Welcome!

Please be seated by 8:55 AM ET

The webinar will go live at 9:00 AM ET

Advisory Panel on Rare Disease: In-Person Meeting

June 6, 2018

9:00 AM – 4:00 PM

Welcome, Introductions, and Setting the Stage

Matt Cheung

Chair, *Rare Disease Advisory Panel*

Vincent Del Gaizo

Co-Chair, *Rare Disease Advisory Panel*

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

Housekeeping (cont.)

- We ask that panelists stand up their tent cards when they would like to speak and use the microphones
- Please remember to state your name when you speak

Conflicts of Interest

- Welcome to the Rare Disease Advisory Panel 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.
- 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.

Agenda

Agenda Item	Time
Welcome and Setting the Stage	9:00 AM – 9:20 AM
Recap of Last Meeting	9:20 AM – 9:30 AM
Dissemination and Implementation: Challenges and Opportunities for Rare Disease Research	9:30 AM – 10:30 AM
Break	10:30 AM – 10:45 AM
PCORI Case Study: Collaborative Assessment of Pediatric Transverse Myelitis	10:45 AM – 11:45 PM
Lunch	11:45 PM – 12:30PM
Update on NORD	12:45 PM – 1:30 PM
Healthier Together: Networks of Patients, Clinicians, and Researchers to Transform Chronic Illness Care	1:30 PM – 2:30 PM
Break	2:30 PM – 2:45 PM
UPDATE: PCORI Rare Disease Topic Page and Resources	2:45 PM – 3:00 PM
Rare Disease Advisory Panel Planning Discussion	3:00 PM – 3:30 PM
Closing and Next Steps	3:30 PM – 4:00 PM

Introductions

- Please quickly state the following:
  - Name
  - Stakeholder group you represent
  - Position title and organization

Introductions: Current Panelists

Introductions (cont.)

Vincent Del Gaizo ***(Co-Chair)***

Owner, *Plaza Dry Cleaners*

Representing: Patients, Caregivers and Patient Advocates

Introductions (cont.)

Matt Cheung, PhD, RPh ***(Chair)***

Adjunct Professor, *Pharmacy Practice, University of the Pacific*

Representing: Payers

Introductions (cont.)

Julie Abramson

Project Manager and Architect, *Hennepin County*

Representing: Patients, Caregivers, and Patient Advocates

Introductions (cont.)

Stephen Mathai, MD

Associate Professor, *Johns Hopkins University School of Medicine*

Representing: Researchers

Introductions (cont.)

Yaffa R. Rubinstein, MS, PhD

Rare Disease Patient Registries and Bio-repositories Special Volunteer,
National Information Center of Health Services Research & Health Care Technology at the NLM/NIH

Representing: Researchers

Introductions (cont.)

Marcia Rupnow, MS, PhD

Vice President of Value Evidence and Outcomes, *GlaxoSmithKline*

Representing: Industry

Introductions (cont.)

Maureen Smith, MEd

Board Member, *Canadian Organization for Rare Disorders (CORD)*

Patient Member, *Ontario Ministry of Health and Long Term Care*

Representing: Patients, Caregivers, and Patient Advocates

Introductions (cont.)

James J. Wu, MSc, MPH

Senior Manager, *Global Health Economics, Amgen Inc.*

Representing: Industry

Introductions (cont.)

Lisa Heral, RNBA, CCRC

Registered Nurse, *Pacific Quest and Bay Clinic - Hawaii*

Representing: Patients, Caregivers, and Patient Advocates

Introductions (cont.)

Cindy Luxhoj, MUP*

Executive Director and Founder, *Alagille Syndrome Alliance*

Representing: Patients, Caregivers, and Patient Advocates

**Attending via webinar*

Introductions (cont.)

Kathleen Gondek, MS, PhD*

Vice President, *Global Health Economics Outcomes Research and Epidemiology, Shire PLC*

Representing: Industry

**Attending via webinar*

Introductions (cont.)

Naomi Aronson, PhD*

Executive Director, *Clinical Evaluation, Innovation, and Policy, Blue Cross and Blue Shield Association (BCBSA)*

Ex-Officio Member from PCORI's Methodology Committee

**Not attending today's meeting*

Introductions (cont.)

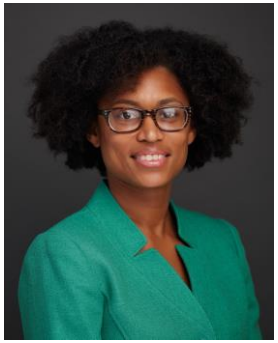
Patricia Furlong*
Founder, President and CEO, *Parent Project Muscular Dystrophy*

Representing: Patients, Caregivers, and Patient Advocates

**Not attending today's meeting*

Rare Disease Advisory Panel – PCORI Staff

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



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

Nora McGhee, PhD
Senior Manager
Office of the Chief Science Officer

Allison Rabinowitz, MPH
Program Associate
Office of the Chief Science Officer

Sarah Philbin, MPH
Program Associate
Clinical Effectiveness and Decision Science

Recap of September 27th In Person Meeting

Matt Cheung

Chair, Rare Disease Advisory Panel

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Recap of September 27th In Person Meeting

- As a refresher, at the previous RDAP in-person meeting in September, 2017, we:
  - Learned about the directions and initiatives of the International Rare Disease Research Consortium (IRDiRC) from Thomas Morel.
  - Provided input to PCORI's communication department on the content of the PCORI Rare Disease Topic Page as well as a One Pager resource for applicants.
  - Reviewed the content of an informational PowerPoint presentation on PCORI's rare disease portfolio for RDAP members to use in educating the public on PCORI's research.
  - And reviewed a case study of a PCORI-sponsored study in urea cycle disorders.
  - Finally, we reviewed the progress on creating a Core Outcome Set for Pediatric Rare disease. From the discussion, we sent a Survey Monkey to the group to determine if panelists believed select domains and outcomes were important.

PCORI Dissemination & Implementation Program Updates

Joanna Siegel, SM, ScD

Director, Dissemination and Implementation

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PCORI's Mandate

"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...**

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

--from PCORI's authorizing legislation

PCORI Dissemination & Implementation Program

- The D&I Program is charged with heightening awareness of the results of PCORI-funded research, and with advancing efforts to put these findings into practice to improve healthcare delivery and health outcomes.

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.

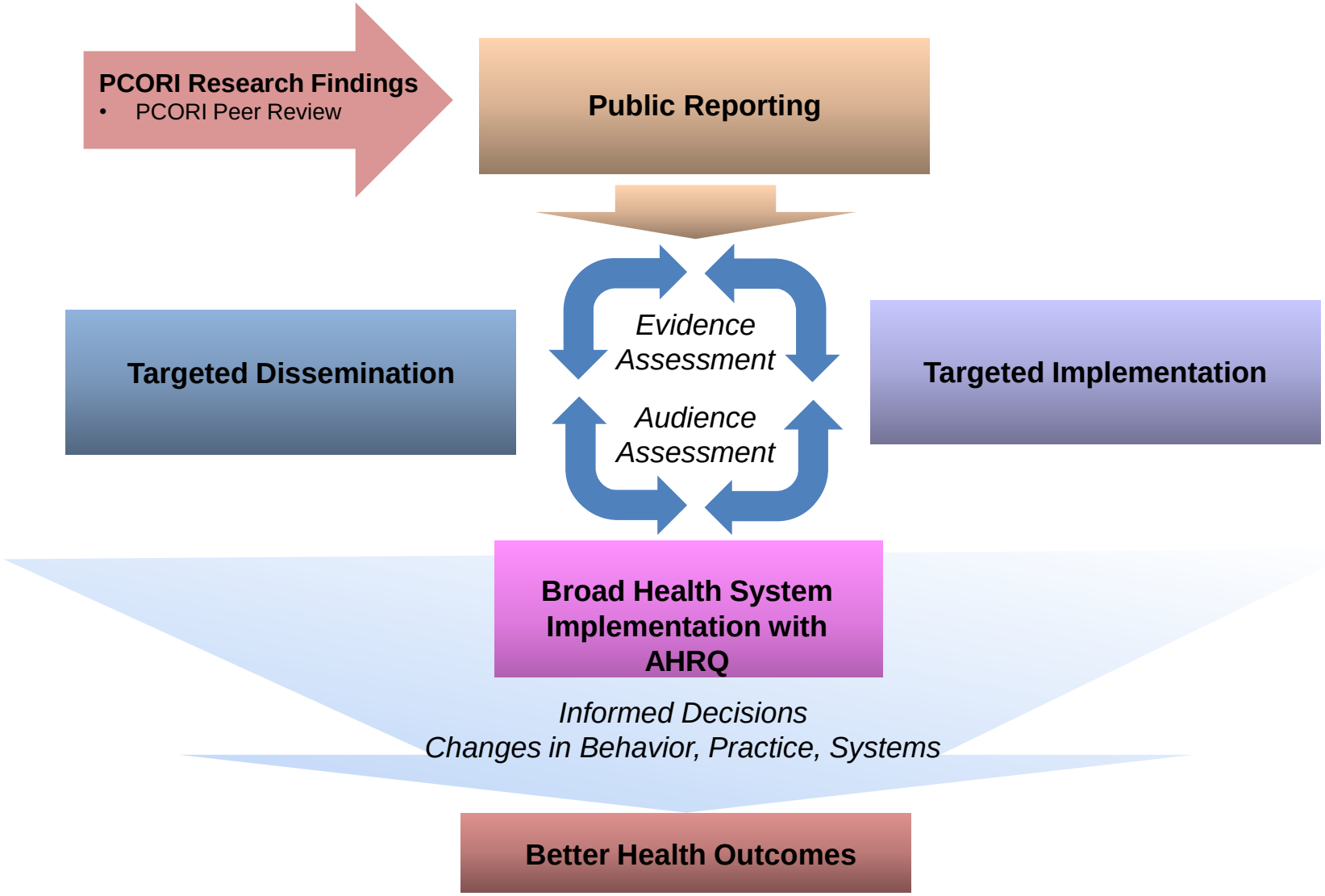
Definitions: Implementation

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 Dissemination & Implementation of Research Results



Today

- Public Reporting
- Implementation Efforts
- Dissemination Activities
- Rare Disease Research Portfolio

Meeting PCORI's Public Reporting Mandate

Public Reporting of PCORI Research Findings following Peer Review

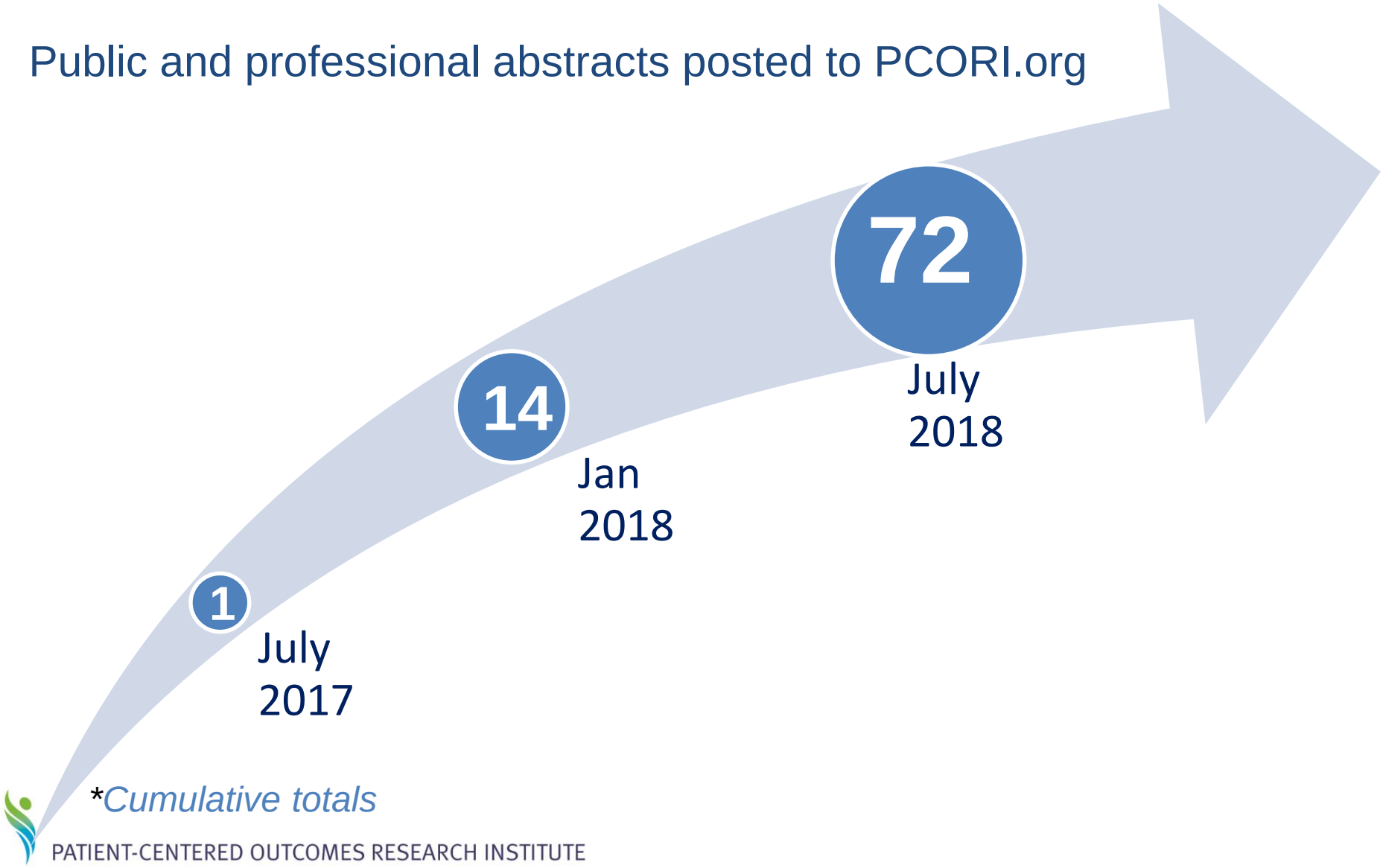
- PCORI's authorizing law and the processes adopted by the Board outline approach for releasing findings – to assure **accessibility and full transparency** in reporting results from PCORI studies.

- **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

- **Within 12 months** of PCORI's acceptance of the DFRR, we release (post to pcori.org):
  - Final Research Report
  - Detailed peer reviewer comments

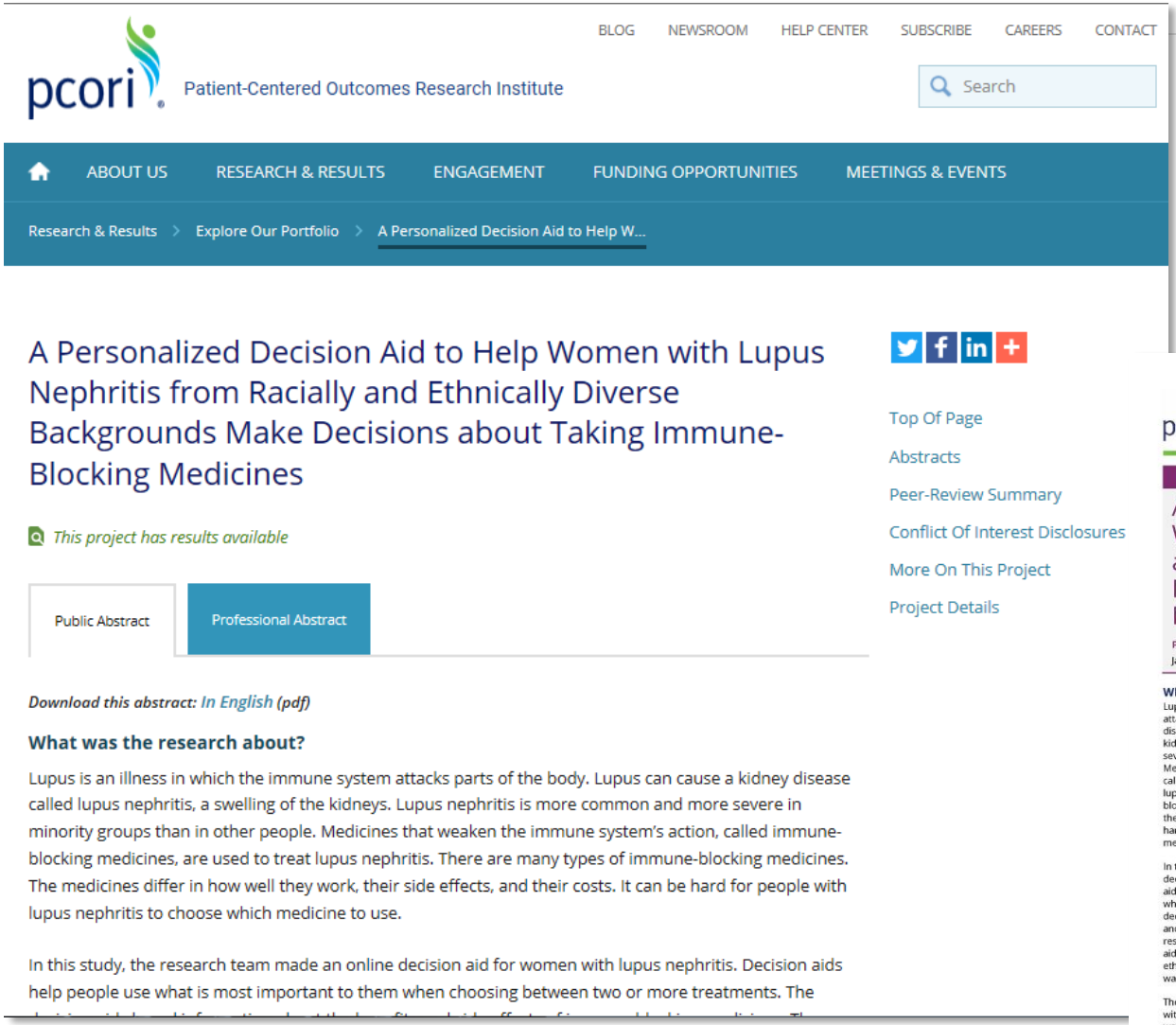
Final Results PCORI Studies: Release of Findings

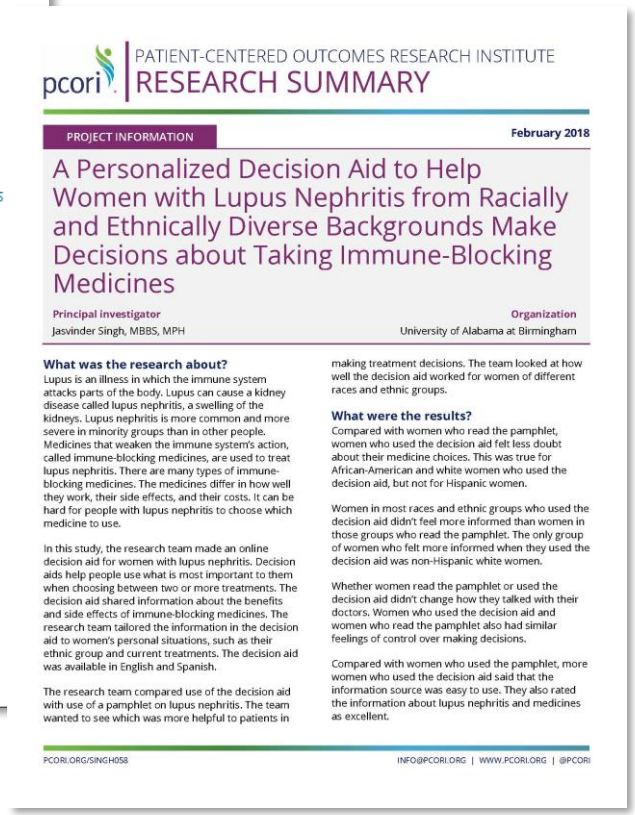
Public and professional abstracts posted to PCORI.org



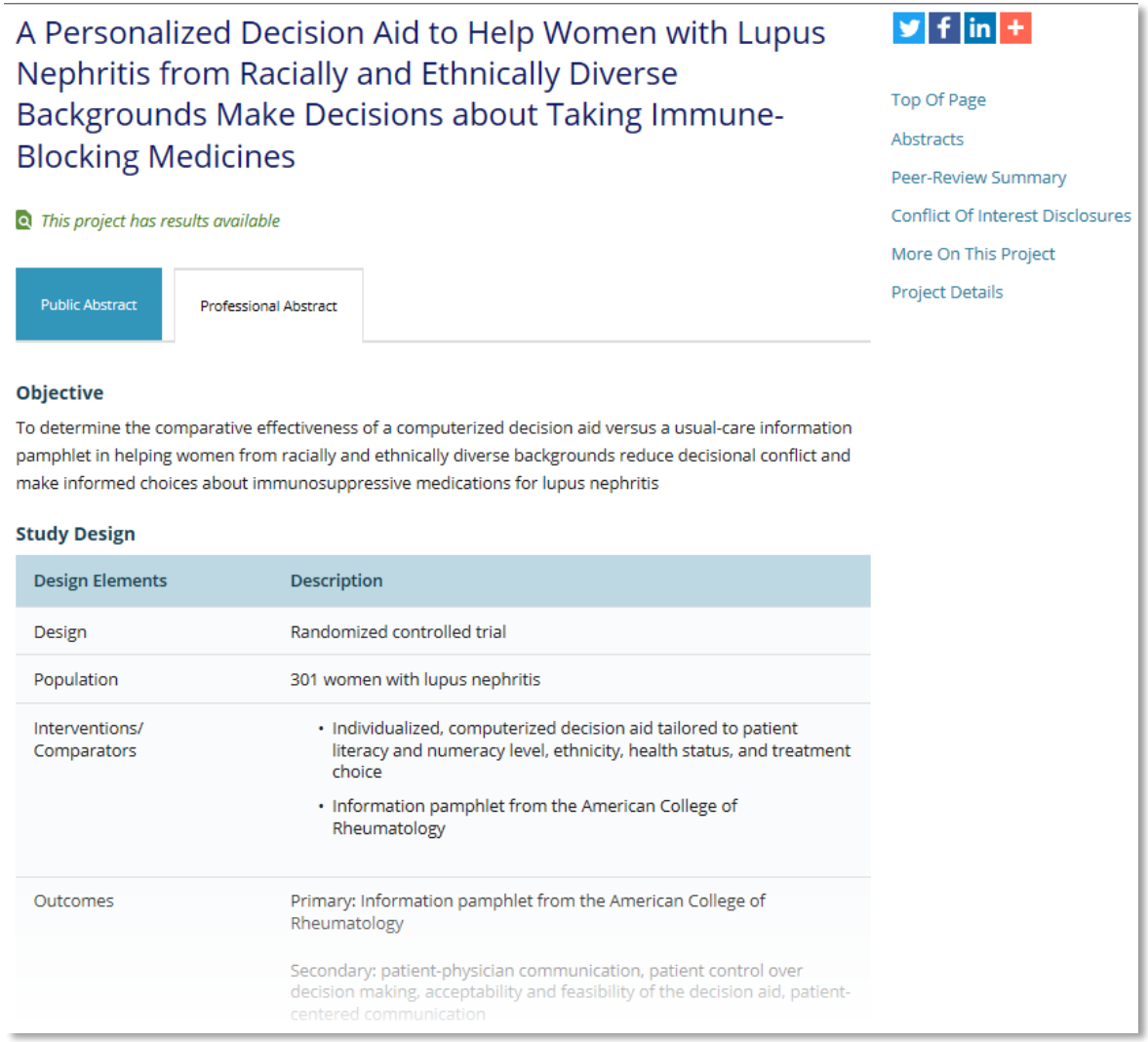
**Cumulative totals*

Posted Results: Public Abstracts





Posted Results: Professional Abstracts



A Personalized Decision Aid to Help Women with Lupus Nephritis from Racially and Ethnically Diverse Backgrounds Make Decisions about Taking Immune-Blocking Medicines

This project has results available

Public Abstract | Professional Abstract

Top Of Page
Abstracts
Peer-Review Summary
Conflict Of Interest Disclosures
More On This Project
Project Details

Objective

To determine the comparative effectiveness of a computerized decision aid versus a usual-care information pamphlet in helping women from racially and ethnically diverse backgrounds reduce decisional conflict and make informed choices about immunosuppressive medications for lupus nephritis

Study Design

Design Elements	Description
Design	Randomized controlled trial
Population	301 women with lupus nephritis
Interventions/ Comparators	• Individualized, computerized decision aid tailored to patient literacy and numeracy level, ethnicity, health status, and treatment choice • Information pamphlet from the American College of Rheumatology
Outcomes	Primary: Information pamphlet from the American College of Rheumatology Secondary: patient-physician communication, patient control over decision making, acceptability and feasibility of the decision aid, patient-centered communication

Implementation Efforts:

Promoting Uptake and Integration of Findings

Limited Competition D&I PFA: **Implementation of PCORI-Funded PCOR Results**

Purpose

- To provide **PCORI investigator teams** the opportunity to propose the next steps to put their findings into practice, drawing on the knowledge and experience working with stakeholders gained during their PCORI research award.

Which Findings?

- Any findings for which results are available (DFRR accepted for peer review, or published in peer-reviewed journal.

Eligibility

- **Limited Competition PFA**: Funding available to previously-funded PCORI awardee teams – PI or other major role -- with comparative effectiveness research findings.

Scope of Awards: Up to $1M direct costs; Up to 3 years

Budget: $9M per year (3 funding cycles per year)

Implementation of Shared Decision Making

Purpose

To promote the targeted implementation and systematic uptake of shared decision making (SDM) in healthcare settings

Which Findings?

- PCORI SDM CER results
- PCORI (non-SDM) CER results incorporated into existing, effective SDM strategies

Eligibility: Funding available to previous PCORI SDM awardee teams and to non-PCORI awardee teams incorporating PCORI CER evidence into existing SDM strategies

Scope of Awards: Up to $1.5M direct costs; Up to three years

Budget: $6.5M per cycle

Dissemination of Findings from PCORI-Funded Studies

Engagement Award: **Dissemination Initiative**

Purpose

- Give **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

Scope of Awards: $300k total costs, up to 2 years

Budget: within Engagement Award budget of $20.5M/year

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

Other PCORI Targeted Dissemination Activities

- Evidence Updates
- Continuing Medical Education (CME)

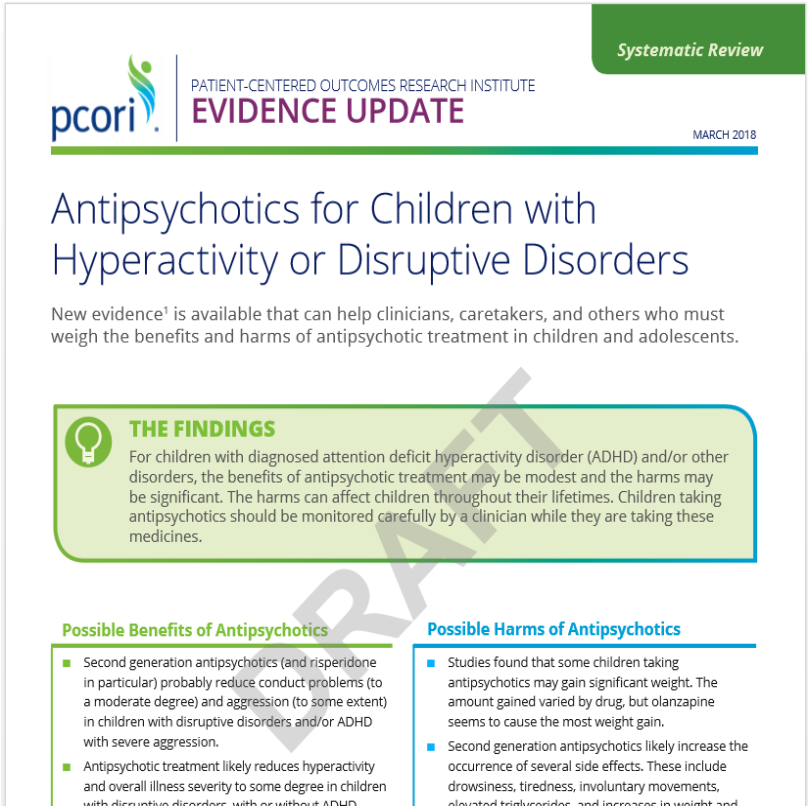
Evidence Updates – Prostate Cancer

- *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

Evidence Update: Antipsychotics for Children with Hyperactivity, Other Disorders

- Evidence Update for foster care case workers, child welfare administrators, and others directly involved in policies and decisions regarding the use of antipsychotics for these children in the foster care system

- Studies show that children in foster care are prescribed antipsychotics at a higher rate than other children served by Medicaid


Systematic Review

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EVIDENCE UPDATE

MARCH 2018

Antipsychotics for Children with Hyperactivity or Disruptive Disorders

New evidence[1] is available that can help clinicians, caretakers, and others who must weigh the benefits and harms of antipsychotic treatment in children and adolescents.

THE FINDINGS

For children with diagnosed attention deficit hyperactivity disorder (ADHD) and/or other disorders, the benefits of antipsychotic treatment may be modest and the harms may be significant. The harms can affect children throughout their lifetimes. Children taking antipsychotics should be monitored carefully by a clinician while they are taking these medicines.

DRAFT

Possible Benefits of Antipsychotics

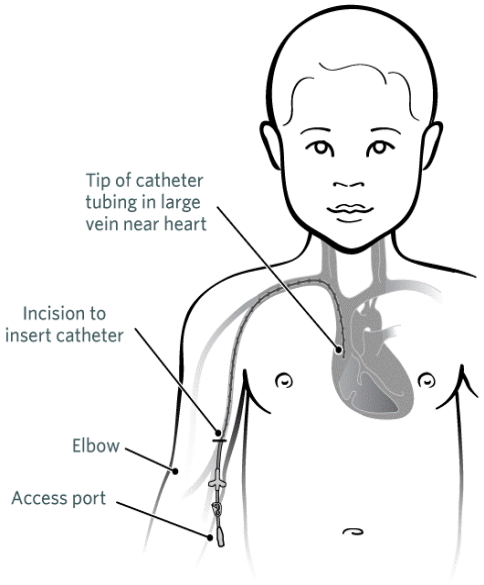
- Second generation antipsychotics (and risperidone in particular) probably reduce conduct problems (to a moderate degree) and aggression (to some extent) in children with disruptive disorders and/or ADHD with severe aggression.
- Antipsychotic treatment likely reduces hyperactivity and overall illness severity to some degree in children

Possible Harms of Antipsychotics

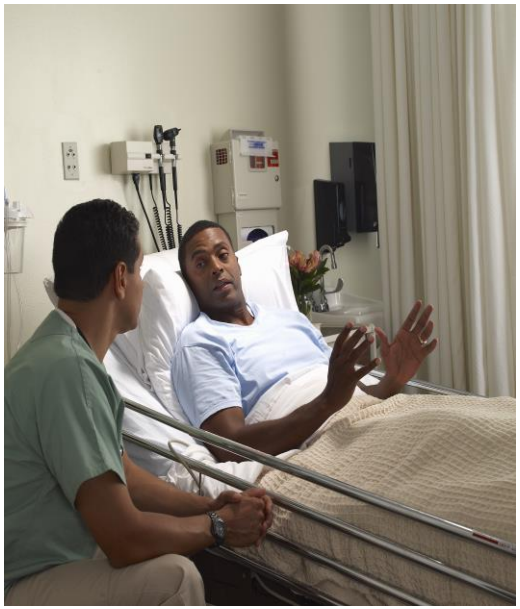
- Studies found that some children taking antipsychotics may gain significant weight. The amount gained varied by drug, but olanzapine seems to cause the most weight gain.
- Second generation antipsychotics likely increase the occurrence of several side effects. These include drowsiness, tiredness, involuntary movements,

PCOR TRANSLATION CENTER

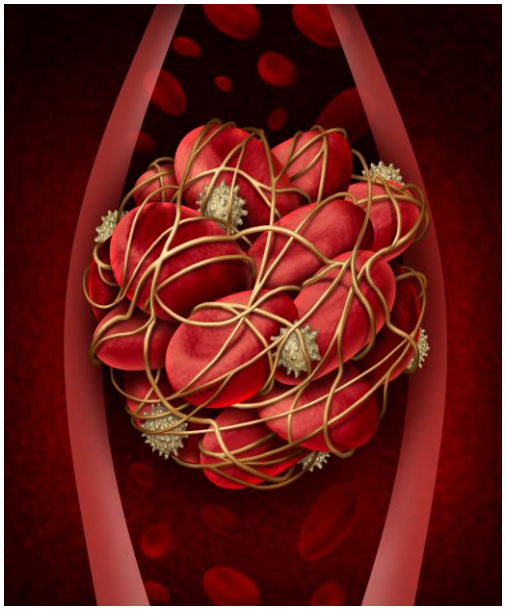
CME Programs



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

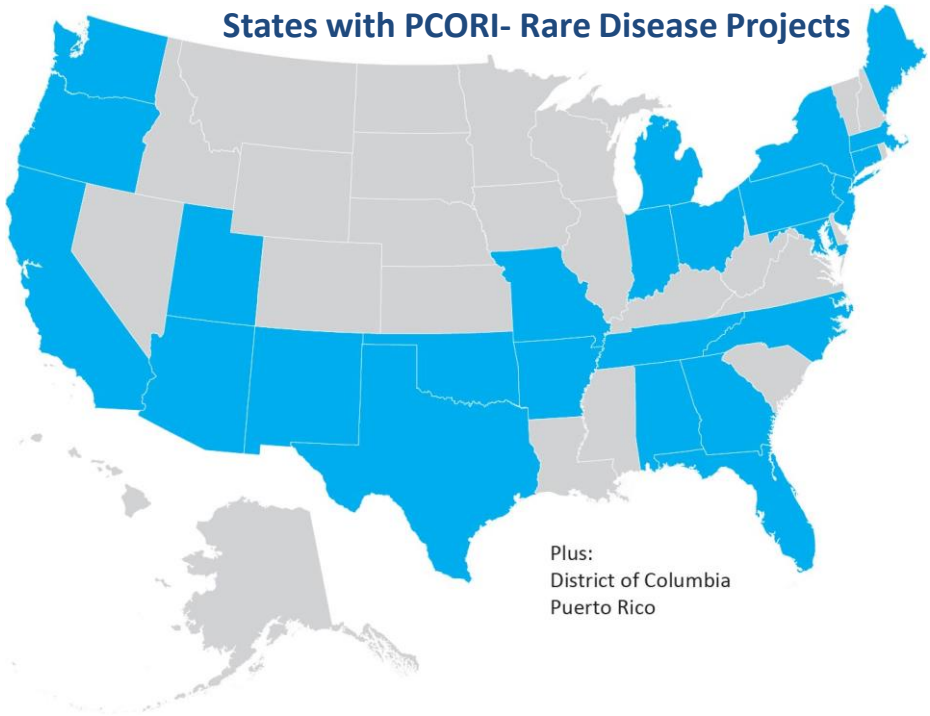
PCORI-Funded Rare Disease Projects:

Opportunities for Dissemination and Implementation of Findings?

Snapshot of PCORI-Funded Rare Disease Projects

Rare Disease projects:
31 Research Awards
$81 million in Research

Number of states where we are funding Rare Disease research:
25 (plus the District of Columbia and Puerto Rico)



As of September 2017

Status of Rare Disease Research Portfolio

31 research awards

23 still in progress

5 in PCORI peer review

3 accepted as “final” by PCORI

~~*(will be posted to pcori.org within 90 days of acceptance)*~~

Posted!

Discussion

1. When and how can we most effectively engage the rare disease community around dissemination and implementation of PCOR evidence?

2. What suggestions do you have for PCORI to do this most effectively and efficiently?

3. What role would the RDAP like to play?

Break

10:30 – 10:45 a.m.

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The CAPTURE Study:
Collaborative **A**ssessment of **P**ediatric **T**ransverse myelitis: **U**nderstand, **R**eveal, **E**ducate

Benjamin M. Greenberg, MD, MHS
Director, Transverse Myelitis Program
UT Southwestern and Children's Health Dallas
PCORI RDAP March 2018

children's health℠
Children's Medical Center

CONQUER
Collaboration on Neuroimmunology
Question, Understand, Educate, Restore

UT Southwestern
Peter O'Donnell Jr.
Brain Institute

Outline

- Background on Transverse Myelitis
- Design of CAPTURE Study
- Approaches to Challenges in Rare Disease Research
  - Recruitment
  - Collecting outcomes data
  - Data Sharing
- Opportunities for PCORI in Rare Disease Research

Outline

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Idiopathic Transverse Myelitis

- Transverse Myelitis (TM) is inflammation of the Spinal Cord, Idiopathic TM is inflammation of the spinal cord not due to multiple sclerosis or other systemic conditions
- Can cause **acute** or **subacute** paralysis (weakness, numbness, bowel/bladder dysfunction)
- Multiple variants
- Affects both children and adults (3 months – 100 years)
- Geographically diverse
- **RARE – less than 1500 cases a year, less than 300 in children per year**

Key Features of Pediatric TM That Should Be Considered by the PCORI RDAP

- Rarity
- Acute/Subacute → Recruitment
- Diagnostic Heterogeneity → Time window for recruitment
- Symptom Heterogeneity → Need to confirm diagnosis
- Acquired (not genetic) → Multivariate outcomes
- Geographic/Seasonal Diversity → Difficulty identifying affected
- Pediatric Cohort → Requires casting a wide net
- → Consenting can be difficult

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CAPTURE Study

- Significance
  - Largest outcome study collected partial data on <50 patients
  - No large studies based on patient reported outcomes/QOL
  - No mechanism for searching available data to determine relevance to current cases
  - Multiple new therapeutic options, but inability to design or power studies (*what patients want and how scientists think are different)
- Design
  - Prospective
  - Collect both clinician derived and patient reported outcomes
  - Novel data dissemination modality

Entry Criteria and Processes

- Onset within 6 months (*Changed from 3 months)
- Two cohorts
  - In person – consented at collaborating center
  - Virtual – consented by UT Southwestern/Childrens Dallas
- Central review of records/images for online cohorts
- Data collection at baseline, 3 month, 6 month and 12 months

Collaborators

- University of Texas Southwestern/Children's Dallas
- Children's Hospital of Philadelphia
- Kennedy Krieger Institute
- Colorado University
- Johns Hopkins
- Sick Kids/Toronto
- Cincinnati Childrens
- University of Alabama Birmingham

- Transverse Myelitis Association
- Traitwise

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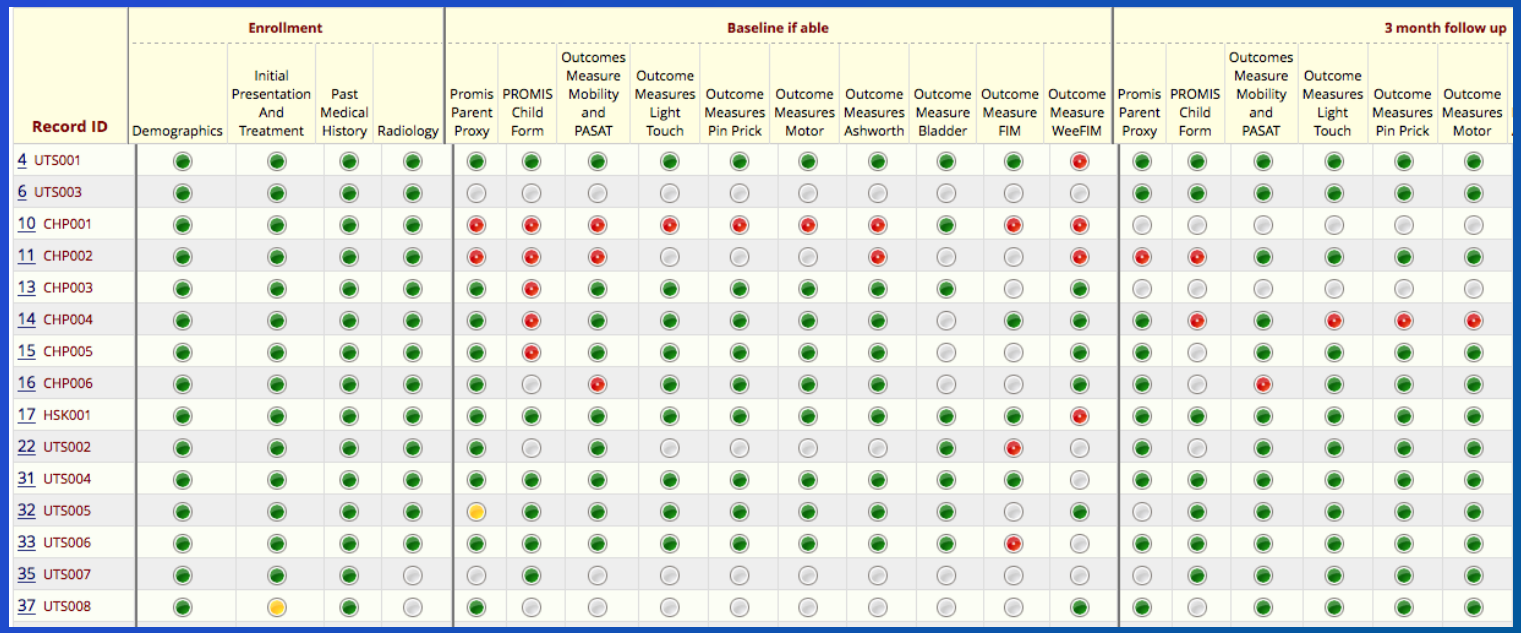
Brain Institute

Data Collection

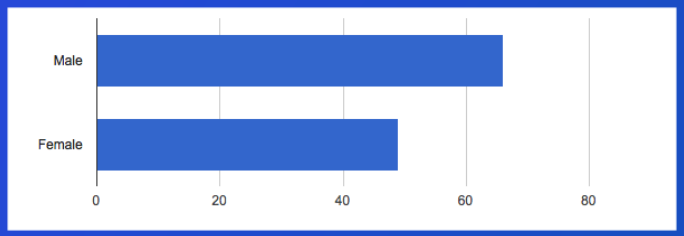
- Online questionnaires provided via RedCap
  - Patient reported outcomes on multiple topic areas
  - Parent reported outcomes on multiple topic areas
  - Use of NIH PROMIS tools
- Records and images mailed to central center
- In person visit data entered into RedCap data collection portal

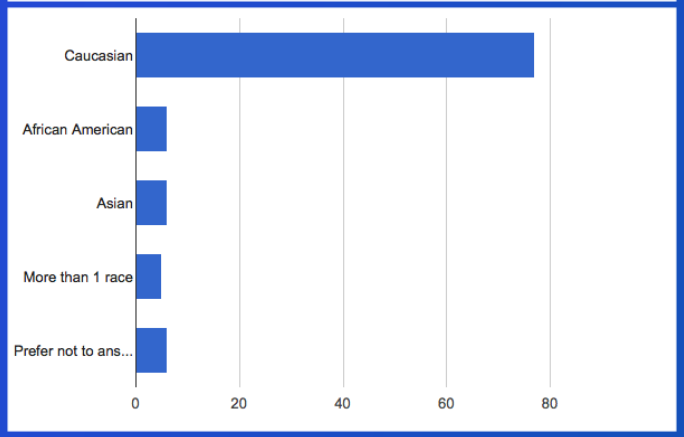
RedCap Data Dashboard

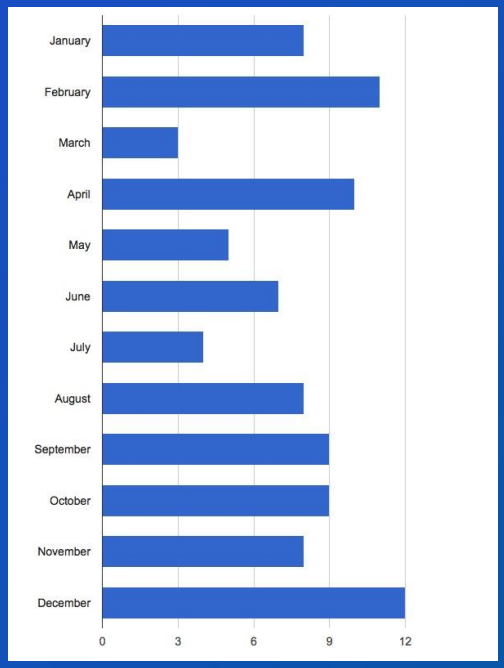


Record ID	Enrollment				Baseline if able										3 month follow up					
	Demographics	Initial Presentation And Treatment	Past Medical History	Radiology	Promis Parent Proxy	PROMIS Child Form	Outcomes Measure Mobility and PASAT	Outcome Measures Light Touch	Outcome Measures Pin Prick	Outcome Measures Motor	Outcome Measures Ashworth	Outcome Measure Bladder	Outcome Measure FIM	Outcome Measure WeeFIM	Promis Parent Proxy	PROMIS Child Form	Outcomes Measure Mobility and PASAT	Outcome Measures Light Touch	Outcome Measures Pin Prick	Outcome Measures Motor
4 UTS001																				
6 UTS003																				
10 CHP001																				
11 CHP002																				
13 CHP003																				
14 CHP004																				
15 CHP005																				
16 CHP006																				
17 HSK001																				
22 UTS002																				
31 UTS004																				
32 UTS005																				
33 UTS006																				
35 UTS007																				
37 UTS008																				

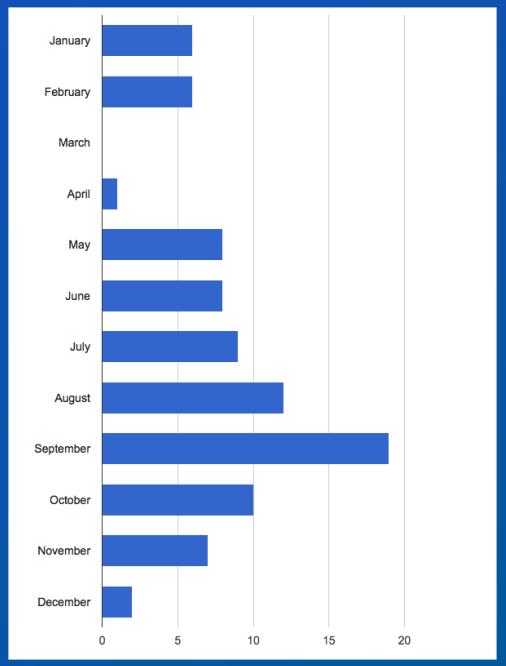
RedCap Data Composites







Birth Month



Month of Onset

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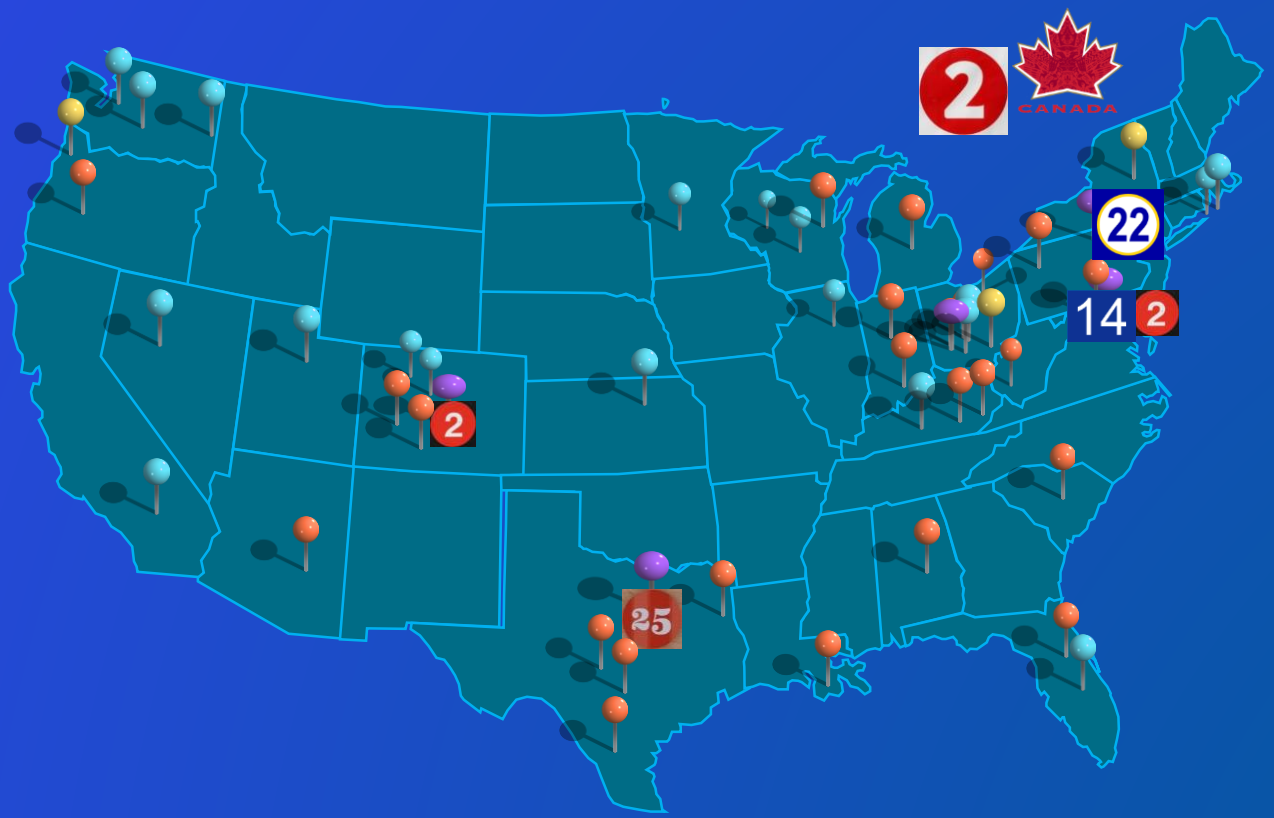
Enrollment Update (10/2017)



Enrollment Totals

- UTSW 68 (25 in person/ 43 Online)
- CHOP 22
- KKI 14
- Colorado 2
- Cincinnati 1
- JHU 2
- Toronto 2

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Challenges

Recruitment Challenges

- Infrequent, unpredictable event
- Time sensitive study (looking at outcomes needs some assessment of starting point)
- No geographic focus
  - Delays in diagnosis
  - Clinicians are unlikely to be aware of study – lack of referrals
- Sudden onset – children go from normal and healthy to paralyzed over hours to days
  - Parents may not be in a state of mind that makes them capable of considering research

CAPTURE
Traditional Approach to Recruitment

- Diverse locations
  - Expanded during study
- Advertising to clinicians
- Change from “within 3 months of onset” to “within 6 months of onset”

CAPTURE
Untraditional Approach to Recruitment

- Simultaneous in person and virtual cohort
  - Some patients can't make it to a center
  - Cross validation between PROs and clinician derived data at in person centers
- Partnership with the Transverse Myelitis Association (TMA)
  - Patient advocacy organization that assisted with advertising
  - Presence on google searches
  - Families gravitate to TMA at time of diagnosis (educational resources, podcasts, support resources)
  - Patient ambassador partnered with UTSW/Children's to assist in recruitment

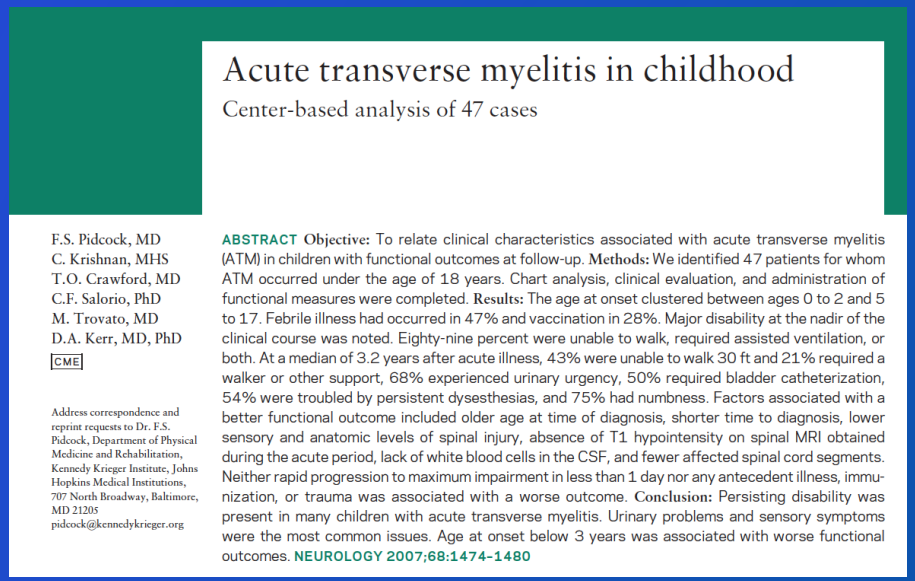
    **Recruitment efforts from a parent are different than a study coordinator

Outcomes Data Challenges

- The gold standard is clinician derived data, but cant acquire on all subjects
- Patient reported outcomes have not been historically applied
- CAPTURE approach was to simultaneously allow for broad enrollment and validate PROs
  - Online data collection tool
  - Simultaneous in person and virtual cohort with cross validation of data

Data Sharing Challenges

Traditional data dissemination plan is via publication



Acute transverse myelitis in childhood

Center-based analysis of 47 cases

F.S. Pidcock, MD
C. Krishnan, MHS
T.O. Crawford, MD
C.F. Salorio, PhD
M. Trovato, MD
D.A. Kerr, MD, PhD

CME

Address correspondence and reprint requests to Dr. F.S. Pidcock, Department of Physical Medicine and Rehabilitation, Kennedy Krieger Institute, Johns Hopkins Medical Institutions, 707 North Broadway, Baltimore, MD 21205
pidcock@kennedykrieger.org

ABSTRACT **Objective:** To relate clinical characteristics associated with acute transverse myelitis (ATM) in children with functional outcomes at follow-up. **Methods:** We identified 47 patients for whom ATM occurred under the age of 18 years. Chart analysis, clinical evaluation, and administration of functional measures were completed. **Results:** The age at onset clustered between ages 0 to 2 and 5 to 17. Febrile illness had occurred in 47% and vaccination in 28%. Major disability at the nadir of the clinical course was noted. Eighty-nine percent were unable to walk, required assisted ventilation, or both. At a median of 3.2 years after acute illness, 43% were unable to walk 30 ft and 21% required a walker or other support, 68% experienced urinary urgency, 50% required bladder catheterization, 54% were troubled by persistent dysesthesias, and 75% had numbness. Factors associated with a better functional outcome included older age at time of diagnosis, shorter time to diagnosis, lower sensory and anatomic levels of spinal injury, absence of T1 hypointensity on spinal MRI obtained during the acute period, lack of white blood cells in the CSF, and fewer affected spinal cord segments. Neither rapid progression to maximum impairment in less than 1 day nor any antecedent illness, immunization, or trauma was associated with a worse outcome. **Conclusion:** Persisting disability was present in many children with acute transverse myelitis. Urinary problems and sensory symptoms were the most common issues. Age at onset below 3 years was associated with worse functional outcomes. NEUROLOGY 2007;68:1474–1480

- Limited ability to personalize data to new patients
- How would a 9 year old boy, with cervical TM and numbness at onset compare with the published group

CAPTURE Traditional Data Sharing Plan

- Publications
- Presentations
- Publications shared via TMA website

CAPTURE Untraditional Data Sharing Plan

- Podcasts
- Patient/Family Symposium
- Partnership with Traitwise to create novel data sharing
  - Create a portal where clinicians can filter out data that is applicable to their current patient
- Create an expandable database that is co-managed with the TMA over time

Outline

- Background on Transverse Myelitis
- Design of CAPTURE Study
- Approaches to Challenges in Rare Disease Research
  - Recruitment
  - Collecting outcomes data
  - Data Sharing
- Opportunities for PCORI in Rare Disease Research

PCORI's Unique Opportunities in Rare Disease Research

- Rare diseases are uniquely engaged with patients and families
  - The division of power among stakeholders is quite different
- There are common challenges among rare diseases
  - Recruitment
    - Subject identification
    - Subject engagement
    - Management of ethics considerations in geographically
  - Developing metrics, utilization of PROs
    - Need partnership between clinicians and patients
  - Data dissemination
    - Systematic barriers to data sharing need honest brokers

Those who fund set the rules…..

PCORI Opportunities

- Advocacy group partnership is critical
  - There are two types of partnership
    - Partnership in advertising and advising
    - Partnership in execution – a true partnership, where the patient advocacy organization engages in recruitment efforts
  - PCORI could set criteria/recommendations for models of partnership
  - PCORI could set criteria/recommendations for models of funding dispersement
- PRO cross validation
- Data Sharing
- Opportunities for sustainable assets

PCORI RDAP Considerations

- Directly partner with patient advocacy organizations on recruitment tools/approaches
- Create common tools for data sharing
- Create common platforms/tools for asset longevity

Conclusions

- Universities, treatment centers and investigators cannot conduct rare disease research in isolation
- Patient partnerships can be developed beyond the traditional model
- Investigators need to be incentivized to share data
- PCORI is in a unique position to enable different approaches to rare disease research

Lunch

We will resume at 12:45 PM ET

NORD®
National Organization for Rare Disorders

PCORI: ADVISORY PANEL ON RARE DISEASES

Pamela K. Gavin

Chief Strategy Officer

Alone we are rare. Together we are strong.®

Background

- Joined NORD in 2010 after 13 years of designing and executing complex, multi-stakeholder programs aimed at improving healthcare quality and patient safety
- Consulted for FDA and NIH and on pre-market and post-market safety data
- Co-Founder of SafeCare™ Systems which developed one of the country's first patient safety management systems

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rarediseases.org

Presentation

I. Overview of the research NORD supports/is interested in

II. Ask 1: Are there overlaps and gaps?

III. Ask 2: Are there opportunities where there could be room for collaboration?

IV. Discussion

   I. Based on each organization's responsibilities and goals, what are the opportunities for PCORI to collaborate with NORD as PCORI's portfolio matures?

   II. Are there other organizations that can work to further the missions of PCORI and NORD?

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NORD's Mission

NORD, a 501(c)(3) organization, is a patient advocacy organization dedicated to individuals with rare diseases and the organizations that serve them.

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NORD is committed to the identification, treatment, and cure of rare disorders through programs of education, advocacy, research, and patient services.

Governance

NORD's Board of Directors is made up exclusively of patient organization leaders, researchers, academics, medical professionals and independent individuals.

Marshall Summar, M.D., Chairman
Children's National Medical Center

Sheldon Schuster Ph.D., Vice Chairman
Keck Graduate Institute of Applied Life Sciences

Steven A. Grossman, Secretary
HPS Group, LLC

Rick Barr, M.D.
Children's Hospital of Mississippi

Ronald J. Bartek
Friedreich's Ataxia Research Alliance (FARA)

Preston Campbell, M.D.
Cystic Fibrosis Foundation

Anthony Castaldo
US Hereditary Angioedema Association (HAEA)

Jonathan Haines, Ph.D.
Case Western University School of Medicine

Susan Hedstrom
Foundation for Prader-Willi Research

Sarah Krug
Cancer101

Vicki McCarrell
Moebius Syndrome Foundation

Charles Mohan, Jr.
The United Mitochondrial Disease Foundation

Jim Palma
TargetCancer Foundation

Kathleen Weis
The Aplastic Anemia and MDS International Foundation

Roger Ziegler
Children's National Medical Center

Addressing the Challenges Faced By Rare Patients

Wait an average of 5-7 years for accurate diagnosis

Only 5% have an FDA approved treatment or therapy

Extensive, life-long medical needs

High cost of care and treatment

Few medical experts

Little research or known about diseases

Social Isolation

Small, scattered patient populations

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NORD's Community

270+ patient organizations

3,600+ advocates

200+ medical students

90+ corporate council

NORD's membership spans across more than 7000 diseases, all 50 states and over 30 countries.

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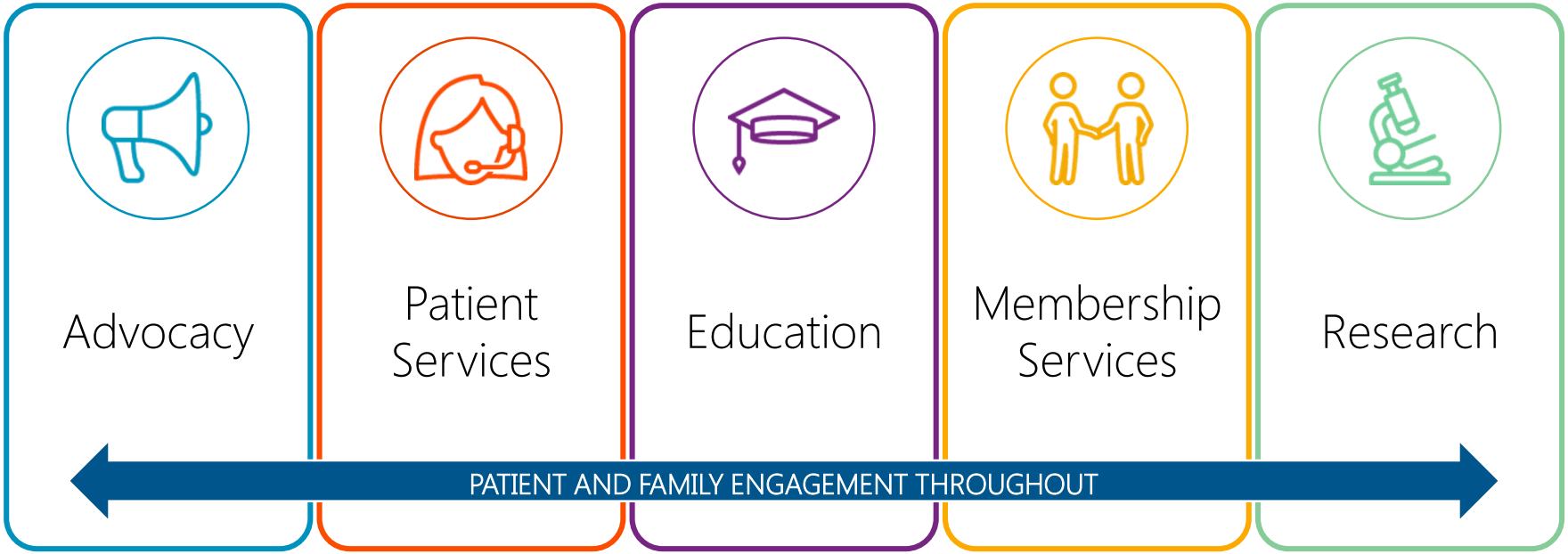
Core Programs



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Research Objectives

With 95% of rare diseases still without an FDA approved treatment and no cures, NORD is committed to helping researchers access the data needed to bring life-saving treatments to patients and their families.

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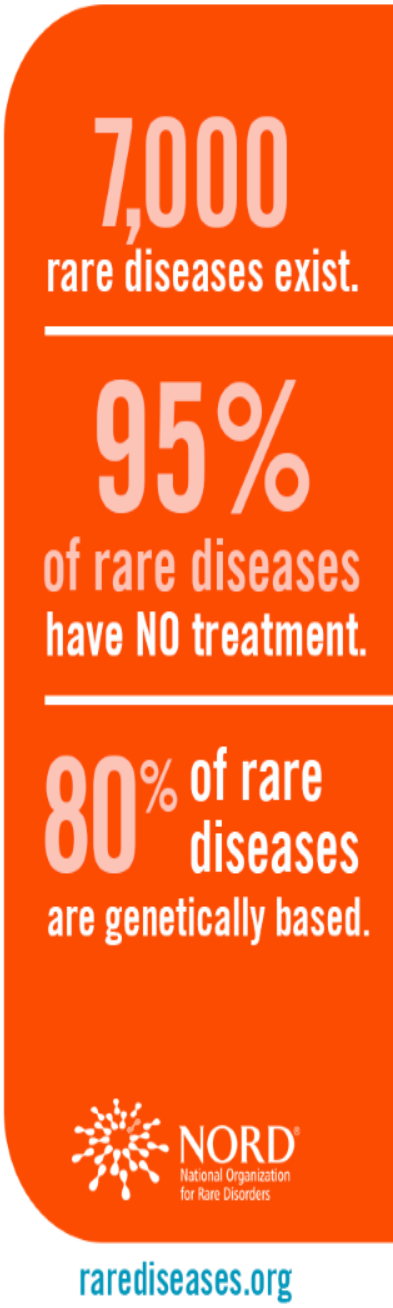
How NORD Supports Research

Areas of Interest

1. Provide seed funding to researchers for rare disease studies
2. Offer opportunities for patients and organizations to contribute their data to advance research and quality clinical care models
3. Collect data that can be used in the discovery, review and approval of new treatments and products
4. Collect data that can advance proactive policies to alleviate the burden of rare disease on families (e.g. cost of not treating vs. treating, socio-economic factors, education, etc.)
5. Collect real world data on patient outcomes to inform clinical protocols and policies that improve access to appropriate treatments
6. Support a culture of innovation that promotes basic and translational research



Collaborative Partnership with the FDA

(2015) Cooperative Agreement for Natural History Studies

- One-of-a-kind partnership to provide natural history studies to patient communities in need of longitudinal data to support research and development of new treatments.

(2018) Rare Disease Listening Sessions

- Unique pilot project to help FDA medical reviewers better understand patient experiences with rare diseases by creating a forum for patients to speak with reviewers regardless of geographic location.

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Rare Disease Listening Sessions

- Goal is to facilitate the patient's voice being heard more directly in the regulatory decision-making process
- Provide patients and families with an opportunity to directly contribute to advancing medical research and new product approvals
- FDA reviewers to understand, from patient perspective, what they are willing to deal with in terms of risks versus benefits.
- Facilitation of dialogue between review divisions and disease-specific patient communities

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The IAMRARE™ Registry

- Patient-driven natural history registry platform that promotes patient engagement and empowerment.
- Empowers patient communities to participate in research and provides flexibility for participation regardless of geographic location
- Educates patients, caregivers, researchers and other stakeholders
- Provides opportunities for researchers to collaborate on projects locally, internationally and across disease states
- Provides incentives for leveraging patient centered outcomes research (PCOR) to optimize the use of existing drugs and/or create novel treatments

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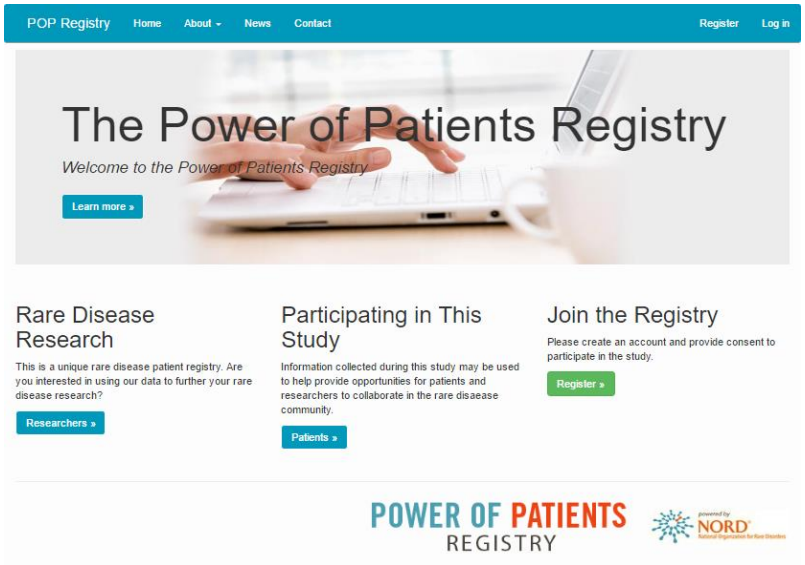
Unique Features of Registry Platform

- Advanced analysis tools provide real-time insight and information to maintain registry engagement over time
- 1-to-1 guidance provided by NORD's dedicated IAMRARE team to create and launch a successful registry
- Access to standardized data dictionaries, as approved by an Institutional Review Board
- Future opportunities to compare data across rare diseases



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Rare Disease Research Grant Program

- Aims to expand the foundation of rare disease information and knowledge
- Sometimes the only source of funding for the study of a specific disease
- Resulting data often serves as foundation for additional grants and project support

NORD has awarded more than $7 million and 150 grants

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Research Grant Impact

- Over $7 million in funding awarded since 1989
- 100+ peer-reviewed journal articles
  - *New England Journal of Medicine*
  - *Nature Genetics*
- 2 FDA-approved treatments
  - Vertical Expandable Prosthetic Titanium Rib (VEPTR)
  - NORTHERA® (droxidopa)

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PCORI & NORD

Opportunities for Collaboration

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Areas for Collaboration

PCORI and NORD have synergistic research philosophies. Together, we can support innovative, applied research programs that result in changes to practices across the rare disease research spectrum.

1. FDA-NORD Rare Disease Listening Sessions
2. IAMRARE™ - Natural History Study Development
3. Patient-Centered Outcomes Research in Rare Diseases: Development of Training and Best Practice Tools
4. RareInsights™

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Presentation

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Alone we are rare. Together we are strong.®

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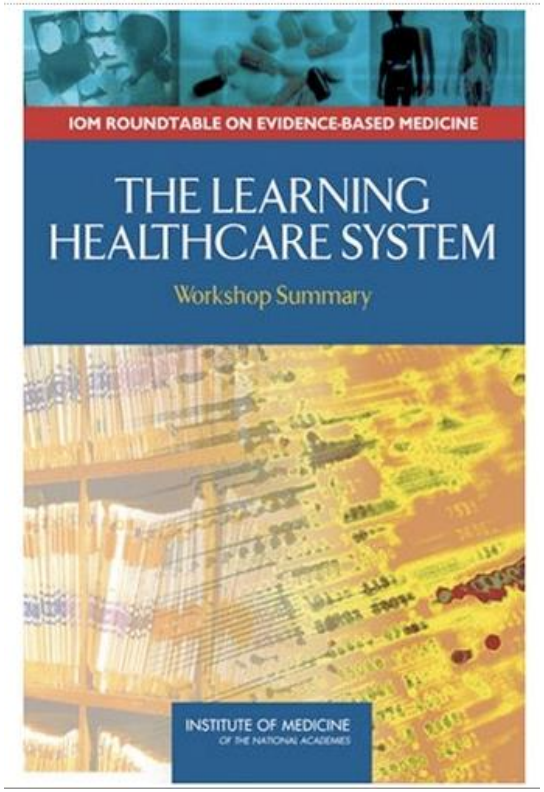
Healthier Together
Networks of patients, clinicians and researchers to transform chronic illness care

Peter Margolis, MD, PhD
James M. Anderson Center for Health Systems Excellence
Cincinnati Children's Hospital Medical Center

Supported by: NIH NIDDK R01DK085719, AHRQ R01HS020024, AHRQ U18HS016957, PCORI PPRN-1306-01754, ImproveCareNow Network Care Centers, CCHMC Learning Networks Program

Learning Healthcare System

- One system for learning and doing (not separate systems for research and clinical care)
- Data generated at the point of care, aggregated to become knowledge, applied to clinical care
- Relentless iteration towards the best care and best health for individuals and populations



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changing the outcome together

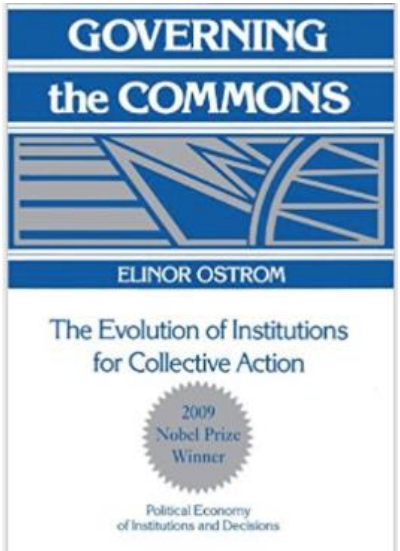
What if….?

- …we could create a vastly better chronic care system by harnessing inherent motivation and collective intelligence of patients and clinicians?

- … this system allowed patients and physicians to share information, collaborate to solve problems, use their collective creativity and expertise to act in ways that improve health?

Actor Oriented Network Organizational Structure

- **Actors** (hospitals, clinics, patients, clinicians, researchers) with a **shared purpose,** capabilities and **values to self-organize**
- Renewable and expandable **commons where the actors accumulate and share resources**
- **Protocols, processes, and infrastructure that enable peer-to-peer collaboration**



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Published in final edited form as:
Science. 2006 December 8; 314(5805): 1560–1563. doi:10.1126/science.1133755.

Five rules for the evolution of cooperation

Martin A. Nowak
Program for Evolutionary Dynamics, Department of Organismic and Evolutionary Biology, Department of Mathematics, Harvard University, Cambridge, MA 02138, USA

Kin Selection: Cooperate with genetic relatives

Direct Reciprocity: I help you, you help me

Indirect Reciprocity: I help you, somebody helps me

Network Selection: Neighbors help each other

Group Selection: Groups of cooperators (tribes) out-compete other groups

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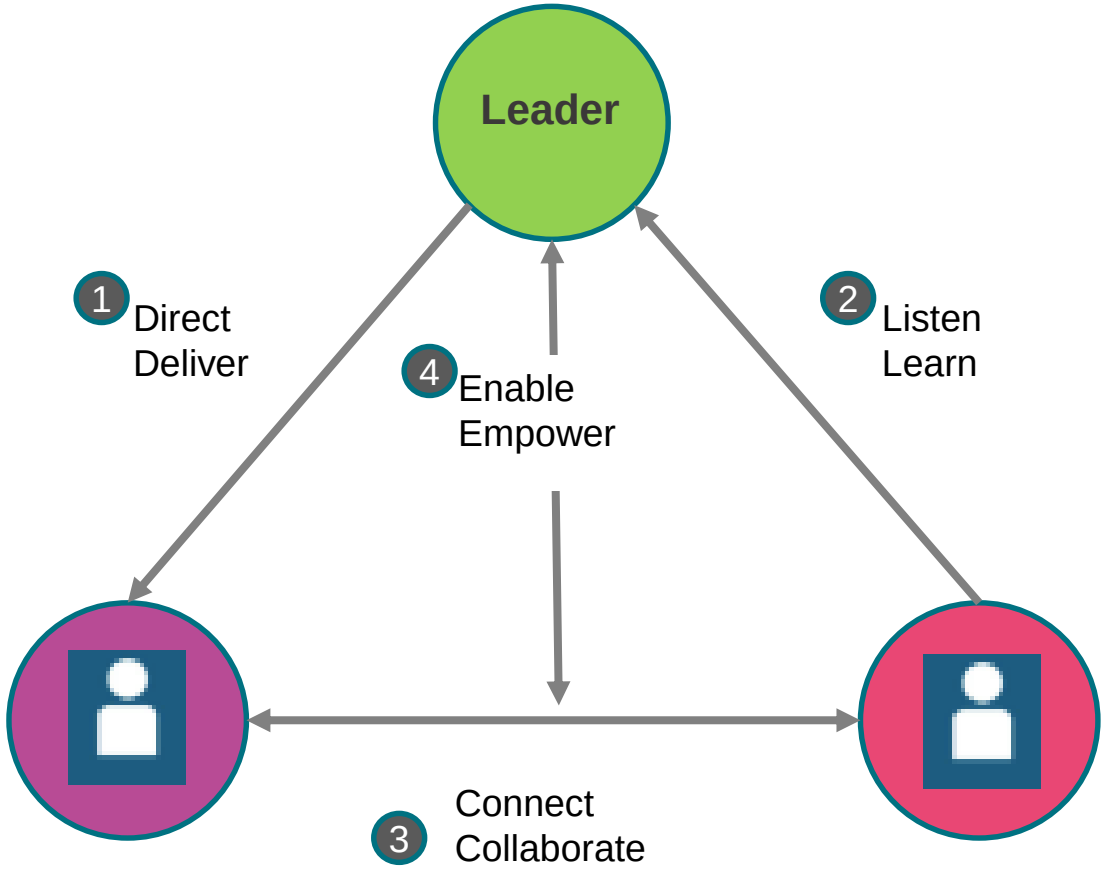
A New World of Communication



Bonchek

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Design principles

1. Focus on outcome
2. Build community
3. Effective use of technology
4. Learning system
   - System science, QI, qualitative research, clinical research

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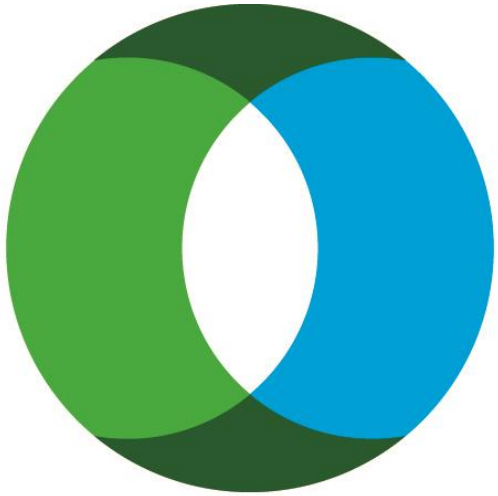
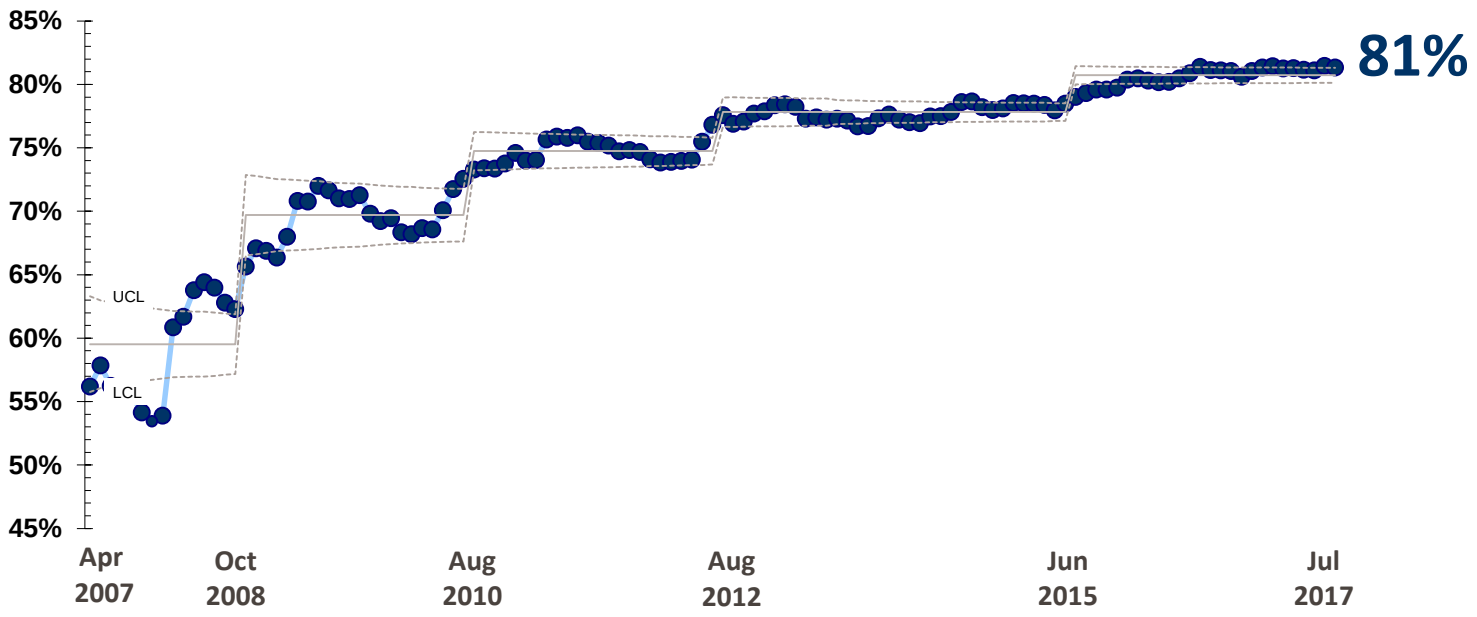
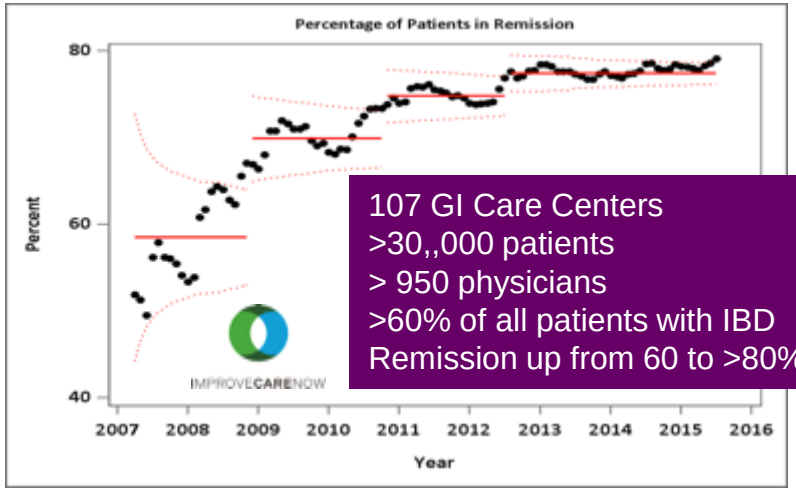


IMPROVE**CARE**NOW

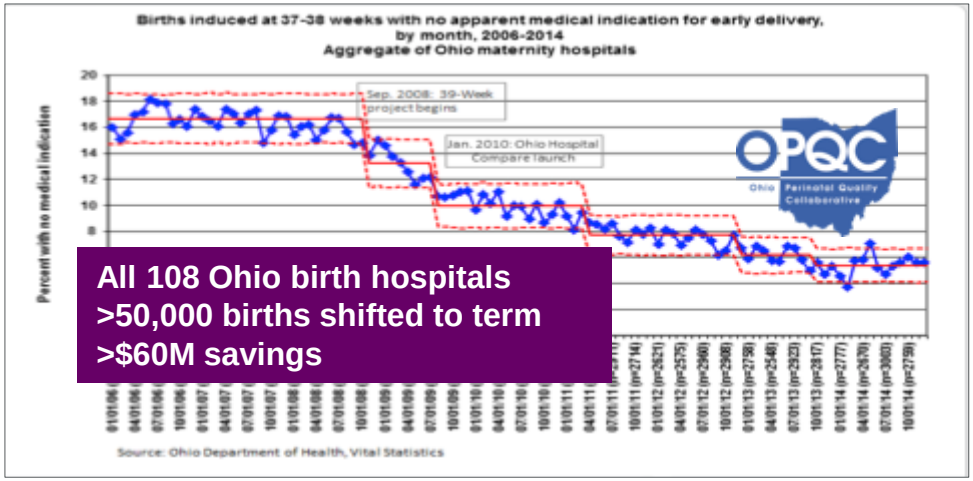
Clinical remission rate in CD and UC

PGA = Inactive (Physician Global Assessment)

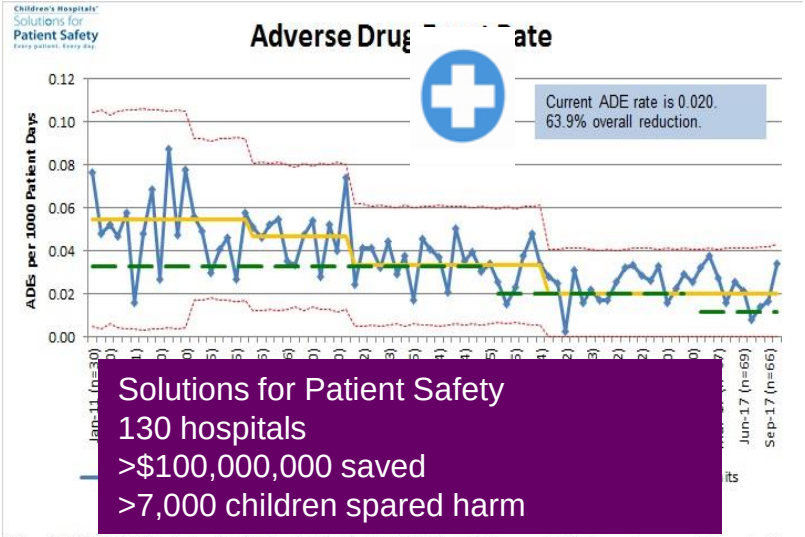




107 GI Care Centers
>30,,000 patients
> 950 physicians
>60% of all patients with IBD
Remission up from 60 to >80%



All 108 Ohio birth hospitals
>50,000 births shifted to term
>$60M savings



Solutions for Patient Safety
130 hospitals
>$100,000,000 saved
>7,000 children spared harm

© Copyright 2017, Ohio Children's Hospitals Solutions for Patient Safety (OCHSPS). All rights reserved. This document was created as part of the quality assessment and peer review activities of OCHSPS Learning N
subject to discovery pursuant to Ohio Revised Code Section 2305.25
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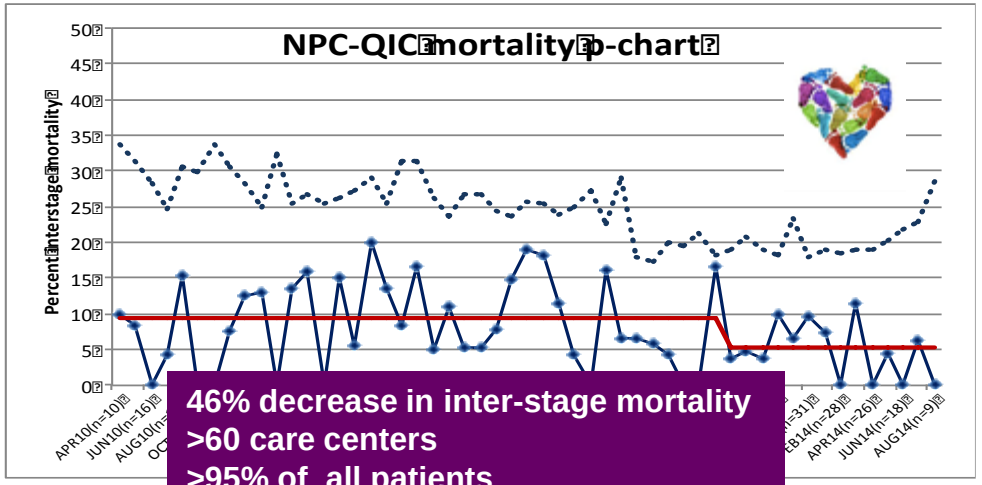

46% decrease in inter-stage mortality
>60 care centers
>95% of all patients

As much as 60% reduction in research costs attracting new revenue sources

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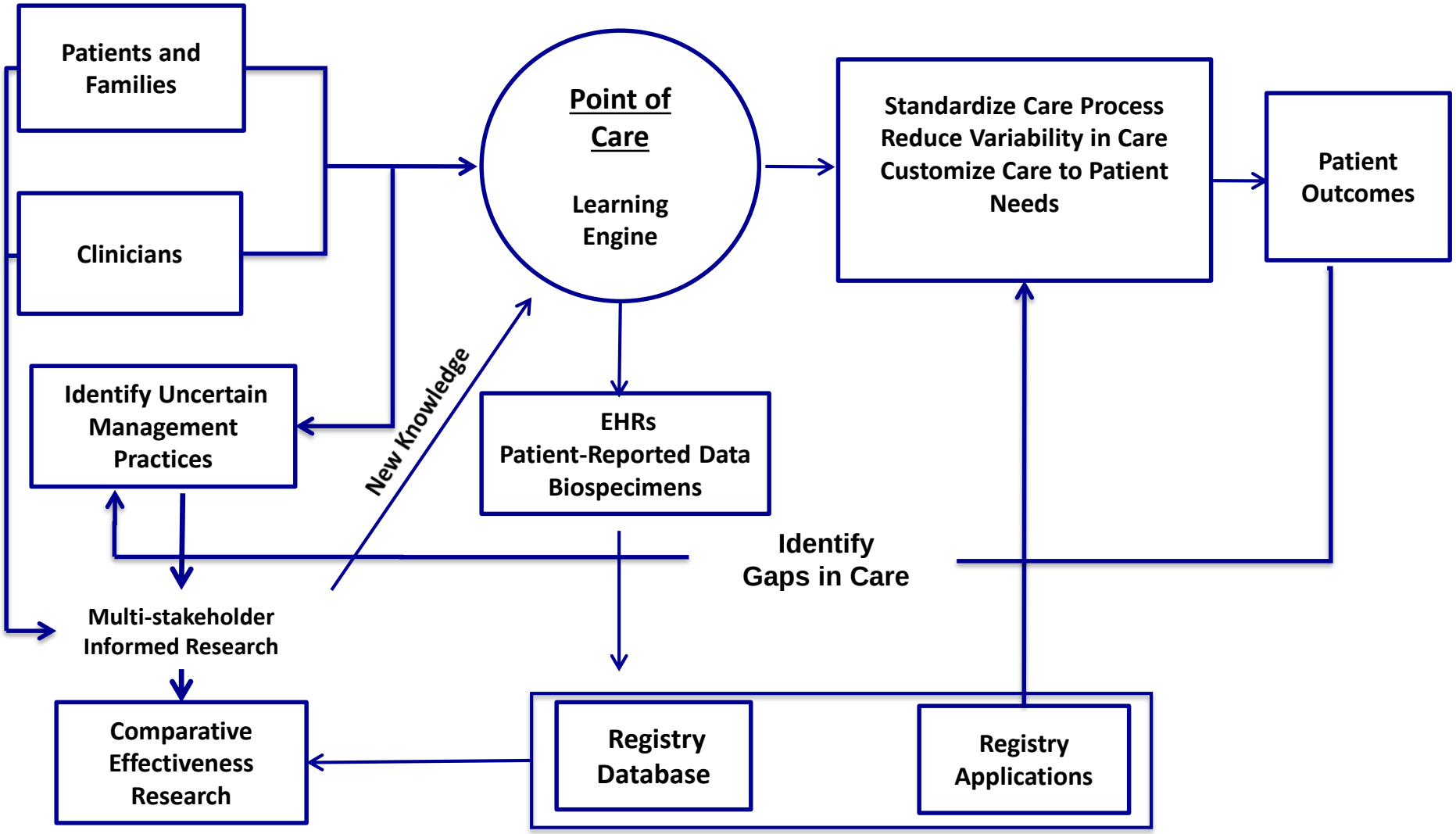
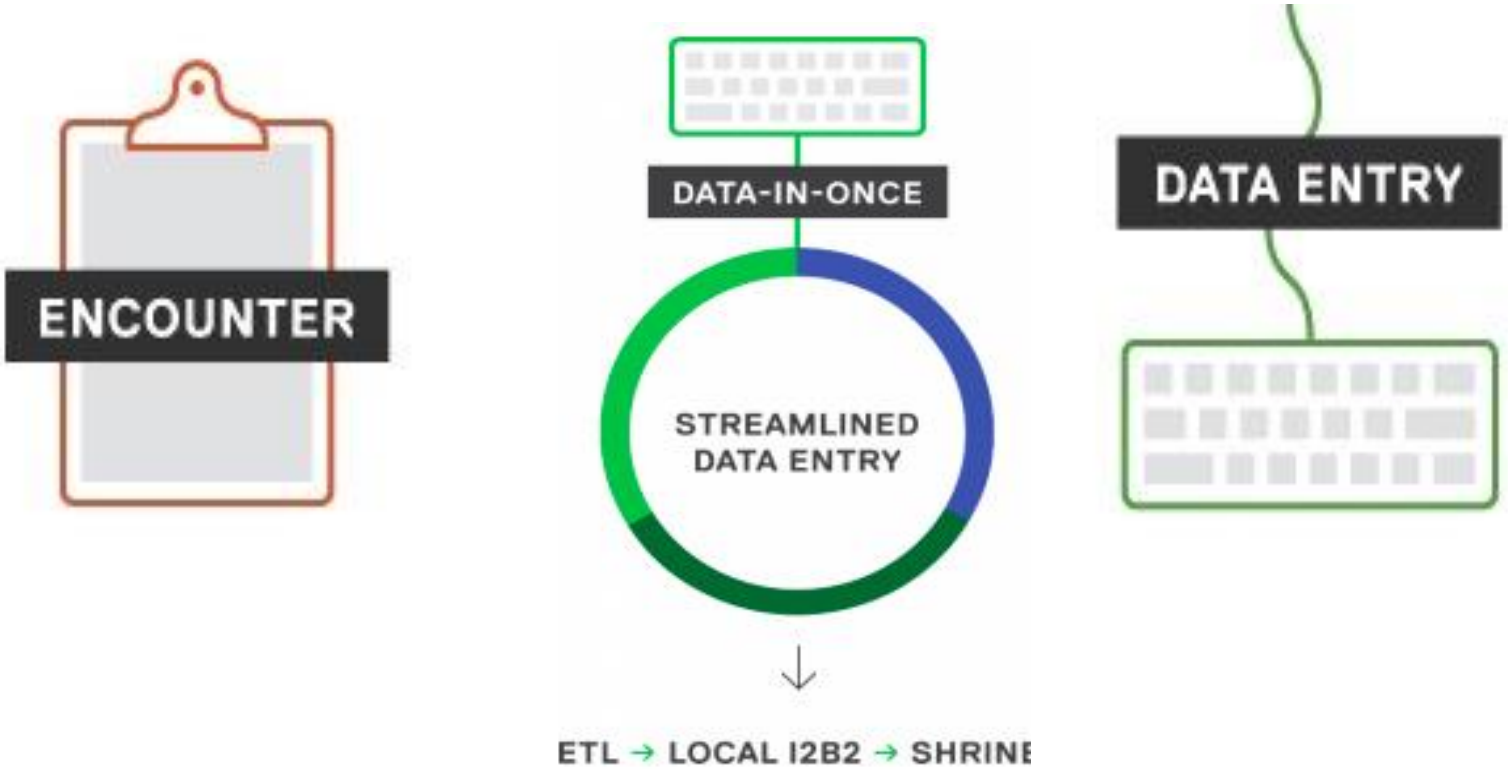
Improving Outcomes with a Learning Health System



“Data in once” - Technology for efficient data capture



Marsolo K, Margolis PA, Forrest CB, Colletti RB, Hutton JJ. A digital architecture for a network-based learning heath system – integrating chronic care management, quality improvement, and research. eGEMS. 3:2015

“Enhanced” Registry

- Automated chronic care reports
- Transparent performance data
- Data quality reports
- Data (and technology) for research
  - Comparative effectiveness
  - Clinical trials
  - N of 1

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Patients

Name	Steven Tannenbaum, 16	Rosie Padilla, 8
Occupation	Field hockey star	Aspiring author
Quote	"I may have a disease but I'm not going to let it control my life."	"I just want this all to go away so I can be back at school with my friends."

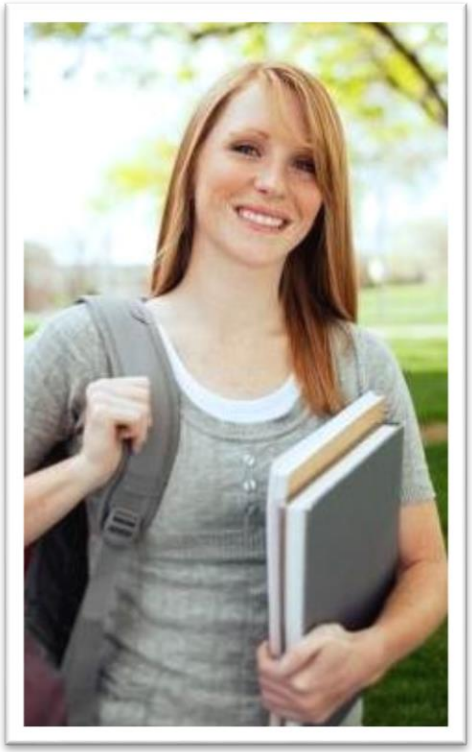
Physicians

Nurse

Name	Darren Ames, 54	Natalia Belko, 42	Veronica Mayfield, 37
Occupation	Pediatric IBD Specialist, Researcher	Pediatric Gastroenterologist	Pediatric GI Nurse
Quote	"I'm determined to not let high-risk patients fall through the cracks–we shouldn't waste any time getting kids the treatment they need."	"I want to be a partner with my patients and their parents–decisions around treatment is a team effort."	"Helping kids with IBD take control of their health is my lifelong pursuit."

Personas

Bianca Simmons, Age 20



"What does not kill you makes you stronger."

Bianca's Goals

- Keep symptoms at bay
- Be a leader in the IBD community

+

the ostomy toolkit

100%	90%	9%	1%
Awareness	Participation	Contribution	Ownership
Knows of ImproveCareNow	Signs Consent Reads a blog	Joins QI Team Becomes a mentor	Leads a team Creates tools

"A Guide to Gutsy Living": Patient-Driven Development of a Pediatric Ostomy Toolkit

Jennie G. David, MS,[a] Alexander Jofriet, BS,[b] Michael Seid, PhD,[c] Peter A. Margolis, MD, PhD,[c]
for the ImproveCareNow Pediatric IBD Learning Health System

As patients (J.G.D. and A.J.) who have lived with pediatric-onset inflammatory bowel disease (IBD) since 12 and 9 years of age, respectively, and who underwent ostomy surgery at 19 and 15 years of age, respectively, we experienced a lack of psychosocial education about our surgeries. This negatively impacted our ability to adjust postoperatively to having an ostomy. For example, we had to learn how to explain our ostomies to friends and how having an ostomy might impact our clothing choices. The education we received about our ostomy surgery was brief and focused only on basic skills regarding caring for an ostomy, including changing and emptying the bag, but did not address concerns we had about

the network is presently composed of 107 pediatric IBD centers in the United States, Europe, and the Middle East.[2,3] One of ICN's central values is coproduction, in which participants (patients, families, clinicians, and researchers) work together to plan,

"we describe how we, as patients, harnessed the capacity of a collaborative chronic care network and were supported to develop a resource that patients needed."

(PAC) is a national council for patients with IBD who are patient advocates

FREE NIH

the final manuscript as submitted and agree to be accountable for all aspects of the work.

The Chair Grant

N ENGL J MED 377;2 July 13, 2017

Jennie G. David, M.S.

For the year between graduating from college and beginning a doctoral program in clinical psychology, I worked as a researcher in a cardiac surgery department in my hometown of

weeks that year on an inpatient floor as well, impatiently exhausting treatments that might settle my disease and the symptoms that could obstruct my pursuit of an academic career. Fastened to my

"The **chair grant**," as I came to refer to it, **seemed to encapsulate the chimera that I was**, the fusion of patient and researcher.

It was about **not being only a patient or only a researcher**, about not thinking that sitting in an infusion chair nullified my worth as a researcher. **It was about using the skills I had cultivated as a researcher,** tended by thoughtful mentors, **to address a problem that I saw and felt as a patient**."

A “Commons” for sharing

IMPROVECARENOW EXCHANGE

+ Add

Category Video Forums Recent or

ENTERAL THERAPY

Question: Can an established tool for nutritional therapy for induction be implemented across the network?

Enteral Therapy Summary

6 views 0 Likes 0 comments

dcunion via **sarahnocito** onto **Research**

NCH "NG placing party." In 2013, our team had "Enteral Therapy Thursday." We all did enteral therapy PO for a day.

9 views 0 Likes 0 comments

marci.johnson via **jsmith** onto **Nutrition**

ENTERAL THERAPY

Question: Can an established tool for nutritional therapy for induction be implemented across the network?

Enteral Therapy Summary

34 views 0 Likes 1 repin 1 comment

sarahnocito onto **ICN Research Teams**

kwiegand Improvers are meeting Friday, July 15th at 4:00pm EST to discuss this topic! Call in using the GTM or email me (kendra.wiegand@cchmc.org) to be added to the group email list. GTM:...

NCH "NG placing party." In 2013, our team had "Enteral Therapy Thursday." We all did enteral therapy PO for a day.

56 views 0 Likes 1 repin 2 comments

Enteral Therapy for Crohn's Disease:

Let them eat.....very little

Resources created at NCH for patients on enteral therapy.

44 views 0 Likes 0 comments

jsmith onto **Enteral Nutrition**

Enteral Nutrition Flowchart

Enteral therapy toolkit includes flowchart, initiation table, and talking points

5 views 0 Likes 0 comments

lacyamor via onto **Enteral Nutrition**

Enteral Nutrition Flowchart

Enteral therapy toolkit includes flowchart, initiation table, and talking points

15 views 1 Likes 0 comments

molibella via onto **Exclusive Enteral Nutrition**

Enteral Nutrition Flowchart

Enteral therapy toolkit includes flowchart, initiation table, and talking points

32 views 0 Likes 0 comments

lacyamor via onto **Enteral Nutrition**

An Educator

NATIONAL PEDIATRIC CARDIOLOGY QUALITY IMPROVEMENT COLLABORATIVE

A learning network that engages patients, families, clinicians, and researchers and uses data for improvement and research

Samuel Hanke MD, MS

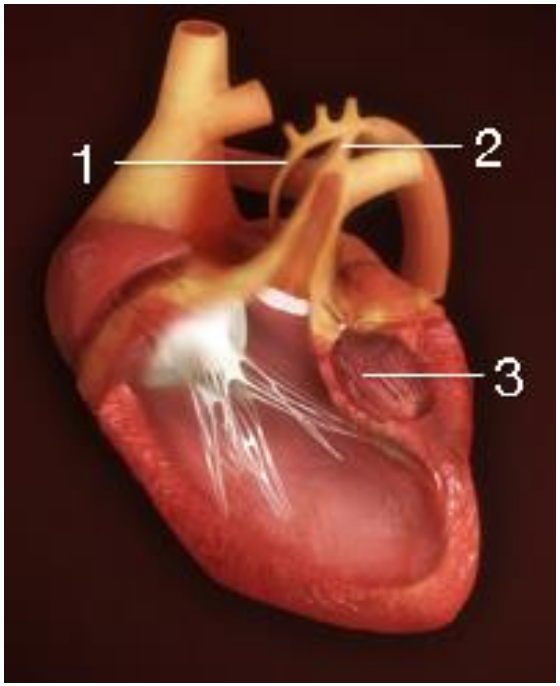
Pediatric Cardiologist, CCHMC

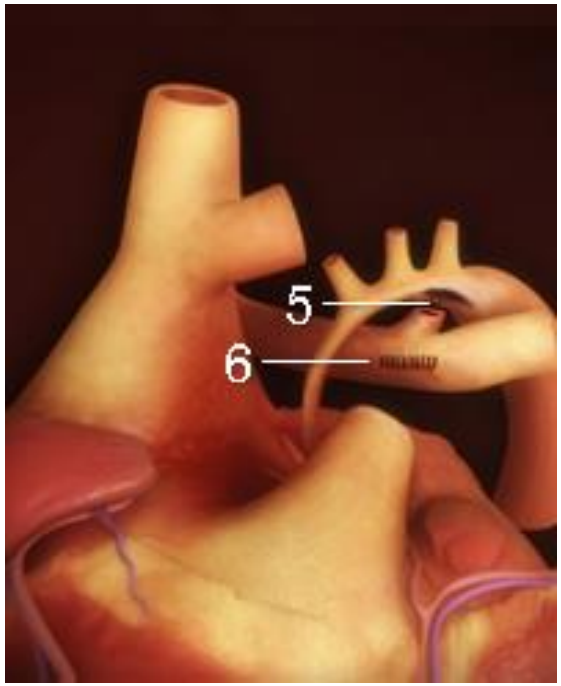
Clinical Data Lead, NPCQIC

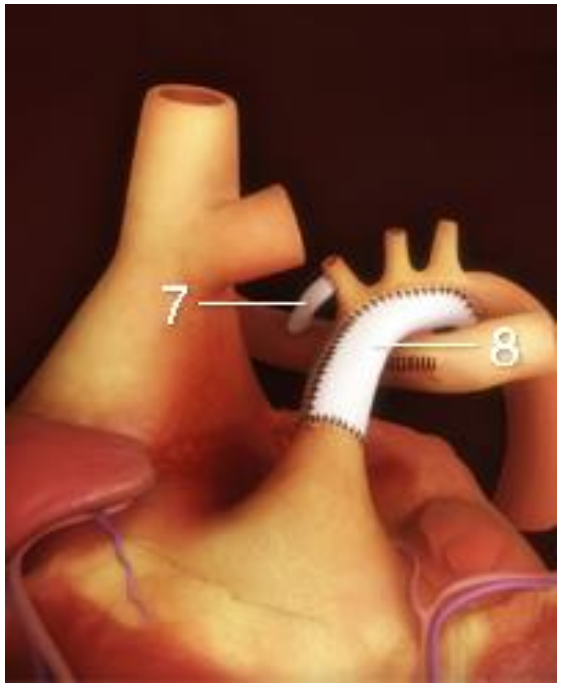
NATIONAL PEDIATRIC CARDIOLOGY
Quality Improvement Collaborative

2006: 6 centers in pilot; 2009 22 centers launch
2018: 65 Care Centers in the US and Canada

Hypoplastic Left Heart Syndrome

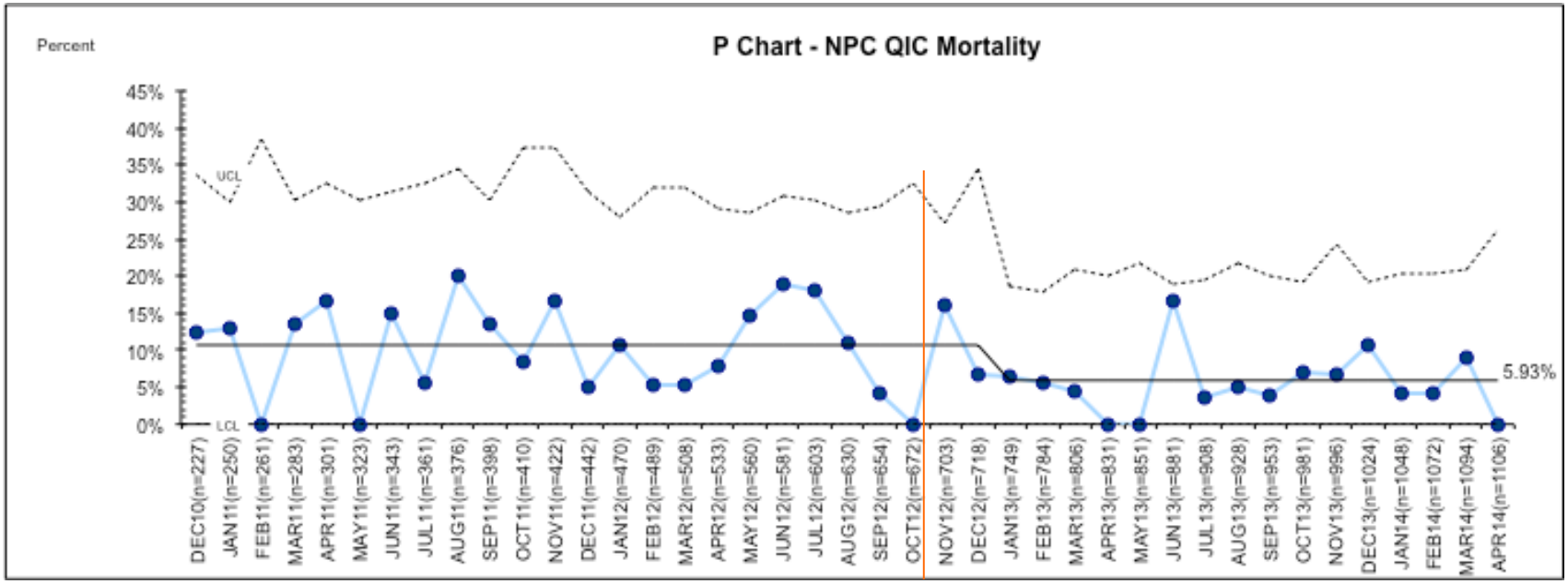






Images courtesy of HI + MediaLab

Interstage Mortality



Reduction in interstage mortality by ~40%

Discovery and Spread: changing the field

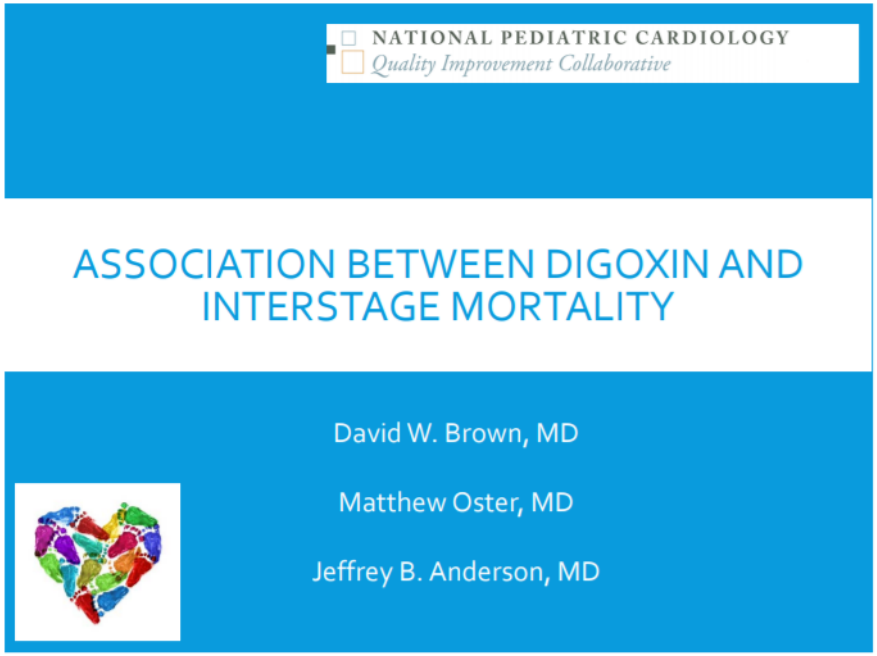
Digoxin and Interstage Mortality

Mortality	Without digoxin	With digoxin	P-value
NPC-QIC	44/438 (10%)	2/121 (1.7%)	0.003
PHN (SVR)	28/228 (12.3%)	3/102(2.9%)	0.02

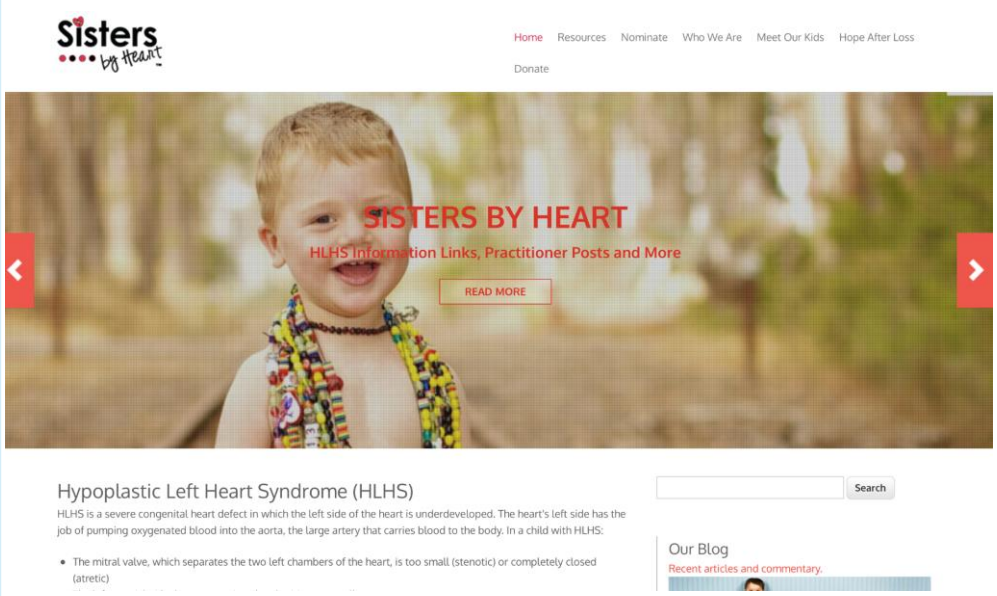
Discovery and Spread: changing the field

- Brown D et al *Digoxin use at discharge is associated with reduced interstage mortality after Stage I Palliation for single ventricle heart disease.*
- American College of Cardiology Scientific Session & Expo, March 14-16, 2015. San Diego, CA.

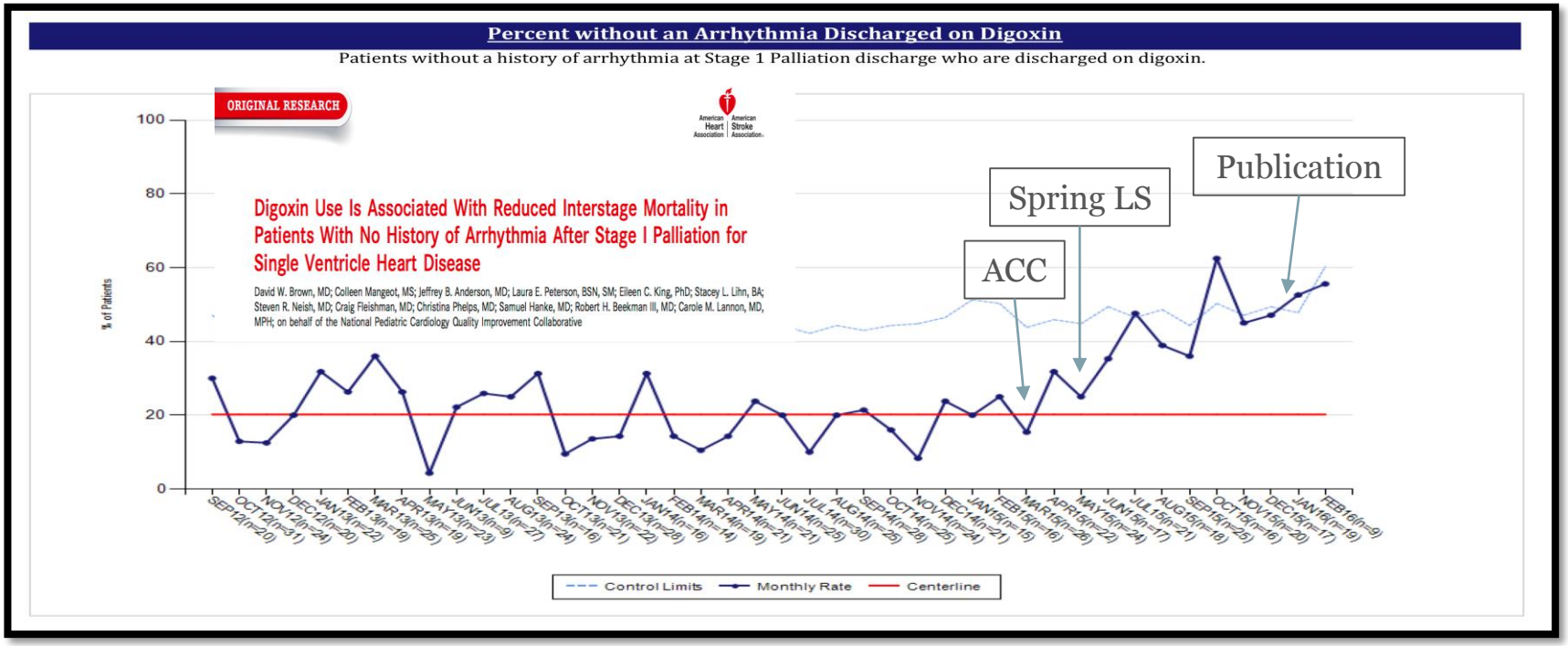
What happened next



May 1, 2015 Spring Learning Session



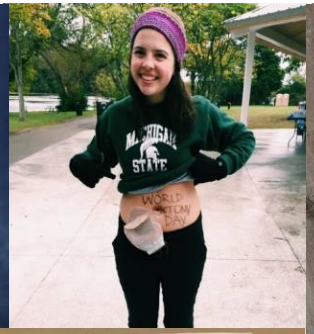
Digoxin Spread

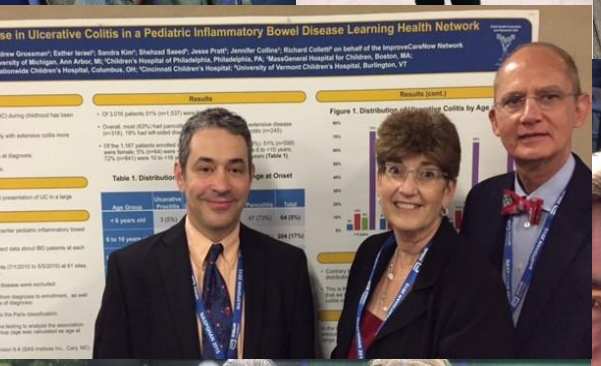


Summary

- Learning Health System Network model overcomes artificial barriers between clinical care, improvement and research
  - System/platform to learn and apply
  - Allows scale and diversity of contribution
  - Self-organizing
  - Co-produced
- Culture of generosity and contribution
- Focus on thriving

Cincinnati Children's
changing the outcome together



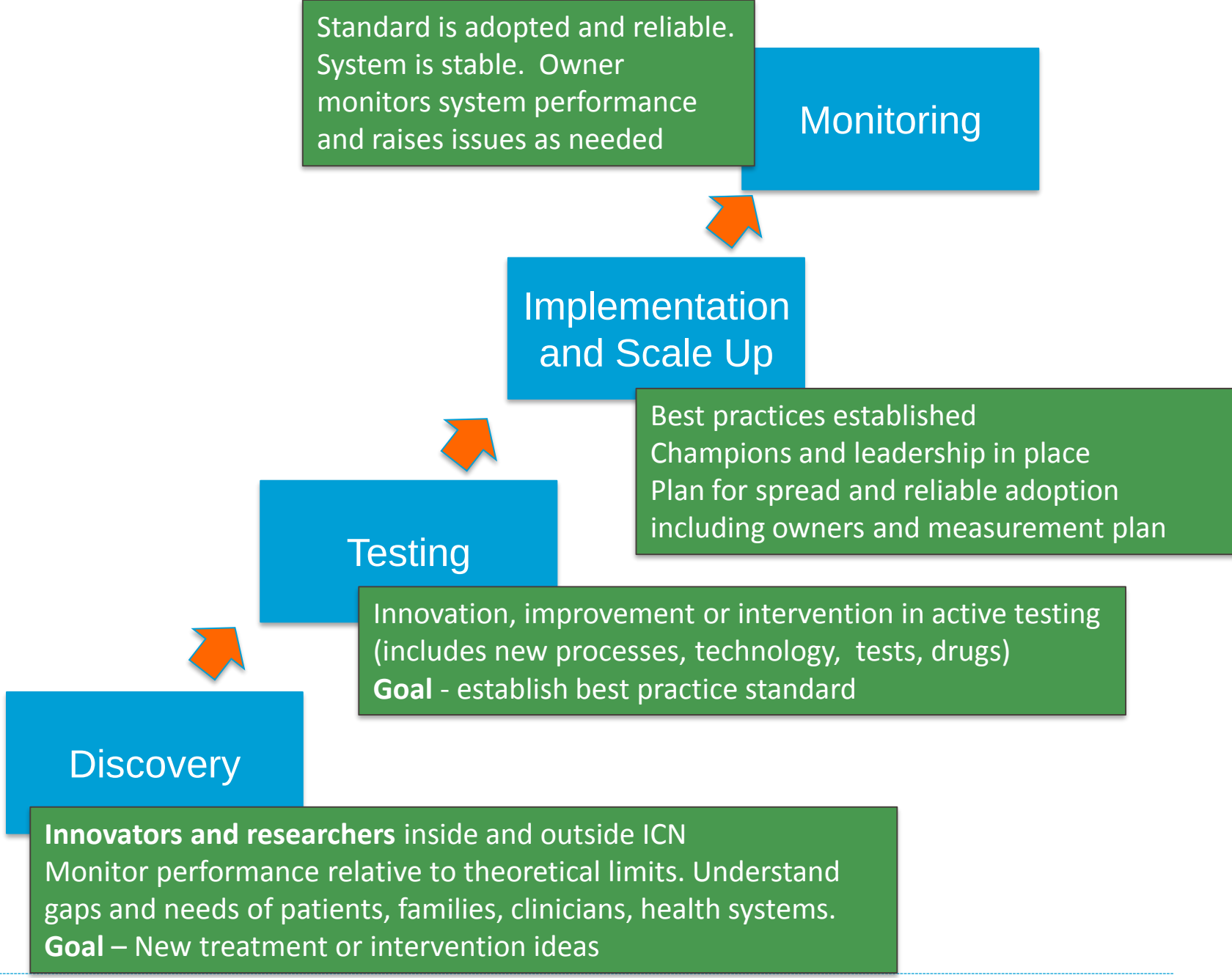

se in Ulcerative Colitis in a Pediatric Inflammatory Bowel Disease Learning Health Network
Results
Results (cont.)
Table 1. Distribution
Age at Onset


Wii U
Patient
Charlotte
Stealth

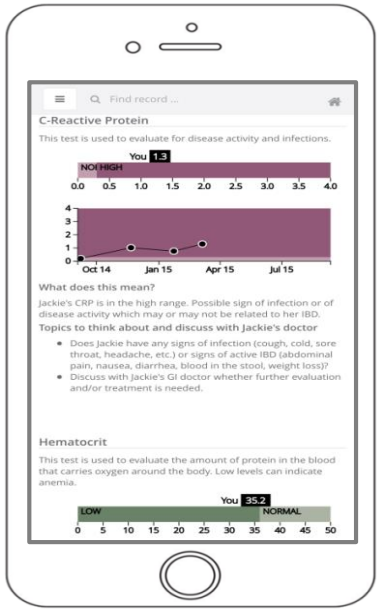

This is not a story about a PhD student or a person who's had IBD for over 12 years, this is how an ordinary patient saw an opportunity and how a network achieved something meaningful together.
Jennie David

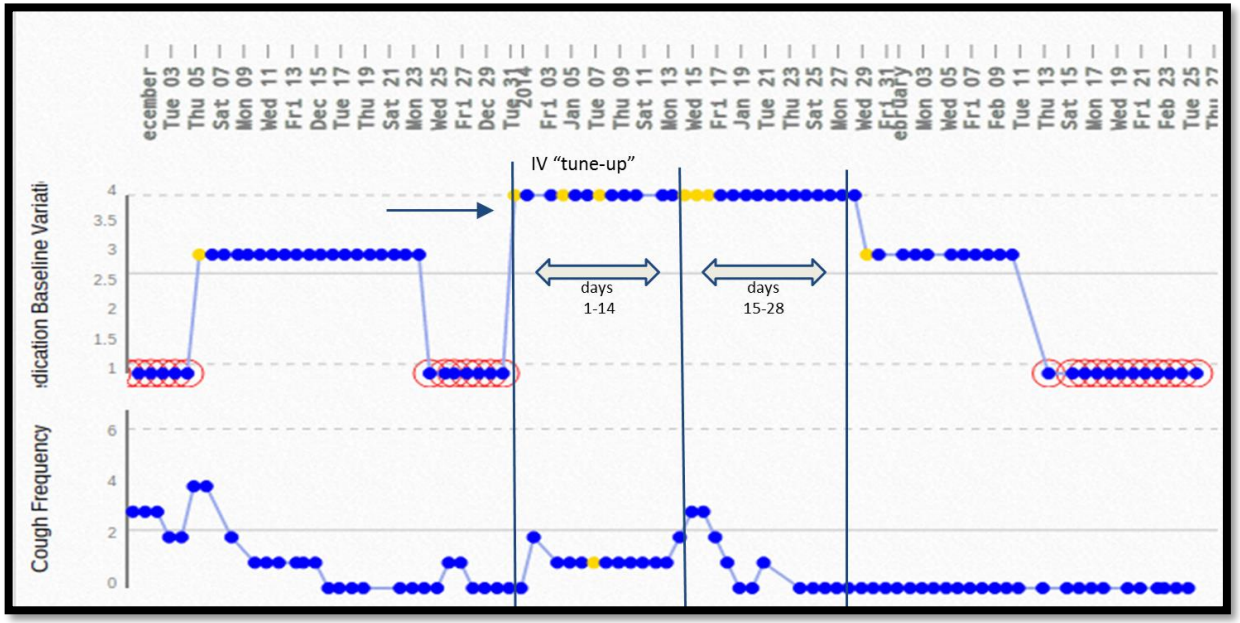

WE ♡ ICN
Patient
Doctors

Building Community Using Public Narrative


Standard is adopted and reliable. System is stable. Owner monitors system performance and raises issues as needed
Monitoring
Implementation and Scale Up
Best practices established
Champions and leadership in place
Plan for spread and reliable adoption including owners and measurement plan
Testing
Innovation, improvement or intervention in active testing (includes new processes, technology, tests, drugs)
Goal - establish best practice standard
Discovery
Innovators and researchers inside and outside ICN
Monitor performance relative to theoretical limits. Understand gaps and needs of patients, families, clinicians, health systems.
Goal – New treatment or intervention ideas

Patient Reported Outcomes





PRODUCE Study: N-of-1 trials to determine effectiveness of a specific carbohydrate diet (SCD) in reducing symptoms and inflammatory burden in patients with IBD compared to liberalized SCD and usual diet at the individual and population level.

Burden of maintaining strict diet

Degree of symptom benefit achieved

Sample size = 120. ¼ the sample size needed for a standard RCT

Heather Kaplan, MD, MSc
Lisa Opipari, PhD

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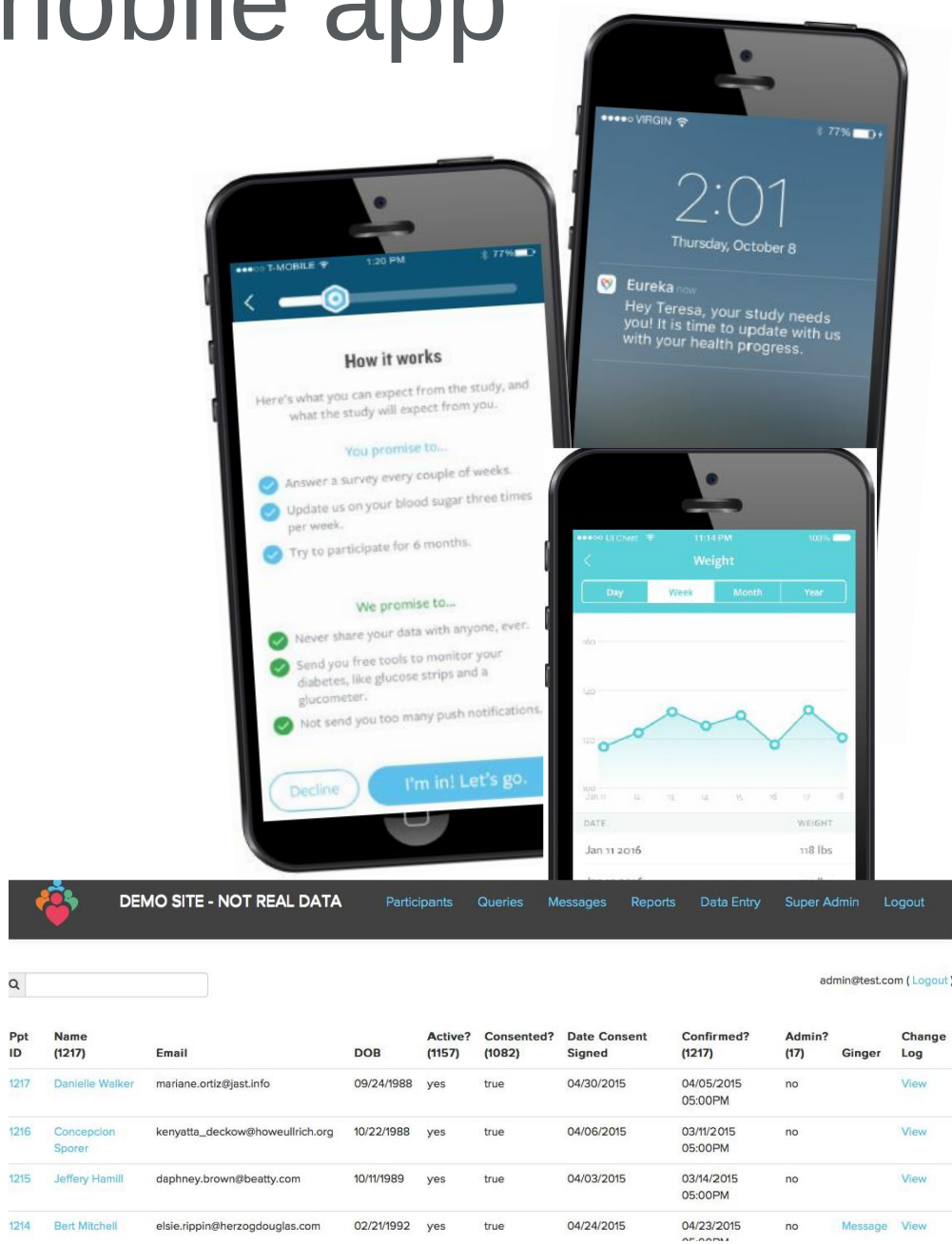
Eureka N-of-1 mobile app

- Participant-facing “front end,” an investigator portal, a secure “back end” for data storage and analyses
- App allows:
  - Collection of outcome data
  - Tracking intervention/exposure status
  - Review of collected data in real time
  - Summary of N-of-1 results
- Website allows:
  - Review of data
  - Tracking of upcoming trial tasks



ICN Network as a Platform for Research

IMPROVECARENOW

RESEARCH CAPABILITIES

Measure **real-world and long-term effectiveness** of interventions, innovations and therapeutics

Test innovations (e.g., medication delivery, diagnostics, technology)

Optimize care and intervention use by clinicians and patients

Conduct **post-marketing surveillance** for adverse events

Engage **clinicians and patients to prioritize** and design studies

Conduct **efficacy, effectiveness** studies

Identify research participants to facilitate study design and recruitment

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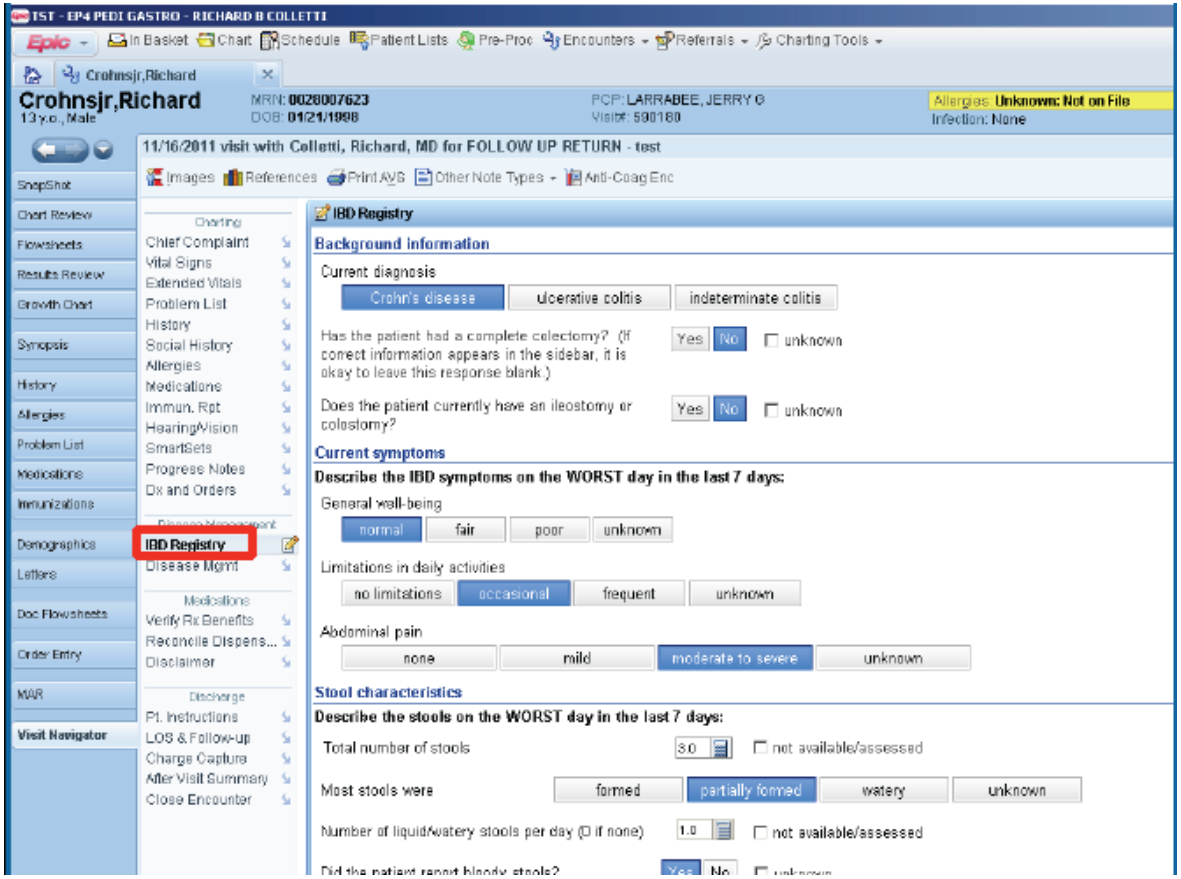
Data-in-once (at clinical visit)



Automated pre-visit planning

IBD PRE-VISIT ASSESSMENT

Patient Name: Huxtable,Rudy /MRN:6005603 | Birth Date: 7/16/2002 | Primary Provider:
Patient Num: 5 | Current Age: 12.0 | Secondary Provider:

Diagnosis: Crohn's Disease - 5/2010	Last Visit: 3/7/2014	Last PPD & Date:
Phenotype: Inflammatory, non-penetrating, non-stricturing	Wt (kg): 20.41	Negative 9/7/2012
Lower: Ileal only	Ht (cm): 91.44	Last CXR:
Upper Proximal: No	BSA: .72	Negative 9/10/2010
Upper Distal: No	Date of last hospitalization:	Last Gold Test & Date:
Perianal Phenotype: No	Not Recorded	Not Done

>> Visits:	01/15/2013	01/23/2013	02/26/2013	04/09/2013	05/21/2013	07/09/2013	08/19/2013	03/07/2014	Age of Result
sPCDAI	0	20	0	10	0	10	25	50	
PGA	Quiescent	Quiescent	Quiescent	Quiescent	Quiescent	Quiescent	Quiescent	Mild	
Nutritional Status	Satisfactory	Satisfactory	Satisfactory	At risk	Satisfactory	Satisfactory	Satisfactory	Satisfactory	
Growth Status	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	
Albumin	4.5		4.3	4.5	4.3	4.4	4.3		12 mo ⓘ
CRP	0.00		0.00	0.00	0.50	0.00			13 mo ⓘ
ESR							7.0		12 mo ⓘ
Hematocrit	36.0		36.1	38.7	35.7	35.5	34.8		12 mo ⓘ

*Result date may differ from visit date ⓘ Lab ordering guidelines: 5-ASA:q6mo 6mp/ASA/MTX:q3-4mo Biologics:q2-3mo

Care Stratification

CS Score	CSS Group	Current Disease Activity	12 Month Disease Activity	BMI Z-Score	Ht Velocity	Hosp Adm within 3 months	Currently on Cortico	Cortico last 12 months	Psychosocial Risk Factors
5	4-9 (High)	1 (Mild)	1 (Mild/Moderate/Severe)	0 (BMIZscore >=-1 or Missing)	3 (HtVelocityZscore <-2)	0 (No or Unknown)	0 (No or Unknown)	0 (No or Unknown)	No

>> Treatments	Dose (mg)	mg/kg (last wt)	Guideline	ⓘ Attention Needed
Immunomodulators				
Thiopurines TPMT date / result	Not done		Consideration: If active dz, consider 6TGN levels q 90	ⓘ Consider 6 TGN levels
Other				
Enteral Therapy	Supplemental therapy		Dietary consult	

Other Labs	Levels	Dates	Levels	Dates	Notes
6MP Patients	6-TGN: 192.0	12/23/2011	6MMPN: 779.0	12/23/2011	

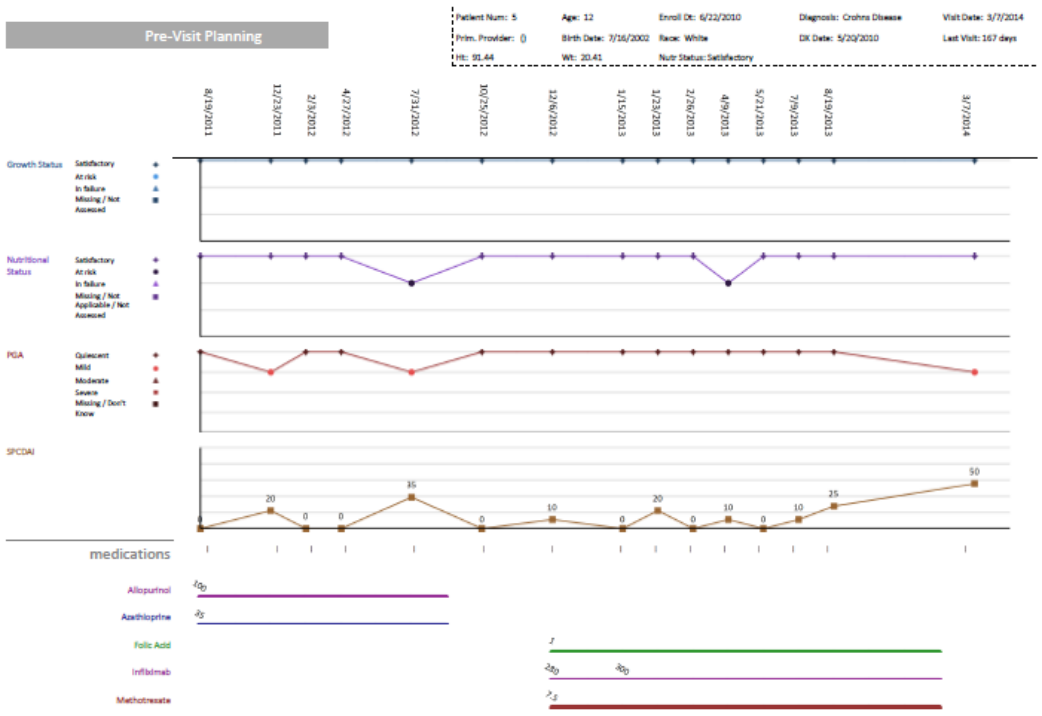
Considerations: The following are general items for your consideration as you establish a plan for your patient. They are not applicable to all patients. Similarly, evaluation and testing beyond those noted below may be indicated. These considerations should not be used in place of your clinical judgement.

Thiopurines: Consider 6 TGN levels

Additional considerations for patients with suspected MILD disease:

Maximize current therapy

• Confirm adherence to medication and dosage

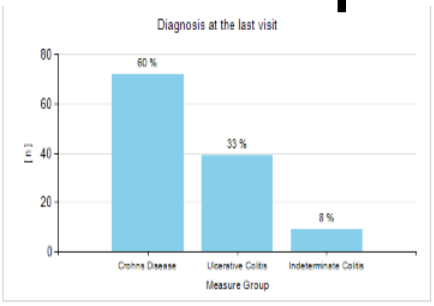


Automated population management

Document Map

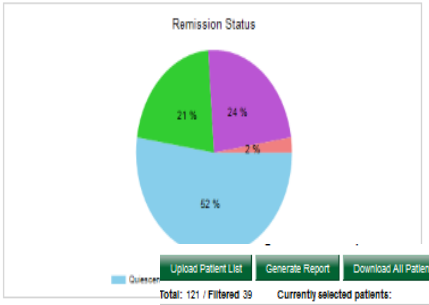
- PatientGroups
  - Care Stratification Score
    - Care Stratification Score
    - Current Disease Activity - CSS
    - 12 Month Disease Activity - CSS
    - BMI Z-score - CSS
    - Height Velocity Z-score - CSS
    - IBD-Related Hospital Admission within 3 Months - CSS
    - Current Corticosteroid Use - CSS
    - Corticosteroid Use in the Last 3-12 Months - CSS
    - Psychosocial Risk Factors - CSS
  - Clinical Reports
    - Diagnosis at the last visit
    - Remission Status
    - Nutritional Status
    - Growth Status
    - TPMT Activity
    - Visit within 200 Days
    - Sustained Remission
  - Demographic Reports
    - Patients by Race
    - Patients by Gender
    - Patients by Age Group
  - Medication Use
    - Thiopurine is at least the dose recommended in the Model Ca
    - Infliximab Dose is at least 4.5 mg/kg
    - Methotrexate Dose is at least 10 mg/m2 or 15 mg/wk
    - Prednisone Free Remisson
    - Prednisone Usage

Switch



	Diagnosis at the last visit (n and %)
Crohns Disease	72
Ulcerative Colitis	39
Indeterminate Colitis	9
Total	120

Switch



	Remission Status (n and %)
[illegible]	76
Quiescent	22
Mild	9
Moderate	10
Severe	1
Total	120

Upload Patient List | Generate Report | Download All Patients | Download 'Filtered' Patients

Total: 121 / Filtered 39 Currently selected patients:

Patient Number	Patient Name	MRN	Birth Date	Gender	Provider ID	Secondary Provider	Assessment Date	Current Diagnosis	PGA	CARE Stratification Group	CARE Stratification Score	Weight	Last Nutritional Status	Last Growth Status
2	Lembcke, Maya	6006959	03/30/1996	Female			12/23/2013	Ulcerative Colitis	Mild	0-3 (Low)	2		- Missing	N/A, > 14 YOF
13	Dvorak, Rodrick	557138	03/02/1996	Male	6	1	03/06/2013	Ulcerative Colitis	Mild	0-3 (Low)	2	114.6	Satisfactory	Satisfactory
22	Lombardo, Tomas	999603	09/29/2005	Male	7	3	09/28/2013	Ulcerative Colitis	Quiescent	4-9 (High)	5	25.1	Satisfactory	Satisfactory
29	Heldt, Carmen	947272	11/03/1996	Male	6	1	06/24/2013	Ulcerative Colitis	Moderate	4-9 (High)	8	80.5	Satisfactory	Satisfactory
30	Yother, Roberta	323447	12/05/2005	Female	6	10	02/25/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	3	53.52	Satisfactory	Satisfactory
31	Mabe, Otis	640839	06/21/2000	Male	5	6	09/21/2013	Ulcerative Colitis	Mild	4-9 (High)	8	32.8	At risk	Satisfactory
32	Harrow, Kristie	955387	04/20/1997	Female	9	1	11/03/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	0	91.2	Satisfactory	N/A, > 14 YOF
34	Narcisse, Peter	328088	07/29/1995	Male	1	4	04/30/2013	Ulcerative Colitis	Mild	0-3 (Low)	3	53.2	Satisfactory	N/A, > 17 YOM
35	Heise, Socorro	719287	08/10/2000	Female	4	8	05/23/2013	Ulcerative Colitis	Mild	4-9 (High)	5	45	Satisfactory	Satisfactory
36	Glazier, Lauran	646097	05/06/2001	Female	5	6	04/11/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	3	25.3	At risk	At risk
37	Paschal, Seth	754713	09/19/1994	Male			04/13/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	3	85.5	Satisfactory	N/A, > 17 YOM
38	Liang, Shanae	572101	11/30/1996	Female			04/22/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	1	53.5	Satisfactory	N/A, > 14 YOF
42	Avilla, Logan	262295	05/28/1996	Female	8	3	04/26/2013	Ulcerative Colitis	Mild	0-3 (Low)	2	65.4	Satisfactory	N/A, > 14 YOF
47	Barrientez, Tobias	408085	09/18/1997	Male	4	7	07/24/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	1	66.7	Satisfactory	Satisfactory
48	Worsham, Roy	987154	02/05/2000	Male	3	7	08/30/2013	Ulcerative Colitis	Moderate	>=10 (Critical)	10	36.2	At risk	At risk
49	Pemberton, Benton	102984	01/26/1996	Male	7	5	03/18/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	3	49.7	At risk	N/A, > 17 YOM
53	Manzano, Setsuko	547276	04/24/2000	Female	4	10	02/11/2013	Ulcerative Colitis	- Missing	0-3 (Low)	0	33.2	At risk	Satisfactory
55	Myatt, Williams	869692	03/17/2002	Male	5	9	09/14/2013	Ulcerative Colitis	Moderate	4-9 (High)	9	21.7	At risk	At risk
57	Hibbard, Alva	196386	02/13/2005	Male	5	5	09/06/2013	Ulcerative Colitis	Quiescent	4-9 (High)	4	48.9	Satisfactory	Satisfactory
59	Golla, Karlene	661783	06/22/2000	Female	6	7	04/29/2013	Ulcerative Colitis	Quiescent	4-9 (High)	6	36.4	Not Assessed	Not Assessed
61	Baynes, Marianne	440146	07/13/2008	Female	10	1	05/23/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	3	15.6	Satisfactory	At risk
65	Shand, Mamie	577282	08/06/1998	Female	8	6	07/16/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	0	58.9	Satisfactory	N/A, > 14 YOF
			09/16/2000	Female	1	5	12/05/2013	Ulcerative Colitis	Quiescent	0-3 (Low)	2	36.5	Satisfactory	Satisfactory
			05/25/2004	Male	4	5	08/18/2013	Ulcerative Colitis	Severe	4-9 (High)	4		Not Assessed	Not Assessed
			11/20/2001	Female			04/25/2013	Ulcerative Colitis	Mild	4-9 (High)	7	29.3	Satisfactory	Satisfactory

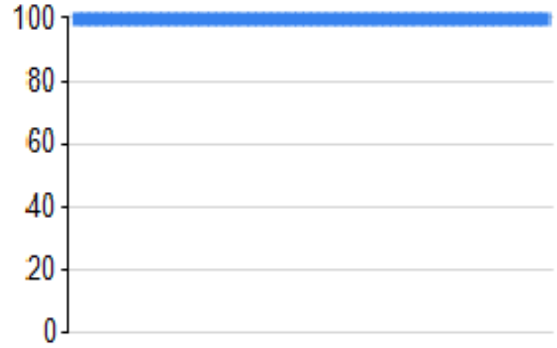
Data as of 12/10/2013 Reporting Month: 2013-11 Reporting Center: Vermont Children's Hospital

Export Center Data To Excel | All Center Measures - Small Multiples Graphs | All Centers Performance Report | All Graphs Per Center Report

Dashboard With Sparkline | All Measures Per Center - Small Multiples Graphs | Gap Analysis Report

Measure Group	Sub Group	Measure Title	Network Target	>=75% cohort Teams' Performance	Team's Performance
Clinical Measures	Clinical Remission	Percent of patients in remission	80	77	80
		Percent of patients with prednisone-free remission	76	74	75
		Percent of patients with sustained remission	45	47	48
		Percent of patients not taking prednisone	95	93	91
	Adequate Nutrition and Growth	Percent of patients with satisfactory nutritional status	90	90	100
		Percent of patients with at risk of nutritional failure		9	0
		Percent of patients in nutritional failure		2	0
		Percent of patients with satisfactory growth status	90	92	98
		Percent of patients with at risk of growth failure		6	2
		Percent of patients in growth failure		2	0
	Model Classification	Percent of visits with a complete bundle	95	85	91
	Model Treatment	Percent of patients with a documented visit within the last 200 days	80	76	83
		Percent of patients whose dose of thiopurine is at least the dose recommended in the ICN Model Care Guidelines	80	67	71
		Percent of visits where initial dose of anti-TNF therapy is given that patient had a TB test within the prior 12 months	95	86	50
		Percent of Patients where the dose of infliximab is at least 4.5 mg/kg	95	95	92
Data Quality		Percent of population registered AND active in registry		75	98
		Percent of actual visits recorded in registry		83	100
		Percent of visits with all critical data recorded		86	91
		Percent of visits meeting the consistency bundle		85	71
		Percent of visits entered that were entered within 30 days of visit date ***-*** Data reported on a two month lag		98	100
		Percent of active patients in registry with visit recorded in last 13 months		92	98

Components of Classification Bundle - Diagnosis (>=75%,[%])

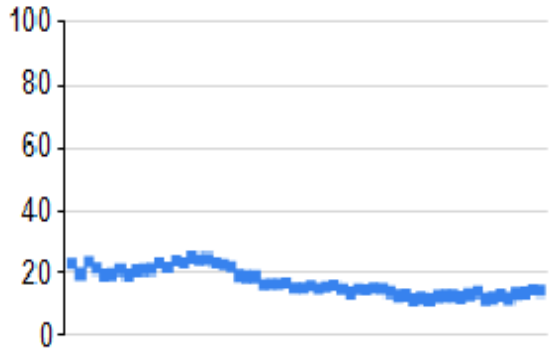


Components of Classification Bundle - Phenotype (>=75%,[%])

Percent of patients with sustained remission - Ulcerative Colitis (>=75%,[%])

Percent of patients by Disease Status (Cumulative) - inactive (>=75%,[%])

Percent of patients by Disease Status (Cumulative) - mild (>=75%,[%])



Percent of patients by Disease Status (Cumulative) - moderate/severe (>=75%,[%])

Break

2:30 – 2:45 pm

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PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

UPDATE: PCORI Rare Disease Topic Page and Resources

Bill Silberg

PCORI Director of Communications

pcori

PATIENT-CENTERED OUTCOMES RESEARCH INSTITUTE

Rare Disease Advisory Panel Planning Discussion

Matt Cheung

Chair, Rare Disease Advisory Panel

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Goals

- Review what determines the agenda for the RDAP In Person Meetings
- How the agenda is developed
- How activities are tracked
- Review proposed topics, speakers
- Discuss future direction

RDAP Agenda is Driven By:

- PCORI Vision and Mission
- RDAP Charter
- RDAP Framework

RDAP Charter: Function and Scope of Work*

The RDAP will:

1. Provide input to PCORI on **research needs** of the rare diseases community and on specific issues and concerns in conducting research on rare diseases;
2. Identify **infrastructure** (data sources, tools, etc.) that currently exist and can be a resource for conducting research;
3. 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
4. Provide ongoing feedback and advice on **evaluating and disseminating PCORI's research portfolio** on rare diseases.
5. Consider study findings and advise on targets and strategies for PCORI **dissemination** efforts;
6. Identify opportunities for **collaboration** with existing international, federal, public and private entities doing similar work in the rare disease space; and
7. **Advise other PCORI committees and panels** to ensure the unique considerations of rare disease are addressed.

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

- Agenda, meeting summaries and recording are posted and available to the public
- 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

RDAP Outstanding items

- 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)
- Costs of RD and impact on individuals and families
- Integrating PPRN and CDRN data
- A "patient organization research navigator" to guide patient groups developing research proposals
- Patient partners to present results/findings
- How Europe is handling the rare disease studies and registries **
- Developing a strategy for outreach and solicit input from RD patients and advocacy organizations
- Method and case studies for dissemination of research and results
- Patient/Caregiver Centered Outcomes for Pediatrics
- Linking clinical and patient-reported outcomes
- Success rate of RD application and sharing with applicants**
- More presentations on challenges and successes of PCORI funded projects **
- Dissemination plans and innovative dissemination approaches**

*recommended by RDAP members
**included in agenda

RDAP Members Recommendations – Future Speakers*

- PCORnet (update on research projects underway)
- Janet Woodcock - Master Protocols
- Representative from NLM
- Sharon Terry
- Leaders of Rare Disease Advocacy Organizations
- NORD**
- FDA
- Alison Rockett Frase, Founder/President of the Joshua Frase Foundation

*gathered from RDAP members
**included in agenda

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.

Panelist Recognition

pcori

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Thank you!

- We would like to give a special thanks to those members whose terms end this year:
  - Patricia Furlong
  - James Wu
  - Lisa Heral
  - Yaffa Rubinstein
  - Vincent Del Gaizo

Panelist Recognition – Patricia Furlong

- Represented: Patients, Caregivers, and Patient Advocates

- Founder, President and CEO, Parent Project Muscular Dystrophy (PPMD)
- PPMD's goal is to end Duchenne, which affects approximately one out of 3,500 boys worldwide and has no cure. Furlong founded the group in 1994 and works in honor of her two sons.
- Provided the patient perspective of the challenges associated with rare diseases.

Panelist Recognition – James Wu

- Represented: Industry

- Senior Manager, Global Health Economics, Amgen Inc.
- Jim Wu is a Health Economist at Amgen, Inc., and has a background in academic research and clinical medicine.
- Provided expertise in health economics, market access/reimbursement, contracting/pricing, and commercial operations.

Panelist Recognition – Lisa Heral

- Represented: Patients, Caregivers, and Patient Advocates

- Registered Nurse at Pacific Quest and Bay Clinic - Hawaii
- In her previous role as a research informatics nurse at the Parkview-Mirro Research Center, Heral managed several projects which engage patients in research to improve care through utilization of informatics science.
- Passionate about ensuring patients have the information they need to make informed healthcare decisions.

Panelist Recognition – Yaffa Rubinstein

- Represented: Researchers

- Dr. Yaffa Rubinstein is the Rare Disease Patient Registries and Bio-repositories Special Volunteer to the National Information Center of Health Services Research & Health Care Technology at the NLM/NIH.
- Provided input on the National Center for Advancing Translational Sciences (NCATS)/National Institutes of Health (NIH), where she established directed the NIH/NCATS GRDR Program, a Global Rare Diseases Patient Registry Data Repository.

Panelist Recognition – Vincent Del Gaizo

- Represented: Patients, Caregivers, and Patient Advocates

- Co-Chair, Advisory Panel on Rare Disease
- Owner, Plaza Dry Cleaners
- For the past 12 years, he has been actively involved in the field of pediatric rheumatology research, directly contributing the patient voice and perspective to research initiatives in these rare diseases.
- Provided leadership of the RDAP for 3 years.

Closing and Next Steps

Matt Cheung

Chair, *Rare Disease Advisory Panel*

Vincent Del Gaizo

Co-Chair, *Rare Disease Advisory Panel*

Parag Aggarwal, PhD

Senior Program Officer, *Healthcare Delivery and Disparities Research, PCORI*

Gyasi Moscou-Jackson, PhD, MHS, RN

Program Officer, *Healthcare Delivery and Disparities Research*

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Adjourn

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