

# Get to Know PCORI

Hosted by the UCSF Research Development Office October 2, 2017

# Re-introducing PCORI: Clinical Research for the 21<sup>st</sup> Century

University of California San Francisco Research Leaders Symposium October 2, 2017

Joe Selby, MD MPH Executive Director, PCORI

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE



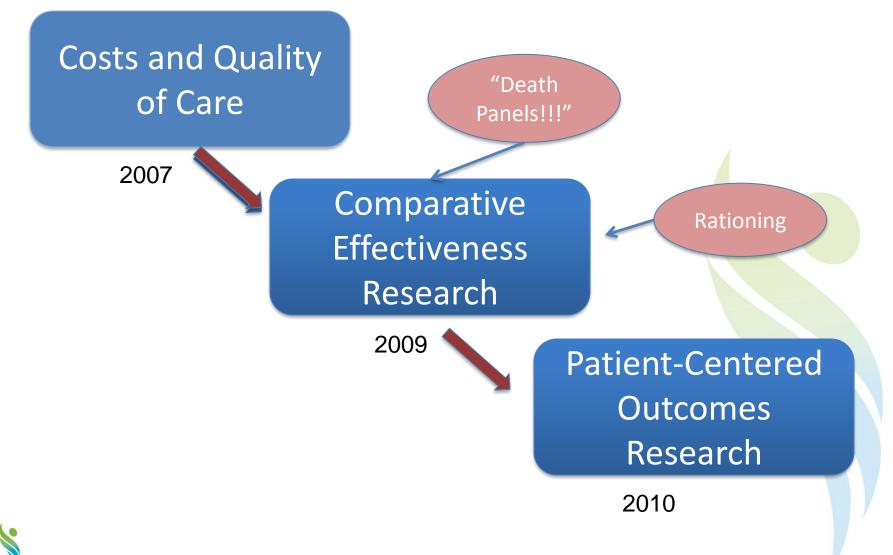
## Getting to Know PCORI – and Getting PCORI Funding!

Toward More Efficient Clinical Research

# Taking Clinical Research to Scale



# Pre-PCORI History (2008-2010)



PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

# PCORI's Legislative Mandate – to serve Decision-makers

"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 <u>research</u> and <u>evidence synthesis</u>...

... and the <u>dissemination</u> of research findings with respect to the relative health outcomes, clinical effectiveness, and appropriateness of the medical treatments, services..."

--from PCORI's authorizing legislation

# We fund research that is...

#### "Patient-centered"

- The project aims to answer **questions that matter to patients** and/or to their caregivers
- The project measures **outcomes that** matter to patients

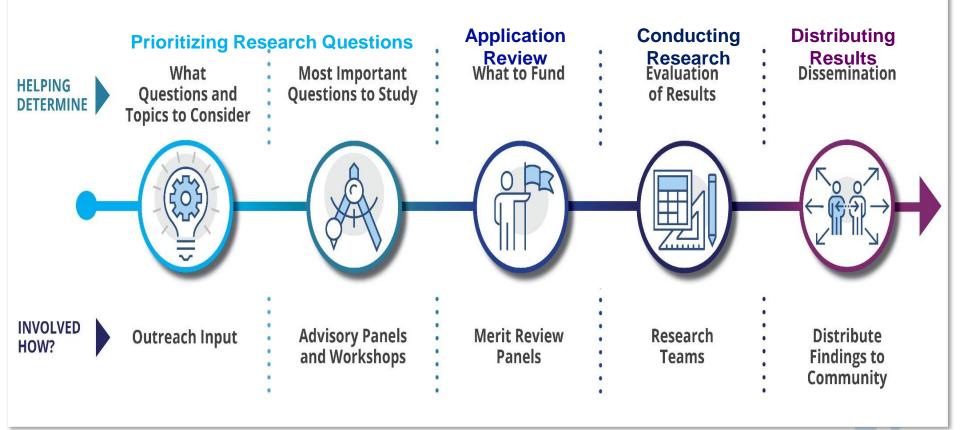


#### "Patient and stakeholder engagement"

- Patients are partners in research, not just "subjects"
- Meaningful engagement between scientists, patients, and other stakeholders in all aspects of PCORI's activities
- Patients, clinicians, payers and other relevant stakeholders participate on the research teams in PCORI-funded research studies

# **Stakeholder Driven**

#### PATIENTS AND OTHER STAKEHOLDERS ARE INVOLVED IN...





**Adrian Felipe Hernandez, MD, MS,** Duke University

#### Impact of Involving Patients on the Research Team

Real world effectiveness of warfarin among ischemic stroke patients with atrial fibrillation: observational analysis from Patient-Centered Research into Outcomes Stroke Patients Prefer and Effectiveness Research (PROSPER) study.

Y Xian et al., BMJ 2015; 351:h3786

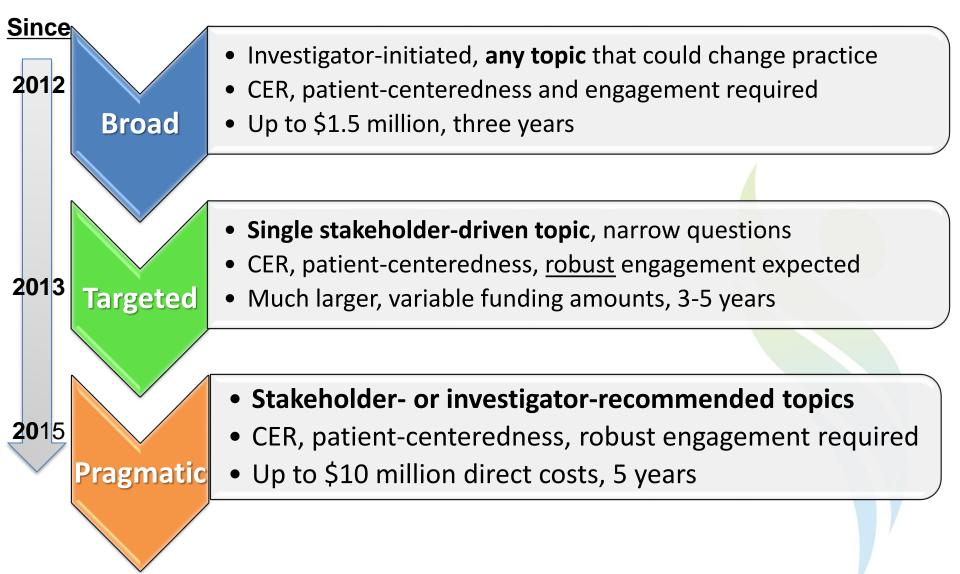


#### Impact of Involving Patients (The PROSPER Study)

- Study Design: Retrospective, observational cohort study within a registry of persons who had AF and survived an initial stroke (n=13,000). Patient advisory panel helped to plan the study
- Research Question: Does use of warfarin post-stroke (in A Fib), affect important clinical outcomes (3 analyses)
- Outcomes: Patient involvement changed the primary outcome from M.A.C.E. to "home time: days spent at home during follow-up.""
- Results: Among 12,553 patients with atrial fibrillation after a stroke, those started on warfarin before discharge enjoyed 47 more days at home during an average of two years of follow-up, as well as lower rates of recurrent stroke, MI, death.

"These findings support the routine use of warfarin for eligible ischemic stroke patients with atrial fibrillation, including those over 80 years of age, women, those with more severe strokes, and those with comorbid conditions"

# **PCORI Funds CER Through 3 Types of Research Awards**

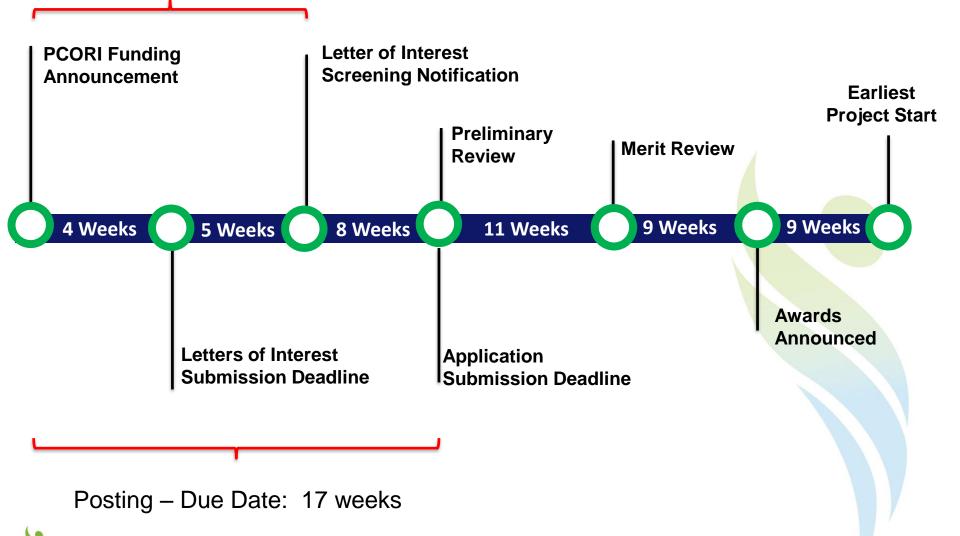


# Letter of Interest Due Dates at PCORI



# **General Timeline of Funding Opportunities**





PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

**STUDY SPOTLIGHT** 

#### PICC Lines vs. Oral Antibiotics at Discharge for Children with Serious Infections (Osteomyelitis, Ruptured Appendicitis, pneumonia)

**Summary** A natural experiment among 32 children's hospitals with wide variation in the use of PICC lines for home antibiotic administration vs. oral antibiotics after a hospitalized infection. Recurrence of infection was low and not different between PICC and oral antibiotics. Adverse events occurred in 16% of children with PICC lines and in 0% of those with oral antibiotics.

**Engagement** Parents, clinicians and hospitals. were involved in planning the study and interpreting findings.

**Potential Impact** Guidelines are now incorporating these findings and we are currently funding a study to determine recent trends in use of PICC lines.

#### **Principal Investigator**

Ronald Keren, MD Childrens' Hospital of Pennsylvania

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

**STUDY SPOTLIGHT** 

#### Shared decision making in patients with low risk chest pain: prospective randomized pragmatic trial.

**Summary** A multi-center randomized controlled trial (N=898) of use of a shared decision-making tool vs. usual care for deciding whether to be admitted from the ED or to return for outpatient workup in low-risk patients with chest pain after myocardial infarction has been ruled out. Patients randomized to use of the tool reported improved knowledge of their risk, increased participation in the decision. Decisions to be admitted were reduced (37% vs 52%) and there were no adverse events in either group.

**Engagement** Parents, clinicians and hospitals. were involved in developing the shared decision-making tool, planning the study and interpreting findings.

**Potential Impact:** PCORI is now funding a dissemination/implementation study based on these findings.

#### **Principal Investigator**

Eric Hess, MD Mayo Clinic Medical School PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE **STUDY SPOTLIGHT** 

#### Glucose Self-monitoring in Non-Insulin-Treated Patients With Type 2 Diabetes in Primary Care Settings: A Randomized Trial

**Summary** A pragmatic, open-label randomized trial (N=450) conducted in 15 primary care practices in No. Carolina. Compared no SMBG, once-daily SMBG, and once-daily SMBG with enhanced patient feedback. No clinically or statistically significant differences in Hb A1c change across the 3 groups at 52 weeks; no differences in HRQOL, and no differences in adverse effects. However, modest but significant differences were noted early on.

**Engagement**. Patients and clinicians were engaged in planning the study.

**Potential Impact**. The investigators argued that these data should be added to a shared decision-making process. Some patients may still wish to try SMBG, but it is likely to reduce the use of SMBG by decreasing physician enthusiasm for it.

#### **Principal Investigator**

Katrina Donahue, MD U No. Carolina School of Medicine PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

# **PCORI's National Priorities for Research**



Assessment of Prevention, Diagnosis, and Treatment Options



Communication &

**Dissemination** 

Research



Addressing Disparities



Accelerating PCOR and Methodological Research



# **PCORI's First Targeted Research Funding Awards**

- Treatment options in uterine fibroids\*
- Multifactorial fall injury prevention strategy in older persons\*\*
- Effectiveness of approaches to transitional care
- Treatment options for African Americans and Hispanics/Latinos with uncontrolled asthma
- Obesity treatment options in primary care for underserved populations
- Hypertension Control in African-American and Rural populations\*\*
- Comparative effectiveness of new treatment options for Hepatitis C
- Comparative effectiveness of novel oral anti-coagulants (NOACs)
- Therapeutic options for treatment-resistant depression
- Comparative effectiveness of disease-modifying treatments for MS
- Back surgery vs. conservative therapy in chronic low back pain
- Prevention and management of opioid abuse in chronic pain (2 PFAs)

• Care transitions for emerging adults with sickle cell disease

# Some Examples of Currently Funded Pragmatic Clinical Studies

- Proton beam radiotherapy vs traditional radiation therapy for Stage II, III breast cancer
- Regional anesthesia vs. general anesthesia for hip fracture repair in the elderly
- Genetic testing to guide the frequency of mammography screening
- Head-to-head comparisons of the new drugs for Hepatitis C; and for new oral anti-coagulants
- Alternative approaches to telemedicine care delivery for behavioral healthcare

# **Most Recent Pragmatic Clinical Studies**

- PRO-ACTIVE: Comparing the Effectiveness of Prophylactic Swallow Intervention for Patients Receiving Radiotherapy for Head and Neck Cancer
- A Pragmatic Trial of Home versus Office-Based Narrow Band Ultraviolet B Phototherapy for the Treatment of Psoriasis
- Comparative Effectiveness of School-Based Caries Prevention Programs for Children in Underserved, Low Income, Hispanic Communities
- PREPARE: Pragmatic Randomized Trial Evaluating Pre-Operative Antiseptic Skin Solutions in Fractured Extremities



#### **New Funding Announcement – Shared Decision-Making**

Sign in to your	ar account 🗙 🖇 PCORI Funding Announg 🗙 🔽 bases and a second sec	
$\leftrightarrow$ $\Rightarrow$ G $\diamond$	Secure   https://www.pcori.org/funding-opportunities/announcement/pcori-funding-announcement	९☆ 🖸 :
	BLOG NEWSROOM HELP CENTER SUBSCRIBE CAREERS CONTACT	
	ABOUT US RESEARCH & RESULTS ENGAGEMENT FUNDING OPPORTUNITIES MEETINGS & EVENTS	



**Funding Opportunities** 

What & Who We Fund

What You Need To Know To Apply

Applicant Training

**Merit Review Process** 

Research Support Funding Opportunities

Awardee Resources

Help Center

PCORI Funding Announcement: Implementation of Effective Shared Decision Making Approaches in Practice Settings

🎔 f in 🛨

10:51 AM

10/2/2017

🕅 🕼 🐼

This PFA promotes the targeted implementation and systematic uptake of shared decision making (SDM) in healthcare settings, in line with PCORI's goal of supporting patients in making informed decisions about their care. This initiative will support projects that propose active, multi-component approaches to implementing effective SDM strategies that address existing barriers and obstacles to uptake and maintenance, so that these interventions are effectively and sustainably integrated into practice. Projects must incorporate rigorous evaluation of the implementation of SDM approaches, as well as the impact of the SDM processes in the targeted settings.

#### **Table of Contents**

#### 1. Introduction

2. Guidance for Preparing Applications

# Treatment Heterogeneity → Precision Medicine -One size does <u>not</u> fit all!

#### (From the Patient-Protection and Affordable Care Act, 2010)

Research shall be designed, as appropriate, to take into account the potential for differences in the effectiveness of health care treatments, services, and items as used with various subpopulations, such as racial and ethnic minorities, women, age, and groups of individuals with different comorbidities, genetic and molecular sub-types, or quality of life preferences and include members of such subpopulations as subjects in the research as feasible and appropriate.



TIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

# **Grantsmanship – PCORI Style**

- Describe the importance of question to patient and clinician the information gap, the decisional dilemma. <u>Cite a systematic review.</u>
- Detail the engagement involvement of patients, physicians, systems, payers, advocacy organizations – in shaping the question and in all aspects of the proposed research.
- Detail the support of the delivery settings where the research will take place.
- Speak to the potential role of engaged partners in disseminating findings

   the pathway to implementation.
- Address possibilities of treatment heterogeneity and propose formal methods to test for treatment heterogeneity.

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE



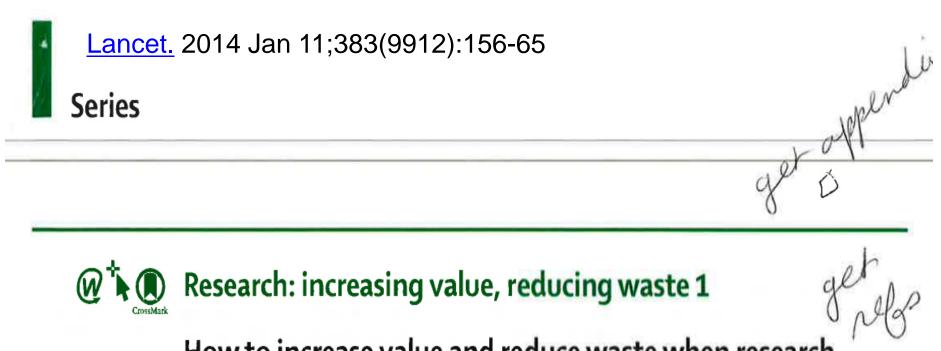
## Getting to Know PCORI – and Getting PCORI Funding!

# Toward More Efficient Clinical Research

# Taking Clinical Research to

Scale





# How to increase value and reduce waste when research priorities are set

Iain Chalmers, Michael B Bracken, Ben Djulbegovic, Silvio Garattini, Jonathan Grant, A Metin Gülmezoglu, David W Howells, John P A Ioannidis, Sandy Oliver

Lancet 2014; 383: 156-65 Published Online January 8, 2014 http://dx.doi.org/10.1016/

The increase in annual global investment in biomedical research—reaching US\$240 billion in 2010—has resulted in important health dividends for patients and the public. However, much research does not lead to worthwhile achievements, partly because some studies are done to improve understanding of basic mechanisms that might not have relevance for human health. Additionally good research ideas often do not wield the anticipated results. As long

## Increasing Value, Reducing Waste: Chalmers et al (2014)

#### **1. Get the Research Questions Right**

- Involve the end-users of the research
- Be transparent in how questions are chosen
- Carefully assess what is already known, require a systematic review
- Assess what is already funded

#### 2. Get the Research Design, Conduct and Analysis Right

- Make full protocols, analysis plans, and raw data publicly available
- Avoid conflicts of interest
- Use appropriate methods for minimizing bias
- Reward reproducibility practices (with funding, academic recognition)

#### 3. Make Research Regulation and Management Efficient

- Streamline regulatory and oversight processes where possible
- Embed research in everyday care settings. PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

## Increasing Value, Reducing Waste: Chalmers et al (2014)

#### 4. Make research results available

- Reward full dissemination of research findings and re-use of datasets
- Develop standards for the content of study protocols, for study reports and for data sharing procedures
- Endorse and enforce study registration policies, wide availability of full study information, and sharing of participant-level data for other researchers

#### 5. Support complete, usable reports of all biomedical research

- Build reporting infrastructure that supports good reporting and archiving
- Improve the capability and capacity of authors and reviewers in highquality and complete reporting
- Shift research regulations and rewards to align with better more complete reporting

# **Transparency and Open Science at PCORI**

#### **1.** Peer Review and Public and Release of Research Findings Policy

- Immediate registration of all projects' on CT.gov, abstract on PCORI website
- Submission of results to CT.gov w/in 12 months of primary completion date
- Peer review of draft final research report completed no later than 12 months after primary completion date
- Posting of full Final Research Report no later than 12 months of acceptance

#### 2. Open Access/Public Access Policy

- All final accepted manuscripts must be deposited in PubMedCentral
- PCORI works to ensure 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 PCORIapproved data repository and cover costs of transfer and storage.
- Draft policy for public comment will be presented later today.

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE



## Getting to Know PCORI – and Getting PCORI Funding!

# Toward More Efficient

Cillical Neseal Cil

# Taking Clinical Research to Scale



# Introducing pcornet

The National Patient-Centered Clinical Research Network



# **PCORnet's Mission**

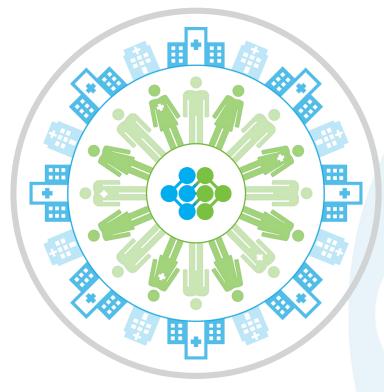
To make it faster, easier, and less costly to conduct clinical research, both observational studies and randomized trials, than is now possible by harnessing the power of large amounts of electronic health data and patient partnerships, and by making contracting negotiations and IRB approval/oversight more efficient.

To embed the research within health systems and use data and research findings to facilitate health system improvement.

And in the process, transform the culture of clinical research from one directed by researchers acting as entrepreneurs to one driven by collaboration, data sharing, and the needs of patients, clinicians, systems and payers.



# PCORnet embodies a "community of research" by uniting people, clinicians & systems



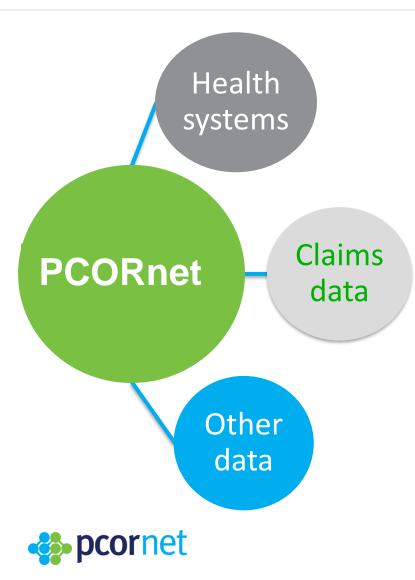
20 Patient-Powered Research Networks (**PPRNs**) 13
 Clinical Data Research =
 Networks (CDRNs)

#### PCORnet

A national infrastructure for people-centered clinical research



# PCORnet Clinical Data Research Networks (CDRNs)



- The Chicago Community Trust (CAPriCORN)
- The Children's Hospital of Philadelphia (PEDSnet)
- Harvard University (SCILHS)
- Kaiser Foundation Research Institute (PORTAL)
- Louisiana Public Health Institute (REACHnet)
- Mayo Clinic (LHSNet)
- Oregon Community Health Information Network (ADVANCE)
- University of California, San Diego (pSCANNER)
- University of Florida (OneFLorida)
- University of Kansas Medical Center (GPC)
- University of Pittsburgh (PaTH)
- Vanderbilt University (Mid-South CDRN)
- Weill Medical College of Cornell University (NYC-CDRN)

# PCORnet Patient-Powered Research Networks (PPRNs)

- University of South Florida (ABOUT Breast Cancer Network)
- Global Health Living Foundation (AR-PoWER)
- Mayo Clinic (Alzheimer's PCPRN)
- Crohn's and Colitis Foundation of America (CCFA Partners)
- University of California Los Angeles (CPPRN)
- Genetic Alliance (CENA)
- COPD Foundation (COPD PPRN)
- Parent Project Muscular Dystrophy (DuchenneConnect)

University of California San Francisco

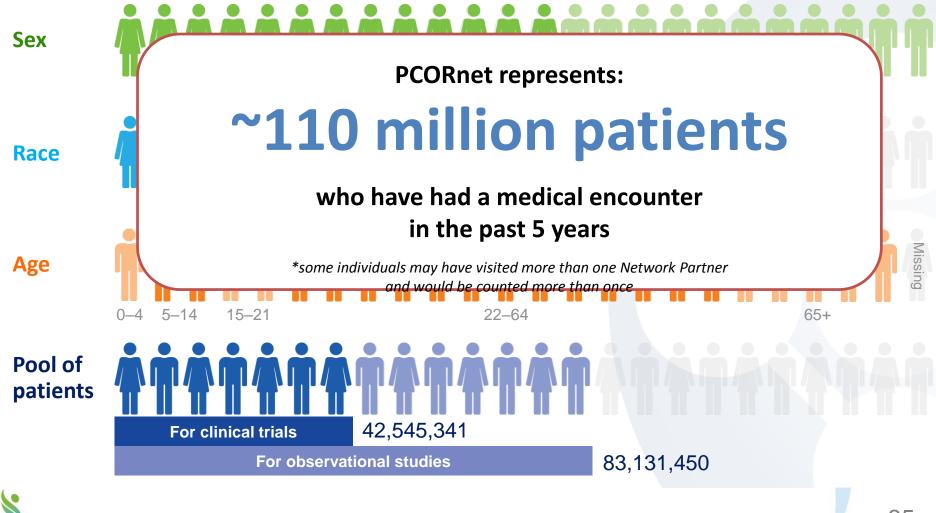
- Cincinnati Children's Hospital Medical Center (ImproveCareNow)
- Sennedy Krieger Institute (IANv- autism)
- Massachusetts General Hospital (MOOD)
- Accelerated Cure Project for Multiple Sclerosis (MS-PPRN)
- Arbor Research Collaborative for Health (NephCure)
- Duke University (PARTNERS)
- Phelan-McDermid Syndrome Foundation (PMS\_DN)
- Immune Deficiency Foundation (PI-CONNECT)
- University of California San Francisco (PRIDEnet)
- Epilepsy Foundation (REN)
- University of Pennsylvania (The Vasculitis PPRN)

PCORnet **130** health systems across the country Over 80 data marts Data on over >100 million patients





# Resulting in a national evidence system with demonstrated research potential



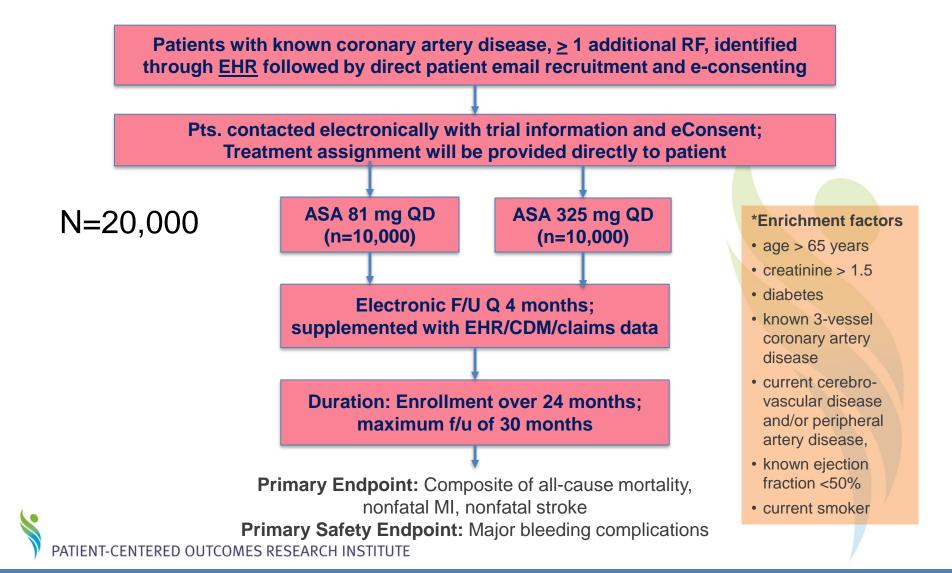
## Collaborative Research Groups – Researchers, Clinicians, and patients across PCORnet

- Autoimmune and Systemic
   Inflammatory Syndromes
   Ben Nowell, Peter Merkel
- Behavioral Health Scott Stroup, Sheryl Kataoka
- Cancer Elizabeth Chrischilles, Sue Friedman, Debra Ritzwoller
- Cardiovascular Health Mark Pletcher, Veronique Roger, Rhonda Cooper-DeHoff
- Diabetes and Obesity John Buse, Russell Rothman, Desmond Schatz
- Health Disparities
   Lewis Raynor, Mitchell Lunn
- Health Systems, Health Policy and Public Health Rainu Kaushal, Elizabeth Shenkman

- Hospital Medicine Andrew Auerbach, Sunil Kripalani, David Meltzer
- Kidney Health Laura Mariani, Debbie Gipson, Michael Matheny, Edward Siew
- Pediatrics Chris Forrest, Elizabeth Shenkman
- Pulmonary
   *Rebecca Bascom, Dave Mannino*

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

# ADAPTABLE Study: Enabling Pragmatic Research: eScreening, eEnrollment and eFollow-up



## **People-Centered Research Foundation**

Launched March 21st

Mission to engage patients, families, research participants, clinicians, scientists, and health system leaders in the design, conduct, dissemination, and implementation of research and analysis that leads to improvements in the health and well-being of individuals and populations and the performance of health care delivery systems



PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

# **Inaugural PCRF Board**

- Chair Robert Califf, MD, former FDA Commissioner and Professor of Medicine, Duke University
- Board Members
  - Richard Bankowitz, MD, MBA, FACP, Executive Vice President, Clinical Affairs, America's Health Insurance Plans (AHIP)
  - Josephine P. Briggs, MD, Director, National Center for Complementary and Integrative Health (NCCIH)
  - Marc M. Boutin, JD, Chief Executive Officer, National Health Council (NHC)
  - Donna Cryer, President & CEO of the Global Liver Institute
  - Craig Lipset, MPH, Head of Clinical Innovation, Global Product Development, Pfizer
  - Joanne Waldstreicher, MD, Chief Medical Officer, Johnson & Johnson
  - Reed Tuckson, MD, Managing Director of Tuckson Health Connections

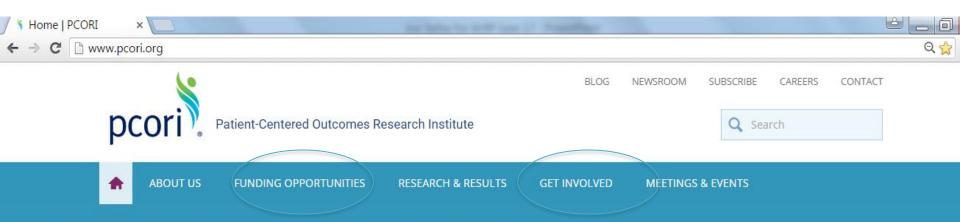
#### **PCORnet** as Part of a Larger **National Evidence Generation Infrastructure Medical Product Safety** DISTRIBUTED NETWORK GOVERNANCE Surveillance **FDA Quality of Care** Payers Health Plans, others Public Sentinel Private Queries Coordinating Queries **Sentinel** Center Results Coordinating Results Center(s) Coordinating Common **PCORnet** Center(s) Data Model **Data Standards Results FDA**, Industry Queries Providers Registries **Medical Product** Hospitals Disease-specific Pes. Coordinating Physicians Safety Product-specific Center(s) Integrated Systems Results Queries Sponsor(s) Coordinating Results Center(s) **Public Health Surveillance** CDC Coordinating **NIH**, Industry Center(s) **Clinical Research PCORI, NIH, Industry** 40 **Comparative Effectiveness Research**

# So, What is PCORI Trying to Change?

- Who's on the Research Team adding patients, and other stakeholders, especially clinicians
- The Kinds of Questions Asked questions that matter to patients, caregivers, clinicians, and systems; questions whose answers are likely to change practice
- How Data are Analyzed toward personalized approach
- The Speed of Implementation from 17 years to ???
- The Role of the Researcher from entrepreneur to team member.

# pcornet

# Thanks..... and Stay in Touch!





#### PCORI BLOG

#### Caregivers Take Center Stage

Family care providers play a major role in the lives of people with dementia—and in a PCORI-funded PCORnet partner network.

FIND OUT MORE >

# Get to Know PCORI

Panel Discussion

Joe Selby, MD MPH Daniel Dohan, PhD Anne Lown, DPH Anda Kuo, MD Mark Pletcher, MD MPH Kathleen Tebb, PhD

Discussion moderated by Kristin Dolan, PhD

# RDO's Large Grant Development Program

- Support the development of large research proposals.
- Our scope of work includes:
  - Strategy input
  - Project management
  - Library of template language and successful grant applications
  - Technical writing and editing

If you want to learn more, visit <u>http://rdo.ucsf.edu/</u> or contact Kristin Dolan (<u>kristin.dolan@ucsf.edu</u>).

