



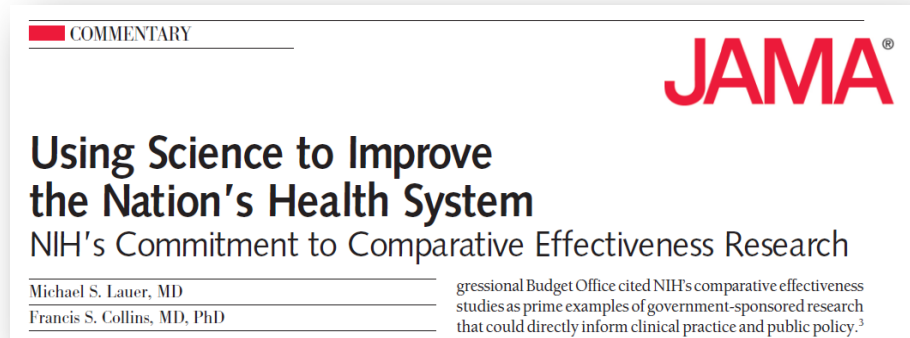
Embedding Pragmatic Clinical Trials in Health Care Systems: Trials and Tribulations

Academy Health Annual Research Meeting
June 25, 2018

Catherine M. Meyers, MD, FAHA
NIH/NCCIH Director, Office of Clinical & Regulatory Affairs



Contemporary Challenges for Clinical Research



- **New approaches & strategies for the clinical trial enterprise**
 - **Stakeholder interactions & leveraging multi-disciplinary expertise**
 - **Methods for preserving randomized trial design & optimizing use of available data**
 - **Dissemination and Implementation**

Lauer MS, Collins FS. JAMA 2010;303:2182-3



Clinical trials get practical

Many clinical trials don't help doctors make decisions. A new breed of studies aims to change that

By **Jennifer Couzin-Frankel**, in Philadelphia, Pennsylvania

trials will involve more women, more minorities, a range of incomes," says Monique

- Need for trials that inform practice & policies
- Decision makers include patients, clinicians, payers & policy makers

REVIEW ARTICLE

THE CHANGING FACE OF CLINICAL TRIALS

Jeffrey M. Drazen, M.D., David P. Harrington, Ph.D., John J.V. McMurray, M.D., James H. Ware, Ph.D., and Janet Woodcock, M.D., *Editors*

Pragmatic Trials

Ian Ford, Ph.D., and John Norrie, M.Sc.

N Engl J Med 2016;375:454-63

From the Robertson Centre for Biostatistics, University of Glasgow, Glasgow (I.F.), and the Centre for Healthcare Randomised Trials, Health Services Research Unit, University of Aberdeen, Aberdeen (J.N.) — both in the United Kingdom.

PRAGMATISM IN CLINICAL TRIALS AROSE FROM CONCERNS THAT MANY trials did not adequately inform practice because they were optimized to determine efficacy.¹ Because such trials were performed with relatively small samples at sites with experienced investigators and highly selected participants, they could be overestimating benefits and underestimating harm. This led to the



A pragmatic–explanatory continuum indicator summary (PRECIS): a tool to help trial designers

Kevin E. Thorpe MMath, Merrick Zwarenstein MD MSc, Andrew D. Oxman MD, Shaun Treweek BSc PhD, Curt D. Furberg MD PhD, Douglas G. Altman DSc, Sean Tunis MD MSc, Eduardo Bergel PhD, Ian Harvey MB PhD, David J. Magid MD MPH, Kalipso Chalkidou MD PhD

Published at www.cmaj.ca on Apr. 16, 2009. An abridged version of this article appeared in the May 12 issue of *CMAJ*. This article was published simultaneously in the May 2009 issue of the *Journal of Clinical Epidemiology* (www.jclinepi.com).

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RESEARCH METHODS & REPORTING

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The PRECIS-2 tool: designing trials that are fit for purpose

Kirsty Loudon,¹ Shaun Treweek,¹ Frank Sullivan,² Peter Donnan,³ Kevin E Thorpe,⁴ Merrick Zwarenstein⁵

¹Health Services Research Unit, University of Aberdeen,

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³Division of Population Health

PRECIS is a tool to help trialists make design decisions consistent with the intended purpose of their trial. This

Key to this reward is that the trial can indeed support end user decisions in the ways intended by the trial design team. That this is not always, or even mostly, the case was highlighted nearly 50 years ago, by Schwartz





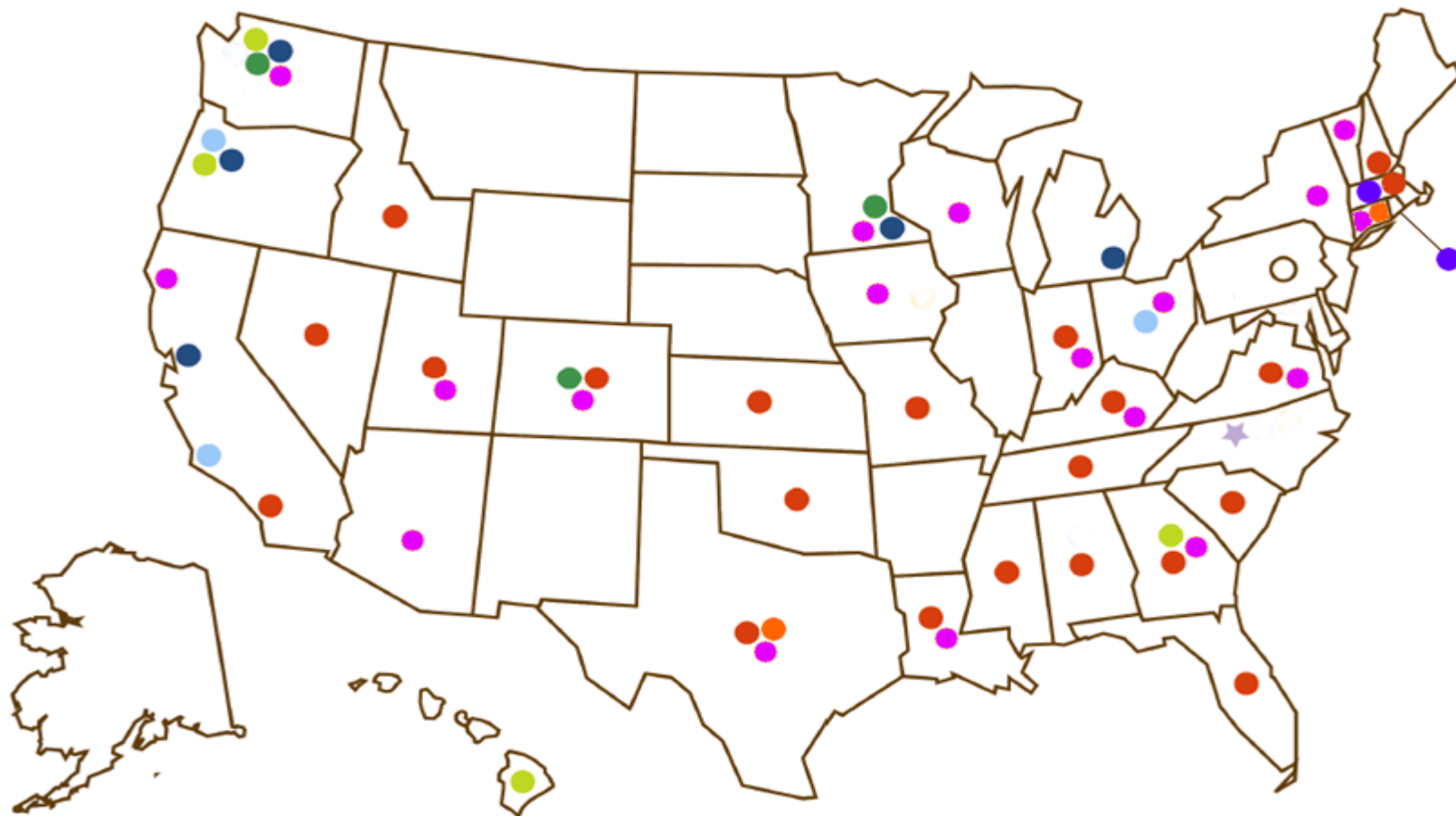
NIH Health Care Systems Research Collaboratory

Initiated in 2012

- **Goal:** To strengthen the national capacity to implement cost-effective large-scale research studies that engage health care delivery organizations as research partners.
- **Aim:** To provide a framework of implementation methods and best practices that will enable the participation of many health care systems in clinical research. Research conducted in partnership with health care systems is essential to strengthen the relevance of research results to health practice.



NIH Health Care Systems Research Collaboratory



- ★ Collaboratory Coordinating Center
- Suicide Prevention Outreach Trial (SPOT)
- Time to Reduce Mortality in End-Stage Renal Disease (TIME) (sites in dialysis units across the US)
- Trauma Survivors Outcomes & Support (TSOS)
- Lumbar Image Reporting and Epidemiology
- Strategies and Opportunities to Stop Colorectal Cancer (STOP CRC)
- Collaborative Care for Chronic Pain in Primary Care (PPACT)
- Active Bathing to Eliminate Infections (ABATE)
- Improving Chronic Disease Management with Pieces (ICD-Pieces)
- Pragmatic Trial of Video Education in Nursing Homes (PROVEN) (sites in nursing homes across the US)



NIH Collaboratory – 1st Set of Trials

- **Time to Reduce Mortality in End-Stage Renal Disease (TiME) *NIDDK***
- **Active Bathing to Eliminate Infections (ABATE) *NIAID***
- **Strategies & Opportunities to Stop Colorectal Cancer (STOP CRC) *NCI***
- **Lumbar Image Reporting & Epidemiology (LIRE) *NIAMS & NCCIH***
- **Collaborative Care for Chronic Pain in Primary Care (PPACT) *NINDS, NIDA & NCCIH***
- **Suicide Prevention Outreach Trial (SPOT) *NIMH***



NIH Collaboratory

2nd Set of Trials – Multiple Chronic Conditions

- **Improving Chronic Disease Management with Pieces (ICD-Pieces) *NIDDK & NHLBI***
- **Pragmatic Trial of Video Education in Nursing Homes (PROVEN) *NIA & NINR***
- **Trauma Survivors Outcomes & Support (TSOS) *NIMH & NIAAA***

3rd Set of Trials – RFA RM 16-019

- **5-6 PCTs launching in Spring 2018**



NIH Collaboratory

Pragmatic Clinical Trials Interventions

- **Organizational change to patient care (e.g. dialysis time or bathing protocol)**
- **Enhancing information available to providers in EHR to change care delivery**
- **Direct to patient screening kits, video education, or online intervention**
- **Enhanced coordination of care delivered to complex patients**



NIH Collaboratory

Partnering Health Care Systems

- Kaiser Permanente
- (Group Health Cooperative)
- Mayo Clinic
- Henry Ford Health System
- HealthPartners Institute
- Parkland Health System
- Texas Health Resources
- ProHealth CT
- Fresenius and DaVita
- Dialysis Corporations
- Hospital Corporation of America
- US Level 1 Trauma Care Centers
- Genesis Healthcare
- UHS Pruitt Corporation
- Oregon Community Health Information Network (FQHCs)
- North Texas VA

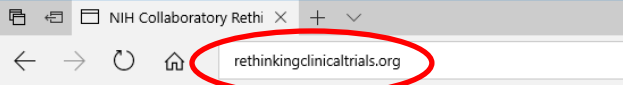


NIH Collaboratory Coordinating Center (CCC)


- **Provide national leadership and technical expertise in all aspects of research with health care systems**
- **Support the design and rapid execution of a set of high impact Pragmatic Trial Demonstration Projects conducted in partnerships with health care systems**
- **Make available data, tools and resources from these, and other, projects to facilitate a broadened base of research partnerships with health care systems**



Rethinkingclinicaltrials.org



NIH COLLABORATORY
LIVING TEXTBOOK
of Pragmatic Clinical Trials




DESIGN

Experimental Designs and Randomization Schemes
Endpoints and Outcomes
Analysis Plan



CONDUCT

Consent, Disclosure, and Non-disclosure
Using Electronic Health Record Data
Data and Safety Monitoring



DISSEMINATION

Designing With Implementation and Dissemination in Mind
Assessing Feasibility

knowledge from the NIH Health Care Systems Research Collaboratory. Pragmatic clinical trials are performed in real-world clinical settings with highly generalizable populations to generate actionable clinical evidence at a fraction of the typical cost and time needed to conduct a traditional clinical trial. They present an opportunity to efficiently address critical knowledge gaps and generate high-quality evidence to inform medical decision-making. However, these trials pose different challenges than are typically encountered with traditional clinical trials. The Living Textbook reflects a collection of expert consensus regarding special considerations, standard approaches, and best practices in the design, conduct, and reporting of pragmatic clinical trials. Given the rapid pace of change in this field, this electronic textbook will continue to be added to and updated.

ENGAGING STAKEHOLDERS

and building partnerships to ensure a successful trial

What is the
NIH COLLABORATORY? 

TRAINING RESOURCES 



Panel Members



Kaiser Permanente Washington
Health Research Institute

Discussant

Eric Larson, MD, MPH, MACP

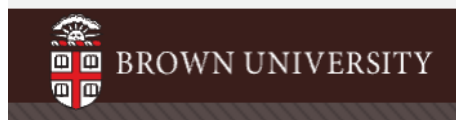
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