Advisory Panel on Rare Disease Winter 2018 Meeting

December 14th, 2018

9:00 AM – 4:00 PM ET

Dial-in number (US): 1 877 309 2074
Access code: 649-058-188

Webinar URL:
https://attendee.gotowebinar.com/register/9179978004807812610

Webinar ID: 762-151-283

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PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

Welcome, Introductions, and Setting the Stage

Matt Cheung, PhD, RPh
RDAP Chair

Cindy Luxhoj, MUP
RDAP Panel Co-Chair

Housekeeping

- Today's meeting is open to the public and is being recorded
- Members of the public are invited to listen to the teleconference and view the webinar
- Meeting materials can be found on the PCORI website
- Anyone may submit a comment through the webinar chat function, although no public comment period is scheduled
- Visit www.pcori.org/events for more information

COI Statement

Welcome to the Rare Disease Advisory Panel in-person meeting.
I want to remind everyone that disclosures of conflicts of interest of members of the Advisory Panel are publicly available on PCORI's website. Members of the Rare Disease Advisory Panel are reminded to update your conflict of interest disclosures if the information has changed, in addition to completing your annual disclosure. You can do this by contacting your staff representative, Allie Rabinowitz.

Finally, if the Rare Disease Advisory Panel will deliberate or take action on a matter that presents a conflict of interest for you, please inform one of the co-chairs so we can discuss how to best address the issue.

Today's Agenda

Start Time	Item	Speakers
9:00 am	Welcome, Introductions, and Setting the Stage	M. Cheung / C. Luxhoj
9:15 am	RDAP New Panel Orientation	M. Cheung
9:45 am	D&I Rare Disease Panel Discussion	J. Siegel / K. Carman
11:00 am	Break	
11:15 am	PCORnet	K. Marsolo
12:15 pm	Lunch	
1:15 pm	PCORI's Future Rare Disease Research	A. Hu / G. Moscou-Jackson
2:30 pm	Break	
2:45 pm	Future Steps for the RDAP	
3:45 pm	Conclusion	M. Cheung / C. Luxhoj
4:00 pm	Adjourn	

Introductions

Please briefly state the following:

- Name
- Position title and organization
- Stakeholder group you represent

Rare Disease Advisory Panel
New Panel Member Orientation

Matt Cheung, PhD, RPh, RDAP Panel Chair

December 14, 2018

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Goals

- Overview of PCORI's mission and strategic goals
- Overview of the Rare Disease Advisory Panel (RDAP) function and scope
- Review how the agenda for RDAP In-Person Meetings are developed
- Discuss how activities are tracked
- Discuss future directions for the RDAP

PCORI's Mission and Strategic Goals

PCORI helps people make informed healthcare decisions, and improves healthcare delivery and outcomes, by producing and promoting high-integrity, evidence-based information that comes from **research guided by patients, caregivers, and the broader healthcare community.**

Our Strategic Goals:

- Increase quantity, quality, and timeliness of useful, trustworthy research information available to support health decisions
- Speed the implementation and use of patient-centered outcomes research evidence
- Influence research funded by others to be more patient-centered

Legislative Language on Rare Disease Advisory Panel

- ‘4) APPOINTING EXPERT ADVISORY PANELS.—
  - (A) APPOINTMENT.—
    - (i) IN GENERAL.—The Institute may appoint permanent or ad hoc expert advisory panels as determined appropriate to assist in identifying research priorities and establishing the research project agenda under paragraph (1) and for other purposes. “
    - (ii) EXPERT ADVISORY PANELS FOR CLINICAL TRIALS.—The Institute shall appoint expert advisory panels in carrying out randomized clinical trials under the research project agenda under paragraph (2)(A)(ii). Such expert advisory panels shall advise the Institute and the agency, instrumentality, or entity conducting the research on the research question involved and the research design or protocol, including important patient subgroups and other parameters of the research. Such panels shall be available as a resource for technical questions that may arise during the conduct of such research.
    - iii) EXPERT ADVISORY PANEL FOR RARE DISEASE.— In the case of a research study for rare disease, the Institute shall appoint an expert advisory panel for purposes of assisting in the **design of the research study and determining the relative value and feasibility** of conducting the research study.

RDAP Charter: Function and Scope of Work*

The RDAP will:

- Provide input to PCORI on **research needs** of the rare diseases community and on specific issues and concerns in conducting research on rare diseases;
- Identify **infrastructure** (data sources, tools, etc.) that currently exist and can be a resource for conducting research;
- Serve on or assist in **identifying experts** to serve on ad hoc panels to assist in evaluating, designing and conducting PCORI-funded research specific to a rare disease; and
- Provide ongoing feedback and advice on **evaluating and disseminating PCORI's research portfolio** on rare diseases.
- Consider study findings and advise on targets and strategies for PCORI **dissemination** efforts;
- Identify opportunities for **collaboration** with existing international, federal, public and private entities doing similar work in the rare disease space; and
- **Advise other PCORI committees and panels** to ensure the unique considerations of rare disease are addressed.

*Taken from the Charter of the Advisory Panel on Rare Disease

RDAP Agenda is Driven By:

- PCORI Mission and Goals
- RDAP Charter
- RDAP Framework

RDAP's Meeting Agenda is Proposed, Developed and Finalized By:

- Members of RDAP and PCORI Staff
- Monthly Conference Calls between Co-Chairs and PCORI Staff

How the RDAP Activities Are Tracked

- Posted after the meeting: Agenda, summary and recording
- Crosswalk Spreadsheet

Activities Completed by RDAP (Partial List)

- First RDAP Members generated a list of topics and identified four priorities areas for action
- Developed, finalized and disseminated Rare Disease Research Guide for Merit Reviewers and Investigators
- Evaluated and recommended enhancements to rare disease applications and PCORI's RD portfolio
- Joint conferences with members of ADPTO and CTAP advisory panels and PCORnet's RD task force
- Reviewed landscape on RD research standards and submitted RD Methodology manuscript
- Recommendations accepted by PCORI Engagement Team to develop programs to support and empower RD research (i.e., engagement awards, training of RD patient advocates on PCOR)
- Recommendations on developing Core Outcomes Sets for Pediatric Rare Disease Research
- Recommendations on posting of rare diseases resources in PCORI.ORG
- Reviewed how Europe is handling the rare disease studies and registries
- Reviewed evaluation on success rate of RD application and sharing with applicants
- Discussed dissemination plans and innovative dissemination approaches
- Presentations by investigators on challenges and successes of PCORI funded projects

Future Directions

- Future directions for PCORI's rare disease research
- Future steps for the RDAP discussions – topic generation and suggestions

PCORI Dissemination & Implementation

Advisory Panel on Rare Disease
In-Person Meeting
December 14, 2018

Joanna Siegel ScD
Director, Dissemination & Implementation

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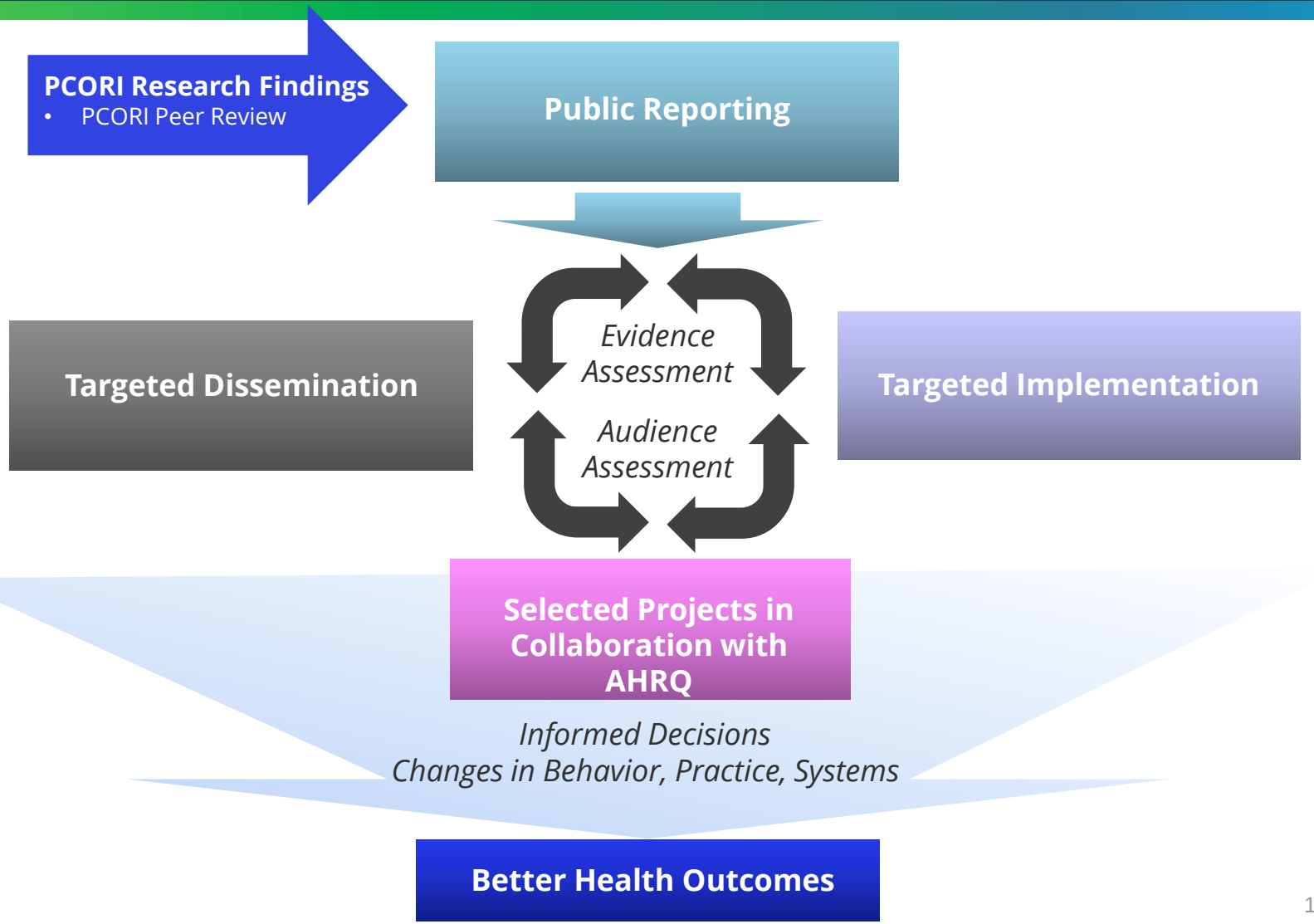
Today

- Overview of PCORI D&I initiatives
  - Joanna Siegel, ScD – *Director, Dissemination & Implementation*

- Presentations on three PCORI-funded Rare Disease studies
  - Overview of studies
  - Reflections on challenges and opportunities for dissemination and implementation
    - Alexander Gelbard MD; Emily Henkle PhD MPH; Jasvinder Singh MD MPH;

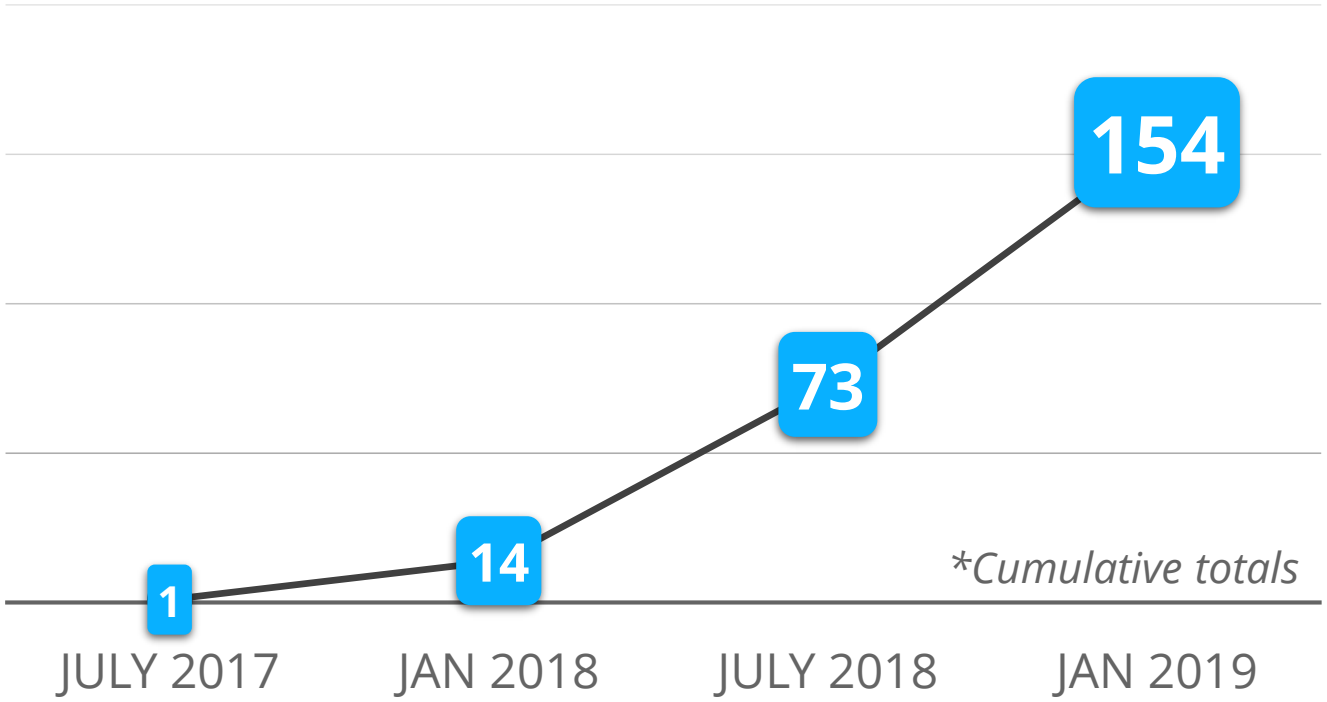
- Panel discussion
  - Kristin L. Carman, MA, PhD - *Director of Public and Patient Engagement*

PCORI Dissemination & Implementation of Research Results



Release of Findings: Completed PCORI studies

Public and professional abstracts posted to PCORI.org



Public Reporting of PCORI Research Findings following Peer Review

- PCORI's authorizing law and the processes adopted by the Board outline approach for releasing findings – to assure **accessibility and full transparency** in reporting results from PCORI studies.

- **Within 90 days** of PCORI's acceptance of the draft final research report (DFRR) following peer review, we release (post to pcori.org):
    - 500-word public abstract
    - 500-word professional abstract
    - Summary of peer review process

- PCORI support for open access to findings published in peer-reviewed journals

Posted Results: The Public Abstract

pcori Patient-Centered Outcomes Research Institute

BLOG NEWSROOM HELP CENTER SUBSCRIBE CAREERS CONTACT

ABOUT US RESEARCH & RESULTS TOPICS ENGAGEMENT FUNDING OPPORTUNITIES MEETINGS & EVENTS

Research & Results > Explore Our Portfolio > Does a Patient- and Family-Centered H...

Does a Patient- and Family-Centered Hospital Communications Program Reduce Medical Errors?

This project has results

Public Abstract | Professional Abstract

Objective

To test the effectiveness of a program to improve communication between physicians, nurses, and families and to better involve families in all aspects of daily decision making in hospital pediatric units

Study Design

Design Elements	Description
Design	Quasi-experimental study
Population	A total of 3,106 admitted patients, as well as 1,837 parents, 330 nurses, and 595 resident physicians from 2 different assessment periods at 7 pediatric hospitals
Interventions/ Comparators	Not applicable
Outcomes	Primary: medical errors, adverse events

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Top Of Page
Abstracts
Related PCORI Dissemi Implementation Projec
Peer-Review Summary
Conflict Of Interest Disc
Journal Articles
More On This Project
Project Details

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE
RESEARCH SUMMARY

PROJECT INFORMATION August 2018

Does a Patient- and Family-Centered Hospital Communications Program Reduce Medical Errors?

Principal investigator Christopher Landrigan, MD, MPH

Organization Boston Children's Hospital

What was the research about?
Even with ongoing efforts to improve care, medical errors still happen in hospitals. Medical errors are mistakes that may or may not cause harm to patients. An example of a medical error is when a doctor prescribes the wrong medicine to a patient. When medical care causes harm, it is known as an adverse event, for example when a patient has an allergic reaction to a prescribed medicine.

In this study, the research team wanted to see if improving communication would help reduce hospital medical errors and adverse events. The team created a program to help doctors and nurses communicate with families during rounds. Rounds are meetings every day when hospital staff, usually doctors and nurses, review patients' progress. Then staff come up with a plan for the day. Staff often make these plans without direct input from the patient or their family.

The program took place in hospital pediatric units, where children receive care. The program included

- A way to make sure that doctors and nurses included families on daily rounds
- A way to make sure medical staff talked about everything important on daily rounds
- Write-ups of rounds for patients and their families
- Training to help staff learn how to include families in the rounds

What were the results?
Compared with before hospitals used the program, after hospitals used the program,

- There was no difference in overall medical errors, but patients had 38% fewer harmful medical errors.
- Patients had 46% fewer adverse events.
- Parents rated their child's care experiences higher on 6 of 25 measures. None of the measures received a worse rating.
- Nurses and parents were more involved in rounds. For example, parents spoke up more and asked more questions.

Who was in the study?
The study included 3,106 children receiving care in pediatric units at seven hospitals in the United States and Canada. Of these, 51 percent were girls, and 8 percent had two or more long term health problems. The average child's age was seven years. The study also included 1,837 parents of children in the study. In addition, 925 doctors and nurses treating the children took part in the study.

What did the research team do?
The research team taught staff how to use the program for nine months. For three months before the training started and three months after the training ended, the team observed doctors, nurses,

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Dissemination of Findings from PCORI-Funded Studies

Definitions: Dissemination

The intentional, active process of identifying target audiences and tailoring communication strategies to **increase awareness and understanding of evidence and to motivate its use** in policy, practice, and individual choices.

-- PCORI Dissemination and Implementation Framework; 2015

- Dissemination activities are designed to bring results to targeted audiences that will have a strong interest in using them.
- Key objectives: increasing **reach, motivation, and ability** to use the findings.

Dissemination generally is not enough to ensure implementation. But sometimes it's a necessary first step – and some findings may benefit from dissemination alone.

Engagement Award Funding Opportunities (Feb 2018)

Up to $300,000 2 years

Engagement Award: Dissemination Initiatives

Objective: Actively disseminate PCORI-funded research findings

Up to $250,000 2 years

Engagement Award: Capacity Building

Objective: Develop infrastructure and partnerships for D&I of PCORI-funded research findings

Up to $50,000 1 year

Engagement Award: Conference Support

Objective: Convene to communicate PCORI-funded research finding to targeted end-users

Engagement Award: Dissemination Initiative

Gives organizations and communities the opportunity to propose meaningful dissemination projects aimed at spreading awareness and increasing knowledge of new evidence from PCORI-funded research.

Draws on the role of the "trusted source" to bring relevant findings to users in ways that will command their attention and interest, through organizations with **established relationships** with end-users.

Which Findings?

- Primary findings **published in peer-reviewed journals,**
- PCORI CME, PCORI Evidence Updates, findings from PCORI-funded systematic reviews.

Eligibility: All PCORI-eligible organizations; **major involvement of stakeholder** partner required

Budget: $300k total costs, up to 2 years

Implementation Efforts:

Promoting Uptake and Integration of Findings

Definitions: Implementation

The deliberate, iterative process of **integrating evidence into policy and practice** through adapting evidence to different contexts and facilitating behavior change and decision making based on evidence, across individuals, communities, and healthcare systems.

-- PCORI Dissemination and Implementation Framework; 2015.

- Implementation activities are designed to change practice, bearing in mind the barriers as well as the opportunities in different settings.
- Key objectives: **adapting** evidence as appropriate for specific contexts, incorporating that evidence to inform decisions, and **integrating** into workflow or other processes in a sustainable way.

PCORI D&I Program Funding Initiatives

Limited Competition: Implementation of PCORI-Funded PCOR Results

- Provides PCORI investigator teams the opportunity to propose the next steps to put their findings into real world practice.
  - *Up to $1M direct costs per project; $9M available per year*

Implementation of Effective Shared Decision Making (SDM) Approaches

- Promotes the implementation and systematic uptake of shared decision making in practice settings. SDM approaches can be those previously studied in PCORI CER, or existing, effective SDM strategies (not PCORI-funded) that incorporate findings from PCORI research.
  - *Up to $1.5M direct costs per project; $6-$8M available per year*

Implementation of Findings from PCORI's Major Research Investments

- Provides a broad application pool the opportunity to propose multicomponent strategies that will lead to uptake and integration of PCORI-funded evidence, in the context of related evidence, into real world practice.
  - *Up to $2.5M total costs per project, $8M available per year*

Other PCORI Targeted Dissemination Activities

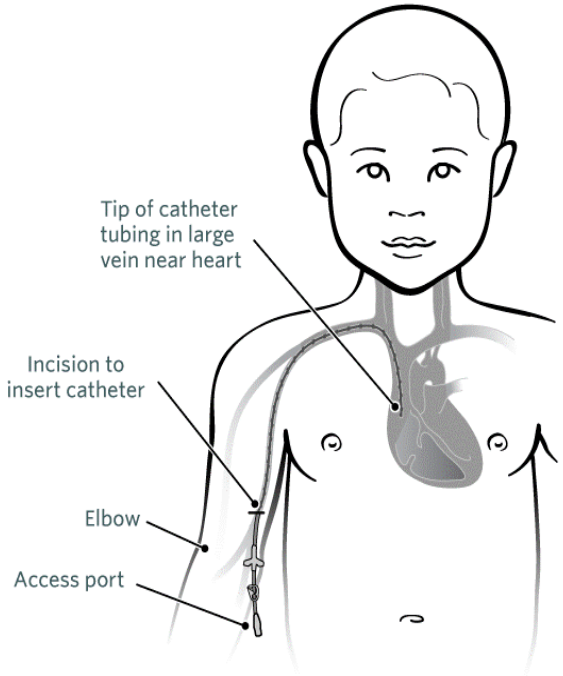
Activities including:

- Evidence Updates
- Continuing Medical Education (CME)

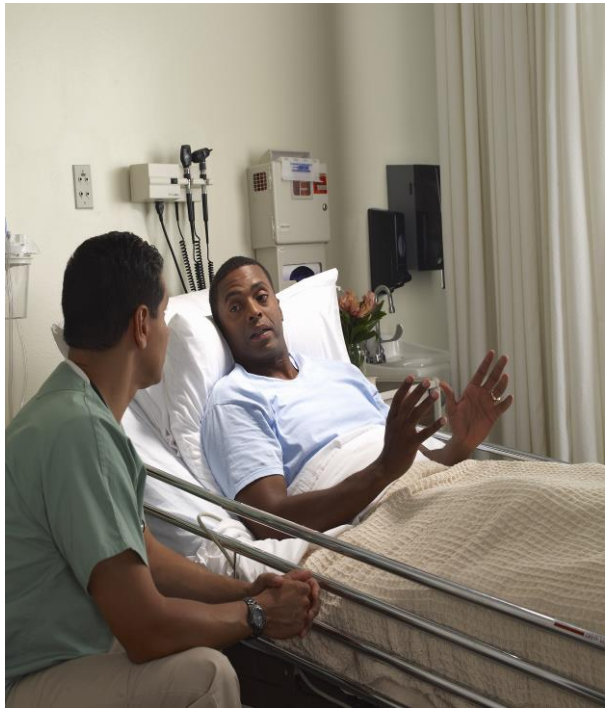
Evidence Updates – Prostate Cancer

- *Current Treatments for Localized Prostate Cancer and Symptom-Related Quality of Life*
- Presents findings from PCORI-funded research (2 studies)
- Evidence Updates for **clinicians** and for **patients**
- Co-branded by American Urological Association, American Society for Radiation Oncology, and Men's Health Network

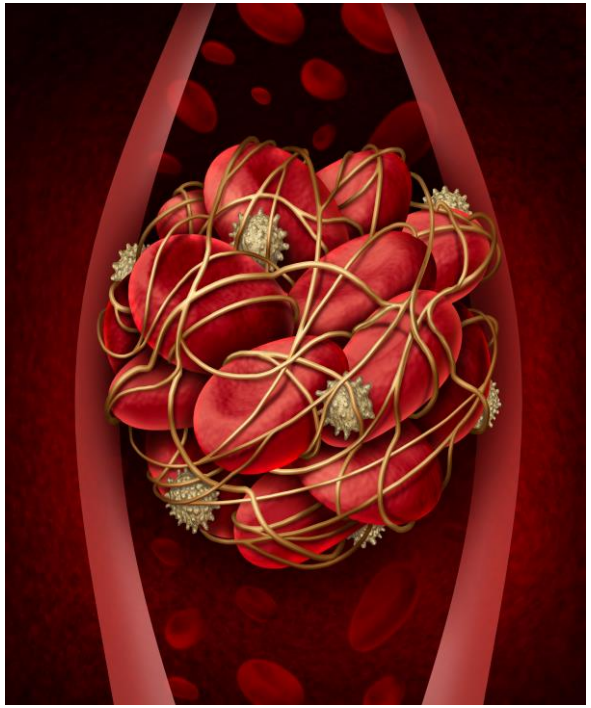
CME Programs



Osteomyelitis in Children
PI: Keren
CME Term: 5/15-6/17
Certificates Issued: 1,211



Prostate Cancer
PIs: Penson, Chen
CME Term: 10/17-10/18
Certificates Issued: 79



Stroke and AFib
PI: Hernandez
CME Term: 9/17-9/18
Certificates Issued: 552

Discussion

- What are the **critical targets** for dissemination and implementation of findings – i.e., the communities that care about and can use this information?
- Are there **consistent** audiences we should always plan to reach?
- What are the **best ways to reach** these audiences? **Best ways to present** the information?
- What can the **RDAP members** do? Can we use panel members in a more strategic and systematic way to disseminate research?
- What type of "**capacity building**" activities would best prepare audiences for future evidence uptake?

Emily Henkle, PhD, MPH

Non-Cystic Fibrosis (CF) Bronchiectasis Patient Network and Research Roadmap

Comparative effectiveness and safety of inhaled corticosteroids and antimicrobial compounds for non-CF bronchiectasis

OHSU Portland State University SCHOOL OF PUBLIC HEALTH

Who we are

- Center for Infectious Disease Studies, OHSU-PSU School of Public Health, Portland, OR
  - Director: Kevin Winthrop, MD, MPH, infectious disease
  - Epidemiologist: **Emily Henkle, PhD, MPH**
  - Team of program managers, administrators, study coordinators, ID/pulmonology fellows, residents, students
- Partner with patient advisors, patient advocacy organizations
  - NTM Info & Research
  - COPD Foundation
- Partner with clinical experts as part of the NTM Research Consortium, founded by Dr. Winthrop

OHSU Portland State University SCHOOL OF PUBLIC HEALTH

What we study

- **Bronchiectasis**: chronic, inflammatory lung disease with multiple causes
  - Associated with cystic fibrosis (CF)
  - **Non-CF bronchiectasis, other known cause or idiopathic**
  - *Probably no longer rare disease if counting all causes*
- **NTM**: nontuberculous mycobacterial infection
  - Chronic pulmonary form, most commonly *M. avium* complex (MAC)
  - Bronchiectasis patients at higher risk for pulmonary NTM
  - NTM causes/worsens bronchiectasis
  - Estimate ~45,000 patients in U.S. with pulmonary MAC disease

PCORI awards, background

- 2015: Eugene Washington Meeting Award, "**NTM Research Consortium Stakeholder Engagement and Planning Meeting**"
  - Publication: Henkle E. et al, Patient-Centered Research Priorities for Pulmonary Nontuberculous Mycobacteria (NTM) Infection. An NTM Research Consortium Workshop Report. Ann Am Thorac Soc. Sep 2016 Sep 13(9): S379-84
- 2016: Engagement Award, "**Non-cystic fibrosis (CF) bronchiectasis patient network and research roadmap"**
  - Supported outreach for COPD Foundation's BronchandNTM360social, launched in May 2016
  - Part of the Bronchiectasis and NTM Initiative https://www.bronchiectasisandntminitiative.org
  - Publication: Henkle E. et al., US Patient-Centered Research Priorities and Roadmap for Bronchiectasis. Chest. 2018 Nov;154(5):1016-1023

PCORI awards, just completed

- 2016-2018: Research Award, "**Comparative effectiveness and safety of inhaled corticosteroids and antimicrobial compounds for non-CF bronchiectasis**"
  - Project completed in July 2018, Draft Final Research Report submitted October 2018
  - Objective: To compare two anti-inflammatory therapies, inhaled corticosteroids (ICS) and macrolide monotherapy, in bronchiectasis patients using a robust new-user observational cohort design
  - Population: Medicare claims dataset, 2006-2014
  - Primary outcomes: hospitalized respiratory infection, NTM
  - Key findings: chronic use of macrolide monotherapy protective against hospitalized respiratory infection compared to ICS, but associated with increased risk of hearing loss; inconclusive results about risk of NTM

PCORI awards, next steps

- 2019?: Engagement Dissemination Initiative Award
  - Disseminate CE findings (no intervention, so D&I not applicable)
  - Targeting pulmonologists
    - Work with American Thoracic Society to develop CME program for bronchiectasis therapy, travel to local Thoracic Societies to disseminate
    - App for physicians to guide bronchiectasis management (COPD Foundation created one for COPD)
  - *Issues: Bronchiectasis patients highly dispersed, many do not know they have bronchiectasis, not organized unless they have underlying disease, no U.S. guidelines, network limited*
- 2019?: Research Award
  - Comparative effectiveness of airway clearance for bronchiectasis, NTM within PCORnet

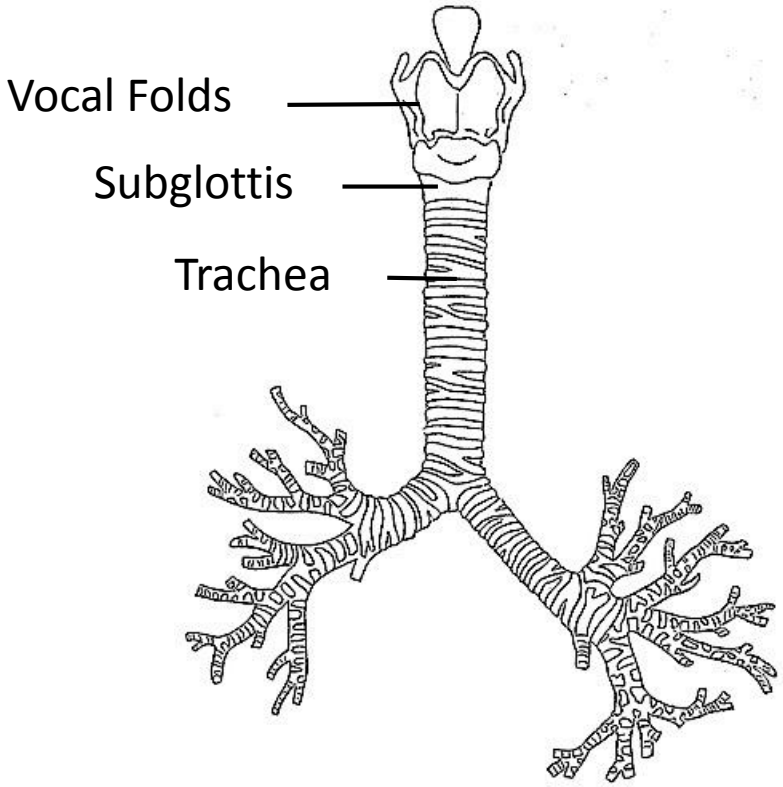
NoAAC
the north american airway collaborative

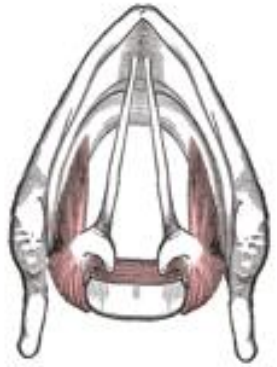
www.noaac.net

NoAAC Funded by PCORI Grant #: 1409-22214

PI(s): Alexander Gelbard MD, David Francis MD

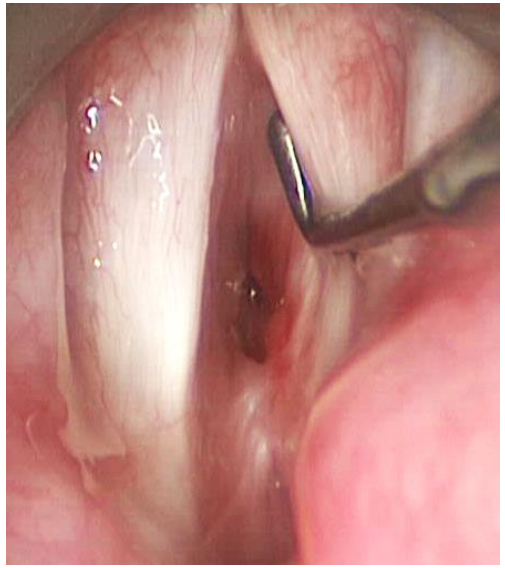
Laryngotracheal Stenosis (LTS)



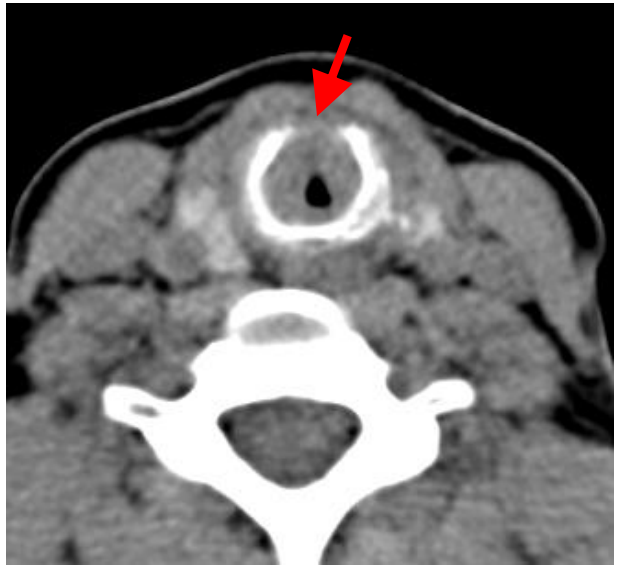


Laryngotracheal Stenosis (LTS)

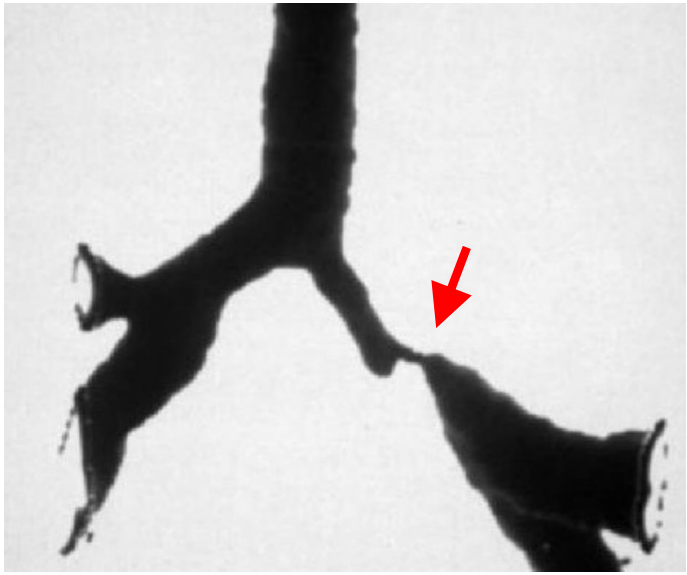
Laryngeal Stenosis



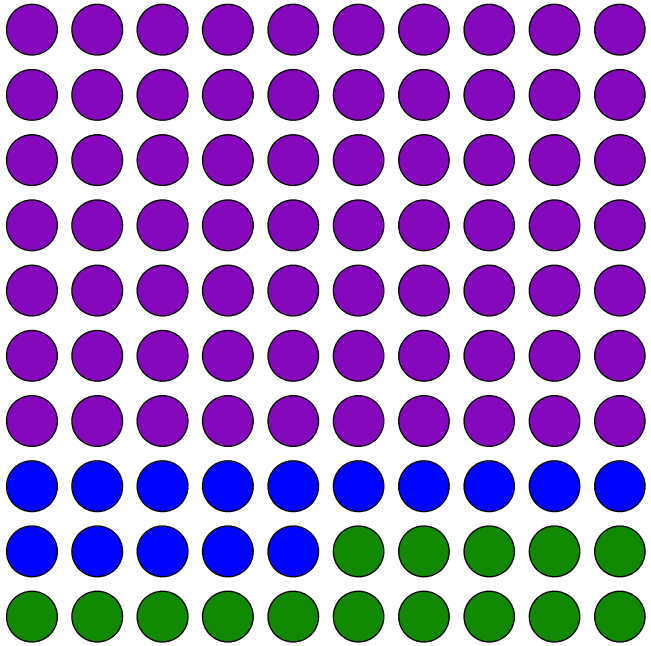
Subglottic Stenosis



Bronchial Stenosis



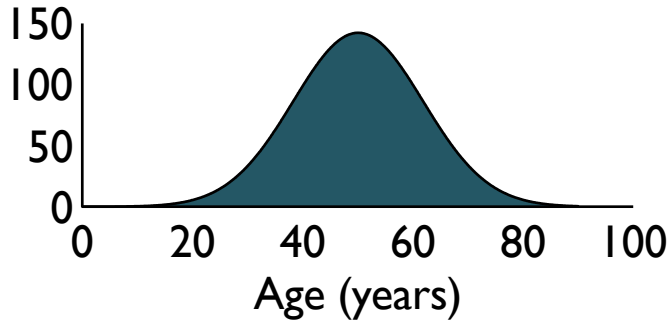
Causes of Laryngotracheal Stenosis



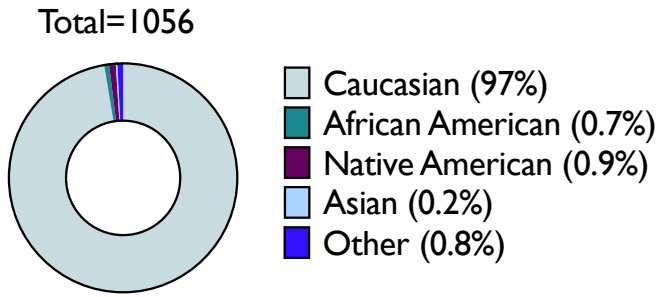
Idiopathic
Autoimmune
Iatrogenic (post intubation)

iSGS Demographics

Age

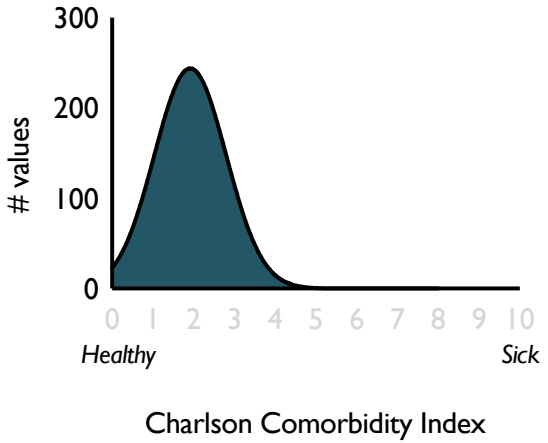


Race

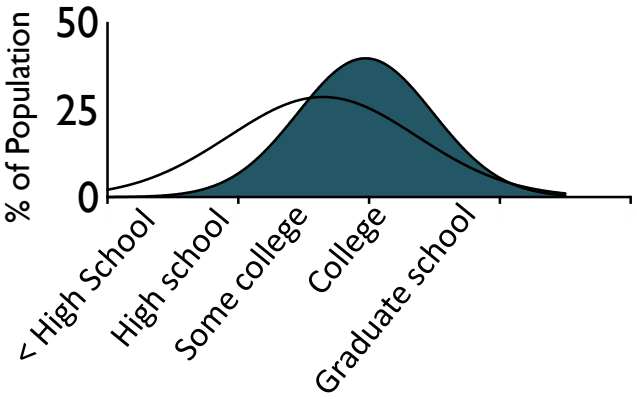


Sex

Health



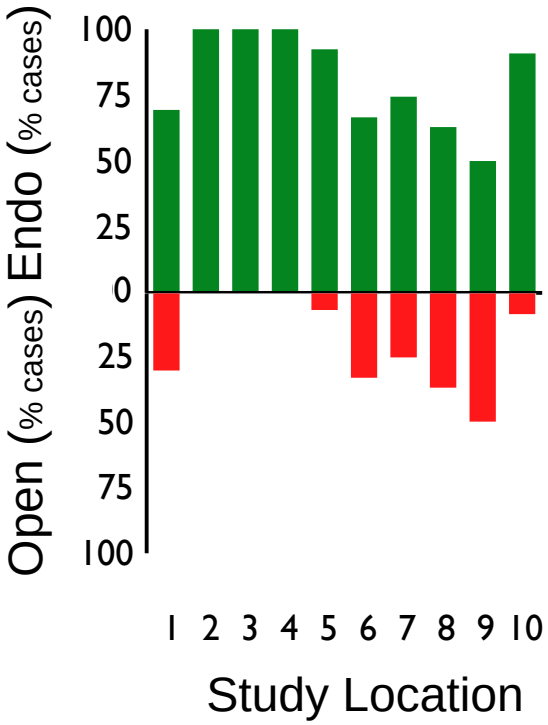
Education/SES

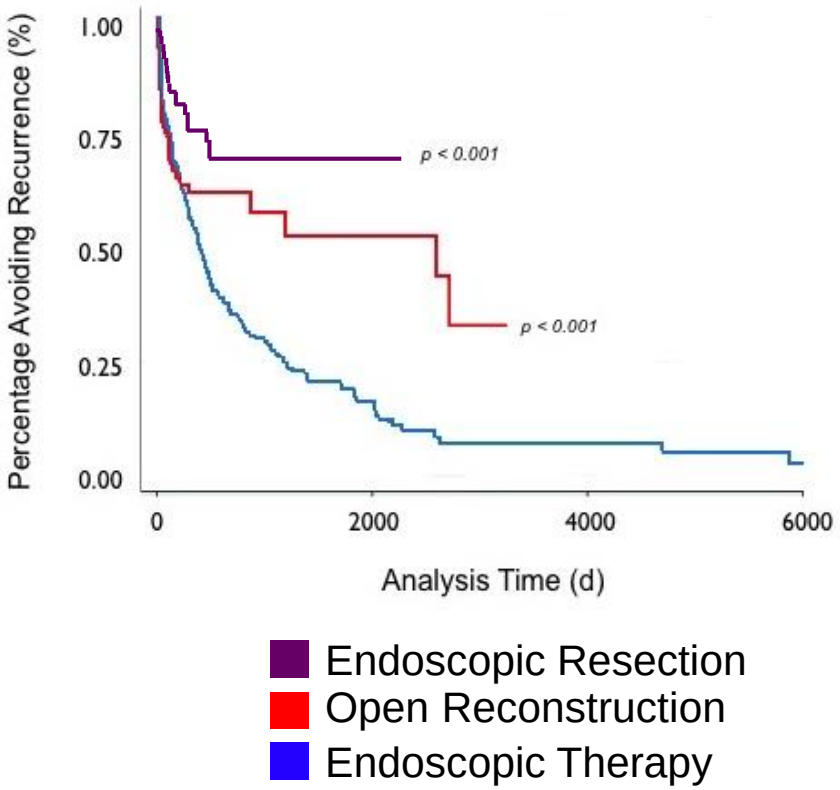


VANDERBILT HEALTH

VANDERBILT CENTER FOR COMPLEX AIRWAY RECONSTRUCTION

Treatment Variation in iSGS Across Centers





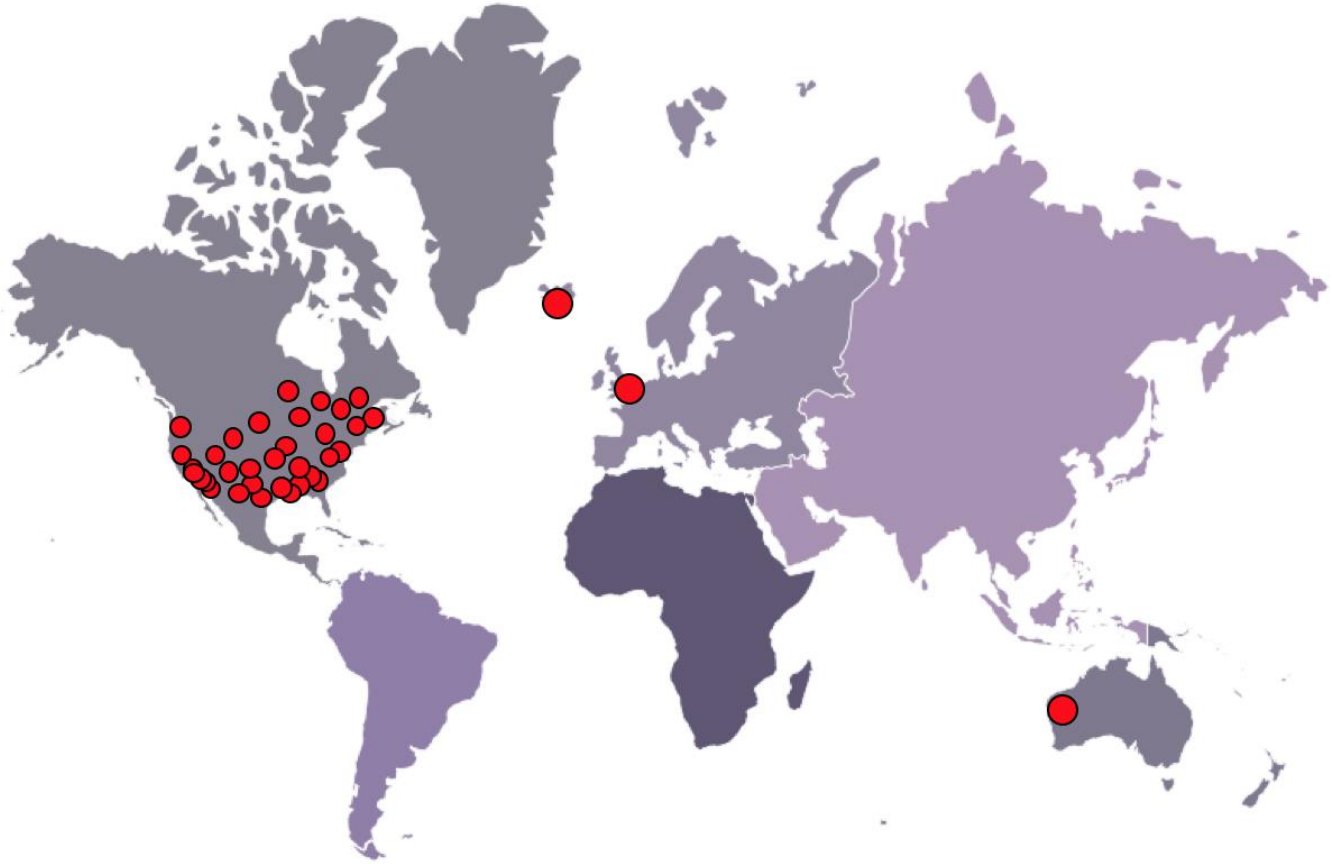
Disease Homogeneity, Treatment Heterogeneity in idiopathic Subglottic Stenosis. Laryngoscope 2016.

North American Airway Collaborative (NoAAC)

NoAAC

the north american airway collaborative

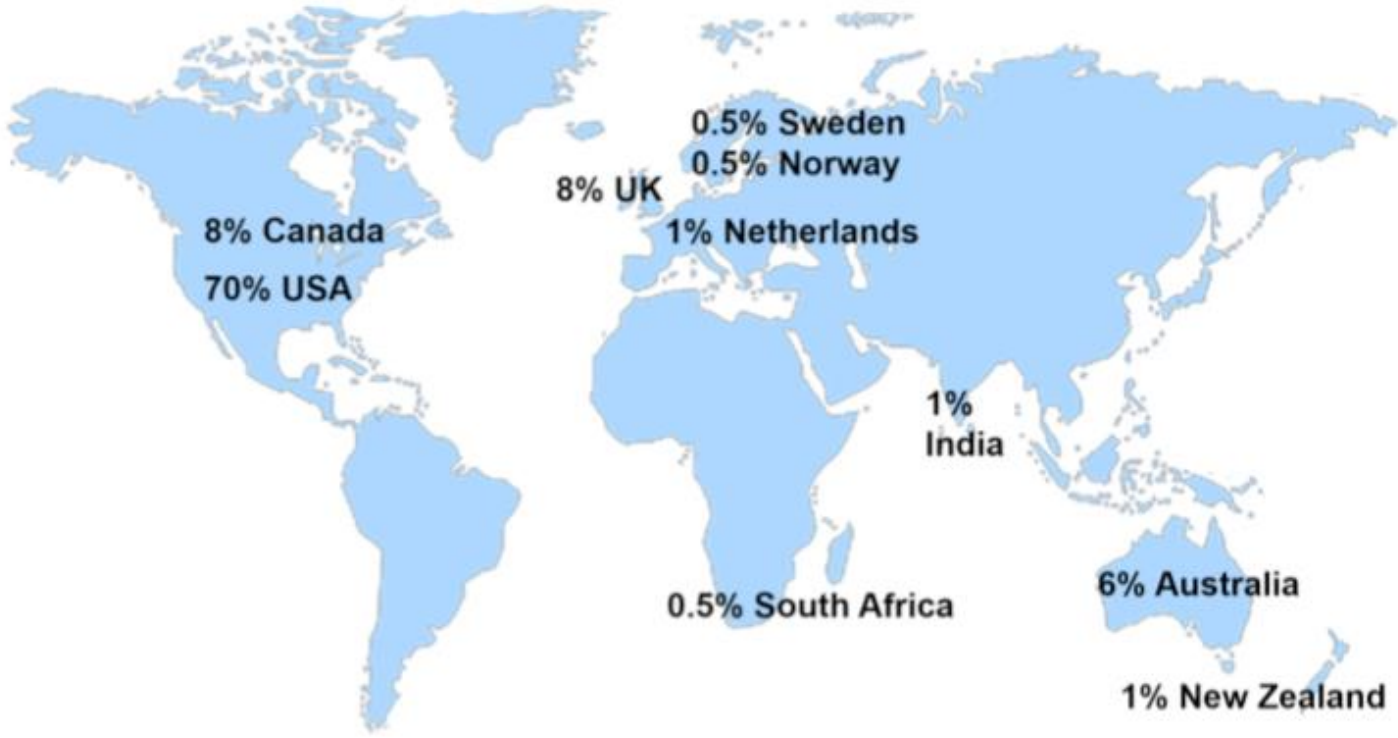
www.noaac.net



facebook: online community Living with Idiopathic Subglottic Stenosis

facebook
Living with Idiopathic
Subglottic Stenosis

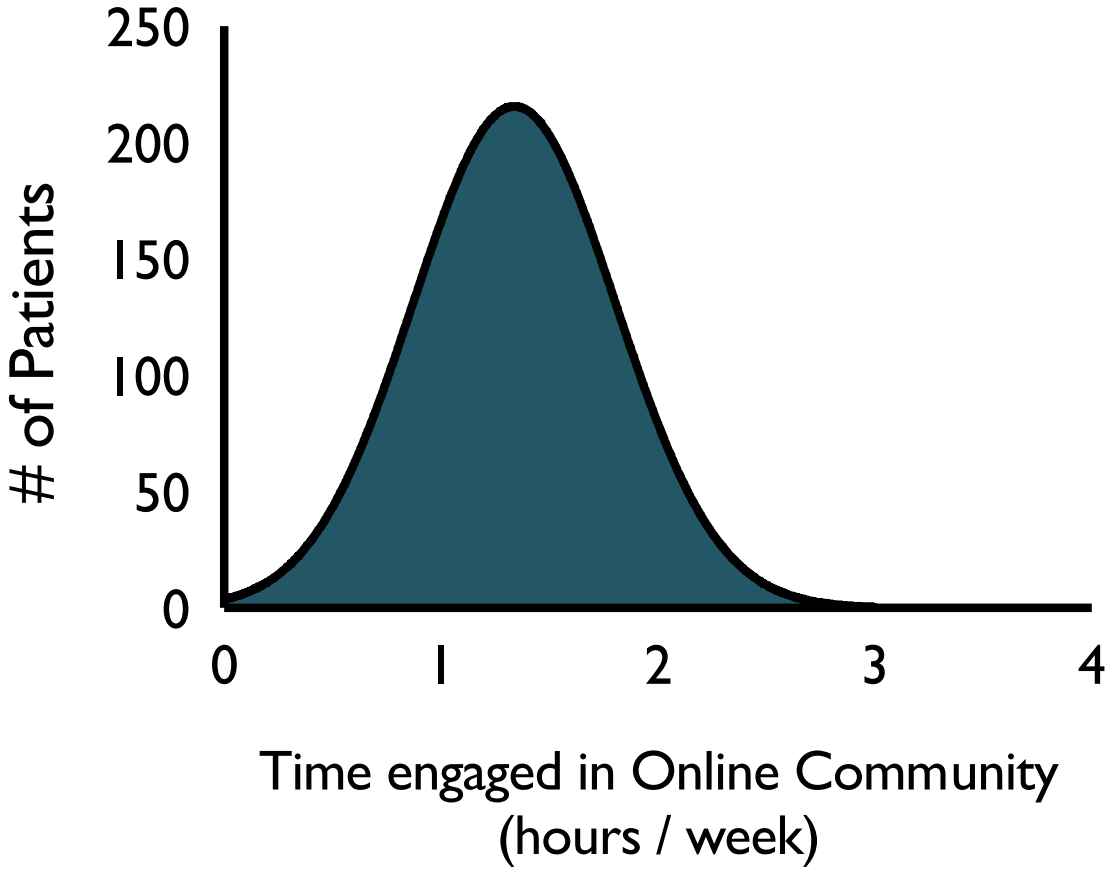
N = 2600
global members



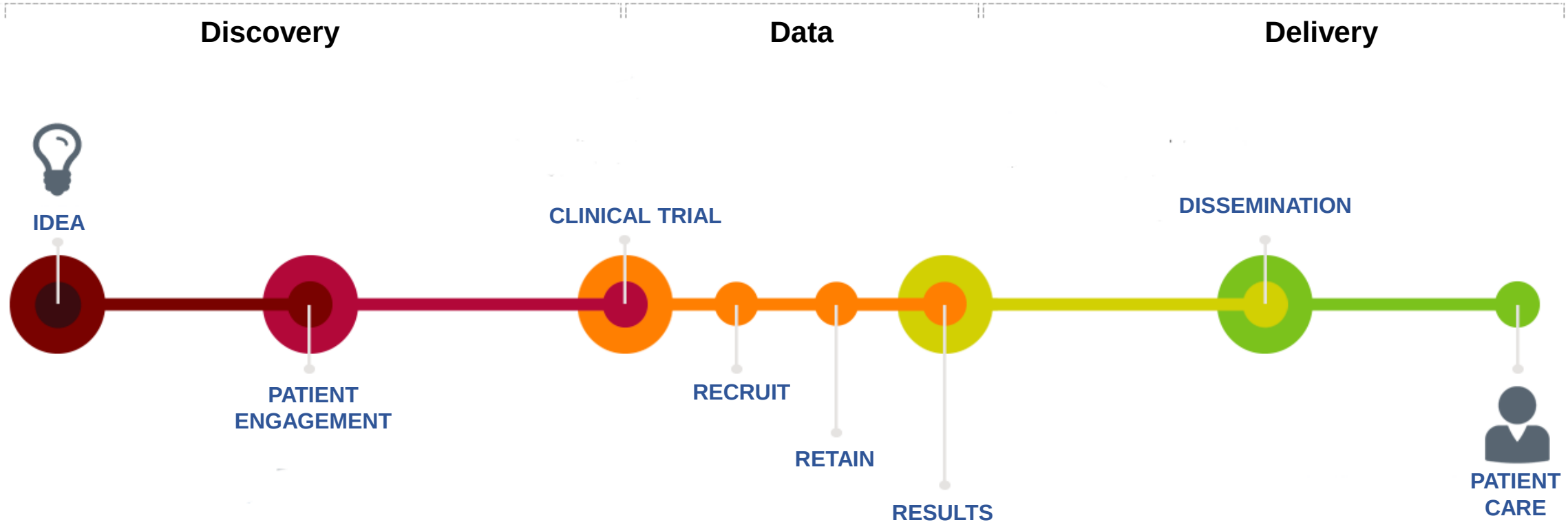
Time Engaged in facebook Online Community

facebook
Living with Idiopathic Subglottic Stenosis

N = 2600
global members



Integrating Online Communities into Translational Research



Scientific Priorities of the iSGS Facebook Support Group

1. How well do the current treatments in iSGS work?
2. Why did this happen to me?

NoAAC PR-02 Study: (NCT02481817)

Prospective Observational Cohort Study

Comparing 3 major treatment strategies

- Dilation
- Endoscopic Resection with Adjuvant medications
- Open Cricotracheal Resection

NoAAC PR-02 Study: (NCT02481817)

Prospective Observational Cohort Study

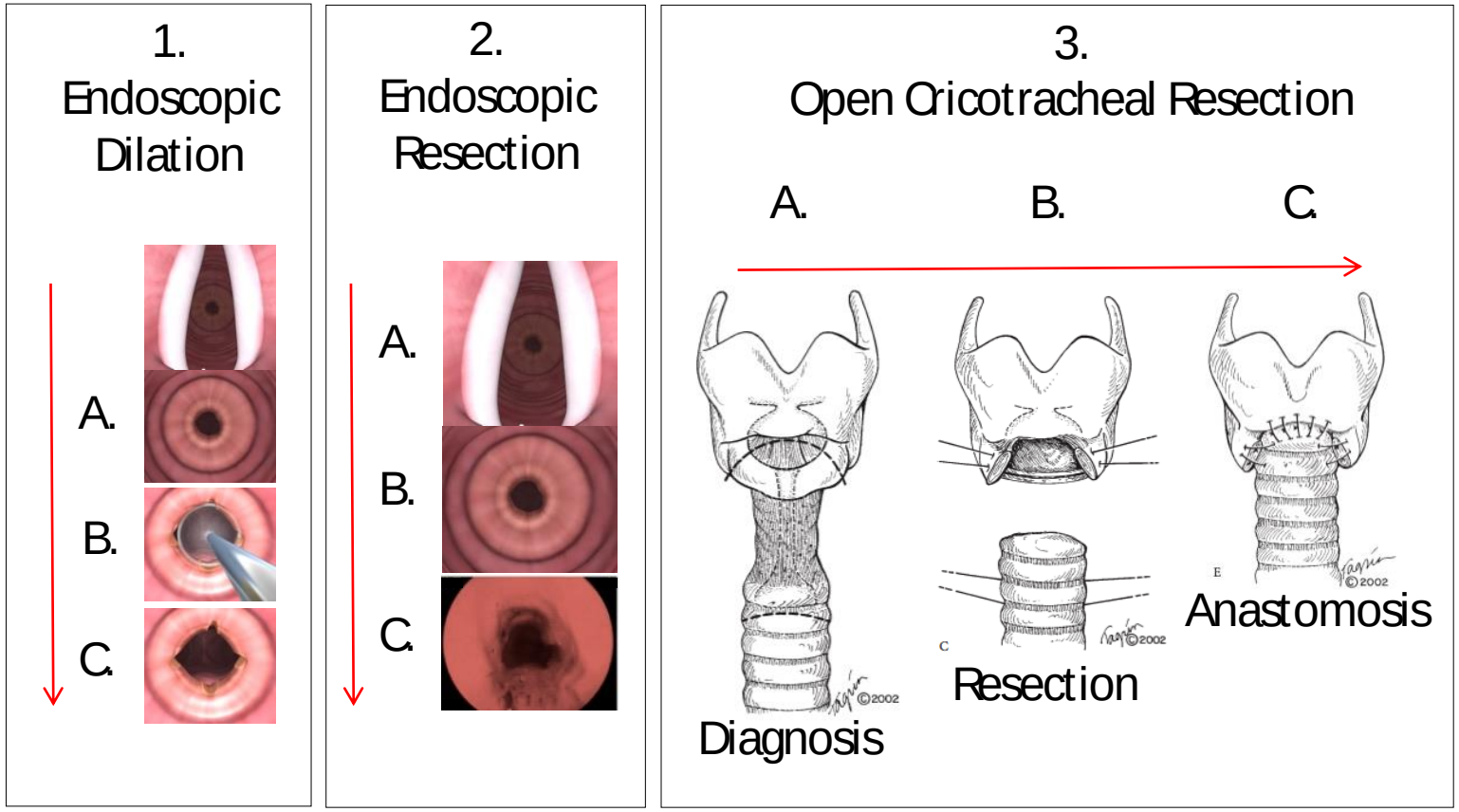
Comparing 3 major treatment strategies

- Dilation
- Endoscopic Resection with Adjuvant medications
- Open Cricotracheal Resection

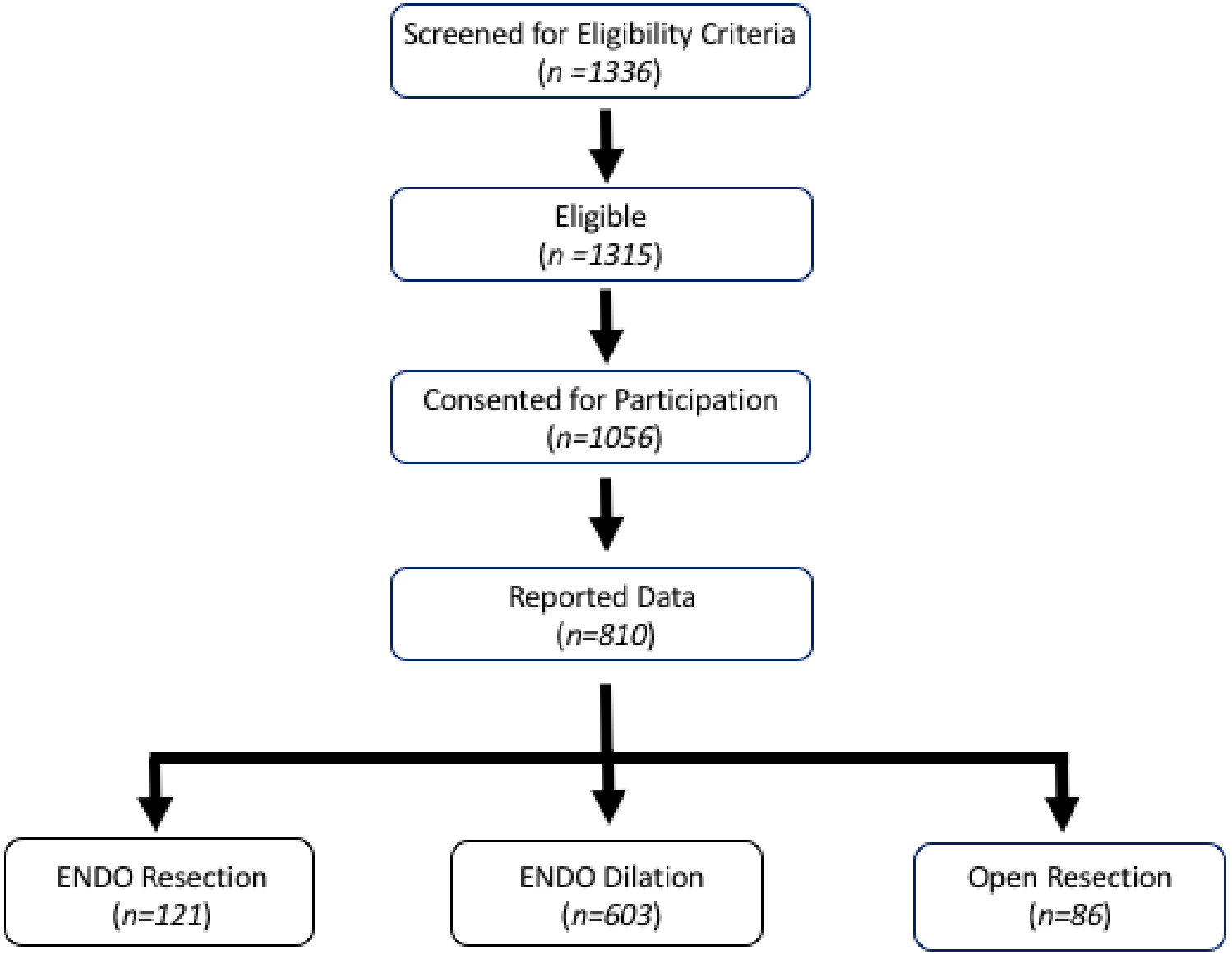
1. How well the most commonly used treatments in iSGS work?
2. What quality-of-life trade-offs are associated with each approach.

Gelbard et al. Treatment Options in Idiopathic Subglottic Stenosis: Protocol for a Prospective Multicenter Trial. BMJ Open 2018.

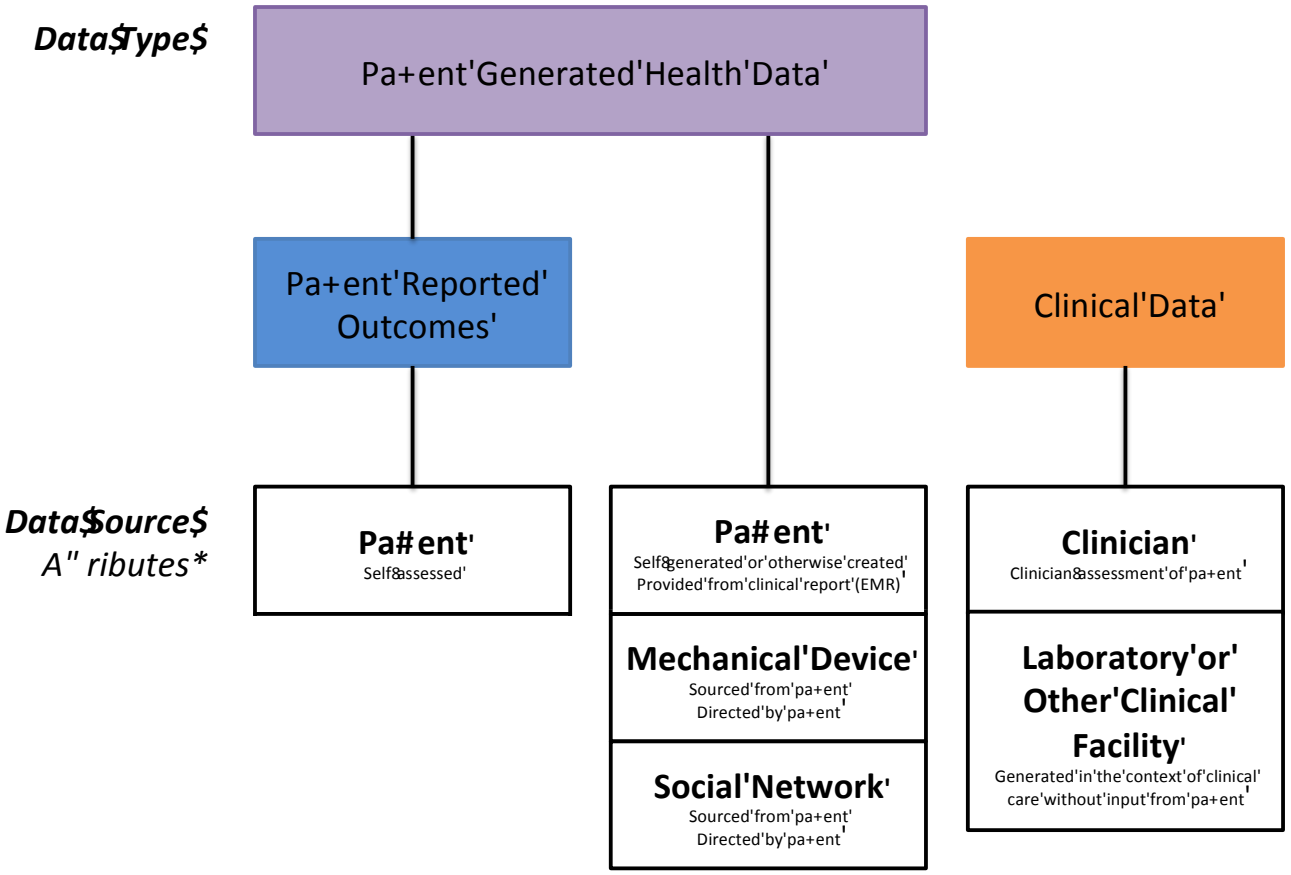
Approaches


1.
Endoscopic
Dilation
A.
B.
C.
2.
Endoscopic
Resection
A.
B.
C.
3.
Open Cricotracheal Resection
A.
B.
C.
©2002
Diagnosis
©2002
Resection
©2002
Anastomosis

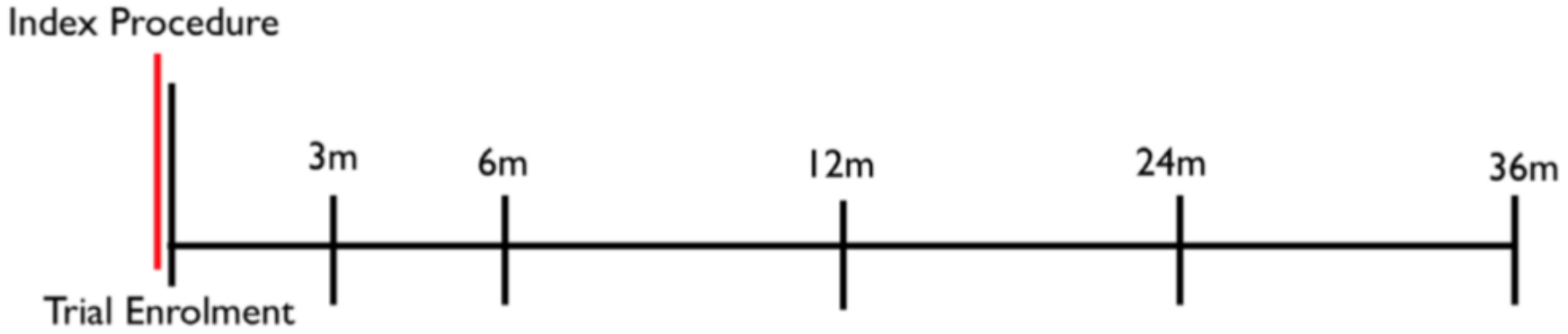
Study Flow


Screened for Eligibility Criteria
(n =1336)
Eligible
(n =1315)
Consented for Participation
(n=1056)
Reported Data
(n=810)
ENDO Resection
(n=121)
ENDO Dilation
(n=603)
Open Resection
(n=86)

Novel Trial Methodology



Study Flow



Digital Trial Infrastructure

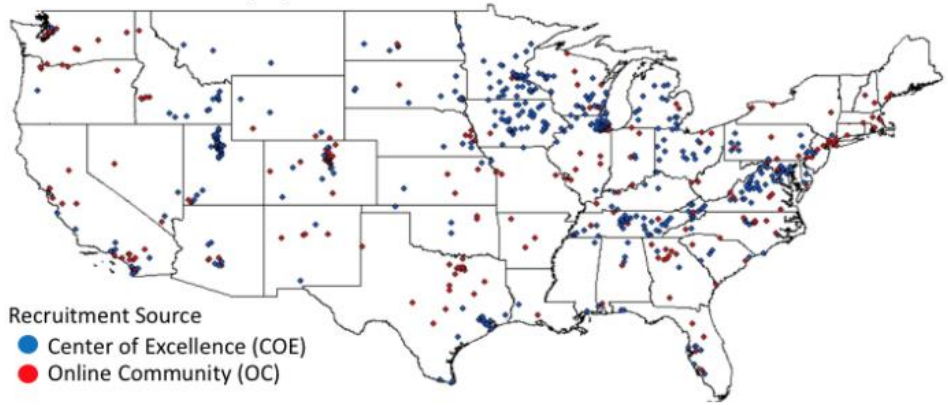
- E-consent
- Demographics
- Medical Records

Automated Longitudinal Follow Up

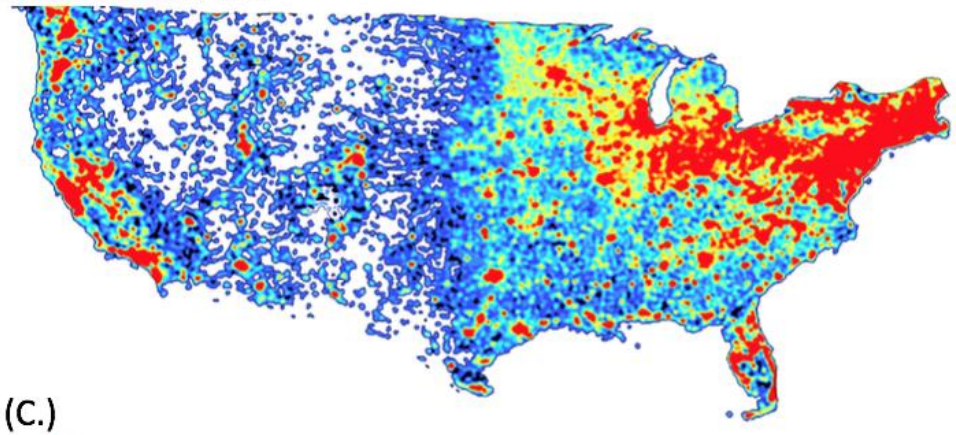
Patient Generated Health Data

Patient Physiology
(Activity and Peak Flow Readings via digital mobile platform)

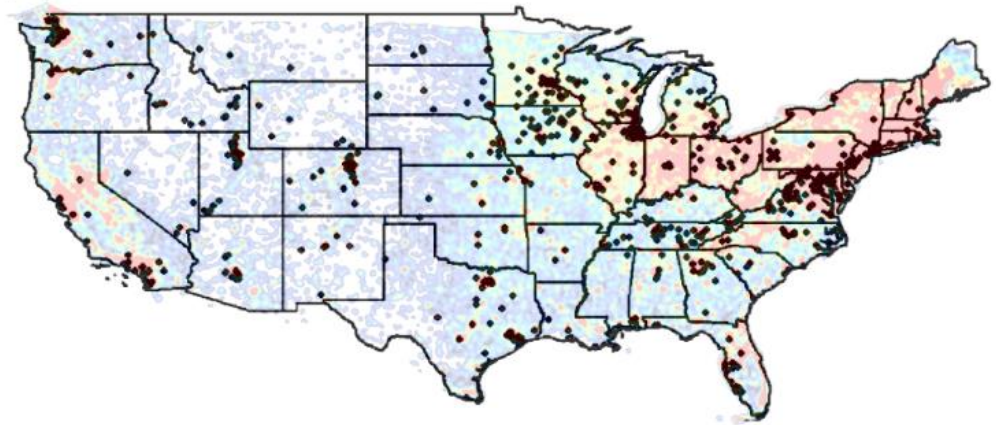
iSGS Patient Residence (A.)



US Population Density (B.)



Overlay (C.)



NoAACPR-02 Study:

Prospectively demonstrate effectiveness of standard treatments

NoAACPR-02 Study:

Prospectively demonstrate effectiveness of standard treatments

Suggest differential effectiveness at avoiding disease recurrence

NoAACPR-02 Study:

Prospectively demonstrate effectiveness of standard treatments

Suggest differential effectiveness at avoiding disease recurrence

Demonstrate differential functional impact on voicing

Acknowledgements

PR-02 Trial Team

VANDERBILT HEALTH

Dr. David Francis (co-PI)
Dr. Yu Shyr PhD
Dr. Lynne Berry PhD
Christopher Wootten
Cheryl Kinnard RN
Kate VonWhalde
Catherine Anderson

NoAAC Collaborators

NoAAC
the north american airway collaborative

www.noaac.net

iSGS Patients

Alexander Gelbard MD
alexander.gelbard@vanderbilt.edu

VANDERBILT CENTER FOR COMPLEX AIRWAY RECONSTRUCTION

A Randomized trial of Individualized Medication Decision-Making with Decision-Aid in Lupus nephritis

Jasvinder Singh, M.B.B.S., M.P.H.

Professor of Medicine and Epidemiology, Division of Clinical Immunology and Rheumatology, The University of Alabama at Birmingham

Endowed Professor, Musculoskeletal Outcomes Research

Director, UAB Cochrane Musculoskeletal Group Satellite Center

Director, Gout clinic, University of Alabama Health Services Foundation

Staff Physician, Birmingham Veterans Affairs Medical Center

PCORI Rare Diseases Winter 2018 Meeting, 12/14/2018

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

Implementation Study: PCORI SDM award

- Implementation of an Individualized Computerized Decision-Aid for Immunosuppressive drugs for lupus, shown to be effective for reducing decision conflict
- **Implementing a DEcision-Aid for Lupus (IDEAL)**
- Evaluation approach
  - mixed methods, observational evaluation
  - Including a formative and process evaluation
- 16 geographically diverse sites throughout the U.S.
  - Mix of general rheumatology vs. lupus vs. rheumatology-renal clinics
  - Urban vs. suburban location
  - University-based vs. private practice clinics

Implementation Study: PCORI SDM award

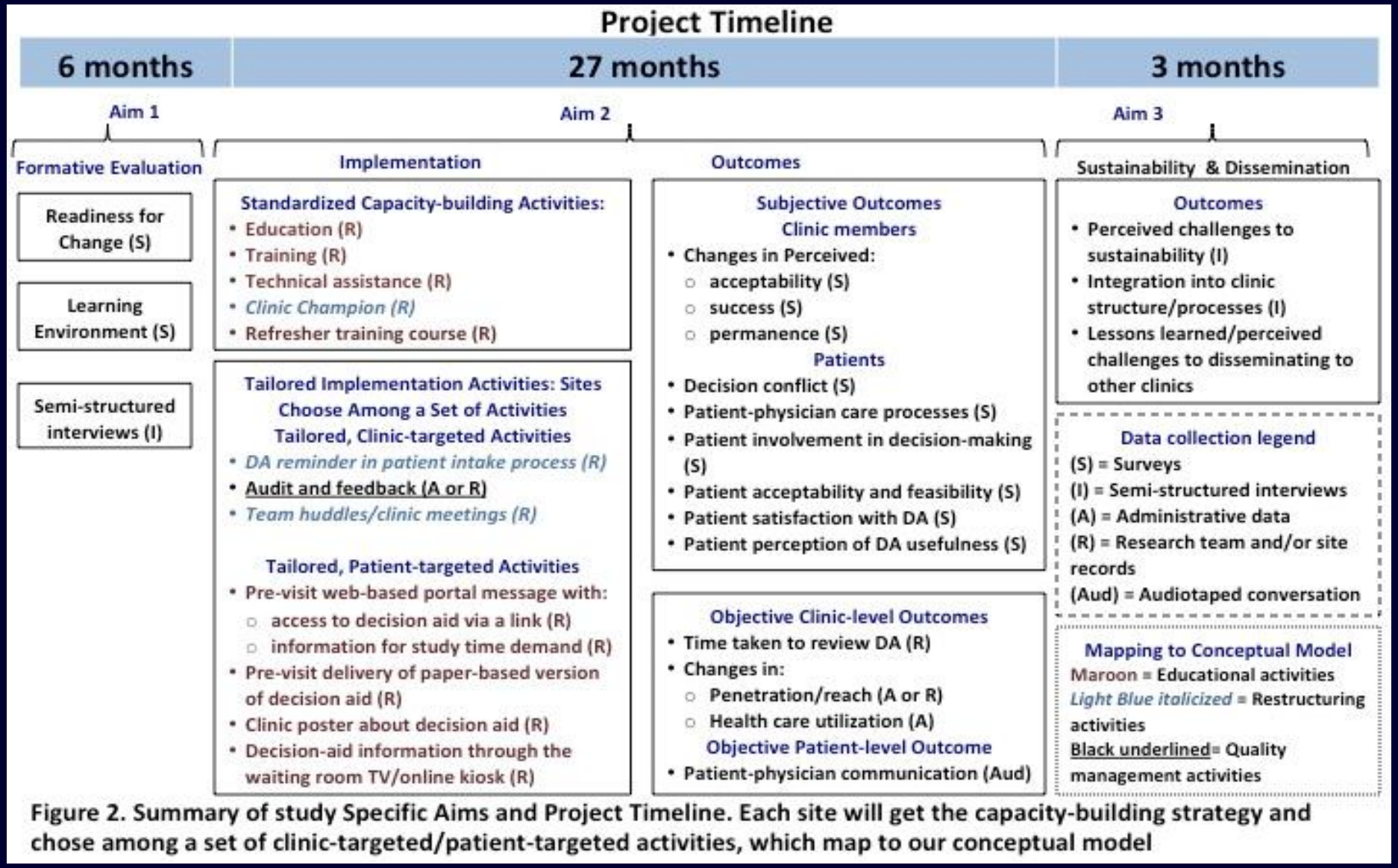


Figure 2. Summary of study Specific Aims and Project Timeline. Each site will get the capacity-building strategy and chose among a set of clinic-targeted/patient-targeted activities, which map to our conceptual model

Discussion

- What are the **critical targets** for dissemination and implementation of findings – i.e., the communities that care about and can use this information?
- Are there **consistent** audiences we should always plan to reach?
- What are the **best ways to reach** these audiences? **Best ways to present** the information?
- What can the **RDAP members** do? Can we use panel members in a more strategic and systematic way to disseminate research?
- What type of "**capacity building**" activities would best prepare audiences for future evidence uptake?

Break

11:00-11:15

PCORnet® Overview

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The National Patient-Centered Clinical Research Network

With PCORnet®, we have developed a nationwide functional research network that…

- **Engages** people, clinicians, and health system leaders throughout
- **Creates** infrastructure, tools, and policies to support rapid, efficient clinical research
- **Uses** multiple data sources including electronic health records, insurance claims data, data reported directly by people, and other data sources
- **Enables** people and systems to work collaboratively

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PCORnet® embodies a “network of networks” that harnesses the power of partnerships

9 Clinical Research Networks (**CRNs**) + 2 Health Plan Research Networks (**HPRNs**) + Patient Partners + 1 Coordinating Center = A national infrastructure for people-centered clinical research

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Clinical Research Networks (CRNs)

Accelerating Data Value Across a National Community Health Center Network (ADVANCE)
Oregon Community Health Information Network (OCHIN)

Chicago Area Patient Centered Outcomes Research Network (CAPriCORN)
The Chicago Community Trust

Greater Plains Collaborative (GPC)
University of Kansas Medical Center

Research Action for Health Network (REACHnet)
Louisiana Public Health Institute (LPHI)

Mid-South CDRN
Vanderbilt University

National PEDSnet: A Pediatric Learning Health System
The Children's Hospital of Philadelphia

New York City Clinical Data Research Network (NYC-CDRN)
Weill Medical College of Cornell University

OneFlorida Clinical Data Research Network
University of Florida

PaTH: Towards a Learning Health System
University of Pittsburgh

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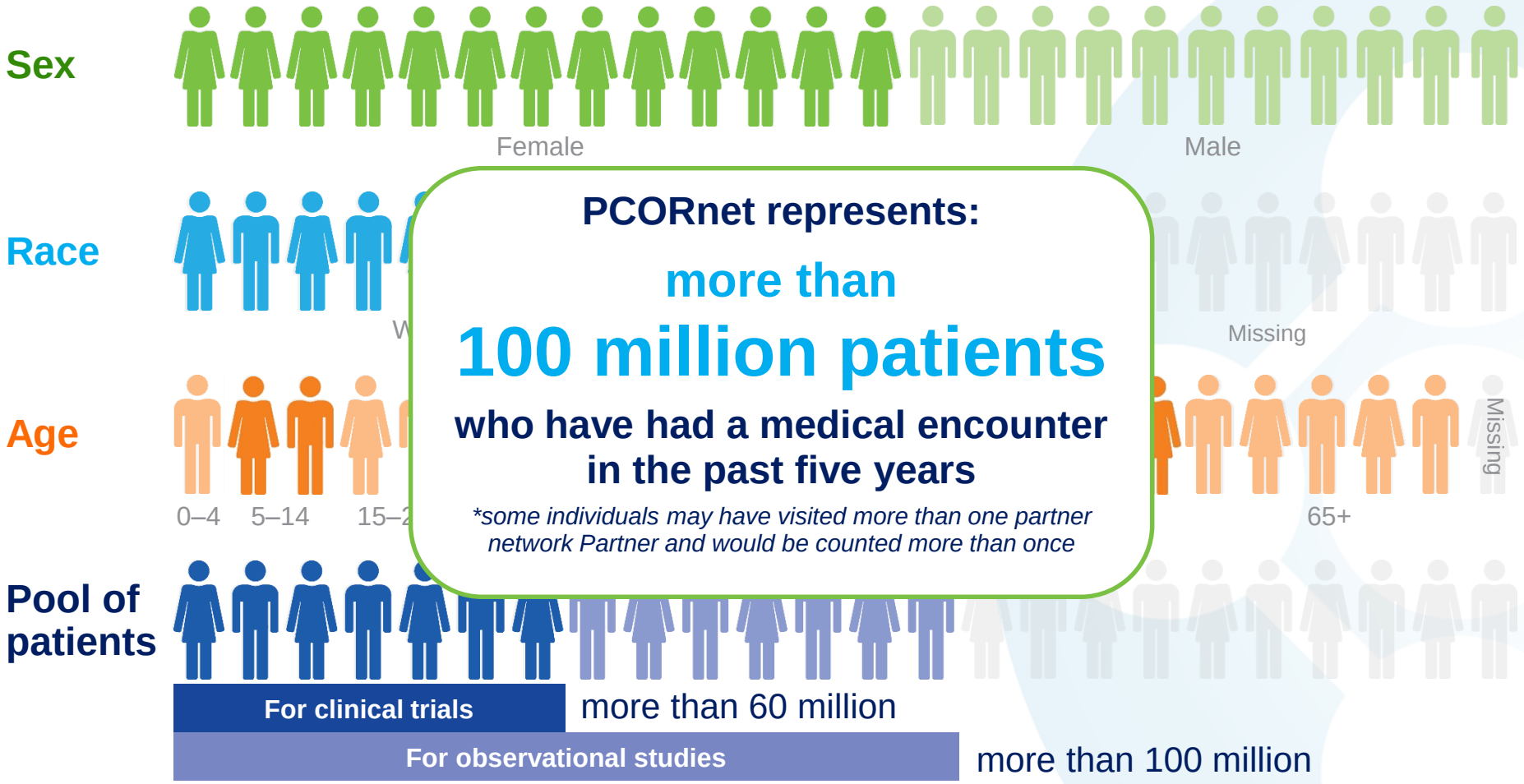
Health Plan Research Networks (HPRNs)

HealthCore (a subsidiary of Anthem)

Humana – Comprehensive Health Insights (CHI; a subsidiary of Humana Pharmacy Solutions)

Resulting in a national evidence system with unparalleled research readiness



PCORnet represents:

more than

100 million patients

who have had a medical encounter in the past five years

**some individuals may have visited more than one partner network Partner and would be counted more than once*

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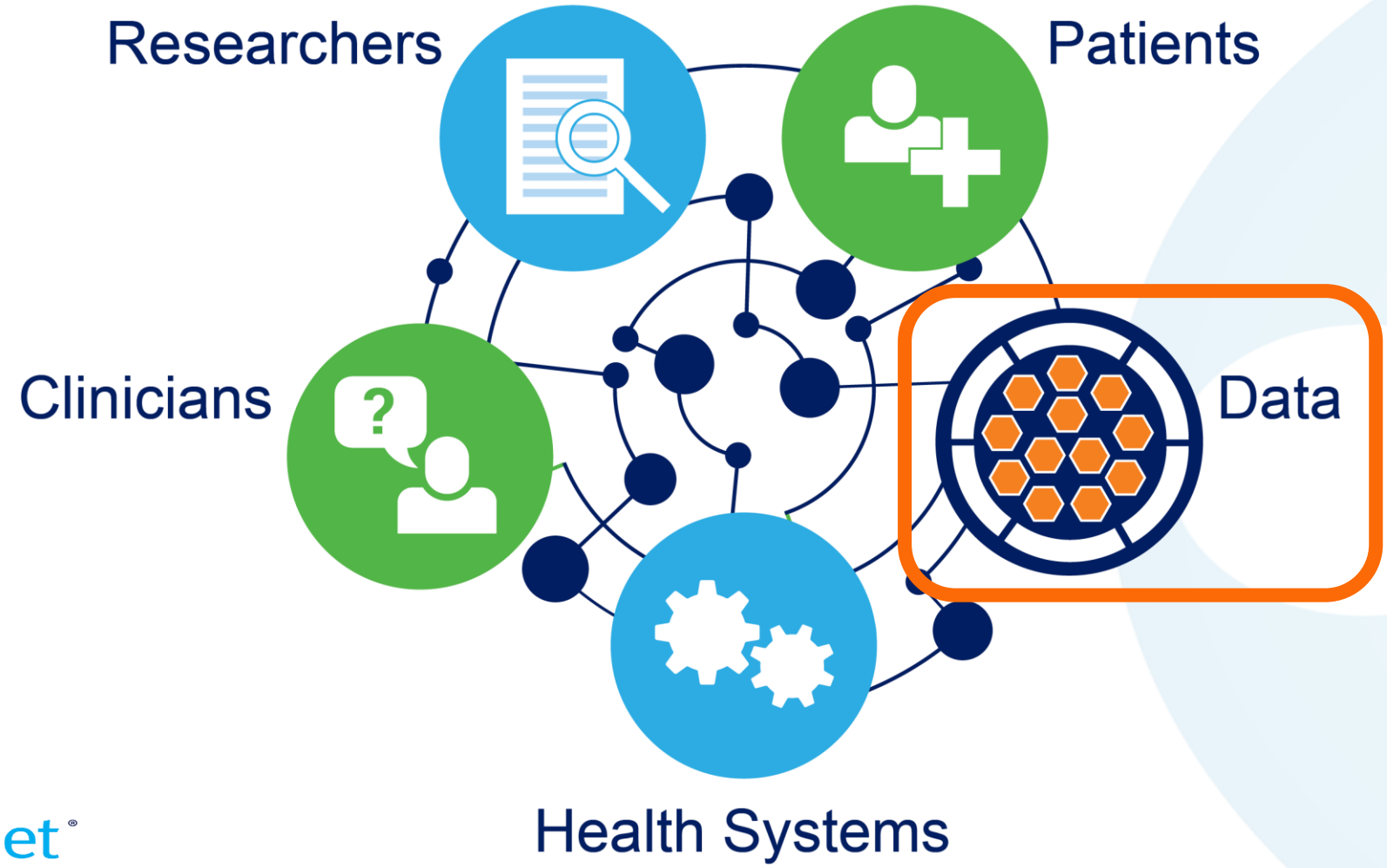
A community of research that unites data from patients, clinicians, and systems



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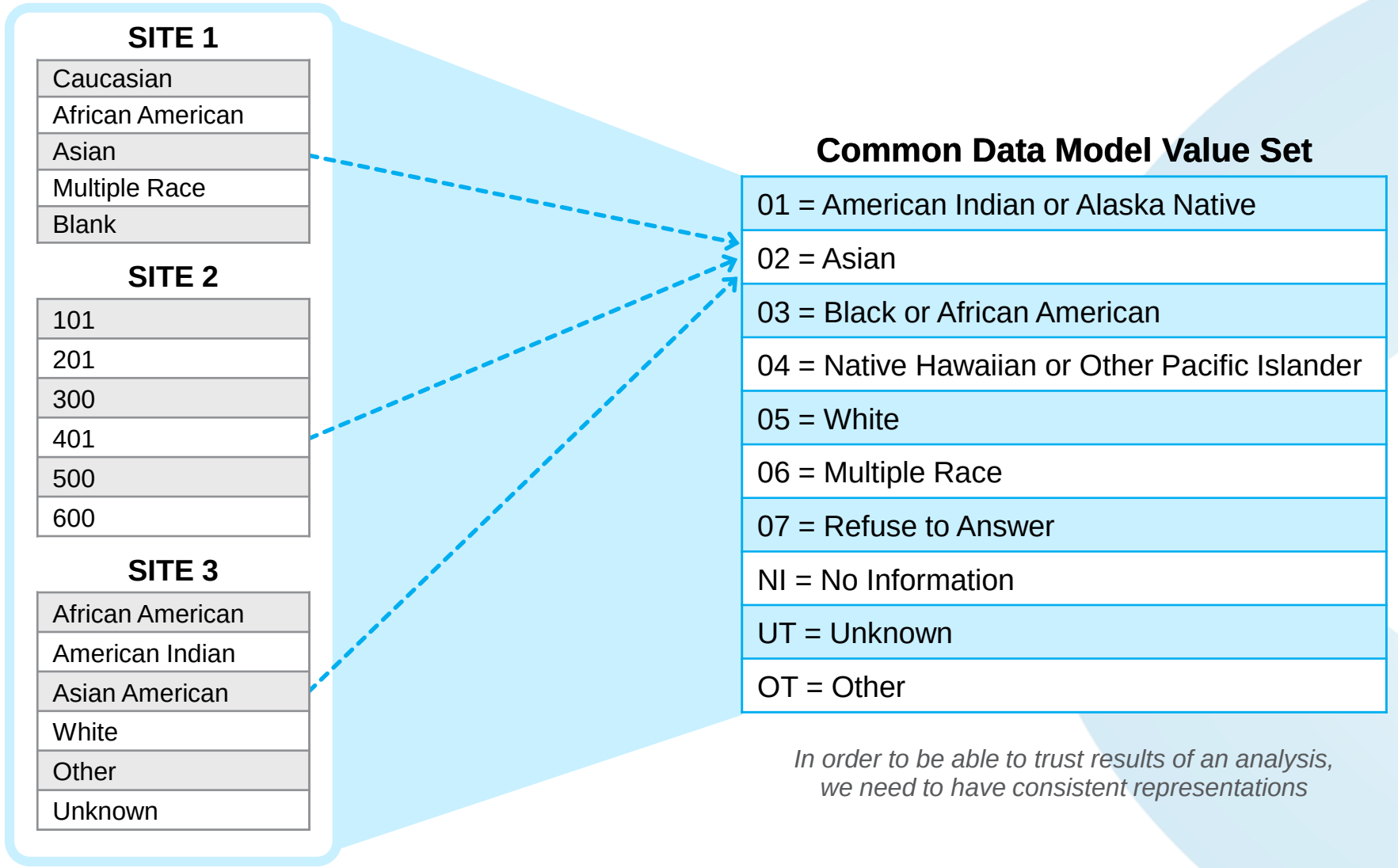
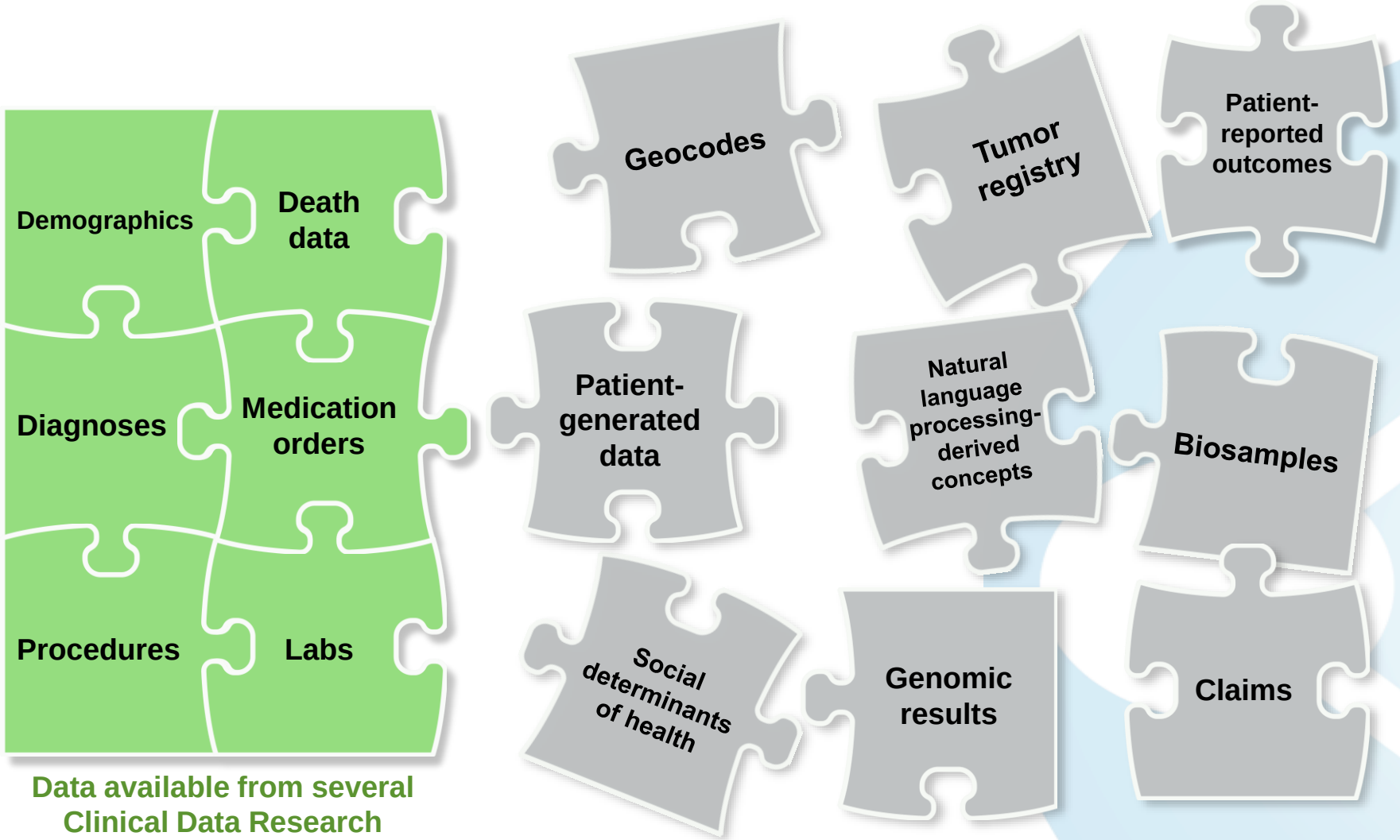
Underpinned by a Common Data Model

Same data are represented differently at different institutions (e.g., Race)



In order to be able to trust results of an analysis, we need to have consistent representations

The PCORnet Common Data Model



Data available from several Clinical Data Research Networks, in the PCORnet Common Data Model and ready for use in research.

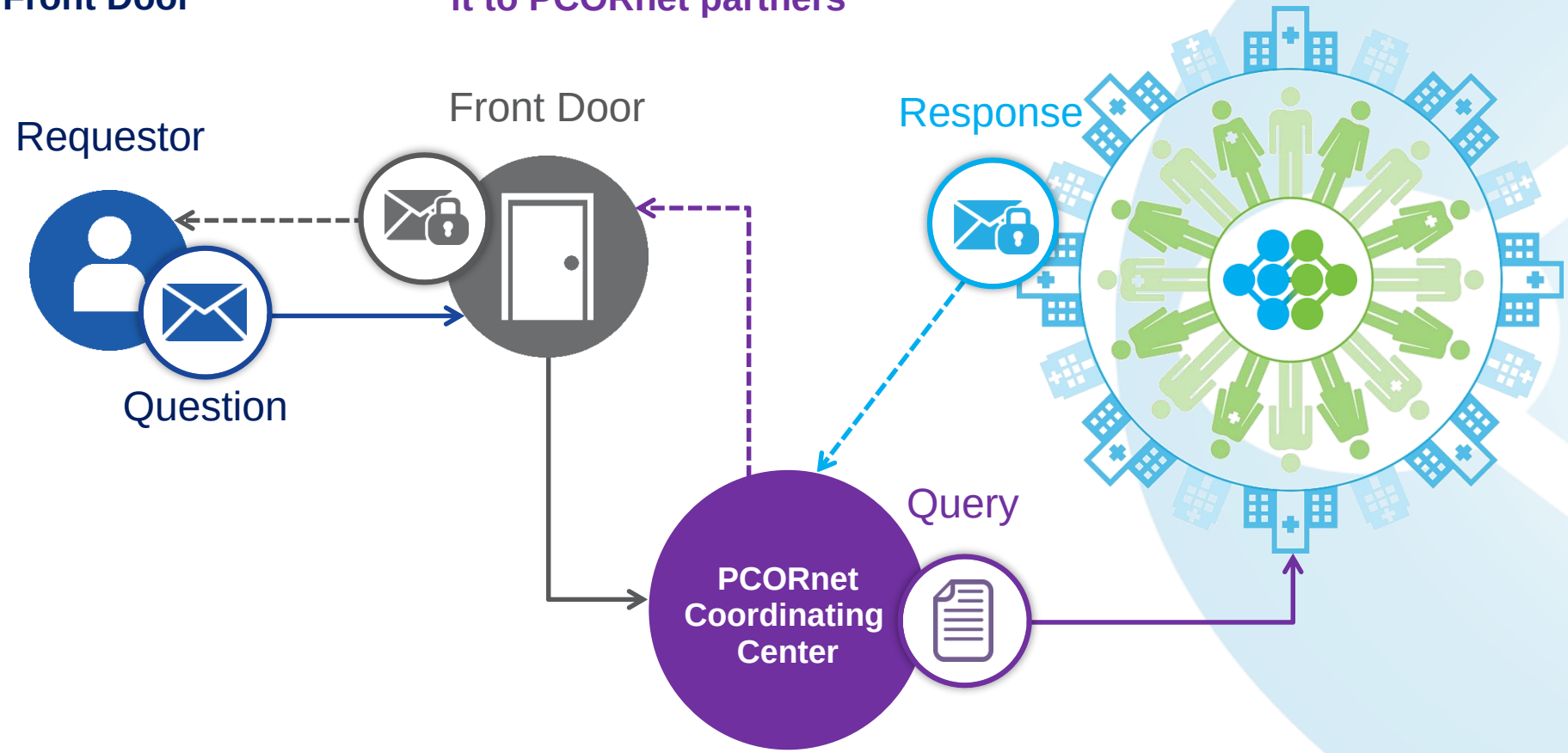
Data available at some Clinical Data Research Networks, may or may not be in the PCORnet Common Data Model and requiring additional work for use in research.

Here's how the PCORnet® distributed research network works

The Requestor sends a question to the PCORnet Coordinating Center through the Front Door

The Coordinating Center converts the question into a query with an underlying executable code, and sends it to PCORnet partners

PCORnet partners review the query and provide a response, which is sent back through the Front Door to the Requestor



Ways to Partner with PCORnet

- Queries to support project feasibility
- Queries to support study execution
- Collaborator requests

Scope of Queries in PCORnet

- Requestors coming to the PCORnet Front Door have broad range of interests and query needs
- Examples:
  - Common conditions (diabetes, respiratory conditions, selected malignancies, myocardial infarction, stroke, rheumatoid arthritis, ulcerative colitis, hypertension, renal disease, influenza and pneumonia)
  - Behavioral health, pain, and mental illness
  - Pediatric conditions
  - Infectious diseases
  - Cancer (breast, colorectal, lung, esophageal, ovarian, pancreatic, prostate, malignant breast cancer and mastectomy)
  - Chronic kidney disease
  - Autoimmune disorders
  - Rare diseases

Source of Query Requests

- Query requests come from:
  - Funders wanting more information to plan a study (Industry, federal)
  - Internal and external investigators preparing for a funding opportunity
  - Collaborative Research Groups (CRGs) within PCORnet seeking to better understand a target population of interest
- Requestors work closely with a team of data experts to specify the query request

Example of a Feasibility Query – Myasthenia Gravis

- Purpose
  - Provide counts of patients with a diagnosis of myasthenia gravis for a potential project

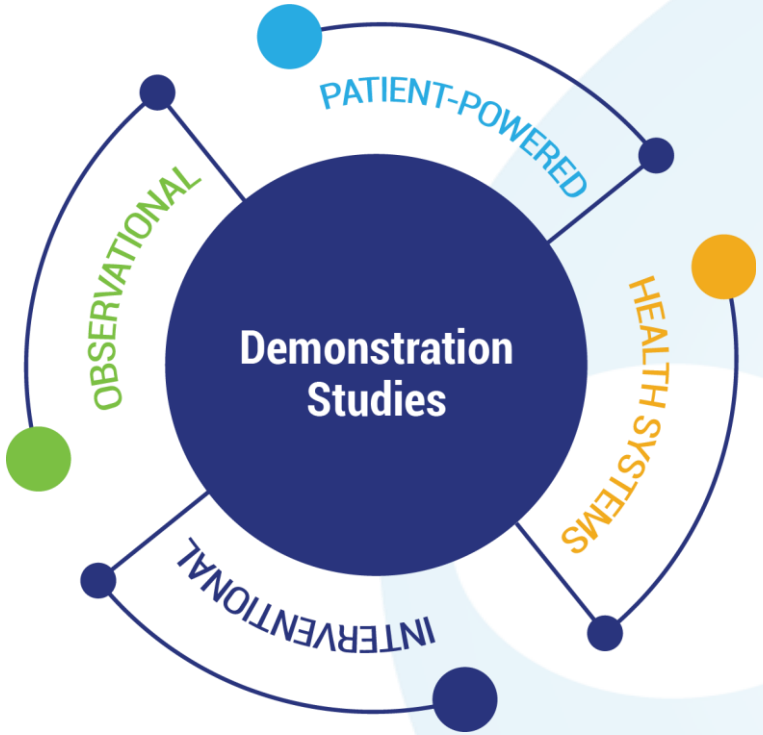
- Description
  - Query 1: Counts of patients with a diagnosis of myasthenia gravis during the query period (January 1, 2012 to June 30, 2017)
  - Query 2: Criteria from Query 1, restricted to inpatient encounters
  - Query 3: Criteria from Query 2, limited to patients who also had a medication of interest

Myasthenia Gravis

	Myasthenia Gravis (MG)		MG (Inpatient Only)		MG (Inpatient only with medication of interest)	
Total Patients	46,129		12,872		1,344	
By Gender						
Female	24,909	54%	6,887	54%	701	52%
Male	21,214	46%	5,970	46%	548	41%
Other	0	0%	0	0%	0	0%
By Age						
0-18	2,113	5%	395	3%	37	3%
19-34	4,397	10%	1,148	9%	86	6%
35-64	19,209	42%	4,510	35%	466	35%
65+	20,240	44%	6,573	51%	517	38%
By Hispanic						
Yes	3,269	7%	714	6%	55	4%
No	33,264	72%	9,495	74%	1,073	80%
Other	9,438	20%	2,455	19%	94	7%
By Race						
Black/African American	5,398	12%	1,644	13%	144	11%
White	33,326	72%	9,458	73%	931	69%
Other	7,301	16%	1,605	12%	73	5%

Queries to Support Research Projects

- Interventional studies
- Observational studies
- Health systems studies



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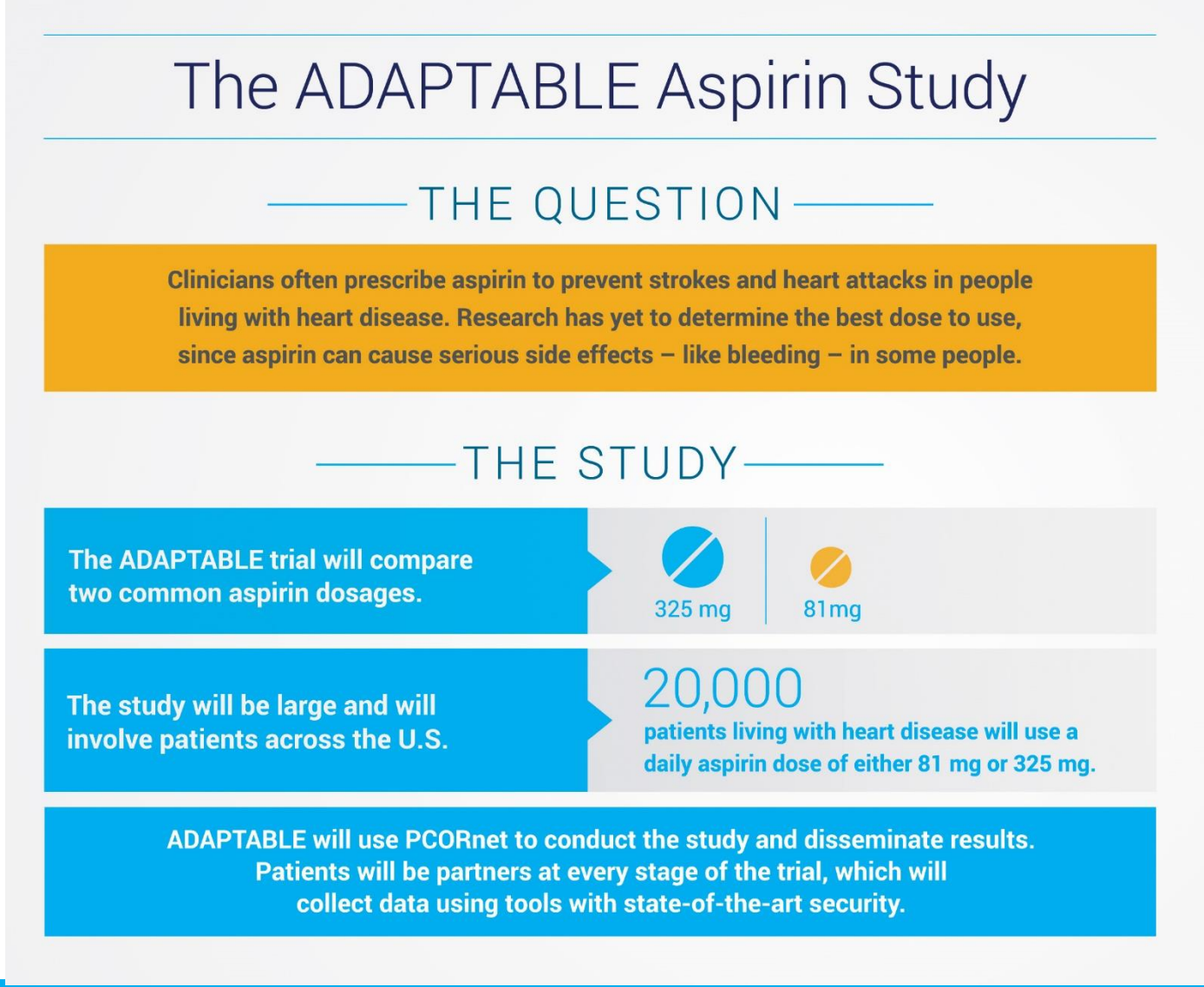
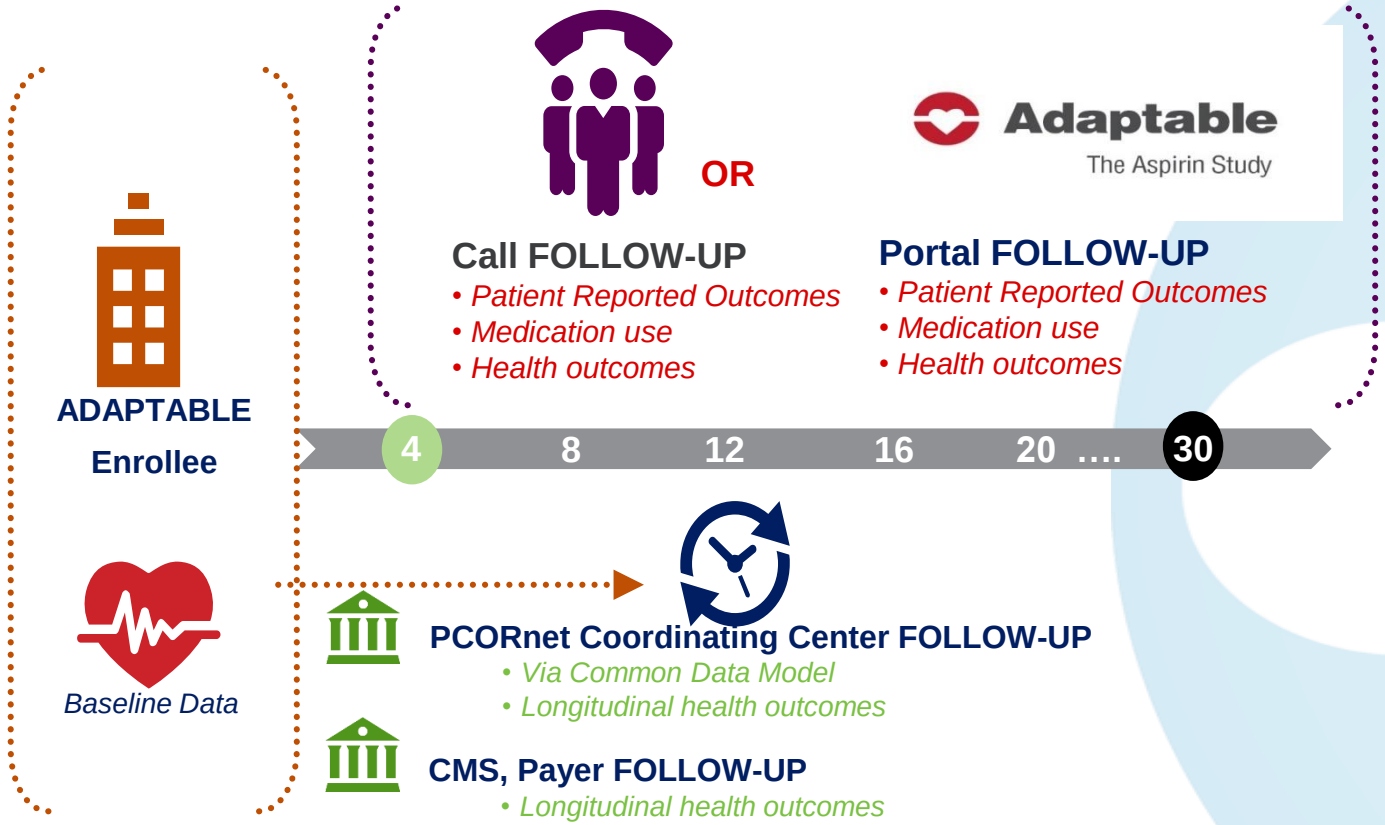
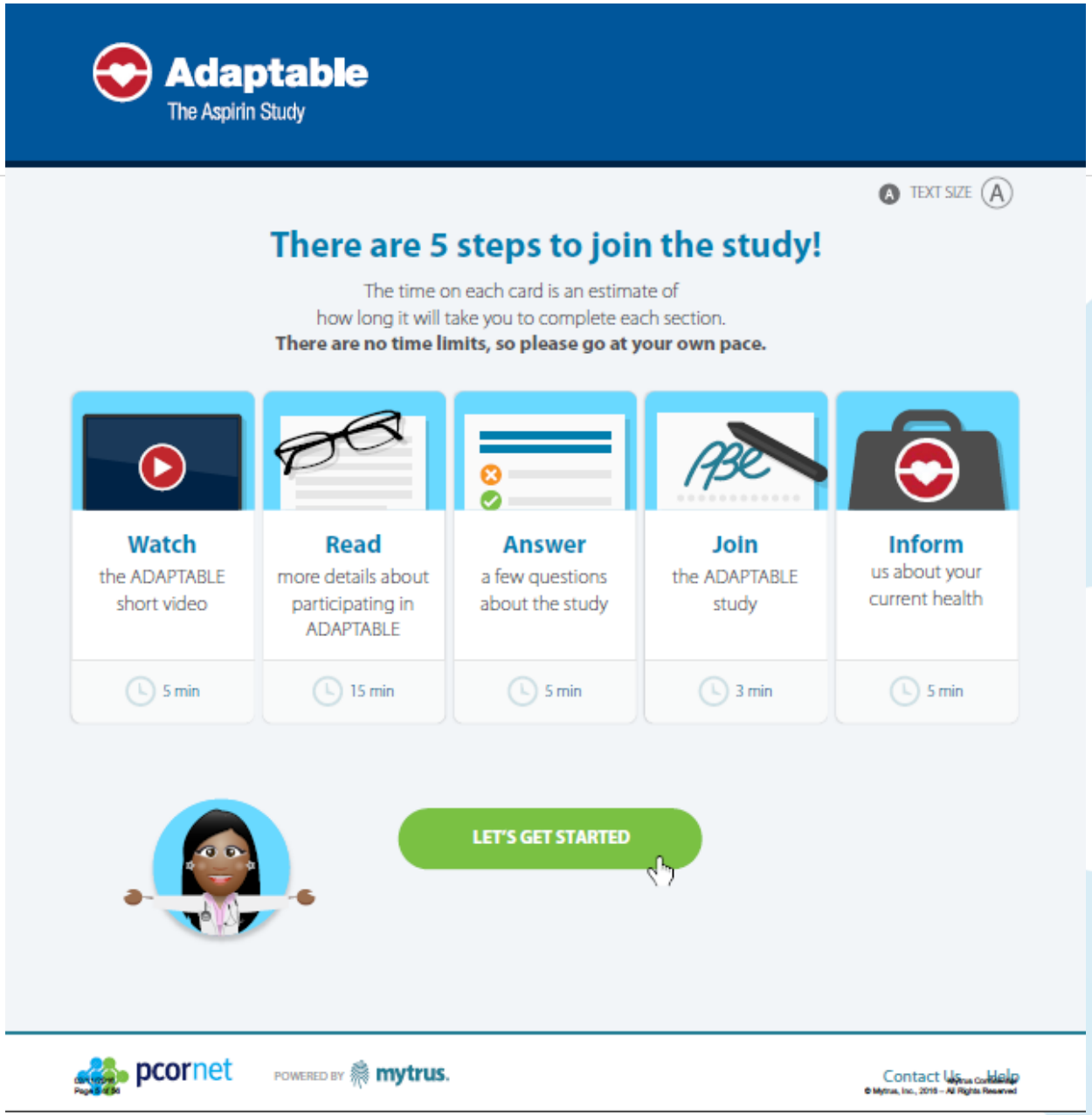
Study Example – ADAPTABLE



Enabling Pragmatic Research: eScreening, eEnrollment and eFollow-up




Adaptable
The Aspirin Study
TEXT SIZE
There are 5 steps to join the study!
The time on each card is an estimate of
how long it will take you to complete each section.
There are no time limits, so please go at your own pace.
Watch
the ADAPTABLE short video
5 min
Read
more details about participating in ADAPTABLE
15 min
Answer
a few questions about the study
5 min
Join
the ADAPTABLE study
3 min
Inform
us about your current health
5 min
LET'S GET STARTED
pcornet
POWERED BY mytrus.
Contact Us
Help

Average Site Enrollment

CDRN	Site	Started Enrollment	Total Enrolled	Enrollment Rate/Month
Mid-South	Vanderbilt	April-16	2,022	65.2
Mid-South	Duke	November-16	1,430	59.6
LHSNet	UMich	February-18	291	32.3
HPRN	HealthCore	November-17	358	29.8
Mid-South	UNC	April-17	584	30.7
LHSNet	Mayo	December-17	321	29.2
LHSNet	Essentia	February-18	267	29.7
Mid-South	Wake Forest	September-18	149	74.5
OneFlorida	U of Florida	November-16	603	25.1
REACHnet	Ochsner	April-16	630	20.3
PaTH	UPMC	August-16	505	18.7
NYC-CDRN	Montefiore	November-16	440	18.3
GPC	KUMC	November-16	469	19.5
PaTH	Utah	October-16	393	15.7
GPC	Iowa	August-16	434	16.1
GPC	Indiana	September-17	168	12.0
NYC-CDRN	Weill Cornell	March-17	236	11.8
GPC	MCW	January-17	285	13.0
LHSNet	Allina	July-18	57	14.3
CAPriCORN	U of Chicago	February-17	238	11.3
GPC	Marshfield Clinic	February-17	233	11.1
PaTH	Penn State	October-16	260	10.4
LHSNet	OSU	May-18	75	12.5
LHSNet	Intermountain	June-18	76	15.2
CAPriCORN	Northwestern	September-16	188	7.2
REACHnet	BSW	October-16	174	7.0
pScanner	UCLA	November-16	131	5.5
GPC	Missouri	March-17	102	5.1
CAPriCORN	Rush	February-17	102	4.9
PaTH	Johns Hopkins	June-17	76	4.5
GPC	Nebraska	April-17	74	3.9
PaTH	Temple	October-16	82	3.3
GPC	UTHSCSA	December-17	28	2.5
OneFlorida	Florida Hospital	August-18	8	2.7
OneFlorida	Orlando Health	September-18	2	1.0
NYC-CDRN	NYU	November-16	34	1.4
GPC	UTSW	March-17	26	1.3
NYC-CDRN	Mt Sinai	March-17	22	1.1
OneFlorida	Bond	September-18	1	0.5
REACHnet	Tulane	October-16	5	0.2

Adaptable

Example of Feasibility & Collaborator Request – Multiple Sclerosis (MS)

- Internal PCORnet investigator preparing a PCORI grant application to assess the effectiveness of various disease-modifying therapies (DMTs) for MS

- Approached the team for help to understand:
  - Feasibility of conducting a study of MS in PCORnet, based on available data
  - Availability of PCORnet investigators interested in collaborating

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Data Feasibility

- Query distributed to assess the number of distinct patients in 2015 with a diagnosis code for MS stratified by age, sex, and race

- Results include responses from 58 data partners

	Multiple Sclerosis	
Total Patients	88,766	
By Sex		
Male	18,400	23%
Female	62,466	77%
Other	2	0%
By Age		
1-29	4186	5%
30-39	12,531	15%
40-49	18,970	23%
50-59	22,432	28%
60-69	16,889	21%
70-89	5,860	7%
By Hispanic		
Yes	2,160	3%
No	62,036	77%
Other	16,672	21%
By Race		
Black/African American	9,502	12%
White	65,277	81%
Other	6,089	8%

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Network Collaborator Request

- Study information was disseminated to PCORnet CDRN Network Partners through multiple communication channels
  - PCORnet Weekly Announcements
  - Direct contact of the Network Navigators
  - Study team held informational webinar
  - Information posted on collaboration website
- 17 individual investigators from 8 Network Partners indicated interest in collaborating

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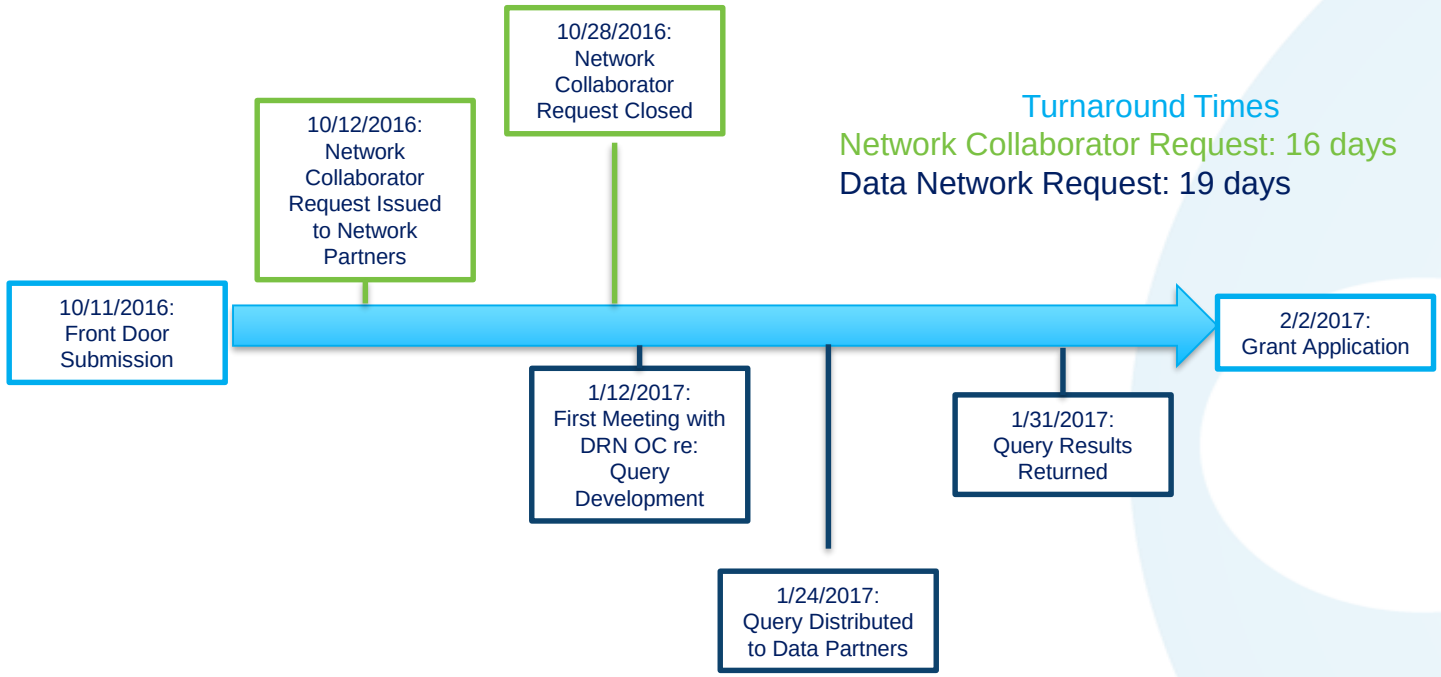
Front Door Activity Timeline



Overall Outcome

- The initial study application was not funded
- The collaboration of newly engaged partners continued and additional opportunities were pursued

The Future of PCORnet with the People-Centered Research Foundation (PCRF)

- PCORI positioned PCORnet for success and sustainability
- PCRF was established in 2017 to ensure continued success and sustainability of the Network and will support infrastructure and governance of the Network
- The vision of PCRF is to create a sustainable network that conducts patient-centered research and answers questions important to patients, caregivers, clinicians, and the broader healthcare community.
- Visit pcornet.org/frontdoor to learn more and begin a conversation
  - All study requests will be reviewed to ensure mission alignment and financial viability

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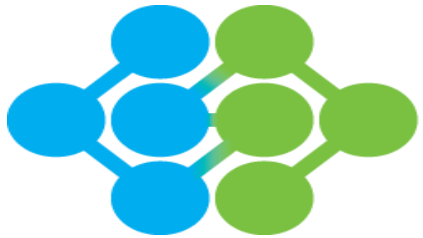
More information on PCORnet®

- Website: www.pcornet.org
- PCORnet Commons: http://pcornetcommons.org/
- Twitter: @PCORnetwork



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The National Patient-Centered Clinical Research Network

Lunch

PCORI's Future Rare Disease Research

Andrew Hu, MPP, Director, Public Policy and Government Relations

Gyasi Moscou-Jackson, PhD, MHS, RN, Program Officer, Healthcare Delivery and Disparities Research

Sarah Philbin, MPH, Program Associate, Clinical Effectiveness and Decision Science

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PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

PCORI Reauthorization Update

Jean Slutsky, PA, MSPH
Chief Engagement and Dissemination Officer

Andrew Hu, MPP
Director, Public Policy and Government Relations

Current Standing on Reauthorization

- A set of bipartisan Senators have agreed to lead efforts and introduce legislation reauthorizing PCORI in 2019.
  - Tentative plan is for these Senators to introduce “marker” legislation during this lame duck session (Nov/Dec)
  - This proposed legislation would be a straight reauthorization that would extend PCORI funding until 2029 with expectation that there will be changes/tweaks when legislation is reintroduced in 116th Congress

- Third-party advocates are also building an independent, proactive effort to support PCORI.
  - There is an effort to coordinate among various stakeholder organizations/communities to support a unified effort to support PCORI reauthorization

- PCORI must still communicate its value and vision for its role moving forward.
  - Based on the input stakeholders have provided, PCORI must communicate a strong signal that, if reauthorized, it can meet the needs of stakeholders

Key Messages and Themes

PCORI will continue to showcase and demonstrate the value of our research.

Need for Information	• Need trustworthy, evidence-based information • Focus on individual patient preferences and values
Real Impact	• Examples of potential savings and impact to individual and health system (ROI) • Investment in high priority topics – opioids, heart disease, diabetes, etc.
Local Stories	• Personal stories where research led to concrete results – dollars saved, outcomes improved, etc. • Leverage impacts on individual districts or states
Unique Role	• Spend less time explaining what CER is, more time highlighting real impacts • Highlight how PCORI is different from NIH and AHRQ

Highlights of Patient-Centered PCORI-Funded Research Results

Patient-centered outcomes research results can reveal underutilized and overutilized care.

High-Impact, Underutilized

Blood Thinner Keeps Stroke Survivors in Their Homes

Using the blood thinner warfarin helped stroke survivors reduce future hospitalizations and stay in their homes—on average 46 more days at home over two years—compared with those who didn't take the drug after being discharged from the hospital. The drug also lowered the rates of stroke recurrence and heart attack, but staying at home rather than having to go to a nursing home or hospital was the outcome that mattered most to patients.

Over five years in the United States,

466

strokes could be avoided

Xian Y et al. *BMJ*. 2015; 351

O'Brien EC et al. *Circulation*. 2015 Oct 13; 132 (15)

Low-Impact, overutilized

For Many with Type 2 Diabetes, Daily Finger Sticks Offer Little Health Benefit

People with type 2 diabetes who are not using insulin are often advised to check their blood sugar levels using daily finger sticks, which can be painful and inconvenient, as well as run up out-of-pocket costs for test strips. This study suggests that for these patients, daily self-monitoring does not help control diabetes or delay the need to start insulin compared with not doing so.

Over five years,

10 BILLION

finger sticks could be avoided

Young L et al. *JAMA Intern Med*. 2017 Jul 1; 177(7)

Trending in the Right Direction

3 Years Ago

- Very little awareness about PCORI among policymakers
- No results yet to show impact and value of PCORI
- Lots of questions about our research prioritization
- Not much engagement from key stakeholders
- Little interest in reauthorization

PCORI Reactions

- Increased focus on targeted, high-priority topics
- Growing number of results and impact analyses
- Ongoing education of policymakers and engagement of key stakeholders
- Delivering on stakeholder requests (i.e., forums, new initiatives, products)

Today

- Identification of bipartisan Congressional champions
- Support for reauthorization from key stakeholders, including payers
- Continued release of impactful research findings
- Increasing awareness on the role and value of PCORI

Discussion Framing

Gyasi Moscou-Jackson, PhD, MHS, RN

Program Officer, Healthcare Delivery and Disparities Research

Findings From the PCORI Rare Disease Methodology Paper

Sarah Philbin, MPH

Program Associate, Clinical Effectiveness and Decision Science

Purpose and Approach

- Purpose:
  - To raise awareness of the available methodological and analytic approaches relevant to conducting rare disease research
- Approach:
  - Reviewed the literature on:
    - Methodological approaches to conducting research on rare diseases
    - How registries and other research infrastructure can facilitate rare disease research
  - Reviewed research methods used in PCORI's rare disease portfolio
  - Requested feedback from RDAP members and PCORI staff

Paper Overview*

- Identified and summarized 3 articles that developed algorithms/provided guidance on the relationship between rare disease or intervention characteristics and study design decisions (Appendix A)
- Described study design and analytic approaches mentioned in the literature that might be relevant to addressing research challenges posed by rare diseases (Appendix B)
- Summarized literature describing the utility of existing infrastructure for supporting rare disease research
- Provided an overview of the research methods used by PCORI-funded rare disease projects and PCORnet PPRNs focusing on one or more RDs (Appendix C)
- Suggested areas for further development

*Whicher, D., Philbin, S., & Aronson, N. (2018). An overview of the impact of rare disease characteristics on research methodology. *Orphanet journal of rare diseases*, *13*(1), 14. doi:10.1186/s13023-017-0755-5

Key Findings* & Areas for Discussion

- The review of the PCORI-funded research portfolio indicated that the majority were using standard RCT design
  - Could the use of a broader array of methodological approaches expand the range of diseases feasible to study under PCORI funding?
- Networks and registries promote contact databases for identifying and recruiting eligible participants
  - Opportunities to address the impact that propriety data arrangements can have on the creation and sustainability of a robust registry
- Methodological areas that were beyond the scope of the paper included health systems and behavioral interventions
  - Challenges with these types of interventions include multiple components and the suitability of the environment in which they are implemented

*Whicher, D., Philbin, S., & Aronson, N. (2018). An overview of the impact of rare disease characteristics on research methodology. *Orphanet journal of rare diseases*, *13*(1), 14. doi:10.1186/s13023-017-0755-5

Discussion

- What can PCORI do to enhance its patient-centered rare disease comparative effectiveness research portfolio?
  - What types of non-CER opportunities (i.e., descriptive, Methods, pilot studies, etc.) are needed to build capacity?
  - Could the use of a broader array of methodological approaches expand the range of diseases feasible to study under PCORI funding?
  - What are the key CER questions or topic areas that are relevant within and across rare disease?
- What organizations and/or agencies should PCORI collaborate with going forward?
- What changes to the PCORI's legislative mandate and/or interpretation of the mandate would benefit rare disease research?

Break

2:30-2:45

Rare Disease Advisory Panel
Future Activities

Matt Cheung, PhD, RPh, RDAP Panel Chair
Cindy Luxhoj, MUP, RDAP Panel Co-Chair

December 14, 2018

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RDAP Agenda is Driven By:

- PCORI Mission and Goals
- RDAP Charter
- RDAP Framework

RDAP's Meeting Agenda is Proposed, Developed and Finalized By:

- Members of RDAP and PCORI Staff
- Monthly Conference Calls between Co-Chairs and PCORI Staff

How the RDAP Activities Are Tracked

- Posted after the meeting: Agenda, summary and recording
- Crosswalk Spreadsheet

Goals

- Review current list of outstanding items from past meetings
- Panel members to share ideas for future topics and speakers

RDAP Outstanding items

From June 2018 Meeting:

- Immediate options for assisting the rare disease community with applying for PCORI funding include:
  - Educating the community about using the PCORI help desk
  - Disseminating contact information for the PCORI rare diseases staff
  - Publicizing the archived webinar, “PCORI Opportunities for Funding and Resources for Rare Disease Organizations.”

From Previous Meetings:

- Identify and develop cross-cutting ideas for RD CER such as COS for Pediatrics RD
- Identify and collaborate with other PCORI advisory panels on activities relating to RD CER
- Outreach slide library for RDAP members to promote PCORI’s effort with RD research
- RD CER prioritization
- On-going – outreach to other RD organizations or entities (e.g. FDA ORDR, PCORNet) for dialogue and collaboration
- On-going – engage RD research teams to identify challenges and opportunities to support their efforts

Future Topics and Speakers

RDAP Members Recommendations – Future Topics*

- Set mid and long term goals and create annual goals
- Determine how RDAP can service various constituents (e.g. parents, young adults in transition)
- Integrating PPRN and CDRN data
- Developing a strategy for outreach and solicit input from RD patients and advocacy organizations
- Method and case studies for dissemination of research and results
- Linking clinical and patient-reported outcomes
- Patient/Caregiver Centered Outcomes for Pediatrics, including cost and burden (Core Outcome Set)
- Update on Canadian project on developing Core Outcomes Set – Maureen Smith
- Assisting patient advocacy organizations with developing research proposals for PCORI, e.g., with tailored tools or advice for the rare diseases community, besides general grant writing such as one from FDA
- Patient partners' experience with research, particularly barriers to success
- Understanding the importance of studying the natural history of disease and what is important to caregivers (although this was deemed to be beyond PCORI's scope, which is limited to comparative effectiveness research)

*Member recommended and updated from June 2018 Meeting discussion

RDAP Members Recommendations – Future Speakers*

- PCORnet (update on research projects underway)
- Leaders of Rare Disease Advocacy Organizations – Ongoing
- FDA – On list of outstanding item
  - Janet Woodcock – Master Protocols
- Representative from NLM – ? Topic
- Sharon Terry – ? Topic
- Alison Rockett Frase, Founder/President of the Joshua Frase Foundation - ? Topic

*Gathered from RDAP members, depending on topic selected

Discussion Questions

- Based on the RDAP function and scope of work, which areas should the RDAP invest in?
  - What topics/activities under each function could the RDAP take action on during the coming year?
  - Which of these activities you consider as the highest priority for the RDAP in the coming year?
  - Which of these topics should be consider low priority or are of low value?

- From the crosswalk, there were fewer activities relating to function/scope of work 4, 5, and 6 than others. Are these high or low priorities at this time? If high, what would you recommend as a topic to include in future agenda. The items are:
  4. Consider study findings and advise on targets and strategies for PCORI dissemination efforts
  5. Identify opportunities for collaboration with existing international, federal, public and private entities doing similar work in the rare disease space; and
  6. Advise other PCORI committees and panels to ensure the unique considerations of rare disease are addressed.

Closing and Next Steps

Matt Cheung, PhD, RPh, RDAP Panel Chair

Cindy Luxhoj, MUP, RDAP Panel Co-Chair

Parag Aggarwal, PhD, Associate Director, Healthcare Delivery and Disparities Research, PCORI

Gyasi Moscou-Jackson, PhD, MHS, RN, Program Officer, Healthcare Delivery and Disparities Research

December 14, 2018

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Adjourn