bob Zwolak, MD, PhD



Romana Hasnain-Wynia, MS, PhD

- Romana has served as Director of the Addressing Disparities Program since October 2012
- Under her leadership, AD has awarded \$200 million to projects answering practical questions in order to understand and reduce disparities nationwide
- Romana will now serve as Chief Research Officer of Denver Health



Thank you and farewell!



Sue Sheridan, MBA, MIM, DHL

- Sue has been with PCORI since February 2012 and served as Director of Patient Engagement
- Her leadership has made PCORI a model of patient engagement in the research community and added the patient voice into all our activities
- In her next role, Sue will re-engage as an advocate for patient safety and reduction of medical errors



Thank you and farewell!



2016: A Year of Refinement

- Research Application Enhancement – with SOC
 - Streamline/harmonize applicant processes, templates, and system; manage change
- Merit Review – with SOC
 - Add scientific reviewers, ensure methods expertise, align PCORI criteria with others, improve summary statements, streamline processes, improve reviewer training/recruitment
- New concepts of sequential targeted PFAs and specific set-asides in PCS introduced
- Preparation and Board Approval of FY2017 Budget, a collaborative effort of staff, Finance Administration Committee, and strategy committees
- Development and update of comprehensive organizational policies and processes for greater operational efficiency



Setting the Stage for 2017:

A Year of Research Results & Dissemination

- Peer Review Process Implemented
- Evidence Synthesis and Dissemination Activities Initiated



Transparency and Open Data at PCORI

1. Peer Review Policy

- Immediate registration of project info on ClinicalTrials.gov, summary on PCORI website
- Submission of results to ClinicalTrials.gov within 12 months of primary completion date
- Abstract with results posted to PCORI website within 90 days of peer review
- Posting of full Final Research Report no later than 12 months after acceptance

2. Open Access/Public Access Policy

- All final accepted manuscripts must be deposited in PubMed Central
- PCORI ensures immediate open/public access to all primary publications

3. Draft Data Sharing Policy

- PCORI requires posting of initial and final study protocols
- Preparation for data sharing required of all funded projects
- PCORI will require deposition of selected complete data packages in PCORI-suggested data repository and cover costs of transfer and storage
- Draft policy for public comment will be presented later today



Peer Review: Accomplishments to Date

- Updated draft final research report instructions with stronger focus on Engagement, Methodology Standards
 - Structured outline broadly follows journal article format; includes sub-headings for methods sections
 - Additional section on participation of patients and stakeholders
 - Addendum for authors to describe adherence to Methodology Standards
- Peer Review Systems are online and accepting draft final research reports
 - Editorial Manager® used to manage peer review
 - Integration with the PCORI Online application system to track milestones
 - Integration with PCOR Translation Center
- Reviewer recruitment and training are up and running
 - Associate Editors trained to work with different types of reviewers
 - Customized reviewer forms for each reviewer type



Current Status of Peer Review*

Number of draft final research reports expected to be in by 12/31/16	43
Number of draft final research reports now in peer review	12
Expected date of posting of abstracts from peer-reviewed reports	Starting early 2017
Number of pilot projects with completed abstracts	47 (of 50)
Expected date of posting of pilot project abstracts	Starting December 2016

**Data current as of 10/19*

Evidence Synthesis and Dissemination Meeting

October 14, 2016

- 40+ stakeholder representatives from all sectors
- Aim of the meeting: to identify the best ways to translate and present findings that can be used for decision making by different groups
- Basic messages:
 - Findings should be clear, concise and actionable
 - Put “bottom line” at the top
 - Work with trusted intermediaries
 - Concentrate on areas where there is new information and clear evidence
 - Emphasize shared decision making; tailor to the audience
 - “Insufficient evidence” has little value to most stakeholder groups but can help identify research gaps



Our 2016 Annual Meeting is Just Weeks Away

- Nov. 17-19, Gaylord National Harbor Hotel, National Harbor, MD
- Theme: **Changing the Conversation about Health Research**
- Registration: >1,000 members of the PCORI community
- Keynote speakers:
 - **Ronnie Sharpe**, Founder, CysticLife
 - **Harvey V. Fineberg, MD, PhD**, President, Gordon and Betty Moore Foundation
 - **Patrick Conway, MD, CMS** Deputy Administrator for Innovation & Quality and CMO
 - **Risa Lavizzo-Mourey, MD, MBA**, President and CEO, Robert Wood Johnson Foundation
- Plenary sessions, breakouts and workshops will:
 - Explore how we can make research more patient-centered and useful to end users
 - Highlight emerging results of PCORI-funded studies and promising work in progress
 - Convene the healthcare community to share lessons learned and build new partnerships

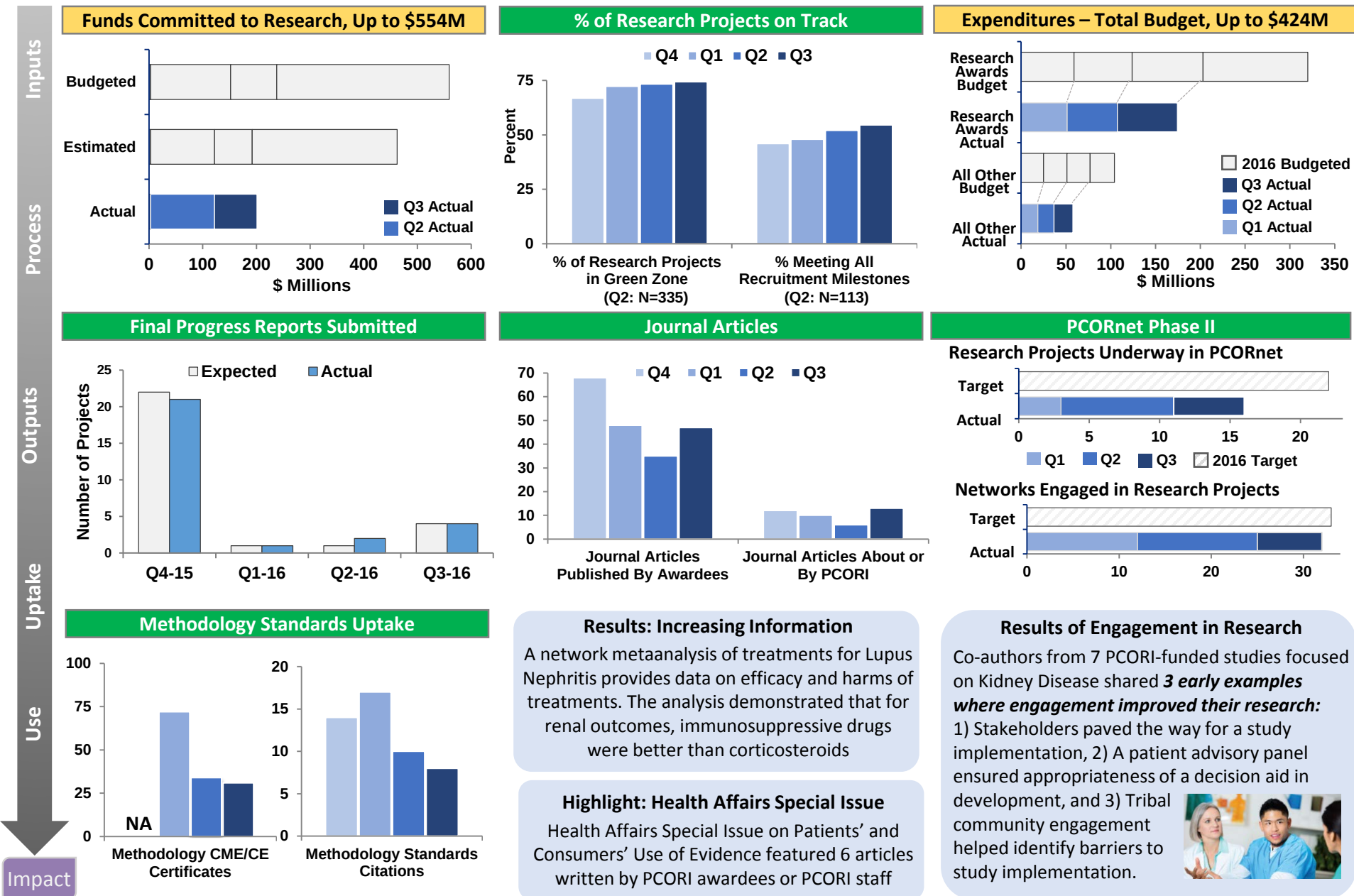
Dashboard Review

Third Quarter of FY-2016

Joe Selby, MD, MPH

Executive Director





Results of PCORI Research: Network Meta-analysis of Treatments for Lupus Nephritis

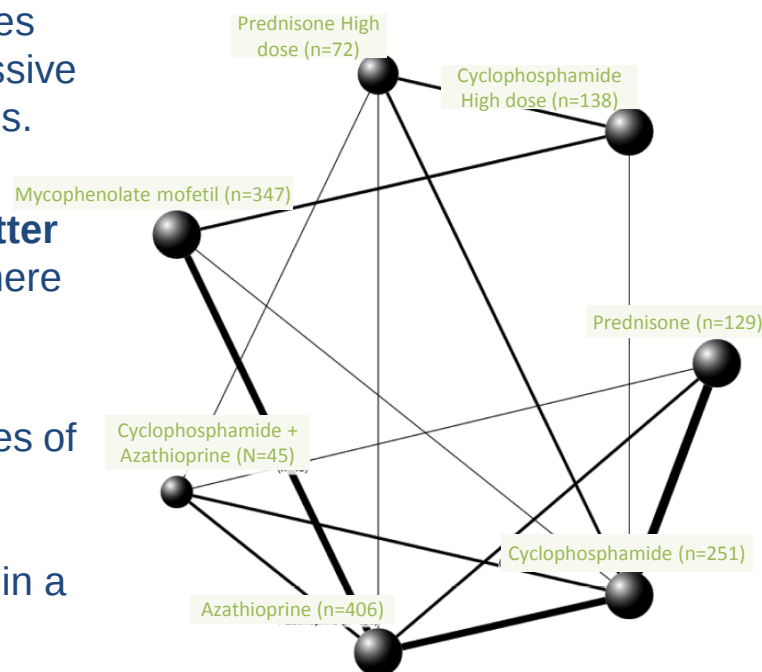
Sing JA, Hossain A, et al. **Treatments for Lupus Nephritis: A Systematic Review and Network Metaanalysis.** *Journal of Rheumatology.* Sep 2016.

- Awarded 2013, Assessment of Prevention, Diagnosis, and Treatment Options project
- Principal Investigator: Jasvinder Singh, MBBS, MPH- University of Alabama at Birmingham

This systematic review and Bayesian network meta-analyses assessed the comparative effectiveness of immunosuppressive drugs and corticosteroids for the treatment of lupus nephritis. 65 RCTs were included in the analysis

For renal outcomes, **immunosuppressive drugs were better than corticosteroids, both clinically and statistically.** There were differences in side effects including herpes zoster, alopecia, gastrointestinal tolerability, etc.

This study provides data on relative and absolute differences of treatment options, which will help with patient-physician discussions around medication use. This data is being incorporated into a patient-decision aid that is being tested in a PCORI-funded RCT in patients with lupus nephritis



Results of Engagement in Research: PCORI Studies of Patients with Kidney Diseases

Cukor D, Cohen LM, et al. **Patient and Other Stakeholder Engagement in Patient-Centered Outcomes Research Institute Funded Studies of Patients with Kidney Diseases.** *Clin J Amer Soc Nephrol.* May 2016.

Co-authored by researchers, patients, and stakeholders from 7 PCORI-funded studies focused on kidney disease, including a Patient-Powered Research Network focused on nephrotic syndrome, the article identified 3 early examples where engagement made a difference in the study:

1. Stakeholder advocacy motivated a major dialysis provider organization to find creative solutions to accommodate novel treatment delivery options in order to participate in the study (PI: Mehrotra)
2. Patient advisory panel feedback on the development of a decision aide helped ensure it was appropriate for the target audience of predialysis CKD patients and their caregivers (PI: Tentori)
3. Community engagement with the Zuni people helped identify psychologic and structural barriers that could be a challenge in a population with the highest prevalence of dialysis-requiring kidney diseases (PI: Shah)

”

...The nephrology research community could serve as a model for implementing the ideals of community-based participatory research and patient-centered methodologies.

PCORI Projects with contributing authors:

- PI: Lewis Cohen
- PI: Elizabeth Cope
- PI: Nashrollah Ghahramani
- PI: Denise Hynes
- PI: Rajnish Mehrotra
- PI: Vallabh Shah
- PI: Francesca Tentori



Health Affairs Theme Issue

Patients' and Consumers' Use of Evidence

Six articles in the April 2016 Special Issue of *Health Affairs: Patients' and Consumers' Use of Evidence*, were authored by PCORI awardees or PCORI staff:

-  42 1. Dohan D, et al. **The Importance Of Integrating Narrative Into Health Care Decision Making.** *Health Aff (Millwood)*. Apr 2016.
-  390 2. Lavalley DC, et al. **Incorporating Patient-Reported Outcomes Into Health Care To Engage Patients And Enhance Care.** *Health Aff (Millwood)*. Apr 2016.
-  46 3. Tai-Seale M, et al. **Enhancing Shared Decision Making Through Carefully Designed Interventions That Target Patient And Provider Behavior.** *Health Aff (Millwood)*. Apr 2016.
-  39 4. Westfall JM, et al. **Reinventing The Wheel Of Medical Evidence: How The Boot Camp Translation Process Is Making Gains.** *Health Aff (Millwood)*. Apr 2016.
-  40 5. Woolf SH, et al. **Authentic Engagement Of Patients And Communities Can Transform Research, Practice, And Policy.** *Health Aff (Millwood)*. Apr 2016.
-  53 6. Carman KL, et al. **Understanding an Informed Public's View on the Role of Evidence in Making Health Care Decisions.** *Health Aff (Millwood)*. Apr 2016.

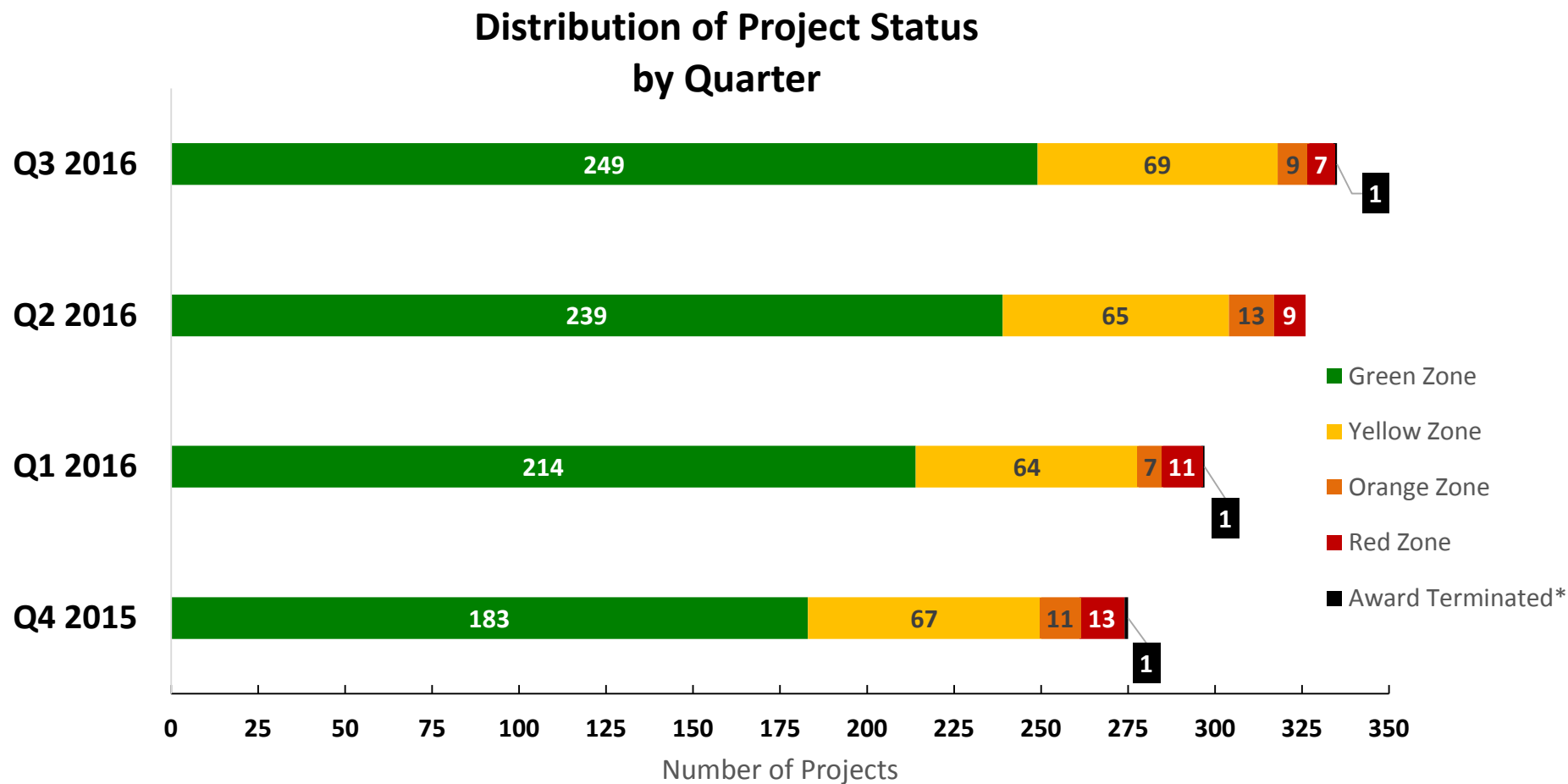


We actively monitor our projects, support them to be successful,
and classify their progress as shown below

GREEN	YELLOW	ORANGE	RED
The Project is meeting >85% of milestones on time -AND- Recruitment occurring on schedule, at expected rate -AND- PO judges that the project has a high probability of meeting its objectives as planned. PO judgment is based on close review of study progress, including recruitment status.	Project does not meet all criteria for "Green" -AND- Project is meeting $\geq 65\%$ of milestones on time. -OR- Recruitment is $\leq 75\%$ and $> 50\%$ of target accrual -OR- PO has concerns that without remediation efforts the project will not be able to meet objectives within project period.	Project does not meet all criteria for "Yellow" -AND- Project is meeting $\geq 50\%$ of milestones on time. -OR- Recruitment is $\leq 50\%$ of target accrual -OR- PO has concerns that the project will not meet objectives within the approved project period. Modifications to the Milestone Schedule and/or project plan are likely required.	Project does not meet all criteria for "Orange" -AND- Project is meeting $< 50\%$ of milestones on time. -OR- Recruitment is persistently and significantly $\leq 50\%$ of target -OR- PO has significant concerns that the project cannot meet its original objectives. Major modifications to Milestone Schedule are required for the project to be completed.
Next Steps			
Continue monitoring project through active portfolio management and per SOPs.	Increased communication with the PI to monitor and assist with getting the project back on track	Placed Under Review at PCORI to determine if it is able to meet its original project plan. Pursue modifications to project plan or milestone schedule as appropriate.	Project Remediation Plan (PRP) memo sent to PI with a 30-day completion date deadline. Inform Leadership of Status



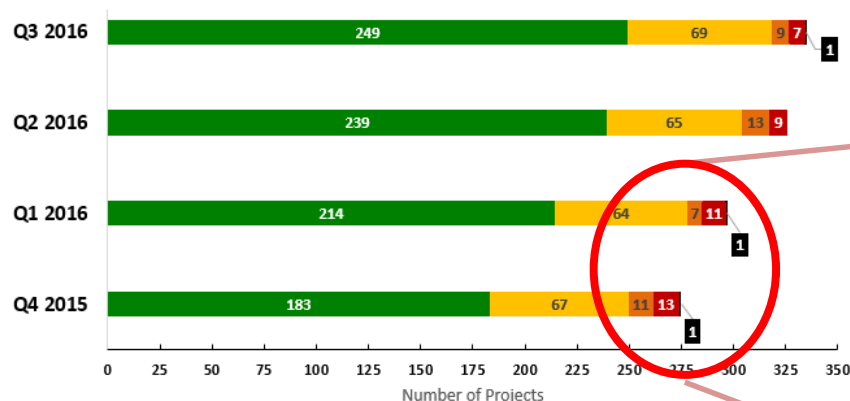
The majority of our projects are on track and we are giving additional attention to those that are not



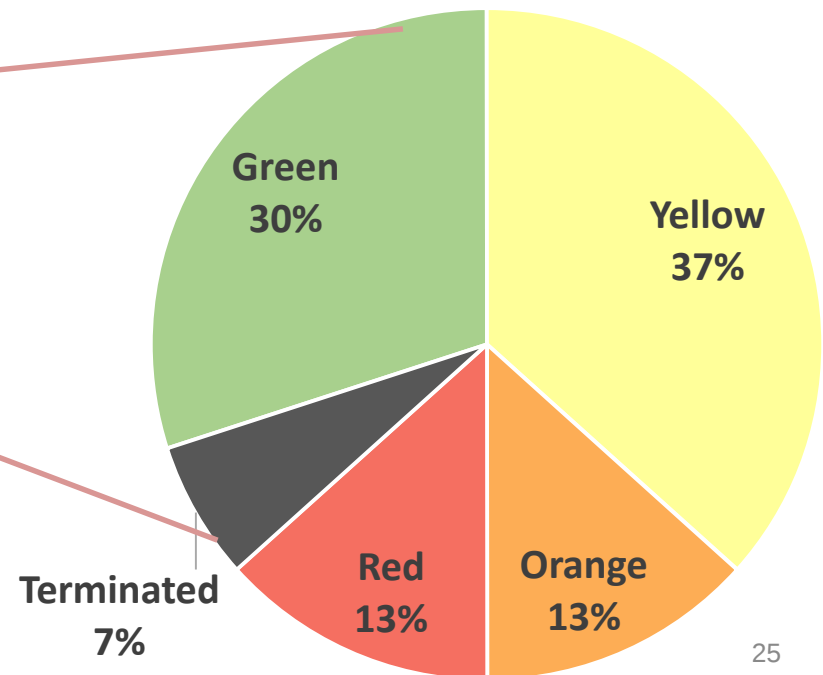
Projects that Fall Behind: Where are they now?

Of the 29 Unique Projects in Q4-15 or Q1-16 that were Red/Orange:

- 2/3 are now Green or Yellow in Q3-16
- 1/3 are still behind or were terminated



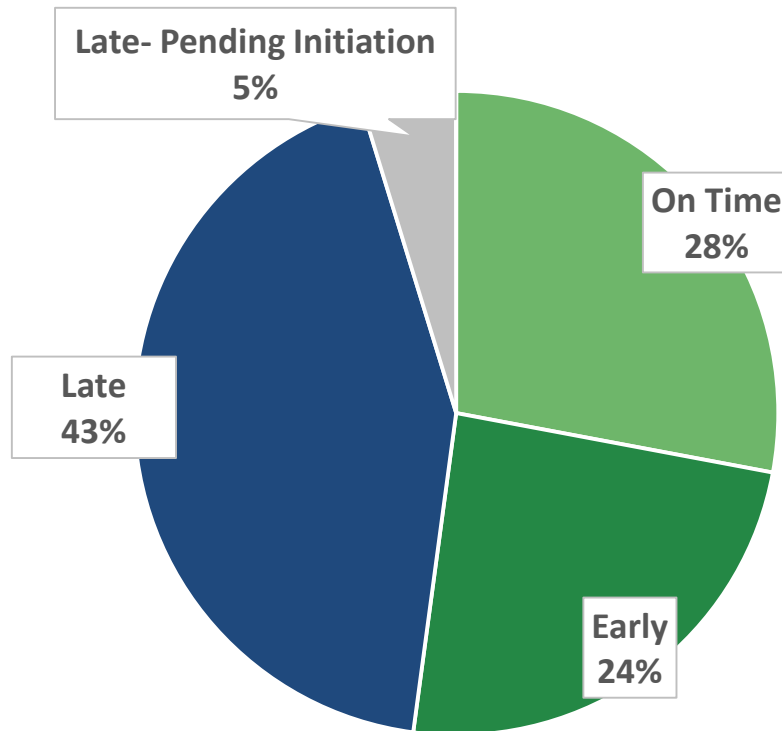
Current Status
Q3-16



52% of Projects Started Recruitment Early or On Time

For all projects that have or should have initiated recruitment (N=211)

Timeliness of Recruitment Initiation



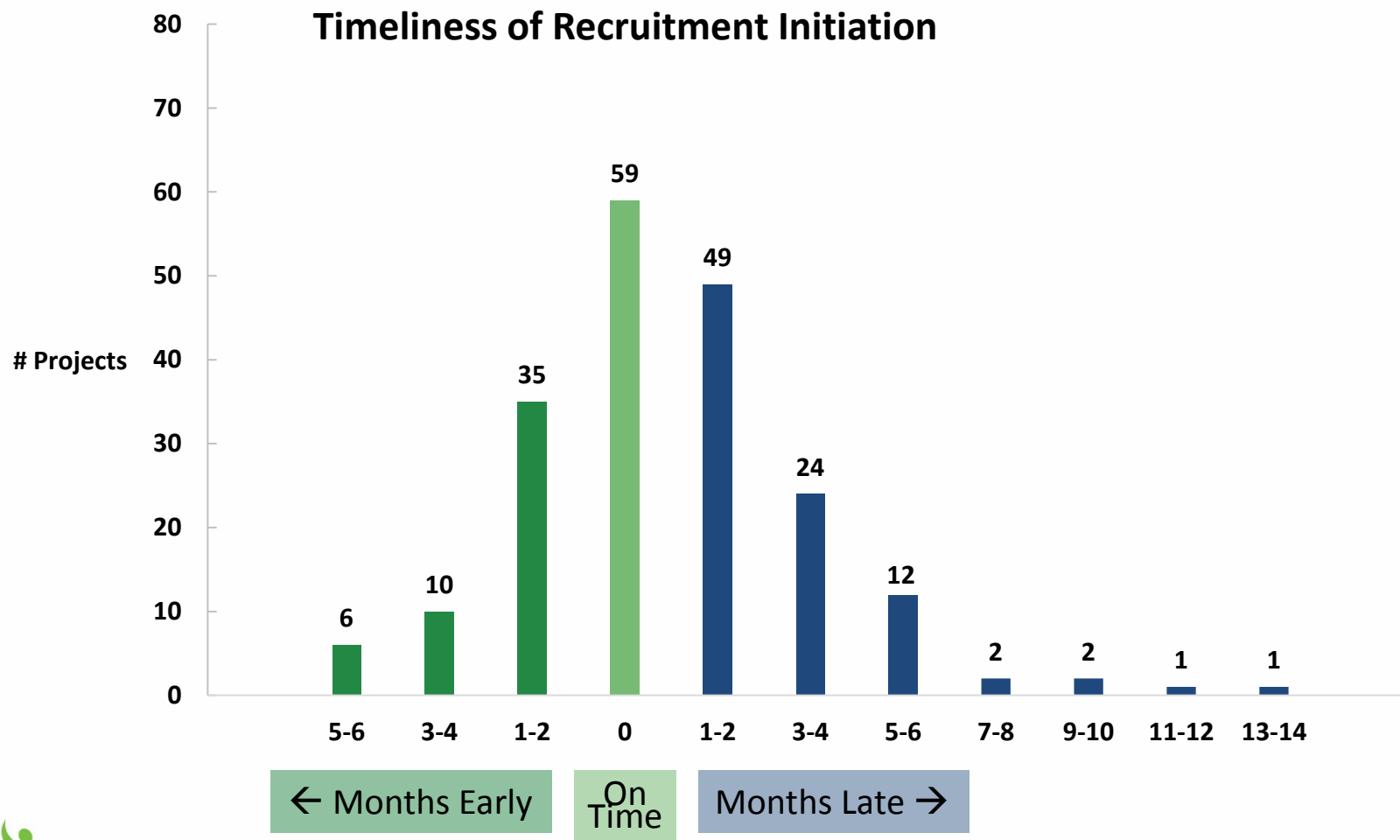
Most Common Reasons for Delayed Initiation

- Subcontract negotiation
- IRB Approval
- Staff turnover



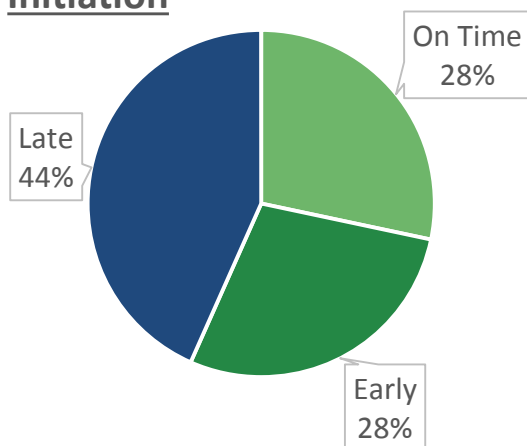
Most Projects Initiated Recruitment within a Few Months of Planned Start Date

For all projects that have initiated recruitment (N=201)

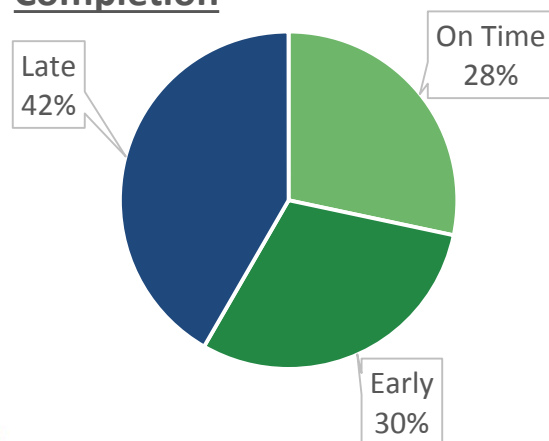


62 Projects Have Completed Recruitment

**Timeliness of Recruitment
Initiation**



**Timeliness of Recruitment
Completion**



		Recruitment Completion	
N=62		Early or On Time	Late
Recruitment Initiation	Early or On Time	24 (37%)	11 (18%)
	Late	12 (19%)	15 (26%)

Time →

- 63% Stay in same timeliness category
- Of those that started late, 44% ended on time
- Of those that started early, 31% ended late

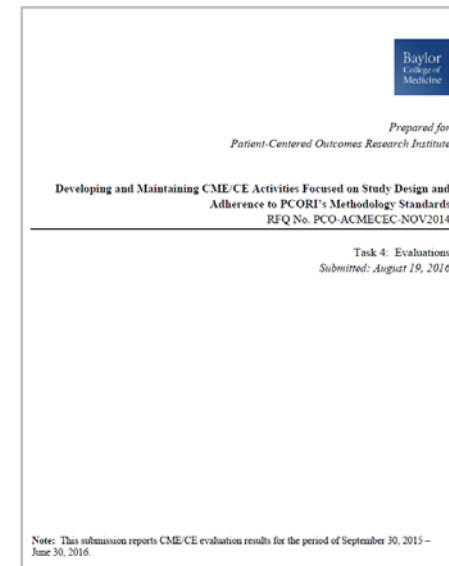


Educational Outcomes Report for Methodology Standards CME/CE Activity

After one year, Baylor College of Medicine provided an Educational Outcomes Report for the PCORI Methodology Standards CME/CE Activity (with 136 Survey Respondents)

“Substantial knowledge and confidence gains are being achieved in line with, if not exceeding, the gains typically observed for Baylor’s educational initiatives. These strong results suggest that [participants] are anticipating improvements in conducting patient-centered research studies and are seeking to implement the Methodology Standards as applicable.”

Examples:



Do you intend to implement the following practice changes?

	Yes	No	Already Implementing
<i>Engage patients throughout the research process in at least one study in which you are involved</i>	93%	3%	4%

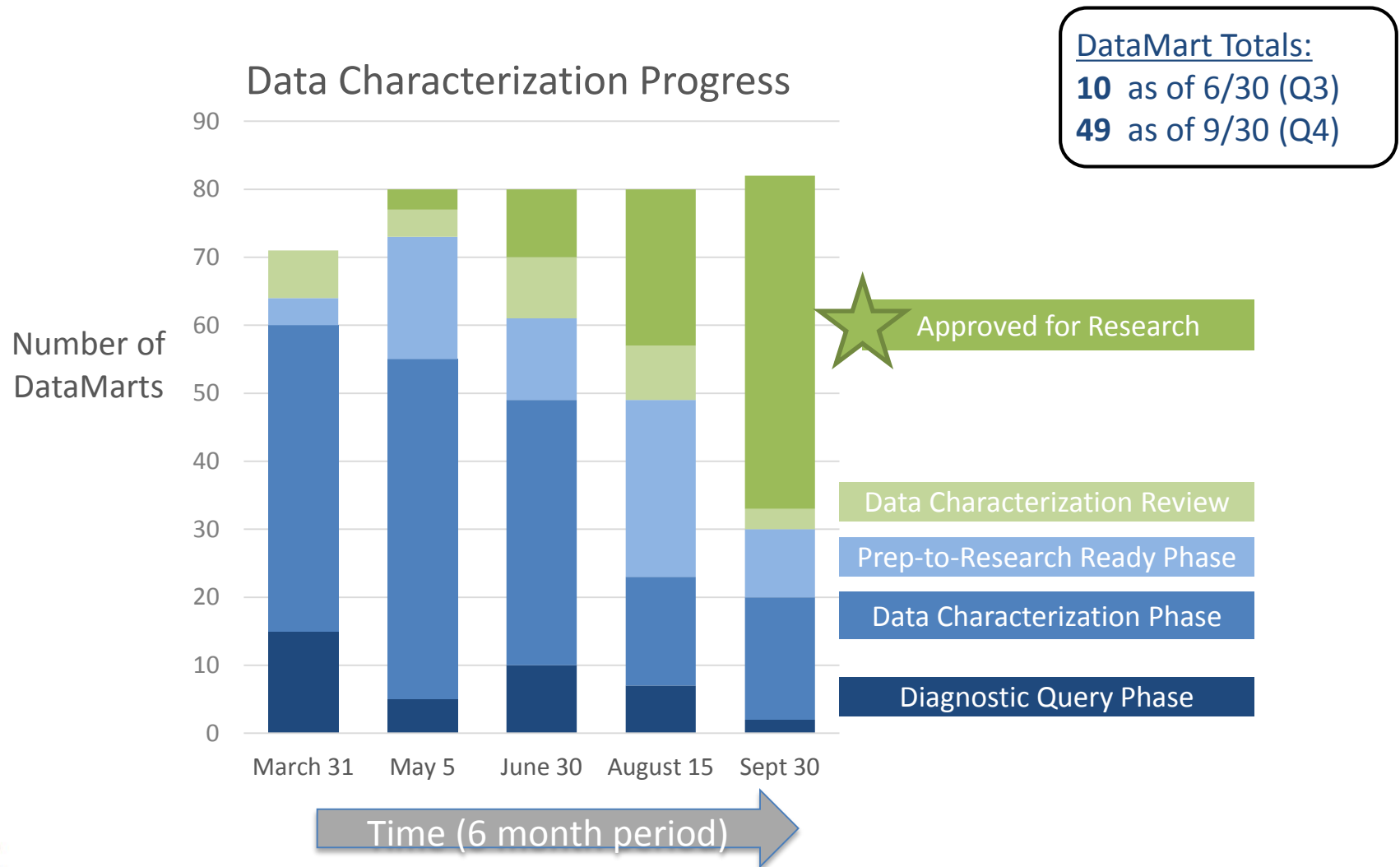
Knowledge of how comparative effectiveness research can contribute to advances in patient care

	<i>No Knowledge</i>		<i>Some Knowledge</i>			<i>High Knowledge</i>			<i>Very High Knowledge</i>		
	1	2	3	4	5	6	7	8	9	10	Mean
<u>Before</u> program:	B										3.5
<u>A</u> fter program:	A										6.9



Research-Ready PCORnet

More than Half of DataMarts Are Now Approved for Research



21% of Recent LOIs Proposed Collaboration with PCORnet

Cycle 3 2016

Of the 414 LOIs received for Cycle 3 2016, **21% had a portion of their study proposal that included collaborations with existing PCORnet entities** (including CDRNs, PPRNs, or Collaborative Research Groups).

Broad (21%)

- 11% of AD proposals
- 22% of APDTO proposals
- 46% of Methods proposals
- 13% of IHS proposals
- 0% of CDR proposals

Targeted, PCS, and D&I (22%)

- 58% of Sickle Cell proposals
- 27% of Palliative Care proposals
- 17% of Opioids proposals
- 16% of PCS proposals
- 7% of D&I proposals



pcornetSM

The National Patient-Centered
Clinical Research Network





Results: Increasing Information
 A network metaanalysis of treatments for Lupus Nephritis provides data on efficacy and harms of treatments. The analysis demonstrated that for renal outcomes, immunosuppressive drugs were better than corticosteroids

Highlight: Health Affairs Special Issue
 Health Affairs Special Issue on Patients' and Consumers' Use of Evidence featured 6 articles written by PCORI awardees or PCORI staff

Results of Engagement in Research
 Co-authors from 7 PCORI-funded studies focused on Kidney Disease shared **3 early examples where engagement improved their research:**
 1) Stakeholders paved the way for a study implementation, 2) A patient advisory panel ensured appropriateness of a decision aid in development, and 3) Tribal community engagement helped identify barriers to study implementation.



PCORnet Governance

Rachael Fleurence, PhD

Program Director, Research Infrastructure, PCORI

Adrian Hernandez, MD, MHS

Principal Investigator, PCORnet Coordinating Center



Agenda

- Introduction
- PCORnet Timeline and Achievements 2014-2016
- Planning for the future of PCORnet
 - A governance model that ensures PCORnet remains mission aligned
 - A sustainability model that supports PCORnet's continued existence beyond the initial PCORI investment
- Discussion



PCORnet Investment Timeline 2014-2016



In July 2012, PCORI set out to fill in a large gap in the US national research infrastructure that was slow, costly, and often produced results that were not meaningful to patients.



PCORnet Achievements 2014-2016

From vision of a strong involvement of participants in all phases of research and use electronic health data in conducting comparative effectiveness research....

....to implementation in two Phases:

Phase I focused on:

- building the network, with focus on governance;
- developing individual CDRNs and PPRNs;
- laying out a common data infrastructure for distributed research

Phase II focused on completing remaining building blocks:

- developing sustainability plans;
- administrative simplicity;
- implementing the Distributed Research Network for observational studies and pragmatic randomized trials;
- launching demonstration projects



Planning for PCORnet's Future

- The Board of Governors' intention from 2013 was for PCORnet to become a sustainable network after PCORI's initial investment

- Approach to sustainability, such as obtaining commitments from health systems for monetary or in-kind cost sharing, cost recovery from external research projects both local and through PCORnet, potential receipt of core support from other public and private funding sources, increased economies of scale and innovation over time, and other approaches...
- Willingness to work with a range of funders, including both public and private entities, including the medical products industry.

(Extract from the Phase II Funding Announcement, 2015)

- Current planning for the future is well underway on two fronts:
 - A governance model that ensures PCORnet stays mission-aligned
 - A sustainability model that supports PCORnet's continuation post-PCORI initial investment

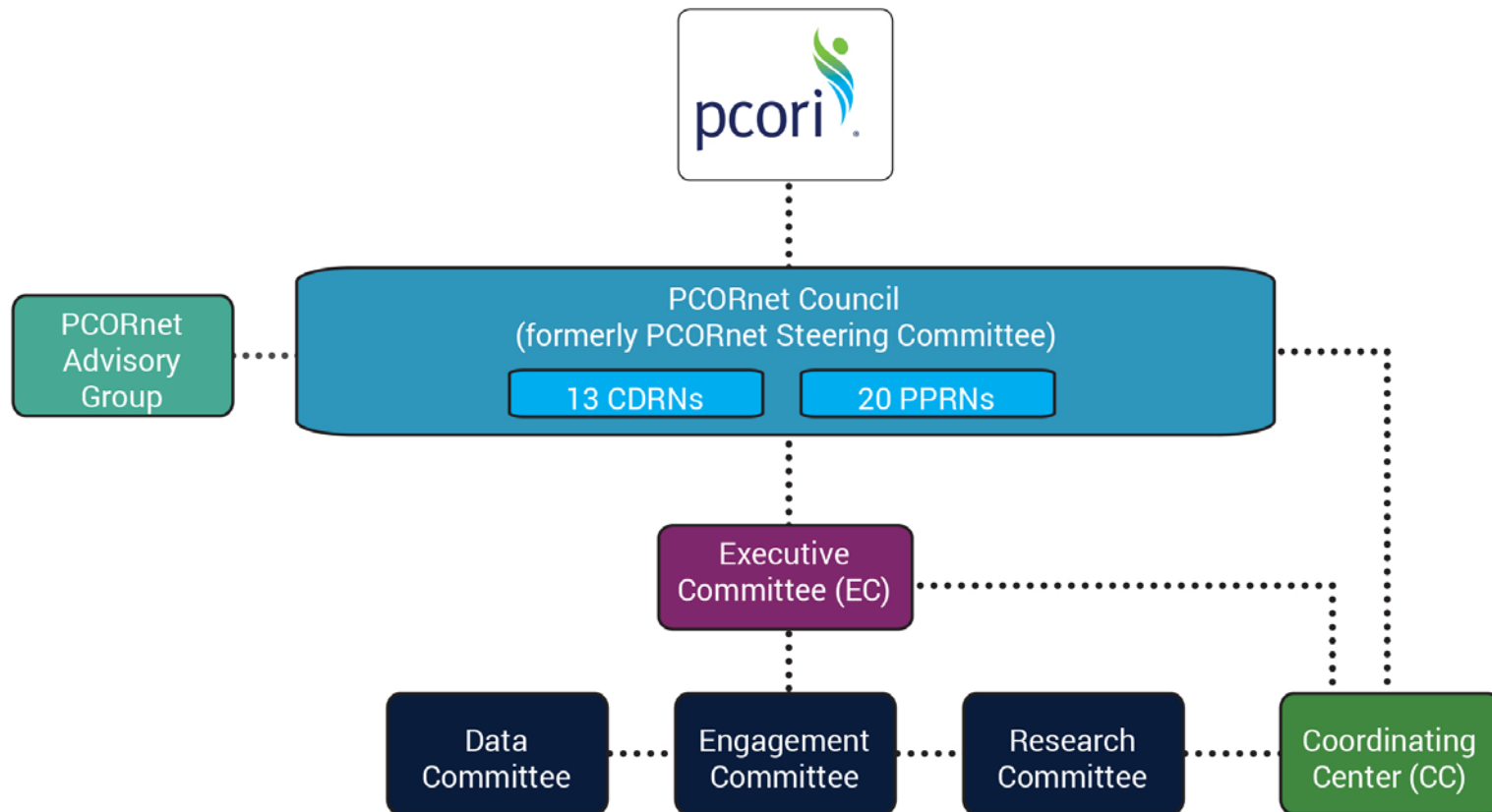


PCORnet's Mission Statement

PCORnet's mission is to enable people to make informed healthcare decisions by efficiently conducting clinical research relevant to their needs



PCORnet's Current Governance Structure



Role Descriptions:

Executive Committee (EC): Oversight for PCORnet operations

PCORnet Council: Representative governing body for PCORnet strategy and operations; includes PCORnet's 13 Clinical Data Research Networks (CDRNs) and 20 Patient-Powered Research Networks (PPRNs)

Coordinating Center (CC): Coordinates operational activities, maintains data infrastructure, identifies research opportunities, coordinates multi-site research

A Governance that Supports and Protects PCORnet's Mission

- The following safeguards are in place in the policies to preserve PCORI values and ensure mission-alignment:
 - Governance policies require patients on each of the committees
 - Governance policies require PCORnet-designated studies to be patient-centered and include patient engagement
 - Requirements are reviewed by PCORnet committee members
 - Networks within PCORnet are required to have engagement policies and procedures
 - Policy amendments must be approved by a simple majority of both CDRNs and PPRNs
 - All policies are currently subject to PCORI approval



Ensuring that the Future PCORnet Remains Mission-Aligned

- Planning for PCORnet's future governance model, operational plan and business plan is currently underway
- Several safeguards are being discussed to ensure continued mission-alignment after PCORI's initial investment ends:
 - A Governing Board whose role will be to ensure mission-alignment
 - An ombudsperson dedicated to providing objective oversight on policies and activities
 - The role of future funders of PCORnet research and determining the optimal breakdown between sources of funding



Expanding Collaborative Research Groups (CRGs)

- Opportunity for researchers and stakeholders to engage in specific areas of interest that align to federal research priorities
- Primary goal is to catalyze new multi-network research by:
 - Advancing the science of patient-centered outcomes and pragmatic research
 - Creating research teams from multiple networks to develop proposals for high priority research questions
 - Developing common data elements
 - Engaging stakeholders
 - Managing membership and coordinating communication
 - Assisting the PCORnet Front Door

Examples of potential CRGs include:

Cancer
Pediatrics
Cardiovascular Health
Health Disparities
Behavioral Health
Autoimmune Disorders
Health Care Delivery



PCORnet as Part of a National Evidence Generation Infrastructure

Medical Product Safety Surveillance

FDA



FDA, Industry

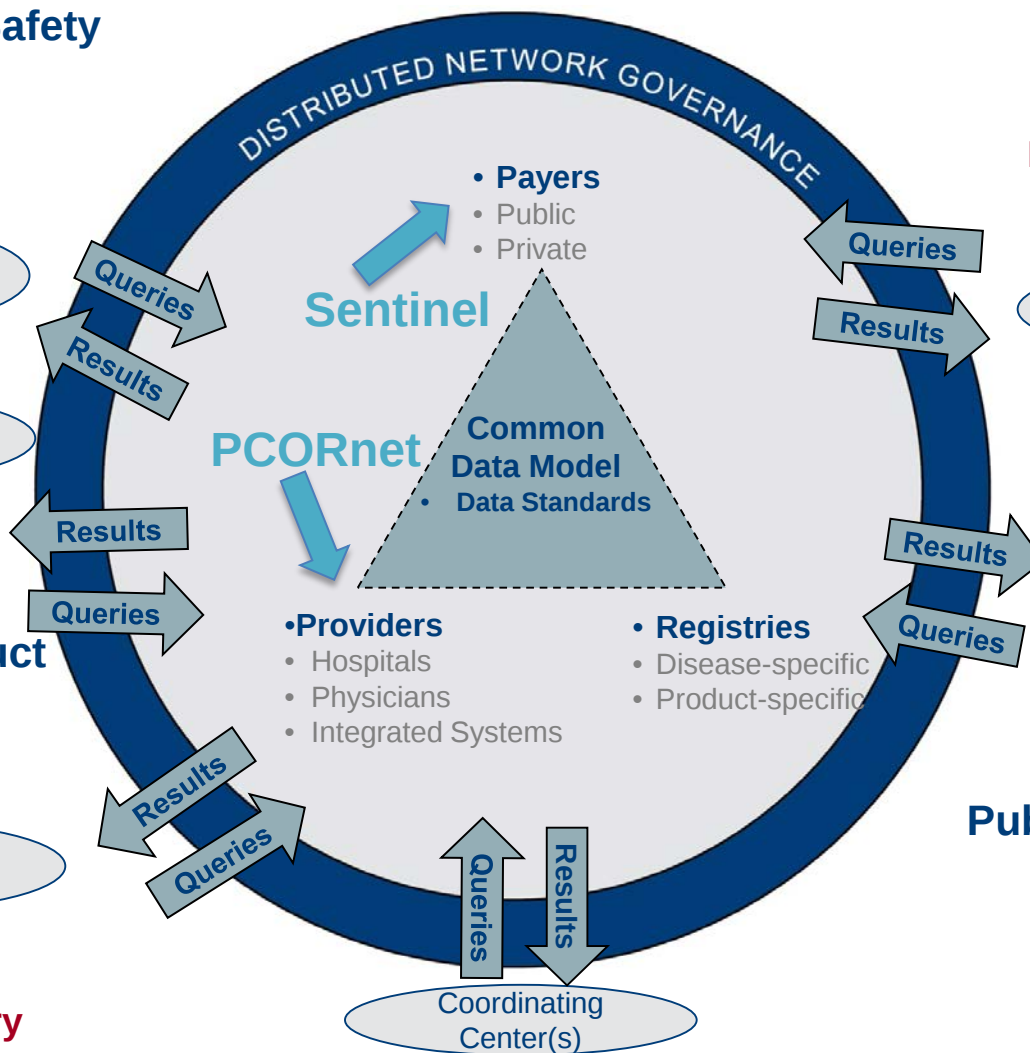
Medical Product Safety



NIH, Industry

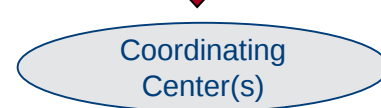
Clinical Research

PCORI, NIH, Industry Comparative Effectiveness Research



Quality of Care

Health Plans, others



Sponsor(s)



Public Health Surveillance

CDC

PCORnet Sustainability

Adrian Hernandez, MD, MHS

Principal Investigator, PCORnet
Coordinating Center

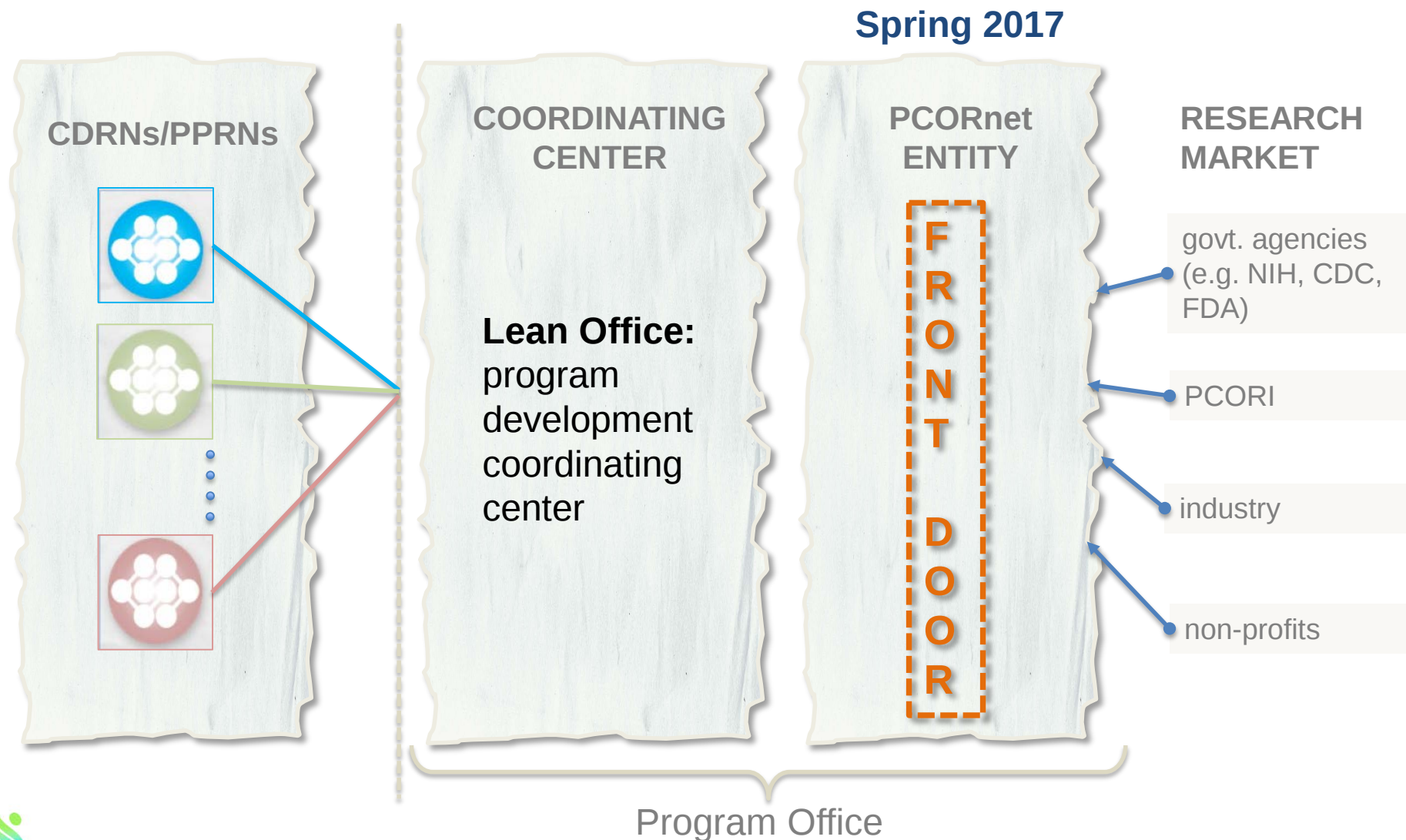


Sustainability Approach

- Build infrastructure and assets
 - Common Data Model
 - Electronic health record, insurance claim, and patient reported outcome data
 - Engaged research partnerships with 13 CDRN and 20 PPRN partners
 - Novel and pragmatic approaches
 - Patient engagement, empowered people, e-identification, e-consent, e-randomization, single IRB, collaborator matching
- Proof of concept
 - Demographic and condition data tables
 - Demonstration and PCORnet designated studies
 - PCORnet Front Door
- Assess landscape and identify niche
- Build relationships and partnerships to conduct studies that are optimized for PCORnet
- Create independent entity to ensure sustainability and enhance efficiencies



Independent PCORnet Operations



Engagement with the Research Market

Adrian Hernandez, MD, MHS

Principal Investigator, PCORnet
Coordinating Center



PCORI and Federal Funders

- Networks are competing for and receiving PCORI funding
 - 21% of PCORI LOIs proposed to utilize PCORnet resources in the latest cycle
 - A PCORI-funded Pragmatic Clinical Study, COMBINE, is a collaboration between a CDRN and PPRN
- Through PCORI, PCORnet has collaborative projects with three federal funders
 - Projects co-funded with the U.S. Food and Drug Administration (FDA) further develop the network infrastructure
 - Six CDRNs participate in the Natural Experiments Networks focused on diabetes, a collaborative initiative with the Centers for Disease Control and Prevention (CDC) and National Institutes of Health (NIH)/National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
 - An NIH Study, INVESTED, is utilizing seven CDRNs and testing streamlined IRB



Industry Engagement

- Industry Workgroup
 - Established March 2015
 - Convened teleconference and meetings through March 2016
 - Ongoing conversations as PCORnet moved into Phase II
 - Reorganized in Summer 2016
 - Convened via teleconference September and October 2016
 - October 26th Meeting
- Company Specific Outreach
 - PCORnet Roadshow
 - 1:1 PCORnet leadership and company leadership
 - Ongoing development of PCORnet projects



Companies

- Janssen
- Pfizer
- Novartis
- GSK
- Boston Scientific
- Verily
- Siemens
- Advamed
- Cyberonics
- Johnson & Johnson
- PhRMA
- MDIC
- Amgen



Industry Workgroup: October 26th Meeting

- PCORnet Products & Services
 - Data
 - Engagement
 - Research
- Sustainability Planning
 - Business Model and future PCORnet entity
 - PCORnet Governance, Partnership & Stakeholders
- Collaborative Pre-competitive project(s)
 - Pre-research queries
 - Early studies
 - Simulated studies/Methodological
 - Real World Evidence & Multi-stakeholder



Discussion



Break

We will return at 11:00 am ET



Join the conversation on Twitter via
@PCORI



Methodology Committee Update

Robin Newhouse, PhD, RN

Chair, PCORI Methodology Committee



Methodology Committee Members

- Robin Newhouse, Chair
- Steven Goodman, Vice Chair
- Naomi Aronson
- Ethan Basch
- Stephanie Chang
- David Flum
- Cynthia Girman
- Mark Helfand
- Michael Lauer
- David Meltzer
- Brian Mittman
- Sally Morton
- Neil Powe
- Mary Tinetti
- Adam Wilcox



Session Topics

- Methodology Committee priorities for FY17
 - Development of new Methodology Standards
- Update on the Methodology Report revisions



Methodology Committee Priorities for FY17

Area	Goals
Meta-analysis	1. Develop new standards for individual participant data and network meta-analysis 2. Develop high-level principles to guide trialists and methodologists on a consortium structure that ensures lack of bias
Complex Interventions	1. Develop new standards for research on complex interventions over the next six months 2. Convene stakeholder group to develop additional methods guidance over the next two years
Qualitative Methods	1. Develop new standards for qualitative methods 2. Fill expertise gaps by appointing an advisor to the MC
Data Management	1. Develop guidance or standards on data management and reproducible research over the next nine months 2. Develop strategic partnerships with other organizations to support and enhance current guidance



Methodology Committee Advisors

- Advisor on qualitative and mixed methods:



Susan Zickmund, PhD, Professor,
University of Utah School of Medicine,
Department of Internal Medicine,
Division of Epidemiology

- Advisor on data quality and analysis of large observational datasets:
 - Discussions on needed areas of expertise are ongoing



Update on Methodology Report Revisions

Completed work:

- Incorporated feedback from public comments
- Modified each section based on input from staff and MC workgroups
- Developed strategy for updating the stories and supplemental materials

Upcoming steps:

- MC will recommend the final version for adoption by Board
- Board will consider the revised standards and the report for adoption



Thank You!



Anniversary Panel



Eugene Washington, MD, MSc



Steve Lipstein, MHA



Break

We will return at 1:30 pm ET



Join the conversation on Twitter via
@PCORI



Stakeholder Panel: Employers



James Gelfand, Senior Vice President, Health Policy, ERISA Industry Committee



Ted Cheatham, Director, Public Employees Insurance Agency, State of West Virginia



Kathryn Wilber, Senior Counsel, Health Policy, American Benefits Council

Updates on Learning about Engagement in Research at PCORI

Laura Forsythe, PhD, MPH

Associate Director, Evaluation & Analysis

Lori Frank, PhD

Director, Evaluation & Analysis



Today's Agenda

Background and Methods

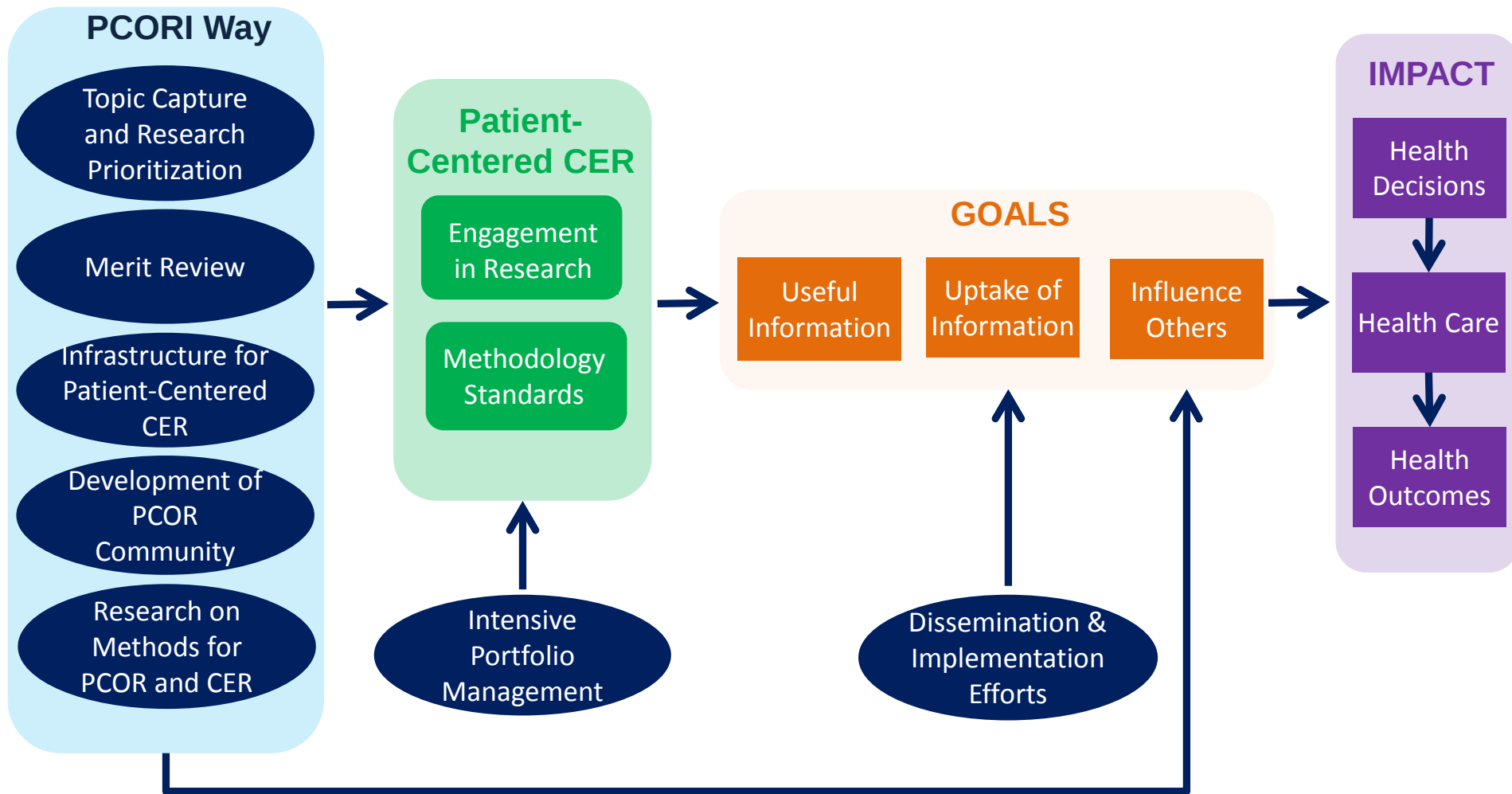
Findings to share

- How active is engagement in PCORI projects?
- Does engagement in research lead to changes in study questions, design, processes, or outcomes?

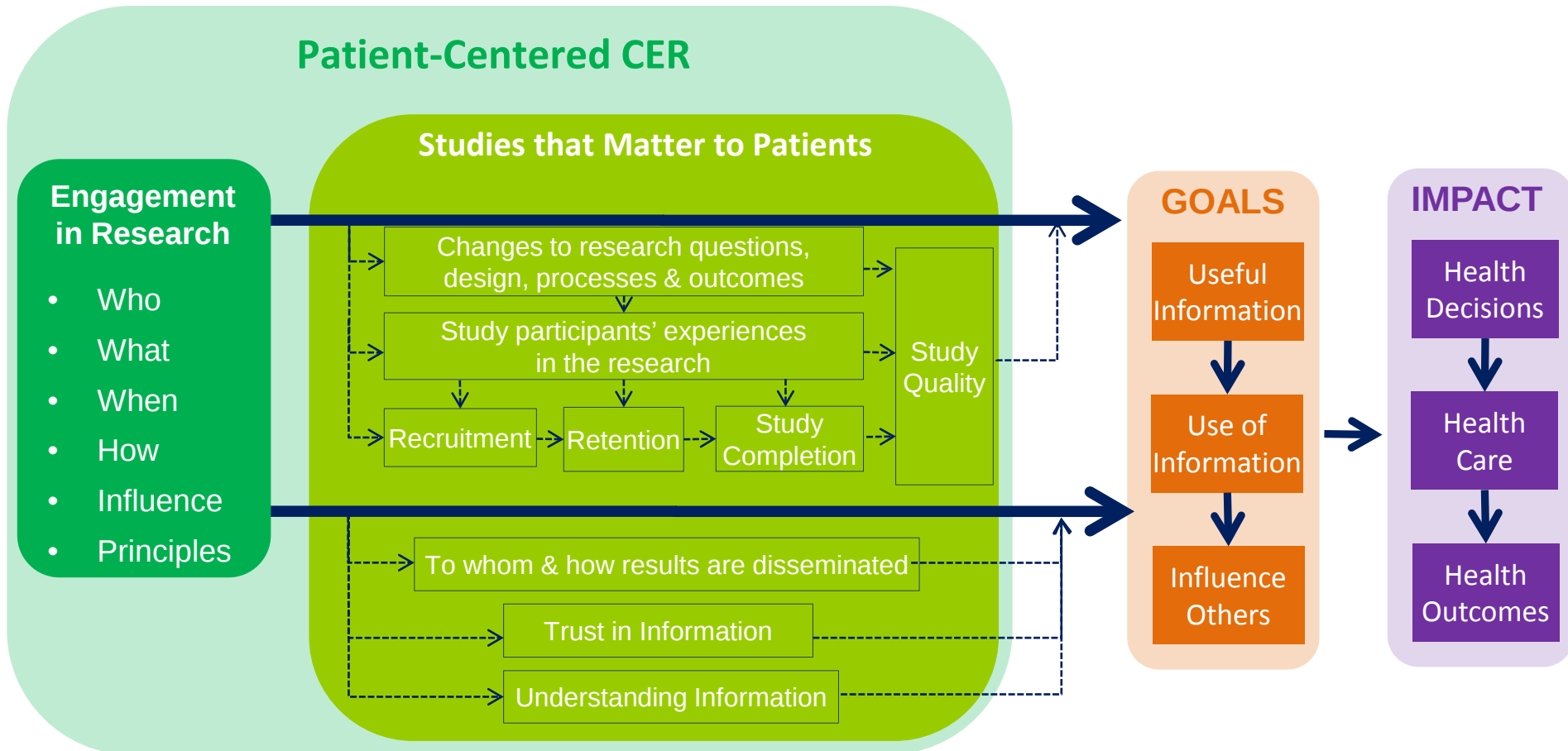
Next steps: Future questions to be answered about effects of engagement



PCORI's Overall Evaluation Framework



The Path to Understanding the Effects of Engagement in Research



The Path to Understanding the Effects of Engagement in Research

Patient-Centered CER

Engagement in Research

- Who
- What
- When
- How
- Influence
- Principles

Studies that Matter to Patients

Changes to research questions,
design, processes & outcomes

Study participants' experiences
in the research

Recruitment

Retention

Study
Completion

Study
Quality

To whom & how results are disseminated

Trust in Information

Understanding Information

GOALS

Useful
Information

Use of
Information

Influence
Others

IMPACT

Health
Decisions

Health
Care

Health
Outcomes

Predictors

Intermediate Outcomes

Long-term Outcomes



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2015

Intermediate Outcomes

2016

2017

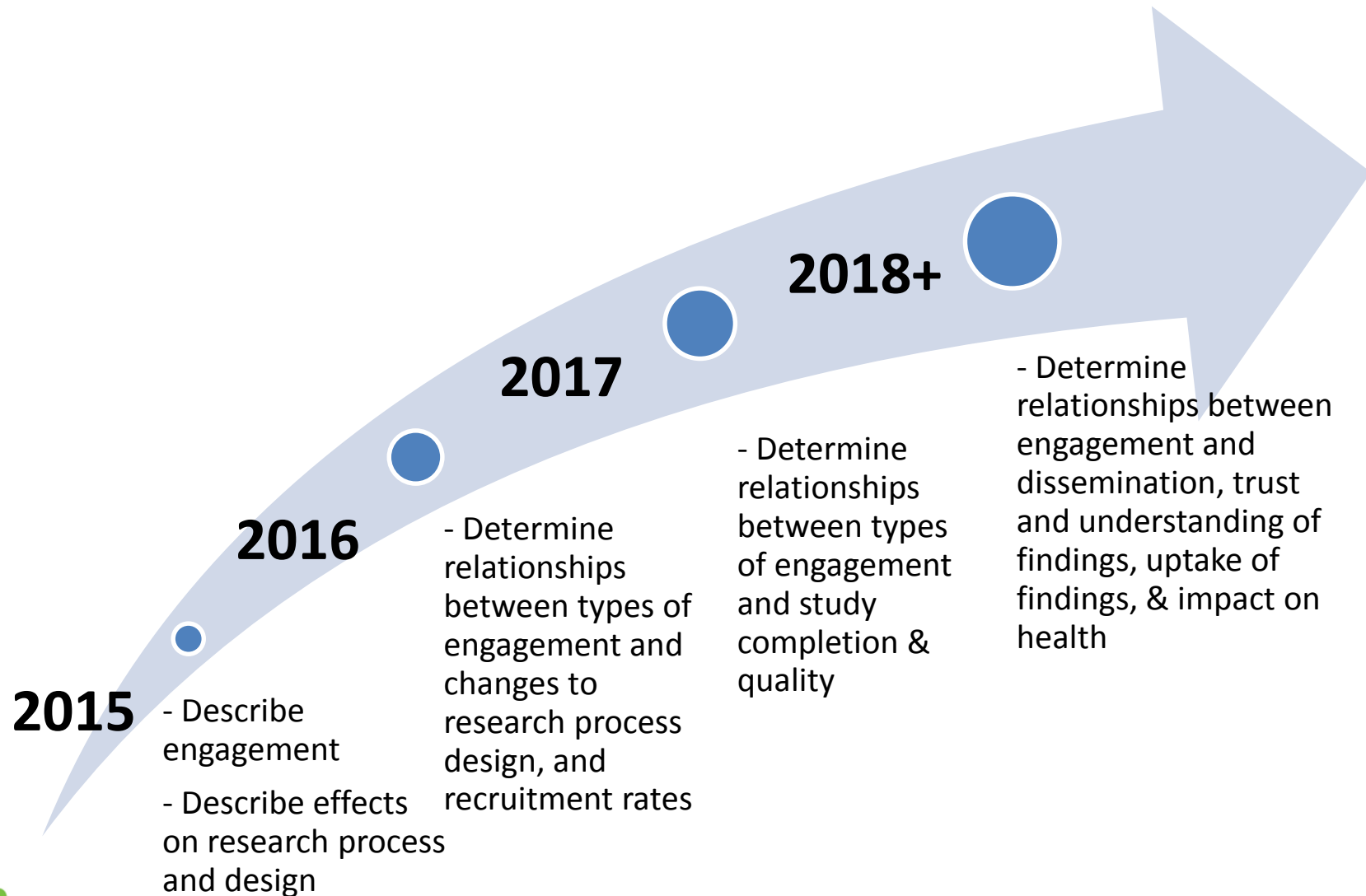
Long-term Outcomes

2018

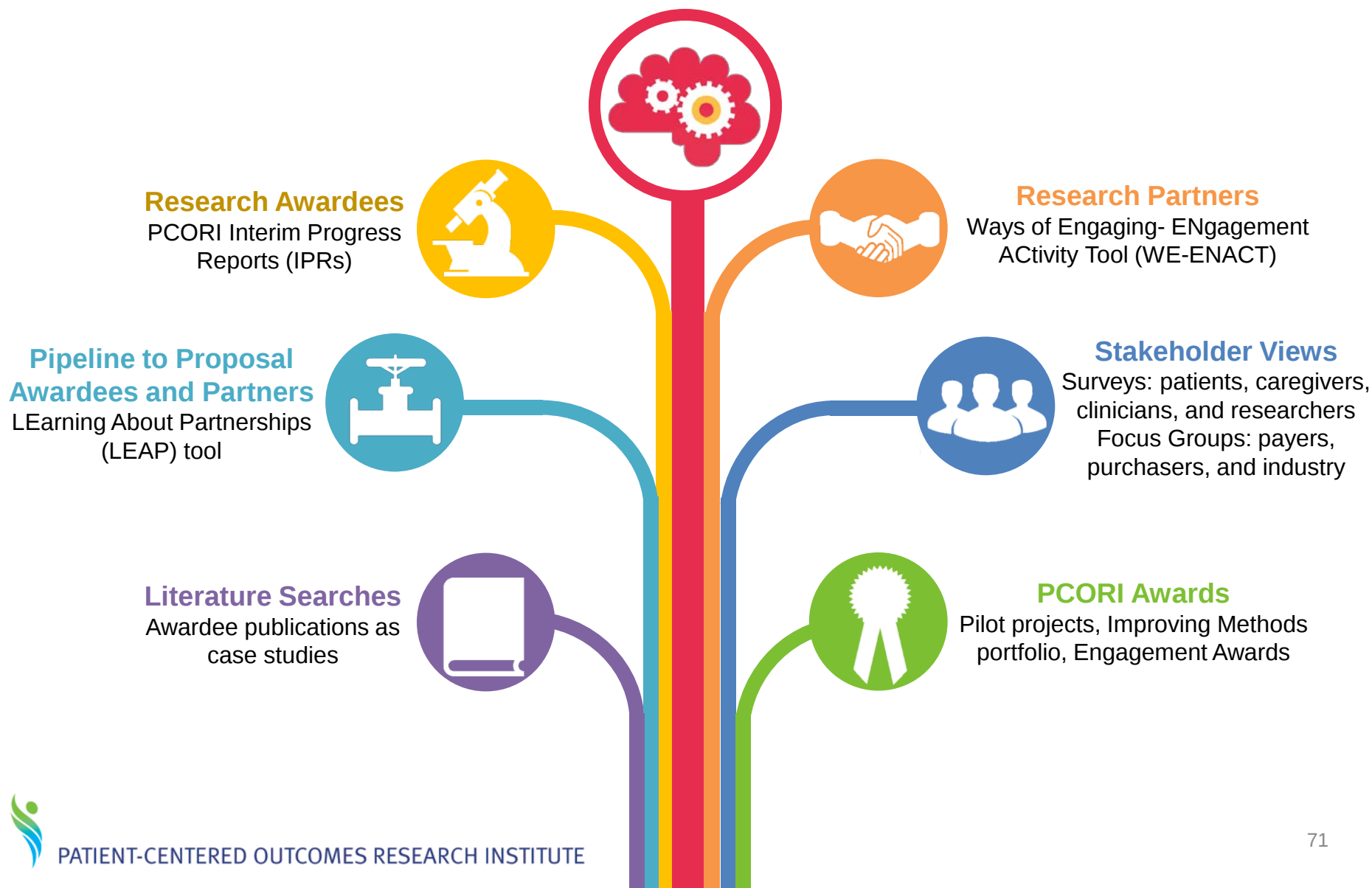
2019



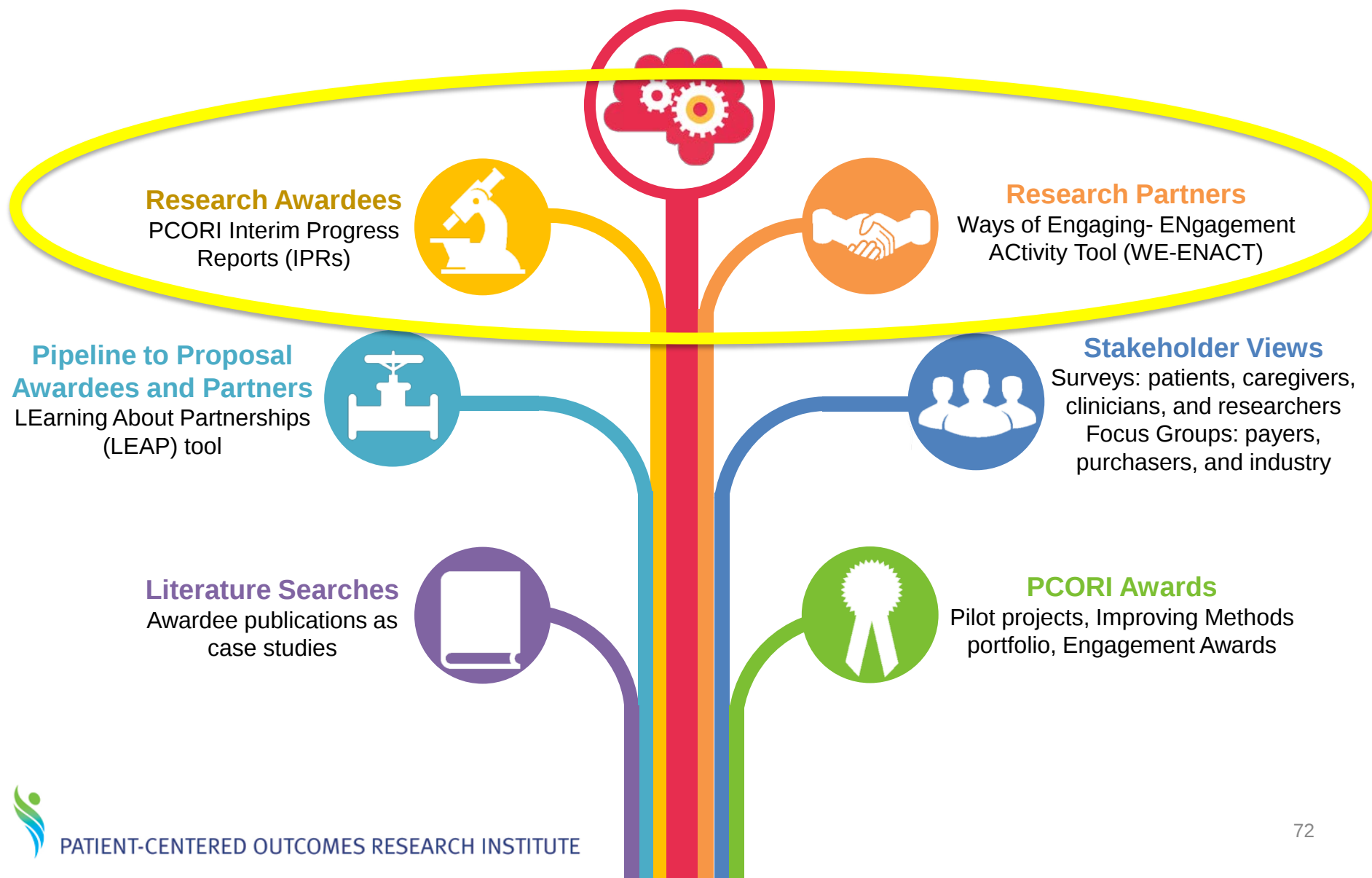
When can PCORI begin to answer key questions about engagement in the PCORI portfolio?



Information Sources on Engagement in Research



Information Sources on Engagement in Research



Methods: Learning from Awardees and Partners

- Data collected annually from awardees (Interim Progress Reports, N = 258) and partners (WE-ENACT; N = 254)
- Open and closed ended items
- Quantitative analysis includes descriptive statistics, cluster analysis
- Qualitative analysis
 - Developed and applied hierarchical codebook
 - Identification of key themes and illustrative quotes
 - Documentation of frequency of themes across portfolio



What is PCORI learning about the effects of research engagement?

Findings to share

- **How active is engagement in PCORI projects?**
- Does engagement in research lead to changes in study questions, design, processes, or outcomes?



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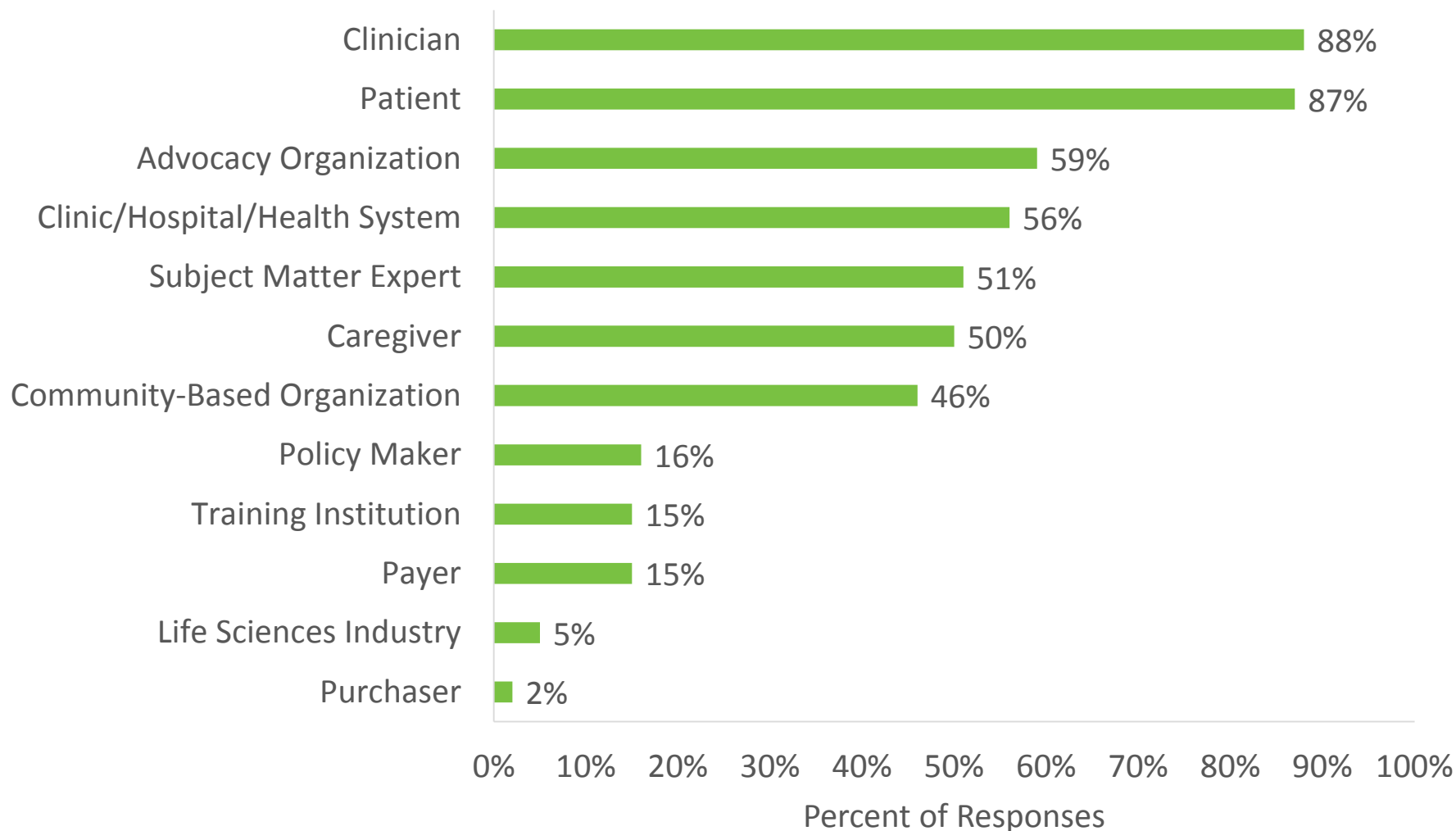
Findings to share

- **How active is engagement in PCORI projects?**
 - *PCORI requires that engagement will be meaningfully incorporated in all projects, and expects that our projects will have more stakeholder communities represented and more active involvement than has been seen historically*
- Does engagement in research lead to changes in study questions, design, processes, or outcomes?



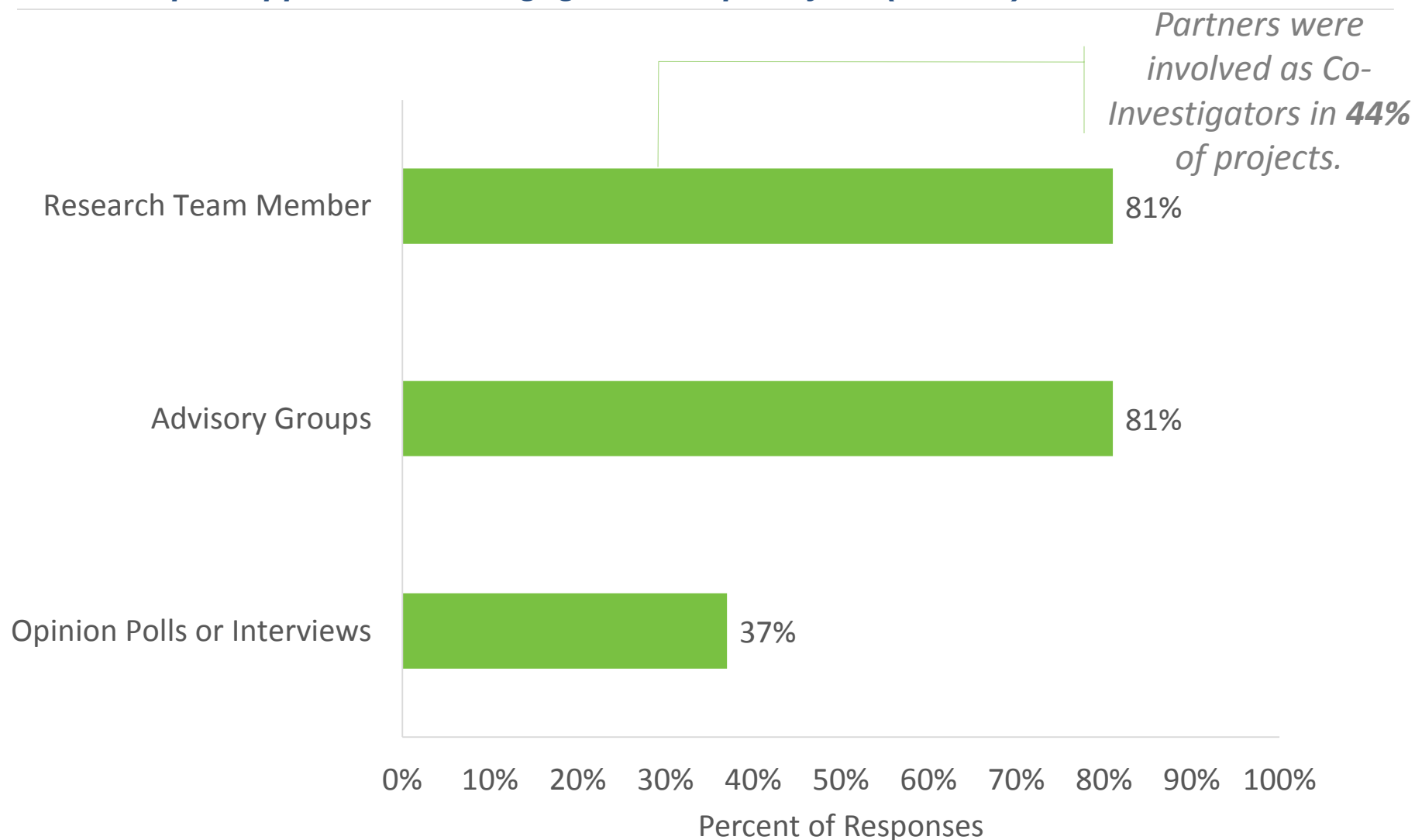
Who is engaged?

Awardee report of partner types engaged in the prior year (N = 240)



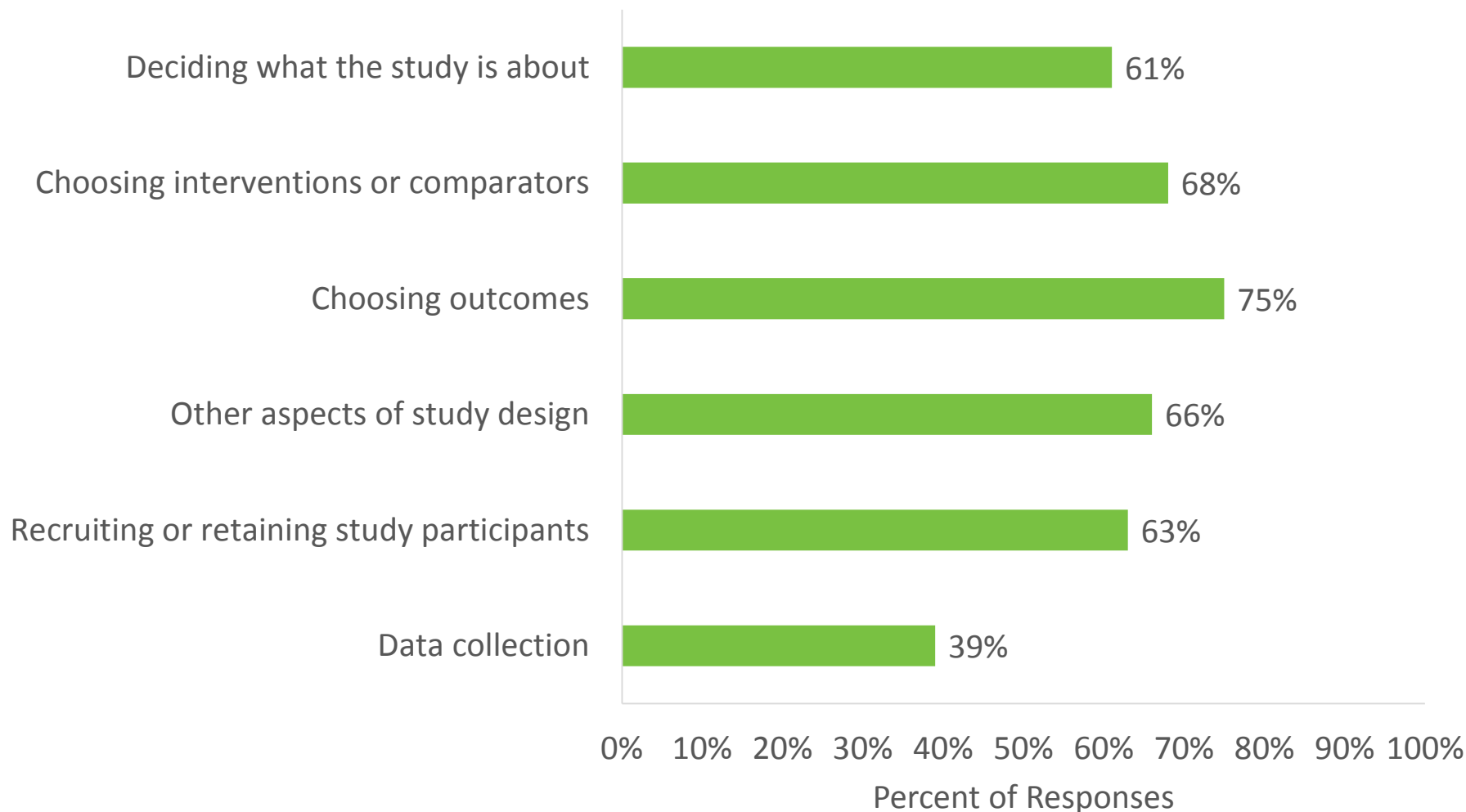
How are they engaged?

Awardee report approaches to engagement in prior year (N = 240)



In what phases of PCORI projects are partners engaged?

Awardee report, prior year (N = 238)



Intensity of Engagement in Research

1. Intensive

Many partner types, many approaches, many phases of the project

2. Intermediate

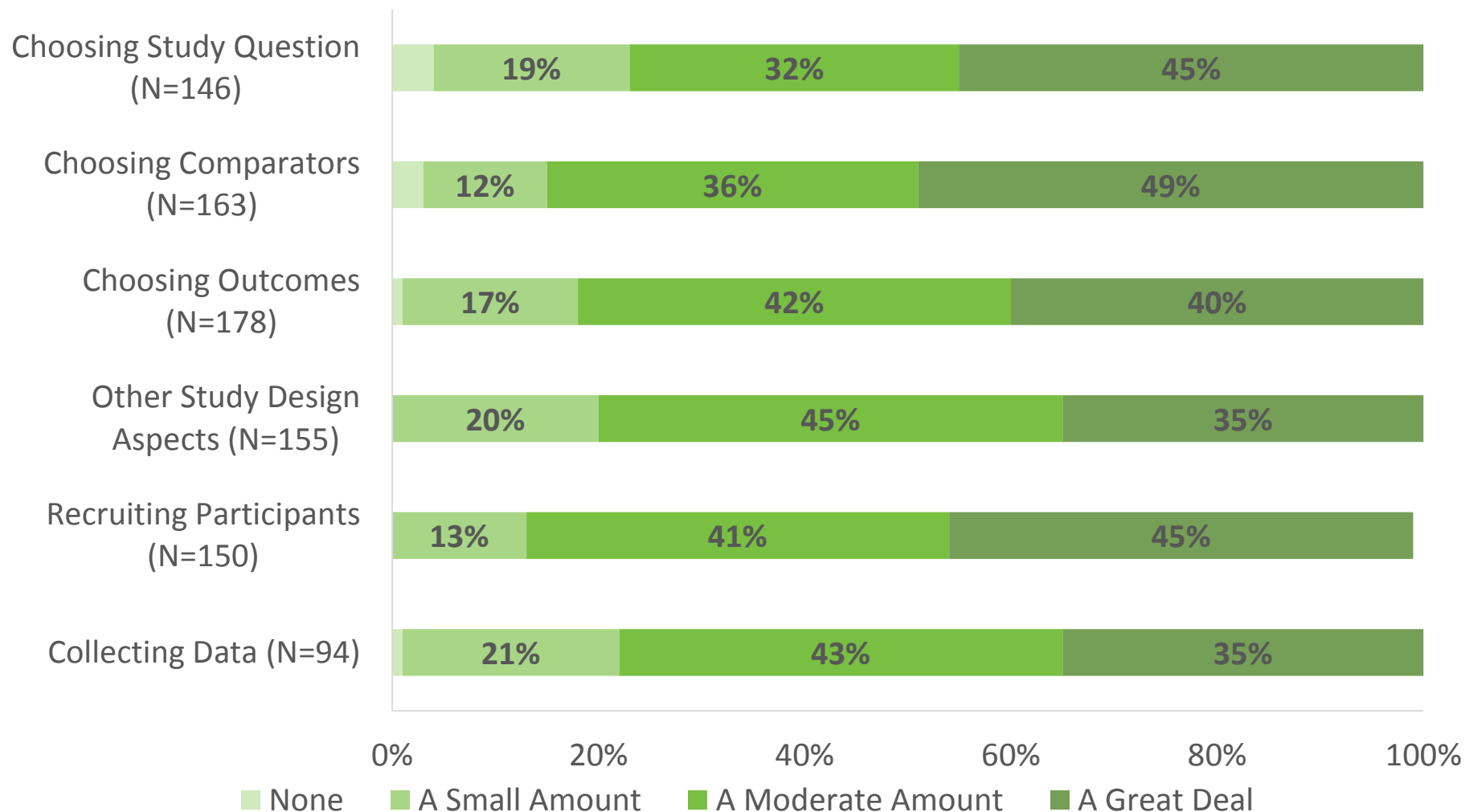
3. Limited

RELATIVELY few partner types, few approaches, few phases
compared to other PCORI projects



Awardees report partner influence across all early phases of research

Awardee rated, prior year



What is PCORI learning about the effects of research engagement?

Findings to share

- **How active is engagement in PCORI projects?**
 - PCORI projects display substantial engagement with multiple partner types engaged via multiple approaches across multiple phases
 - PCORI awardees report influence of their partners across all relevant project phases
- Does engagement in research lead to changes in study questions, design, processes, or outcomes?



What is PCORI learning about the effects of research engagement?

Findings to share

- How active is engagement in PCORI projects?
- **Does engagement in research lead to changes in study questions, design, processes, or outcomes?**



What is PCORI learning about the effects of research engagement?

Findings to share

- How active is engagement in PCORI projects?
- **Does engagement in research lead to changes in study questions, design, processes, or outcomes?**
 - *PCORI expects that engagement will affect key elements in its projects.*



Qualitative Analysis of Awardee and Partner Report

- Large sample of open-ended responses provides rich view of engagement in research: 258 awardees, 254 partners
- Iterative analysis identified engagement themes across all respondents
 - Project processes
 - Impact of partners
 - Challenges
 - Facilitators
 - Resources
 - PCOR principles
- Reviewed and compared awardee and partner responses



In what ways is engagement making a difference?

Key themes from qualitative data analysis (N = 258 awardees, 254 partners)

Awardees

Partners

Understanding partner perspectives

- Refined the study
 - Research questions
 - Interventions and/or comparators
 - Outcomes and measures
 - Data collection
 - Recruitment/retention strategies
 - Enhanced enrollment rates

Themes mentioned in $\geq 10\%$ of responses.



Example: Effects of engagement on recruitment and retention

From PCORI data collection:

“ We discussed why families might choose to withdraw from the study and ... about better ways to communicate with families that are involved in the study. [As a result], **more families stayed in the study.**
– *Caregiver/Family Member*

“ Following this change, **enrollment in the RCT increased from 65% to 95% ... (and) increased the rate of completed 30-day follow-up from 58% to 85%.**
- *Awardee*



Example: Effects of engagement on recruitment and retention

From PCORI data collection:

“ We discussed why families might choose to withdraw from the study and ... about better ways to communicate with families that are involved in the study. [As a result], **more families stayed in the study.**
– Aubrey Gibson, Caregiver partner

“ Following this change, **enrollment in the RCT increased from 65% to 95% ... (and) increased the rate of completed 30-day follow-up from 58% to 85%.**
– Dr. Katherine Deans (PI) and Dr. Peter Minneci (Co-I)

JAMA Surgery

RESEARCH LETTER

Improving Surgical Research by Involving Stakeholders

Enrolling patients in prospective surgical trials is difficult, especially in the urgent and/or emergent care setting. However, there is growing support for including patients, caregivers, and other health care stakeholders in all phases of research to assist with identifying and incorporating outcomes important to the public, developing strategies to improve enrollment and retention rates, and accelerating the dissemination and implementation of results.¹⁻⁵ We report the effect of stakeholder involvement in an ongoing randomized clinical trial (RCT) (ClinicalTrials.gov, [NCT02110485](https://clinicaltrials.gov/ct2/show/study/NCT02110485)) of pediatric appendicitis.

Minneci PC, Nacion KM, Lodwick DL, Cooper JN, Deans KJ. Improving Surgical Research by Involving Stakeholders. JAMA Surgery. June 2016.



What is PCORI learning about the effects of research engagement?

Findings to share

- How active is engagement in PCORI projects?
- **Does engagement in research lead to changes in study questions, design, processes, or outcomes?**
 - PCORI awardees and partners report changes to study interventions or comparators, recruitment strategies, and outcomes and measurement



What is PCORI learning about the effects of research engagement?

Findings to share:

- How active is engagement in PCORI projects?
- Does engagement in research lead to changes in study questions, design, processes, or outcomes?

Next steps: Future questions to be answered about effects of engagement



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Long-term Outcomes



Future Questions about Effects of Engagement in Research

- Do effects of engagement vary by intensity of engagement? Phases with engagement?
 - *Changes to study questions, designs, processes, & outcomes*
 - *Recruitment and retention rates*
 - *Likelihood of and time to study completion*
 - *To whom and how results are disseminated*
 - *Use of findings in decision-making*
- Does intensity of engagement, phases with engagement, or effects of engagement differ by study type (interventional vs. observational) or PCORI program area?
- What are the effects of engagement on:
 - Study operations (e.g., logistics, budget, etc.)?
 - Investigators, partners, and research institutions?



Discussion



Report on Research Synthesis, Evidence Synthesis & Systematic Reviews

Evelyn P. Whitlock, MD, MPH

Chief Science Officer



PCORI and Evidence Synthesis

- *PCORI's authorizing legislation states that **evidence synthesis** is a core function of PCORI:*

“(C) PURPOSE.—The purpose of the Institute is to assist patients, clinicians, purchasers, and policy-makers in making informed health decisions by advancing the quality and relevance of evidence concerning the manner in which diseases, disorders, and other health conditions can effectively and appropriately be prevented, diagnosed, treated, monitored, and managed through research and evidence synthesis that considers variations in patient subpopulations....”



Evidence Synthesis

- Methodologies for integrating evidence from variable sources to produce more comprehensive or best evidence
 - Provides knowledge beyond individual studies alone
 - Identifies areas of agreement and disagreement in quantitative and/or qualitative terms
 - Permits identification of research gaps
 - Examples: **Systematic reviews**, rapid reviews, decision models, analytic approaches (e.g., aggregate data meta-analysis (MA), individual patient-level data (IPD) MA, network MA, others)



Research Synthesis Overview

- “Research synthesis” is an umbrella term for tools and methods that synthesize information to create knowledge
- PCORI’s Research Synthesis Program covers a range of activities
 - Evidence synthesis (e.g., systematic review, other)
 - Research data “re-use” to explore variation in treatment effect/more personalized medicine
 - Portfolio Synthesis of PCORI’s research investments (e.g., portfolio “cluster” analyses, mapping, communication)
 - Other research synthesis tools (e.g., evidence maps)



PCORI's Research Synthesis Program

- Three initial goals:
 - Research to address heterogeneity of treatment effects, more personalized individual healthcare choices
 - More rapid deployment of actionable CER evidence in context
 - Communication of current portfolio (rationale, themes and lessons, evidence context)

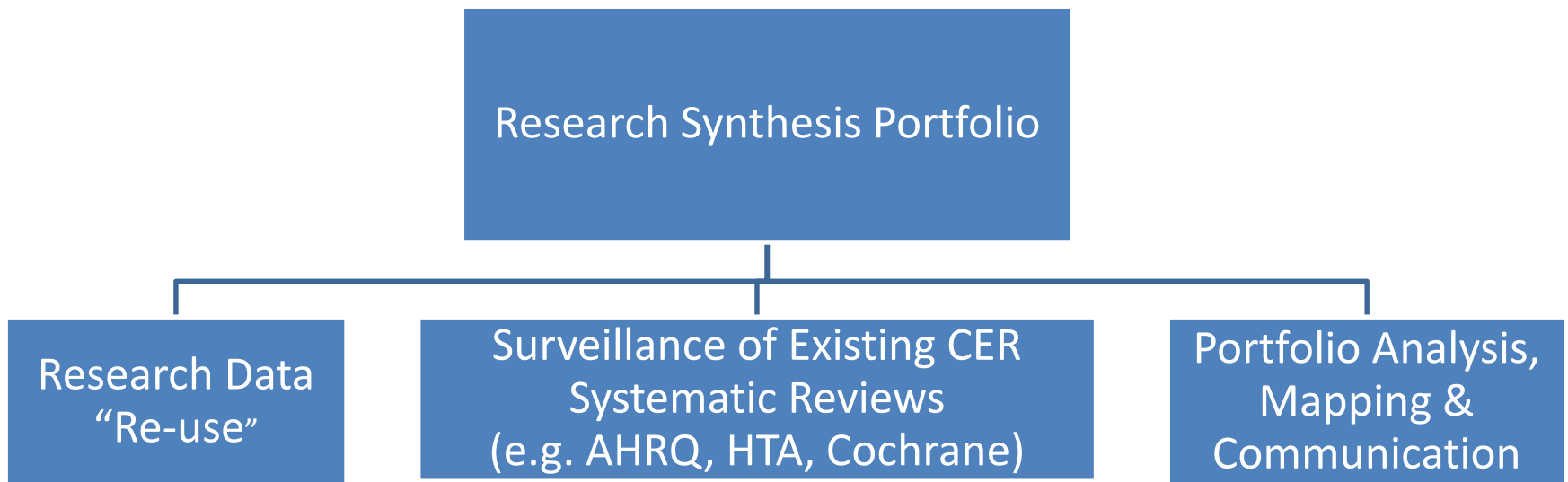


Immediate Plans

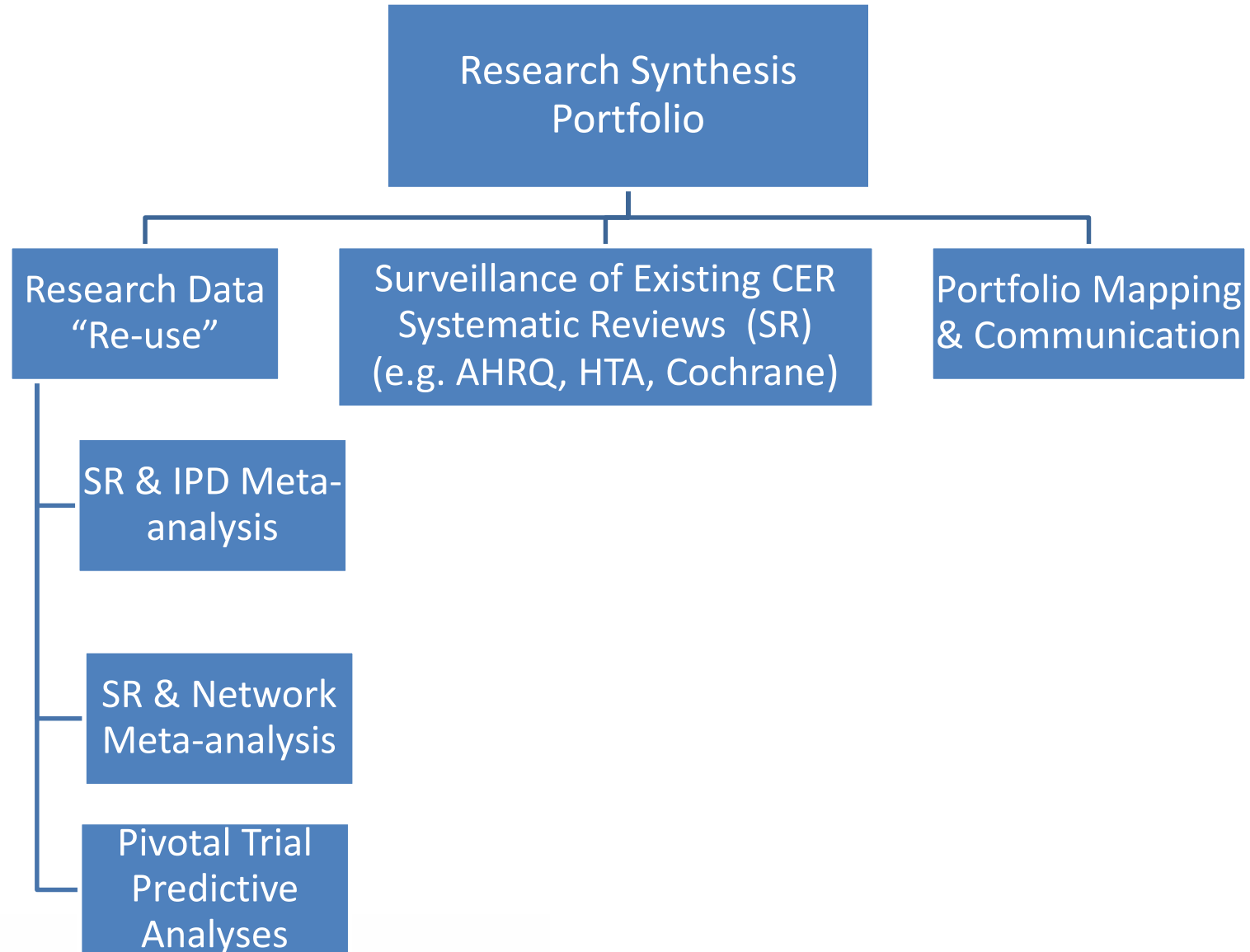
- We are focusing on **short-turnaround, rigorous, relevant** CER or heterogeneity of treatment effect products
 - Strategic, selective focus on generating new research products (IPD MA, other research “re-use” opportunities)
 - Locating and qualifying existing CER SR products for immediate dissemination or updating through AHRQ



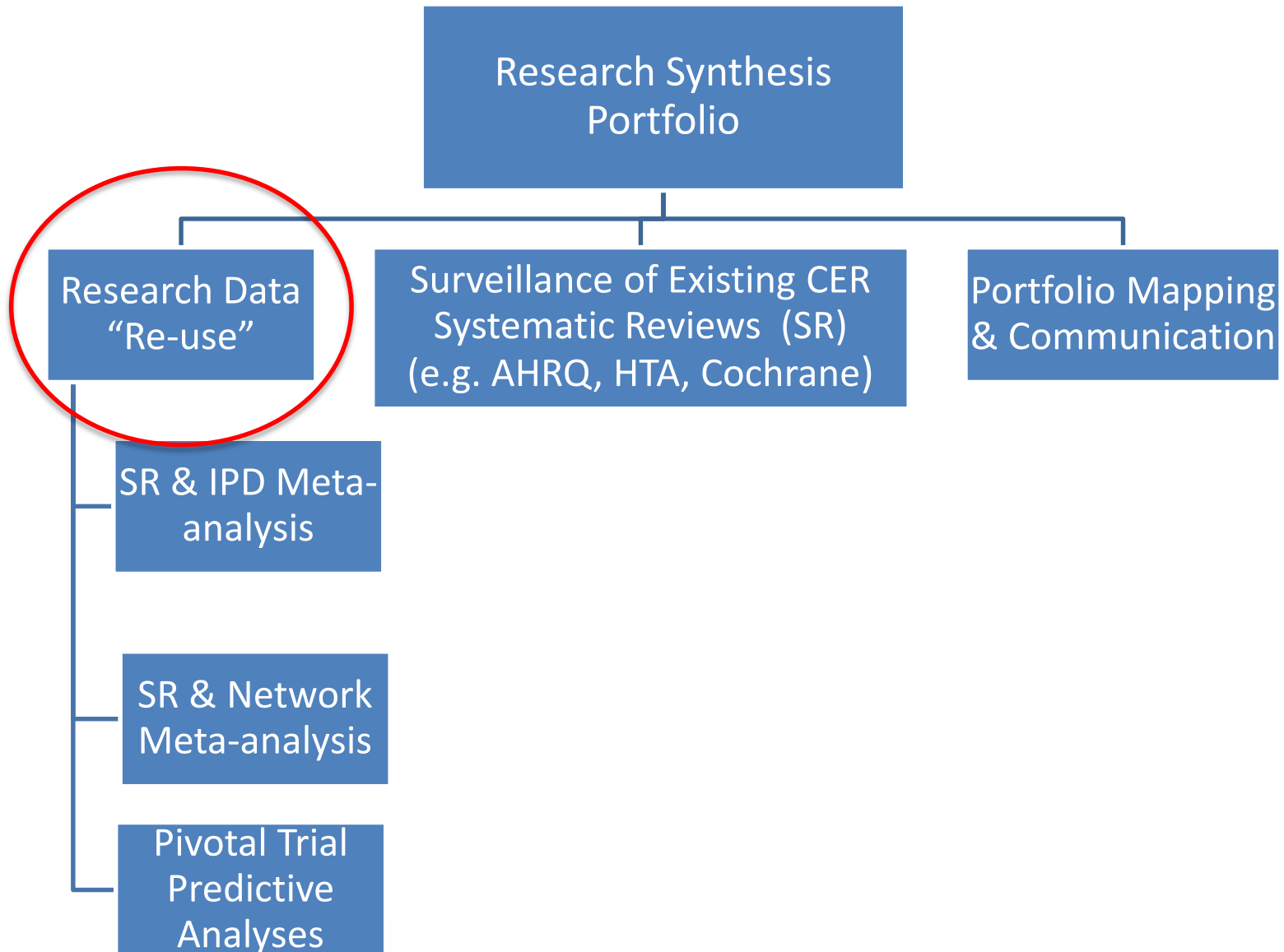
Overview of Research Synthesis Activities



Overview of Research Synthesis Activities



Overview of Research Synthesis Activities



What are Research Data “Re-use” Opportunities?

- Analytic techniques applied to existing research-generated data:
 - Good for situations where there is expected or demonstrated heterogeneity of treatment effect
 - Can move beyond average effect sizes to target or optimize treatment approaches
- Can generate relatively rapid, actionable results
- Potential unique funding niche for PCORI to differentiate itself

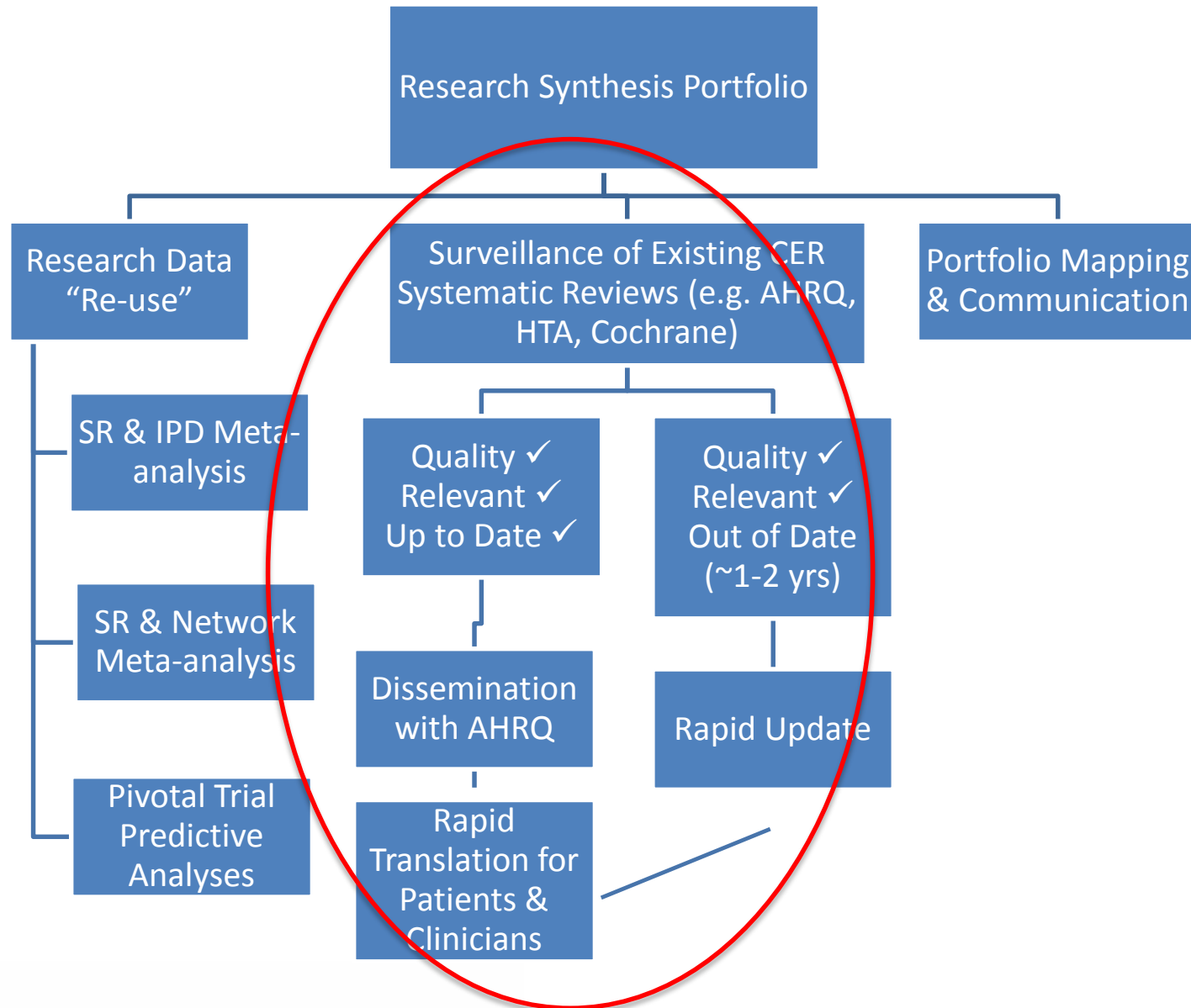


Individual Participant Data Meta-analysis

- Individual participant data (IPD) meta-analysis obtains and synthesizes *individual-level data* from multiple related studies
- Advantages of IPD-MA (“gold standard”):
 - Can standardize variables and analyses across studies
 - Differential treatment effects can be robustly assessed for subgroups, particularly based on multiple factors
 - More accurate risk-of-bias assessments
 - May have more up-to-date follow-up information compared to the original publications
 - New analytical opportunities (e.g., time-to-event analyses)



Overview of Research Synthesis Activities



Systematic Reviews (SR)

- A scientific investigation that focuses on a specific clinical question and uses explicit, planned scientific methods to systematically identify, select, assess, and summarize the findings of similar but separate studies, in order to make clear what is known and not known
- PCORI has Methodology Standards for Systematic Reviews (derived from IOM)
 - PCORI requires the use of systematic reviews in formulating research gaps in proposed research



Next Steps

1. We are launching a pilot IPD meta-analysis project on progesterone and preterm birth with March of Dimes and National Institute for Health Research
2. We are establishing governance standards and funding streams for current and future IPD MA
3. We have requested a new methodology standard for meta-analyses (IPD and network, in particular)
4. We are beginning to conduct surveillance of existing systematic reviews to commission selected updates through AHRQ
5. We are integrating evidence synthesis opportunities into our topic pathway
6. We are exploring other potential opportunities in IPD meta-analysis and other novel PCOR-relevant analytics



Comments/Questions



Break

We will return at 3:45 pm ET



Join the conversation on Twitter via
@PCORI



PCORI's Data Access and Data Sharing Policy: Board of Governors Update

Joe Selby, MD, MPH

Executive Director

Jason Gerson, PhD

Senior Program Officer, CER Methods



Release of Draft Data Access and Data Sharing Policy

- Seeking Board approval to release draft Data Access and Data Sharing Policy for public comment
- Intent of draft policy is to set forth expectations and guidelines for PCORI Research Awardees for management of their data in order to:
 - Facilitate reproduction of original analyses to increase the integrity of PCORI-funded research findings
 - Promote data sharing to enable conduct of additional analyses using data from PCORI-funded studies, thereby augmenting the knowledge generated from the original study
- Draft policy developed by PCORI, with input from expert advisory group and RTC
 - PCORI has also engaged in discussions with other funders and regulators of clinical research
 - Received detailed comments on draft policy from NIH



Release of Draft Data Access and Data Sharing Policy

- Highlights of draft policy include:
 - PCORI funding to support deposition of data and data documentation (study protocol, metadata, analytic code) for studies funded through Pragmatic Clinical Studies (PCS) and Targeted Funding Announcement mechanisms
 - Requirement for all other studies to prepare data for data sharing (with funding provided by PCORI for deposition in the data repository on a case by case basis)
 - Requirement to maintain data in repository for minimum of seven years
- The policy is drafted in a manner that will enable PCORI to incorporate additional operational details and procedures over time, based on learning from the public comment period and from a pilot project in which a number of current PCORI awardees will work with data repositories to deposit their study data and data documentation
- We are planning for a 45-day comment period



Targeted Questions to Accompany Draft Policy

- We have developed a list of questions (with input from RTC) that will focus the public's attention on a number of important issues related to the policy
 - Individuals and organizations who choose to comment on the draft policy will be encouraged to respond to these questions, but will be free to comment on the overall policy as well
- Comments and additional questions from Board members are most welcome



Board Vote

Call for a Motion to:

- **Approve** posting for public comment of draft Policy for Data Access and Data Sharing

Call for the Motion to Be Seconded:

- **Second** the Motion
- If further discussion, may propose an **Amendment** to the Motion or an **Alternative Motion**

Roll Call Vote:

- Vote to **Approve** the **Final** Motion
- Ask for votes in favor, opposed, and abstentions



Optimal Treatment Combinations and/or Sequences for Nonspecific Chronic Low Back Pain

Proposal for Consideration as a Sequential Targeted PFA

Robert Zwolak, MD, PhD

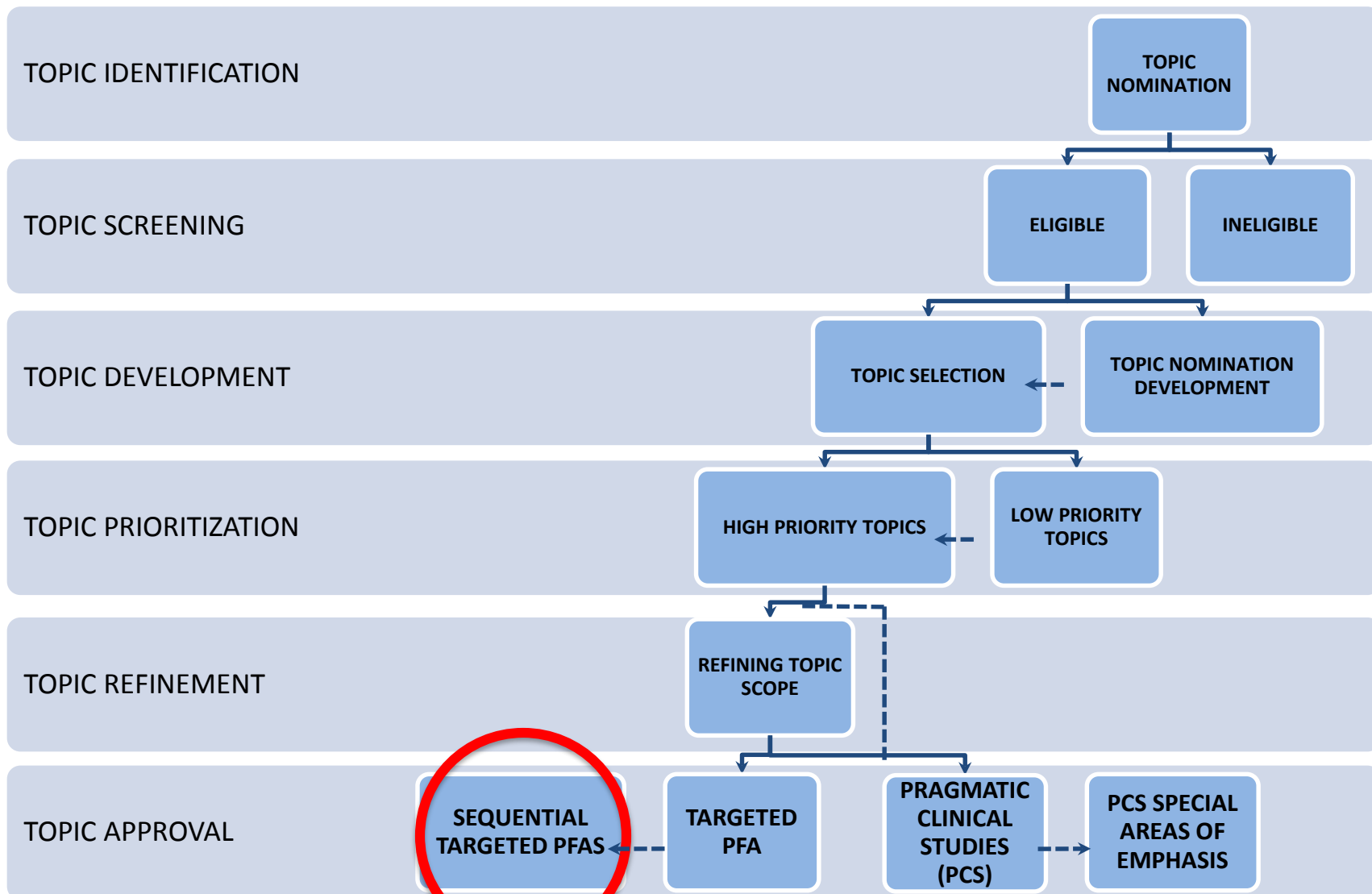
Chair, Science Oversight Committee

Evelyn P. Whitlock, MD, MPH

Chief Science Officer



PCORI Topic Prioritization Pathway



Low Back Pain (LBP): Topic History

Topic Origin: Identified by PCORI Board as a high priority topic (December 2012)

- Questions also submitted by Americas Health Insurance Plans (AHIP), National Business Group on Health (NBGH), and American Physical Therapy Association (APTA)

Stakeholder Workshops:

- March 21, 2013 – Targeted PFA workgroup webinar: Treatment options for back pain
- June 9, 2015 – Prioritizing CER questions for treatment options for chronic low back pain
- January 7, 2016 – Reconvening of the June 2015 workshop

PCS Priority Topic History:

- Active PCS Priority Topic focused on preventing transition from acute to chronic LBP:
 - Spring 2014, Fall 2014, Winter 2015, Spring 2015, Cycle 3 (Fall) 2016

Targeted PFA History:

- Lumbar fusion surgery vs. optimized nonsurgical multidisciplinary program for nonspecific chronic LBP
 - Approved by Board in March 2016
 - Opened April 4, 2016
 - 5 LOIs received, 4 invited to submit, 2 applications submitted
 - Awards to be announced January 2017



Rationale for Sequential Targeted PFA on Chronic LBP

- Chronic LBP remains a high-burden disorder in the US:
 - Affects an estimated 5-10% of adults
 - Accounts for the majority of the \$100 billion annual cost borne directly by LBP patients in the US
- Current Targeted PFA focused on specific surgical approach
- Priority topic and portfolio to date limited but primarily focused on prevention of the transition of acute LBP to chronic
 - **Delitto:** Comparing Primary Care Physician (PCP) care vs. PCP care + Physical Therapy (PT) + Cognitive Behavior Therapy (CBT)
 - **Cherkin:** Testing effectiveness of modified STarT Back risk-stratification tool in US population at improving back pain-related outcomes
- Feedback from stakeholders and a 2016 systematic review indicate that many evidence gaps remain



Research Needs for Treatment of Chronic LBP: 2016 AHRQ Systematic Review (Chou *et al.*)

- Only a small number of currently available interventions have moderate strength of evidence to support use in chronic LBP
- Evidence is lacking to establish whether there is incremental benefit to specific **combinations or sequences** of these available pharmacologic and nonpharmacologic interventions, and which would be most effective
- Evidence is lacking as to whether there are **individual subgroups** more likely to benefit from specific therapies (e.g., older adults)
- Evidence is very limited that assesses **longer-term follow-up** (e.g., one year or more) and **outcomes besides pain and function** (e.g., quality of life, ability to return to work)



Treatment for Nonspecific Chronic LBP: Guidelines

- Multiple guidelines for LBP exist; major ones include:
 - **American College of Physicians/American Pain Society** (2007, update expected 2017)
 - **National Institute for Health Care Excellence** (NICE; 2009, update in progress)
- Generally focus on management of acute LBP
- **Most do not provide specific guidance on how to manage chronic LBP, and show an overall lack of concordance:**
 - Menus of individual treatment options with largely low-to-moderate strength of evidence
 - **Little to no direction on how best to sequence or combine interventions**



Chronic LBP: Disconnect Between Guidelines and Established Interventions (Strength of Evidence - SOE)

Interventions with Moderate SOE in Chou AHRQ SER (2016)

Pharmacologic

- NSAIDs
- Opioids
- Tramadol
- Antidepressants: Duloxetine

Nonpharmacologic

- Exercise Therapy
- Multidisciplinary Rehabilitation
- Acupuncture

Interventions in ACP (2007) + NICE (2009) Guidelines

Pharmacologic

- NSAIDs
- Opioids
- Tramadol
- Antidepressants: TCAs
- Acetaminophen
- Benzodiazepines

Nonpharmacologic

- Physical: Exercise Therapy, Spinal Manipulation
- Multidisciplinary Rehabilitation
- CAM: Acupuncture, Yoga, Progressive Relaxation, Massage
- Self-care: Remain Active, Educational Books/Handout
- Behavioral: Cognitive Behavioral Therapy

 Low SOE
 Insufficient/No Evidence or No Effect

Nonsurgical Interventions for Chronic LBP: New Research

- **Nineteen open or active trials (ClinicalTrials.gov):**
 - 8 drugs
 - 5 devices or procedures
 - 2 physical
 - 2 combination interventions (CBT+ transcranial current stimulation; CBT + spinal manipulative therapy)
 - 1 behavioral
 - 1 acupuncture
- **Eight of the 19 are CER:**
 - Tanezumab vs. tramadol
 - Tanezumab vs. celecoxib
 - CBT + spinal manipulative therapy vs. spinal manipulative therapy alone
 - CBT + transcranial current stimulation vs. CBT alone
 - Traditional back school vs. individual therapist-assisted exercise
 - Cannabis vs. oxycodone
 - Medial branch block vs. paravertebral deep intramuscular injections
 - Rexlemestrocel-L vs. rexlemestrocel-L + hyaluronic acid
- **None investigate optimal sequencing of treatments and few evaluate commonly used/recommended combination approaches**



Proposed Research Question

What is the comparative effectiveness of combinations and/or sequences of noninvasive interventions for patients with nonspecific, nonradicular chronic low back pain?



PICOT: Population

- **Patients with nonspecific chronic LBP**
 - Chronic LBP: pain that persists for ≥ 12 weeks **OR**
pain on at least 50% of days during a six-month period
 - Interested in **heterogeneity of treatment effects** among patient subgroups (e.g., overweight or obese patients, patients with prominent psychosocial stressors, older adults, or other subgroups proposed by investigators with an accompanying strong rationale)



PICOT: Interventions and Comparators

- **Combinations and/or sequences of interventions in common use and with adequate evidence of efficacy/effectiveness.** Interventions of interest may include but not be limited to:
 - Active physical therapy modalities (e.g., exercise therapy)
 - Complementary and integrative health (e.g., acupuncture, spinal manipulation)
 - Non-opioid pharmacologic interventions (e.g., NSAIDs, duloxetine)
 - Multidisciplinary/interdisciplinary rehabilitation interventions (e.g., behavioral and physical components)
- Comparators **must be adequately operationalized** and the proposed operationalization must **align with available evidence of efficacy/effectiveness**
- Combinations or sequences of interventions **must address actual clinical choices** faced by patients, their caregivers, and clinicians in specific practice settings



PICOT: Outcomes and Timing

- **Outcomes (at minimum):** Function, pain, quality of life, return to work or pre-morbid function, and healthcare utilization
- **Duration:** Repeated assessments to measure more immediate, as well as longer-term outcomes at ≥ 12 months



Research Commitment

- The **total commitment** requested for this sequential targeted PFA is up to **\$50 million** in total costs
 - Estimated number of studies: 3-4
 - Total direct costs: \$10 million
 - Maximum project period: 5 years



Timeline

Action	Date
SOC Vote	October 4, 2016 (Approved)
Board of Governors Vote	October 31, 2016
Preannouncement Released	November 1, 2016
Sequential Targeted PFA Announced	January 17, 2017
Letter of Intent Due	February 14, 2017
Application Deadline	May 17, 2017
Merit Review	July 28, 2017
Awards Announced	November 2017



Board Vote

Call for a Motion to:

- **Approve** up to \$50 million for the development of a sequential targeted PFA for the optimal Treatment Combinations and/or Sequences for Nonspecific Chronic Low Back Pain

Call for the Motion to Be Seconded:

- **Second** If further discussion, may propose **Amendment** to the Motion or an **Alternative Motion**

Roll Call Vote:

- Vote to **Approve** the **Final** Motion
- Ask for votes in favor, opposed, and abstentions



Public Comment Period

Sue Sheridan, MBA, MIM

Director, Patient Engagement



Wrap Up and Adjournment

Gray Norquist, MD, MSPH

Chairperson, Board of Directors

