



**CIHR IRSC**

Canadian Institutes of  
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Policy Research

Institut des services et des  
politiques de la santé

# **The Science of Performance Measurement: Next Frontiers in Research**

Robyn Tamblyn

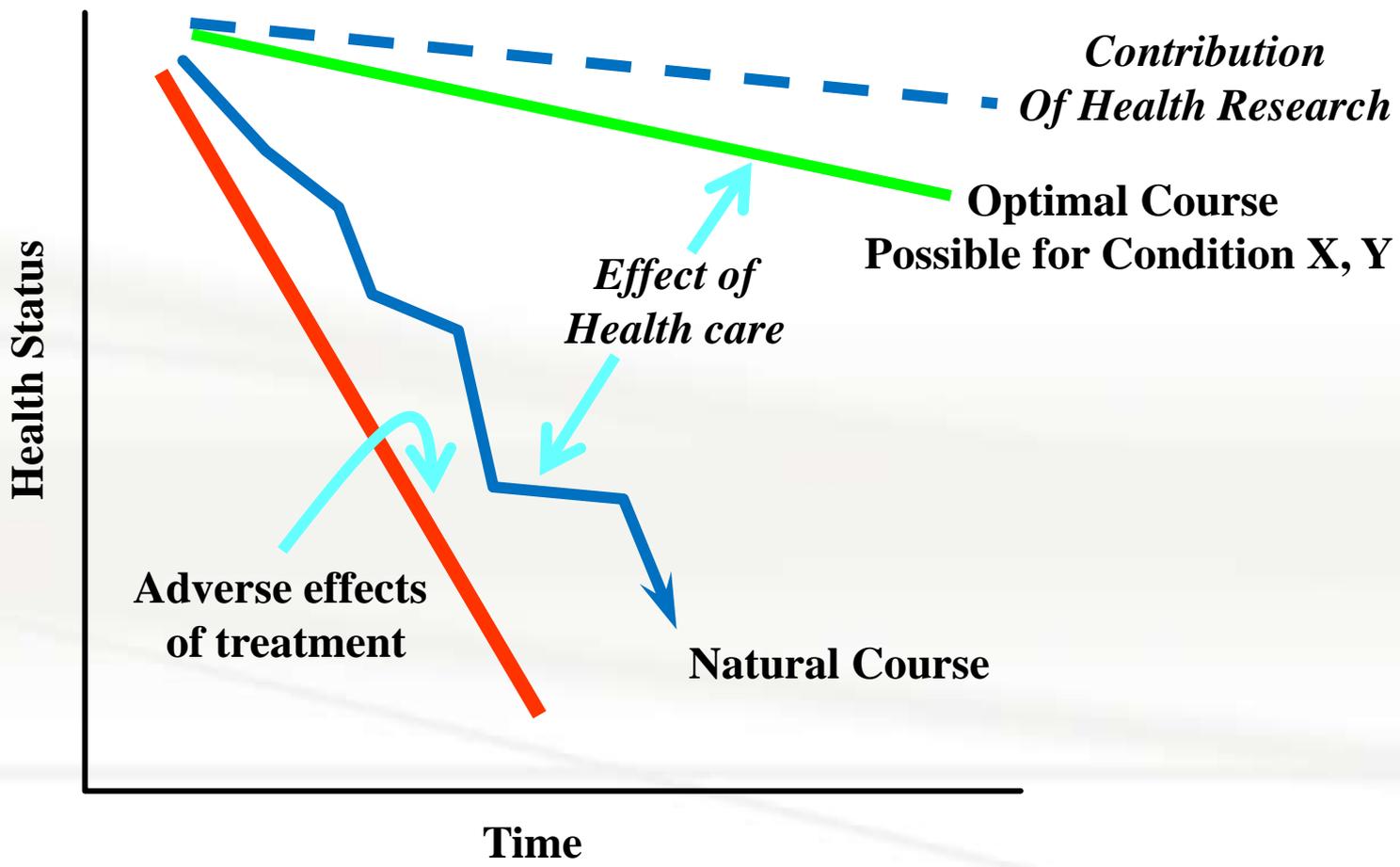
Scientific Director

CIHR Institute of Health Services and Policy Research

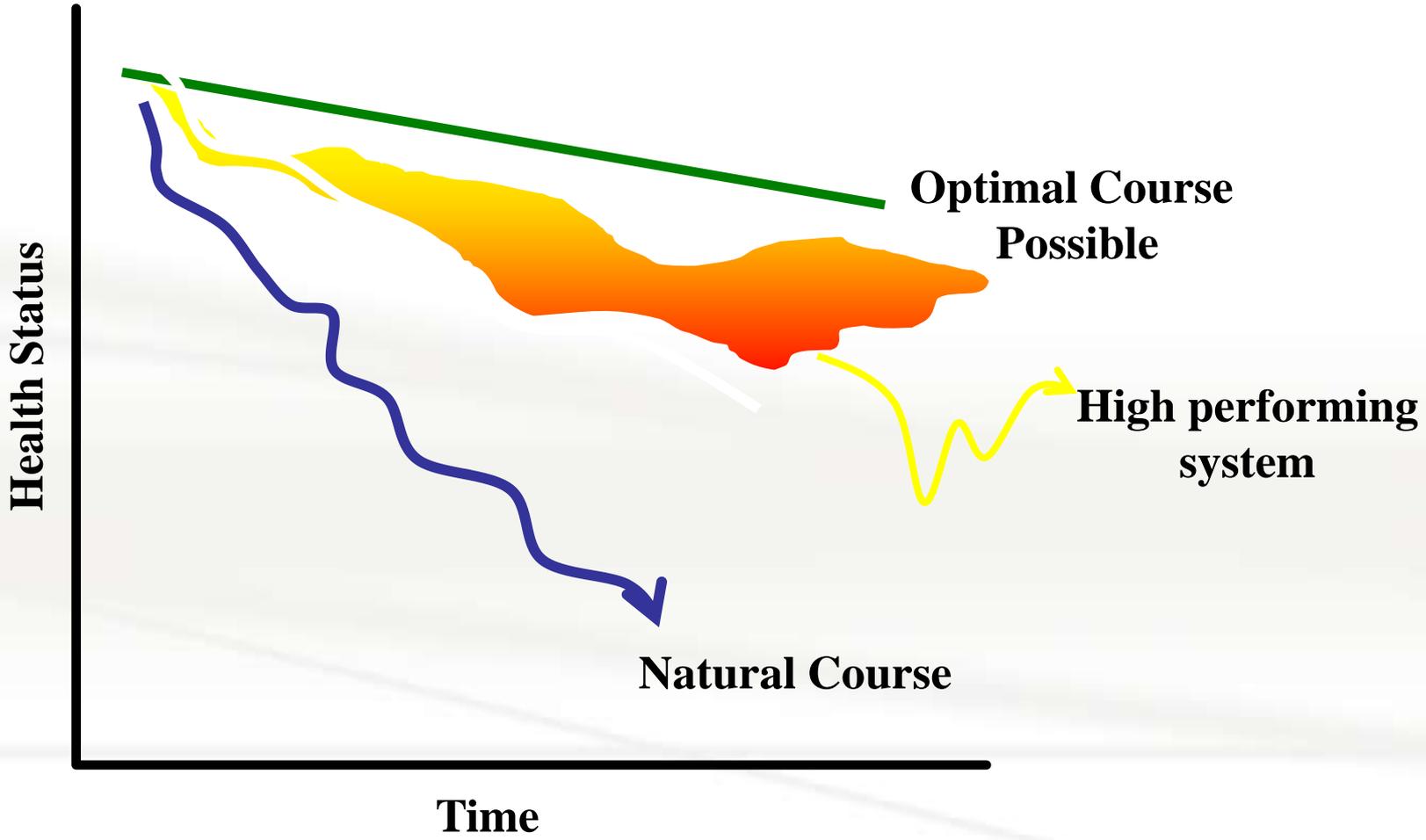
UBC CHSPR Conference: Performance Anxiety  
February 25, 2014

Canada

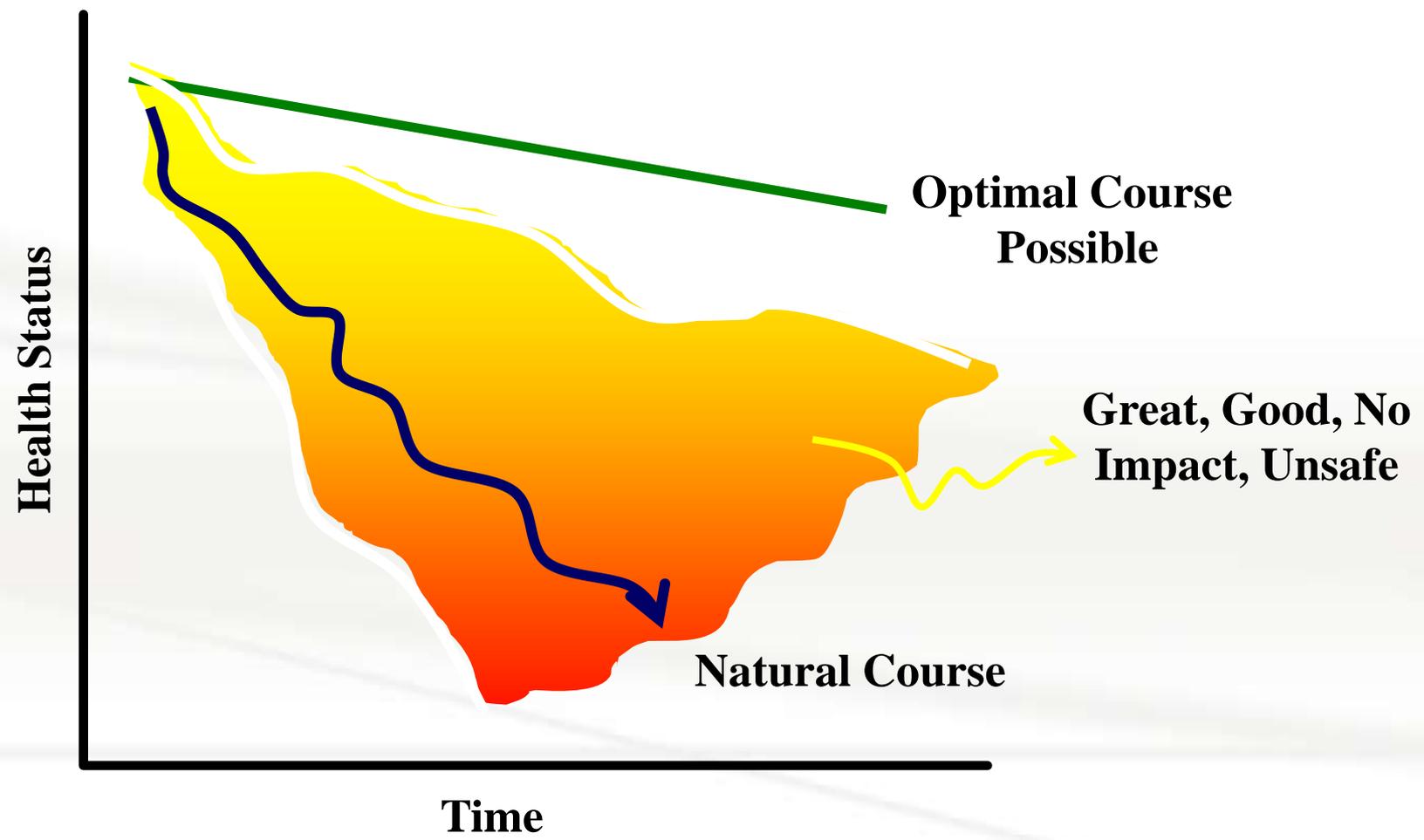
# Society's Expectations



# Best Case Scenario: Optimal Course with Low Variability in Outcomes for Equivalent Resources

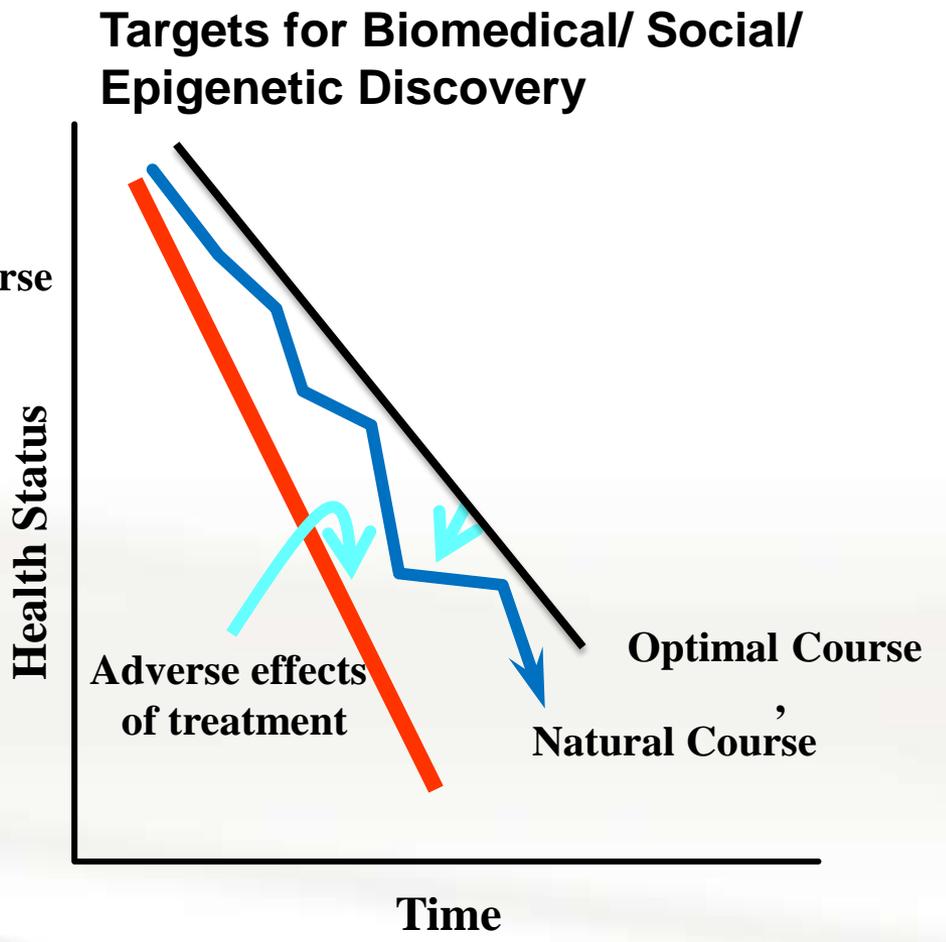
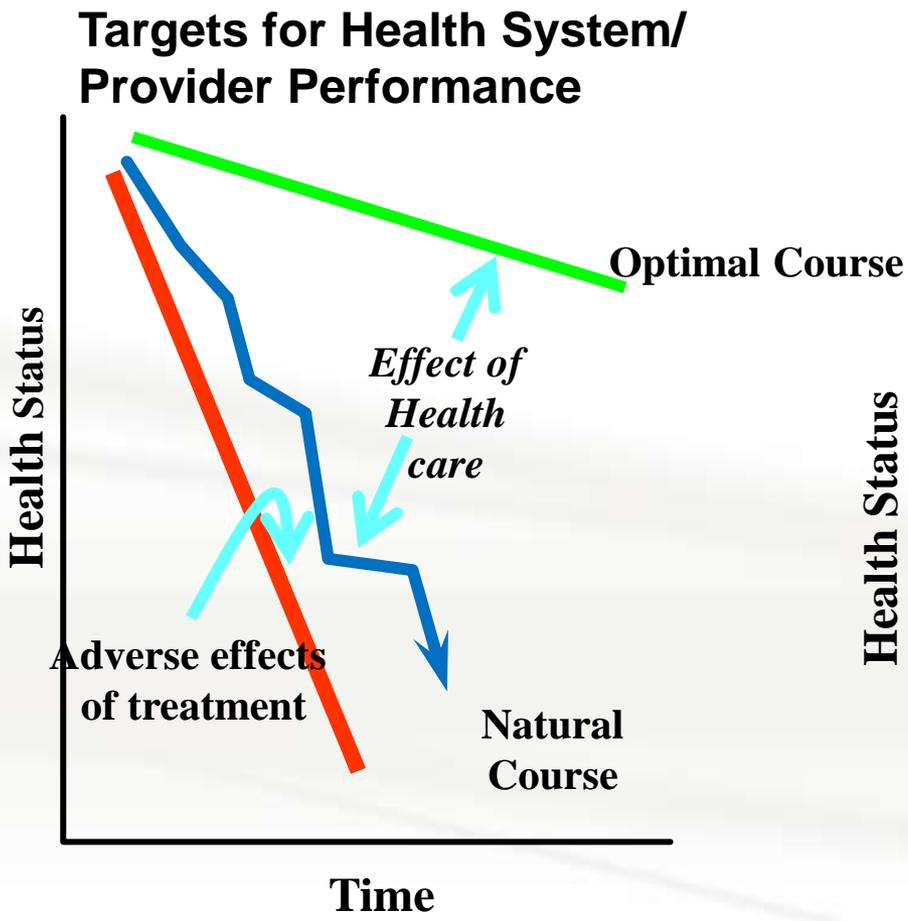


# Poorly Performing System: High Variability in Expected Output for Equivalent Resources





# Moving the Dial on Health: Early Wins Focus on Common Problems with Big Intervention Effects





# What's In the Secret Sauce to Optimize System Performance

Measurement,  
Feedback,  
Incentives

Effective  
Interventions

Organization of  
People,  
Programs,  
Policies to Deliver  
Effective  
Interventions







# Improving Access to Primary Care

## Case study: Primary health care reform in Ontario

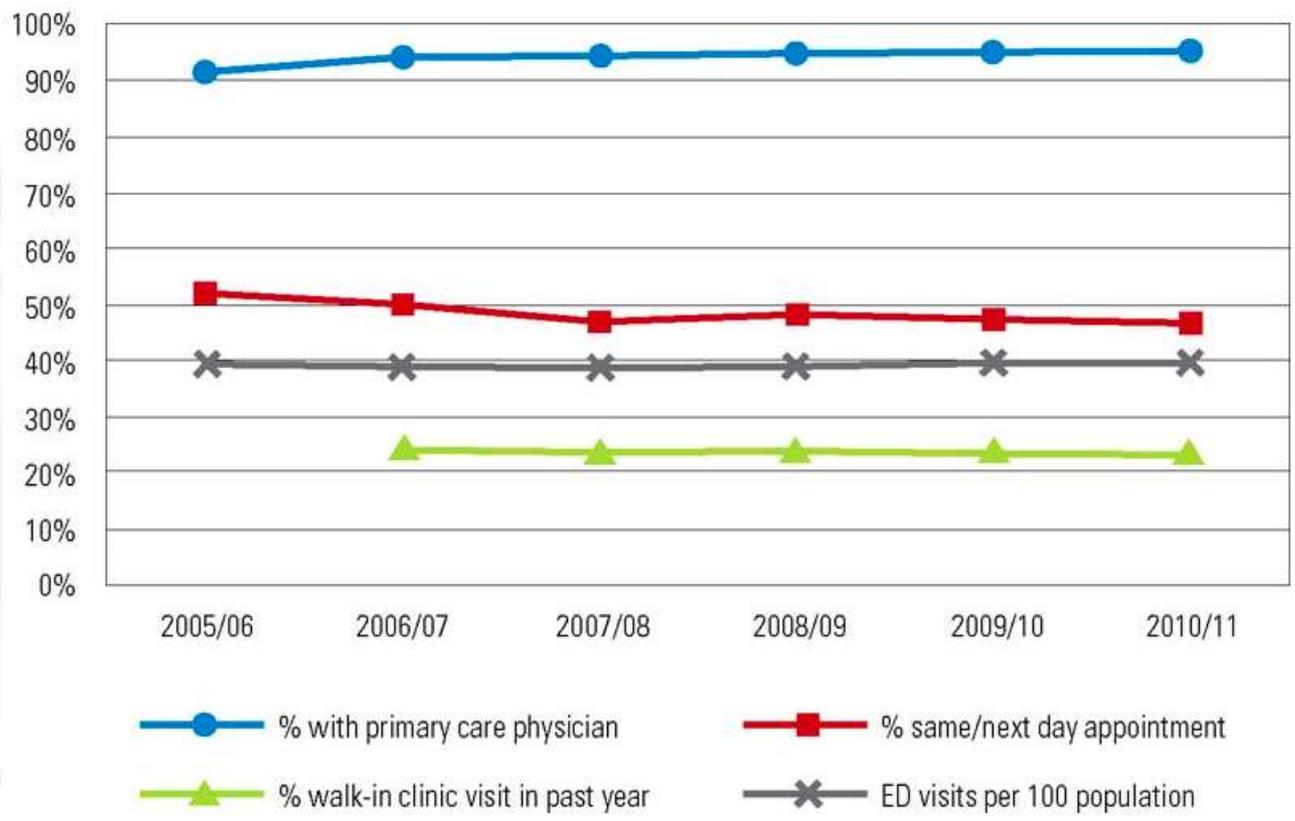
- ~\$1B/year for patient rostering, interdisciplinary care teams, blended payment models, bonus payments and incentives (for screening, prevention, etc.)
- penalty for utilization outside the group practice
- The result?





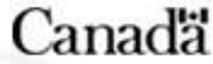
# No Change In Access to Primary Care or ED Use Are there Missing Ingredients? Are these Process Measures Appropriate?

Trends in measures of access to primary care in Ontario, 2005–2006 to 2010–2011



“Many patients continue to be without timely access to care, and the use of walk-in clinics and emergency departments remains high...**the details of how incentives are structured matters.**”

Glazier et al. All the Right Intentions but Few of the Desired Results: Lessons on Access to Primary Care from Ontario's Patient Enrolment Models. *Healthcare Quarterly* 2012; 15(3)

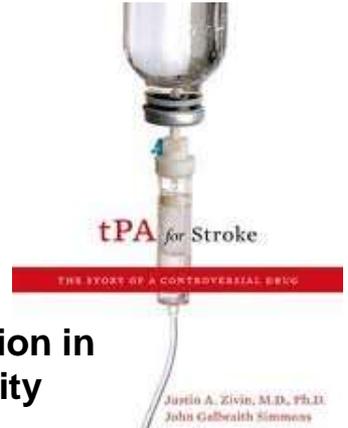


# Restructuring the Care Team: Reduction in Mortality/Disability with Stroke Programs vs tPA



**Stroke Units vs. Usual Care**

*New Protocol for Stroke Mortality, Disability. Gandey, A. (2011). Lancet.*



Absolute Reduction in Mortality/ Disability



**tPA vs. Usual Care**

*Systematic Review tPA: Cochrane, 2010*

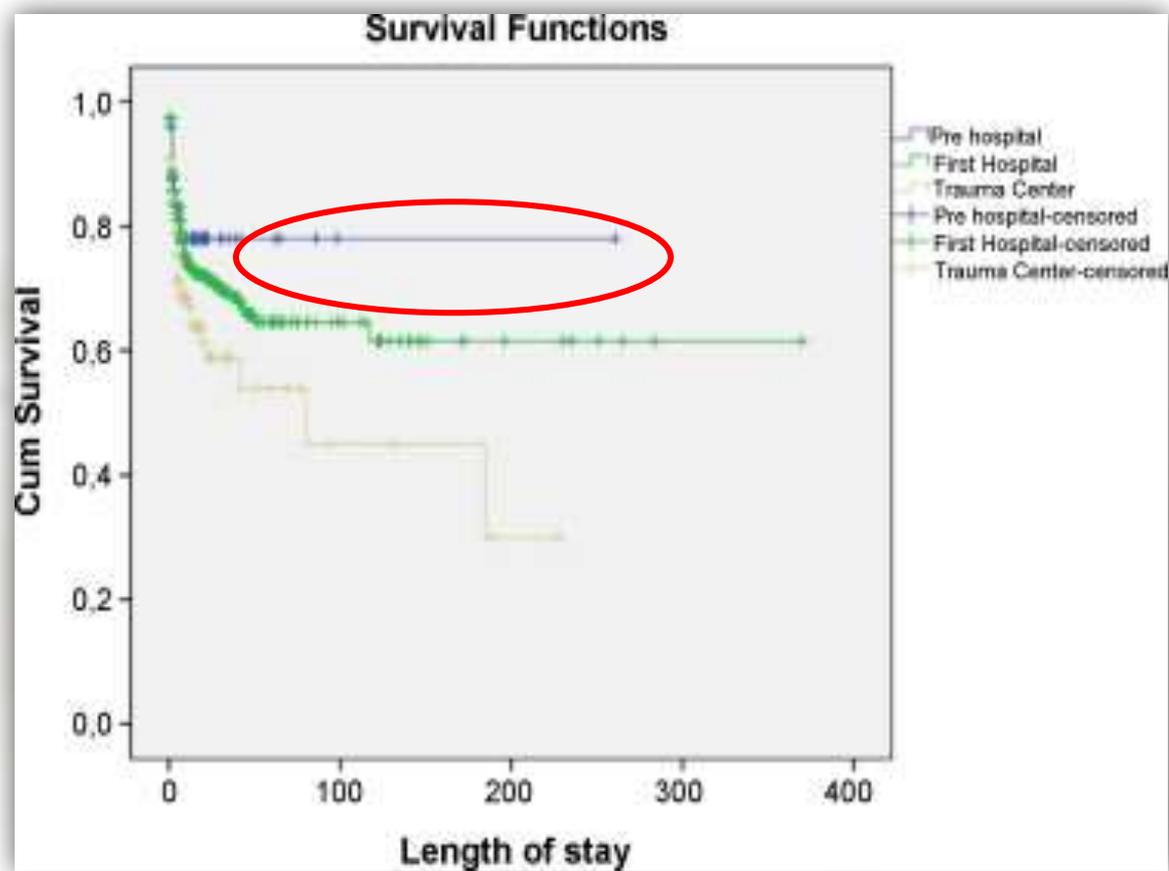
# Re-Designing Pre-Hospital Emergency Care

- “The Golden Hour”
- Improved survival in trauma cases
- Trained healthcare professionals to work specifically in emergency medical situations
  - Ex: Paramedics





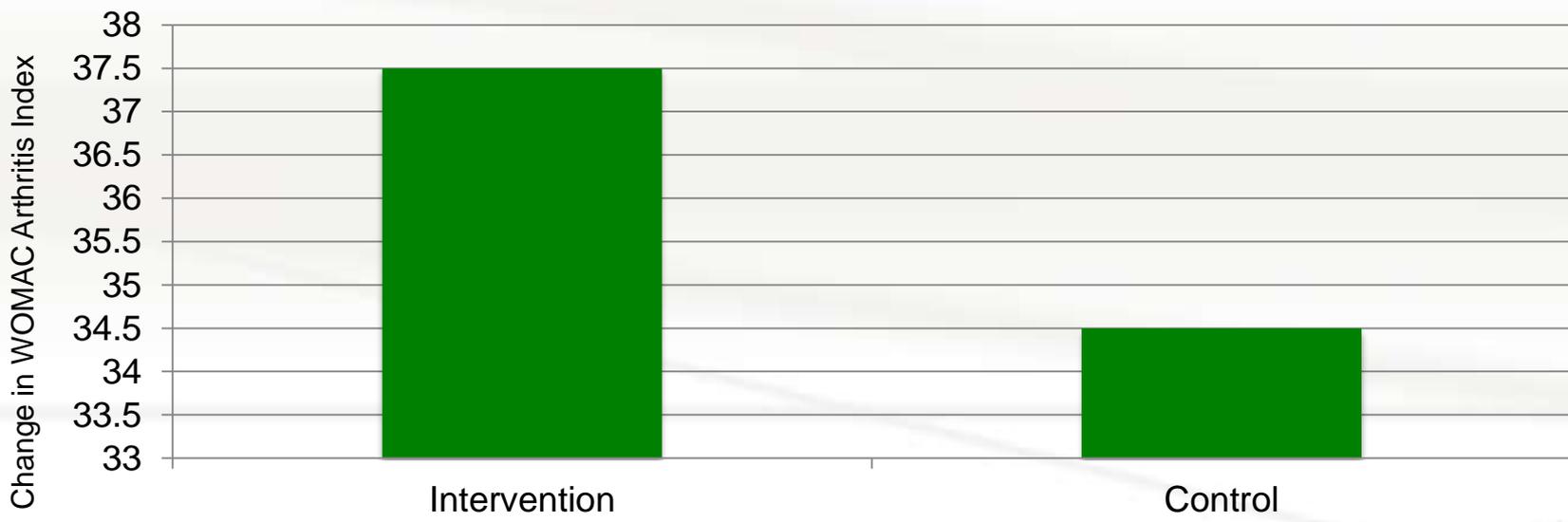
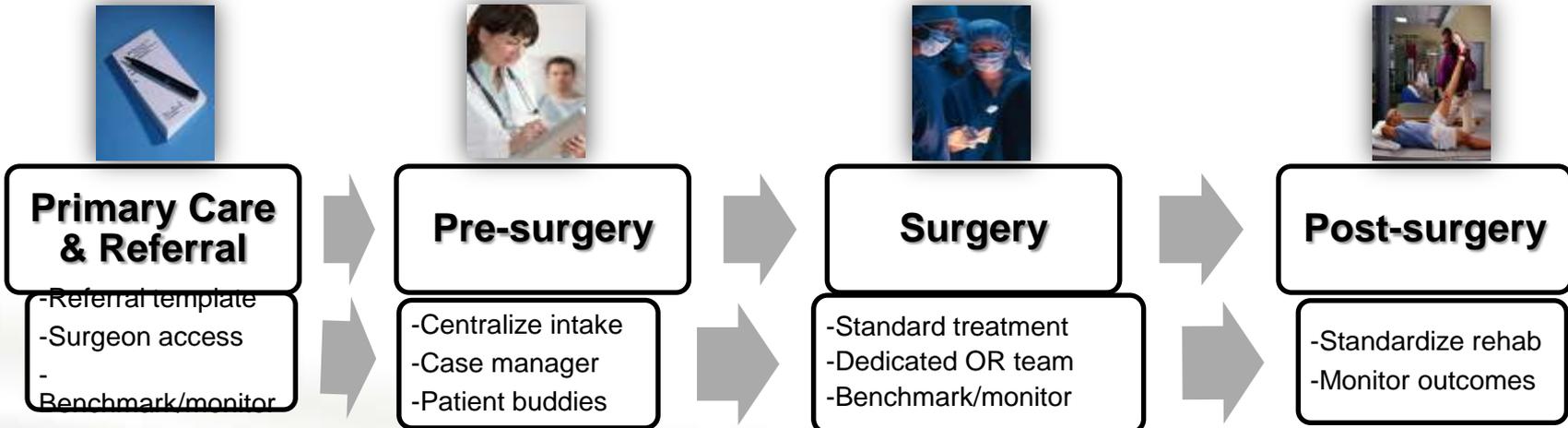
# Impact of Re-Designing Pre-Hospital Care in Trauma Cases



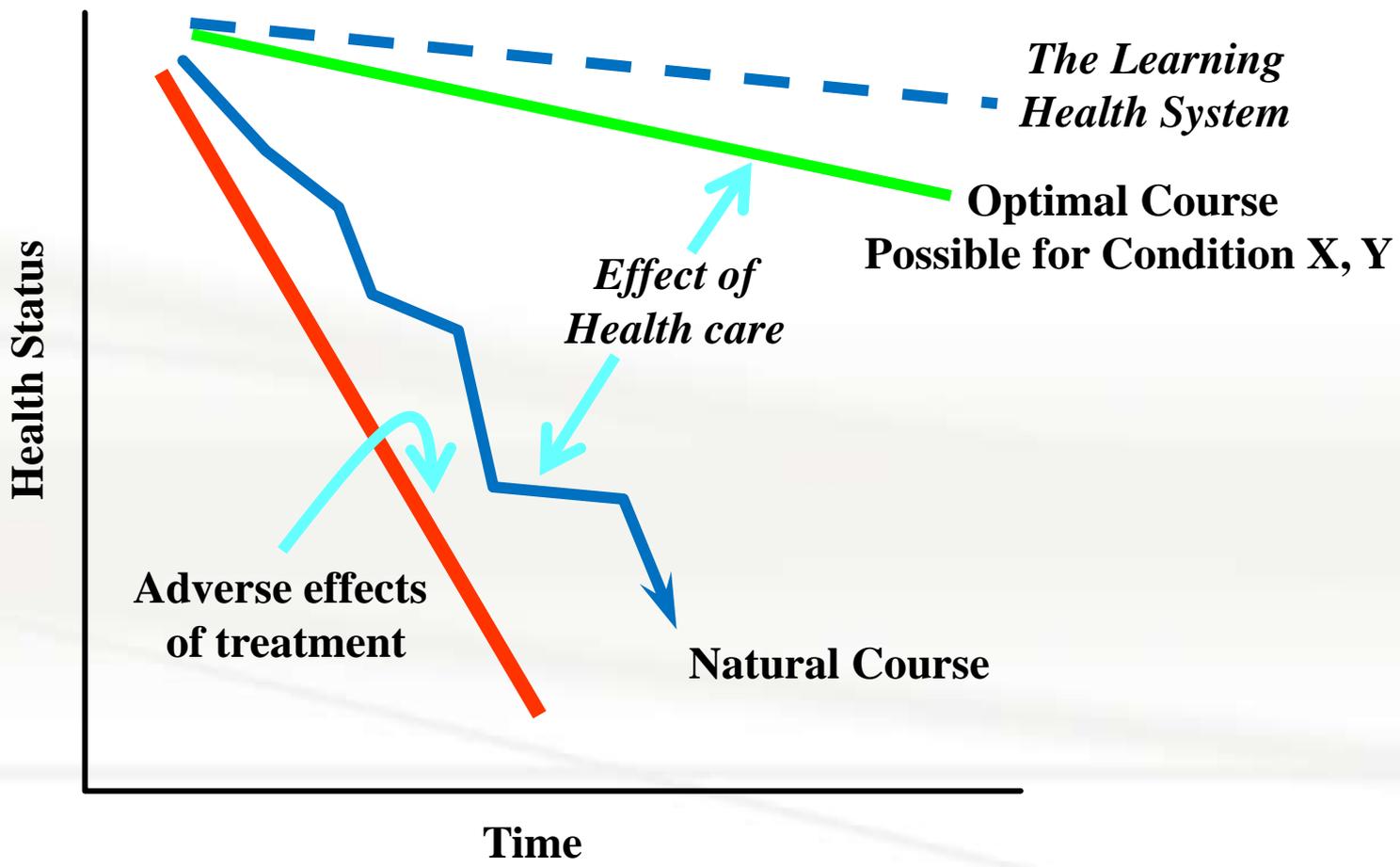
Patients were more likely to survive when their life-threatening events were managed in the pre-hospital phase.

*The importance of pre-trauma centre treatment of life-threatening events on the mortality of patients transferred with severe trauma. Gomes et al., 2010.*

# Re-engineering the Continuum of Care for Hip and Knee Replacement

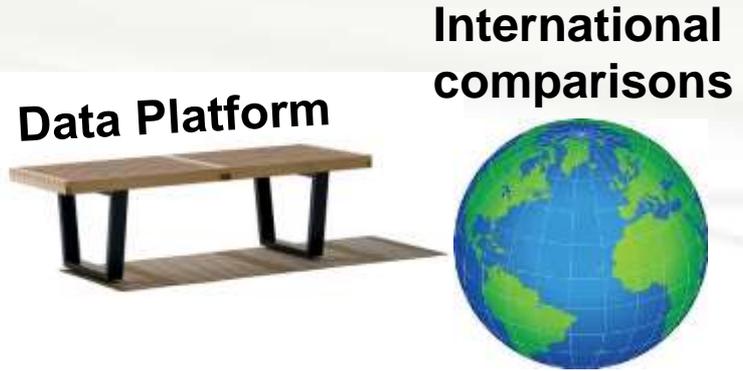
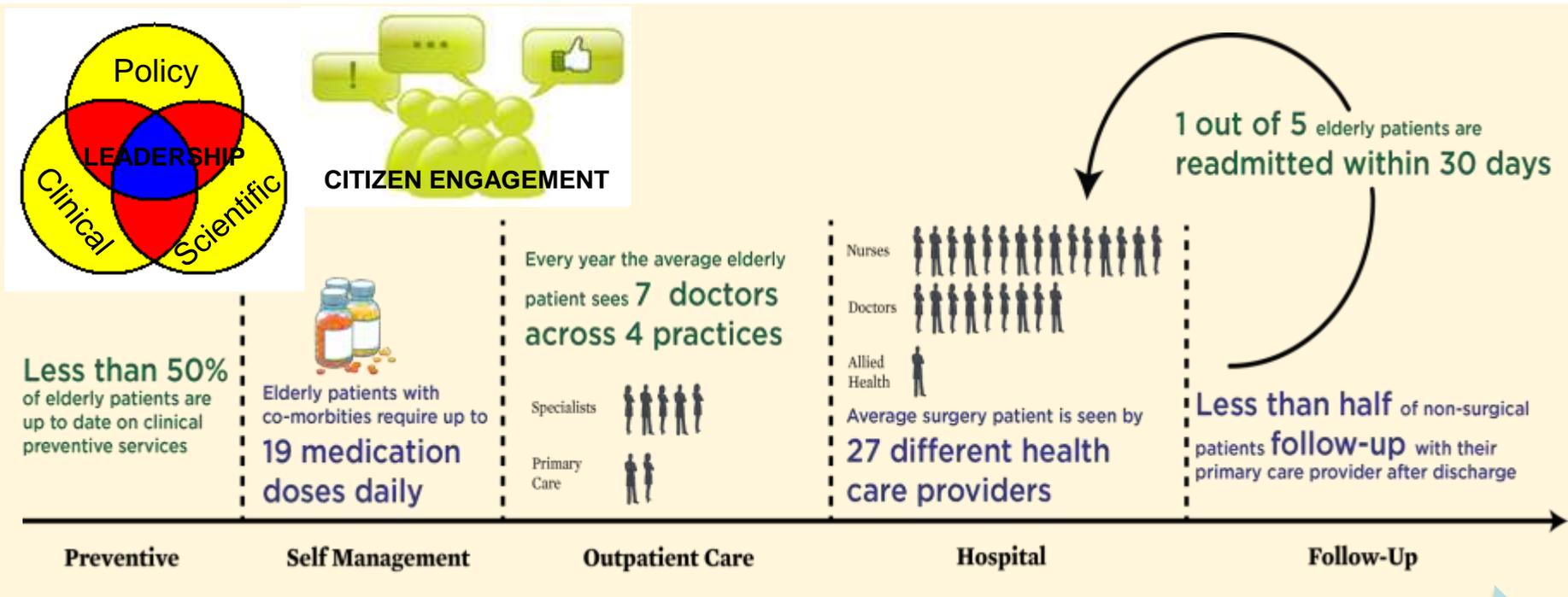


# Raising the Bar: New Generation Learning Health Care System



# The Learning Health System: Tackling the Tough Populations

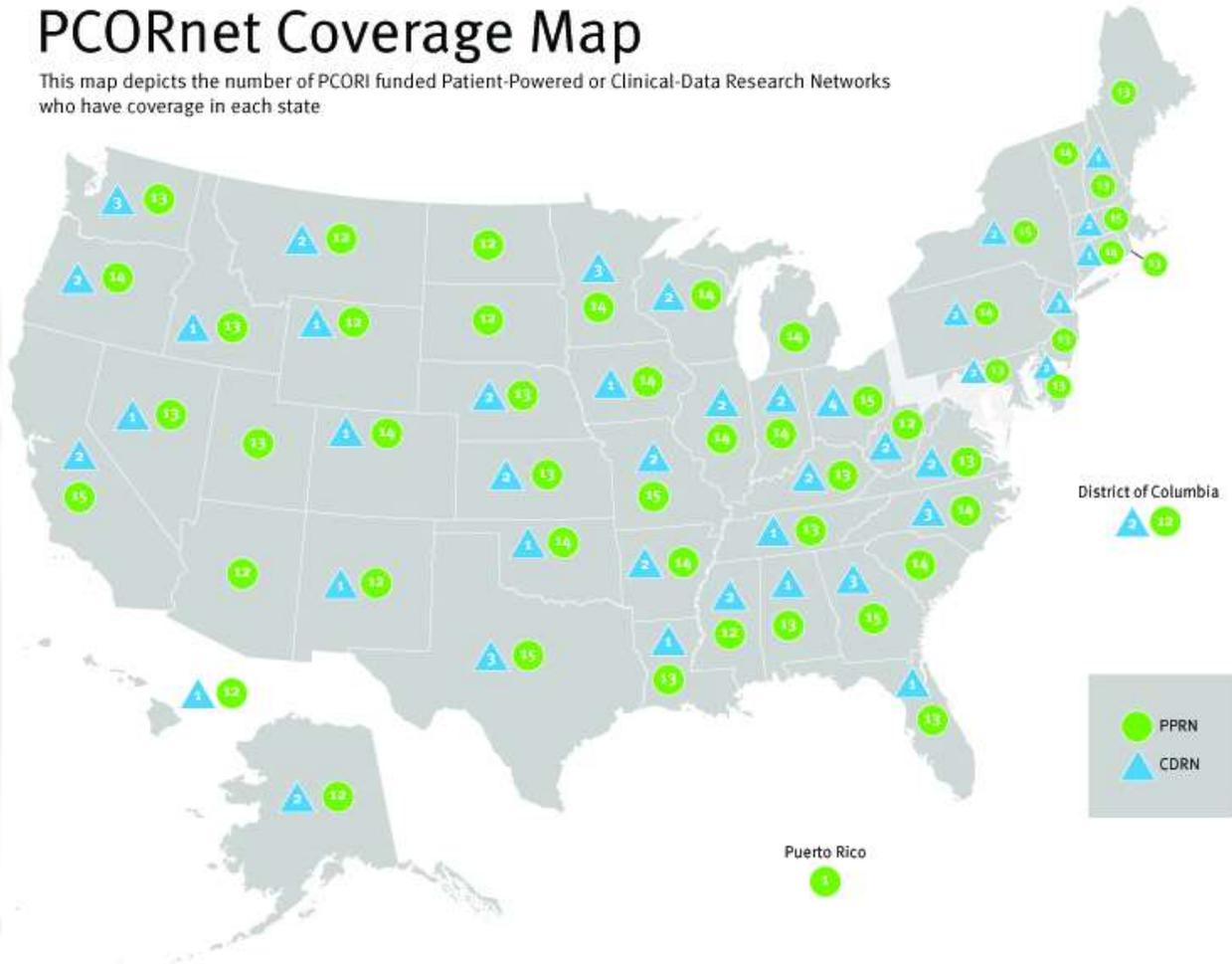
Representative timeline of a patient's experience in the health care system



# Changing the Health Systems Research Paradigm by Building the Living Laboratory: PCORI

## PCORnet Coverage Map

This map depicts the number of PCORI funded Patient-Powered or Clinical-Data Research Networks who have coverage in each state



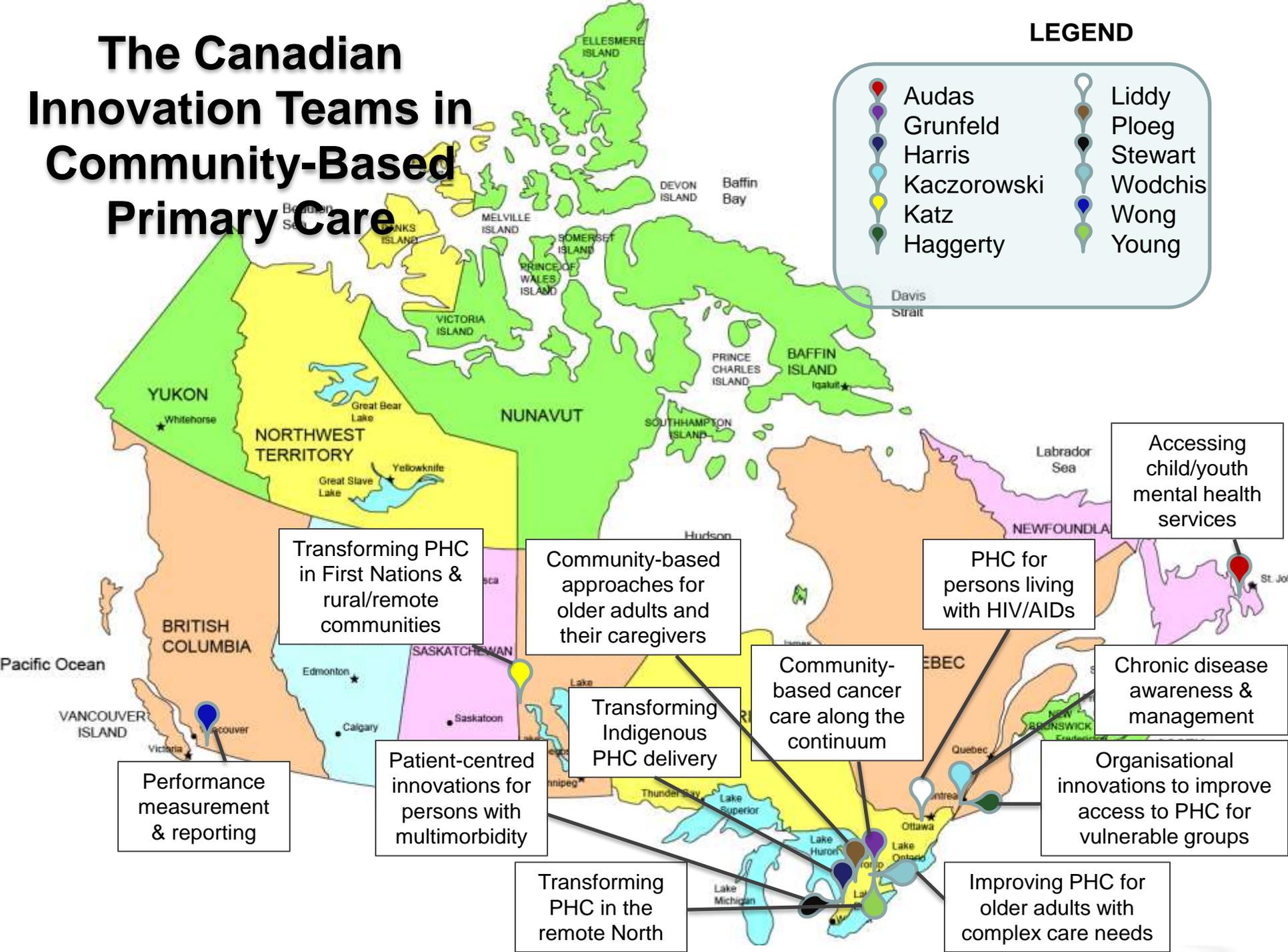
**Clinical Data Research Networks (CDRNs):** system-based networks that originate in healthcare systems, such as hospitals, health plans, or practice-based networks, and securely collect health information during the routine course of patient care

**Patient-Powered Research Networks (PPRNs):** networks operated and governed by groups of patients and their partners and are focused on a particular condition and interested in sharing health information and participating in research

# The Canadian Innovation Teams in Community-Based Primary Care

## LEGEND

- Audas
- Liddy
- Grunfeld
- Ploeg
- Harris
- Stewart
- Kaczorowski
- Wodchis
- Katz
- Wong
- Haggerty
- Young





# Spotlight: Transforming Community-Based Primary Care delivery through performance measurement

**Canadian NPI:** Sabrina Wong  
(University of British Columbia)  
**Funding Partners:** CIHR & MSFHR

*We will help make Canada a leader in evaluating the effectiveness of CBPHC innovations.*

**The challenge:** A comprehensive performance portrait of primary health care in Canada is lacking, and comparisons across jurisdictions are challenging.

**The goal:** Demonstrate the feasibility and usefulness of comparative and comprehensive CBPHC performance measurement and reporting in three provinces as a foundation to inform innovation in the delivery and organization of the Canadian CBPHC system.

# Understanding Attributes of Context, Organization & Research Investment with a Common Set of Indicators

**CBPHC Innovation Teams are working together to identify and report on a common set of context and outcome indicators (in domain areas like access, health outcomes, equity, cost).**



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## Why:

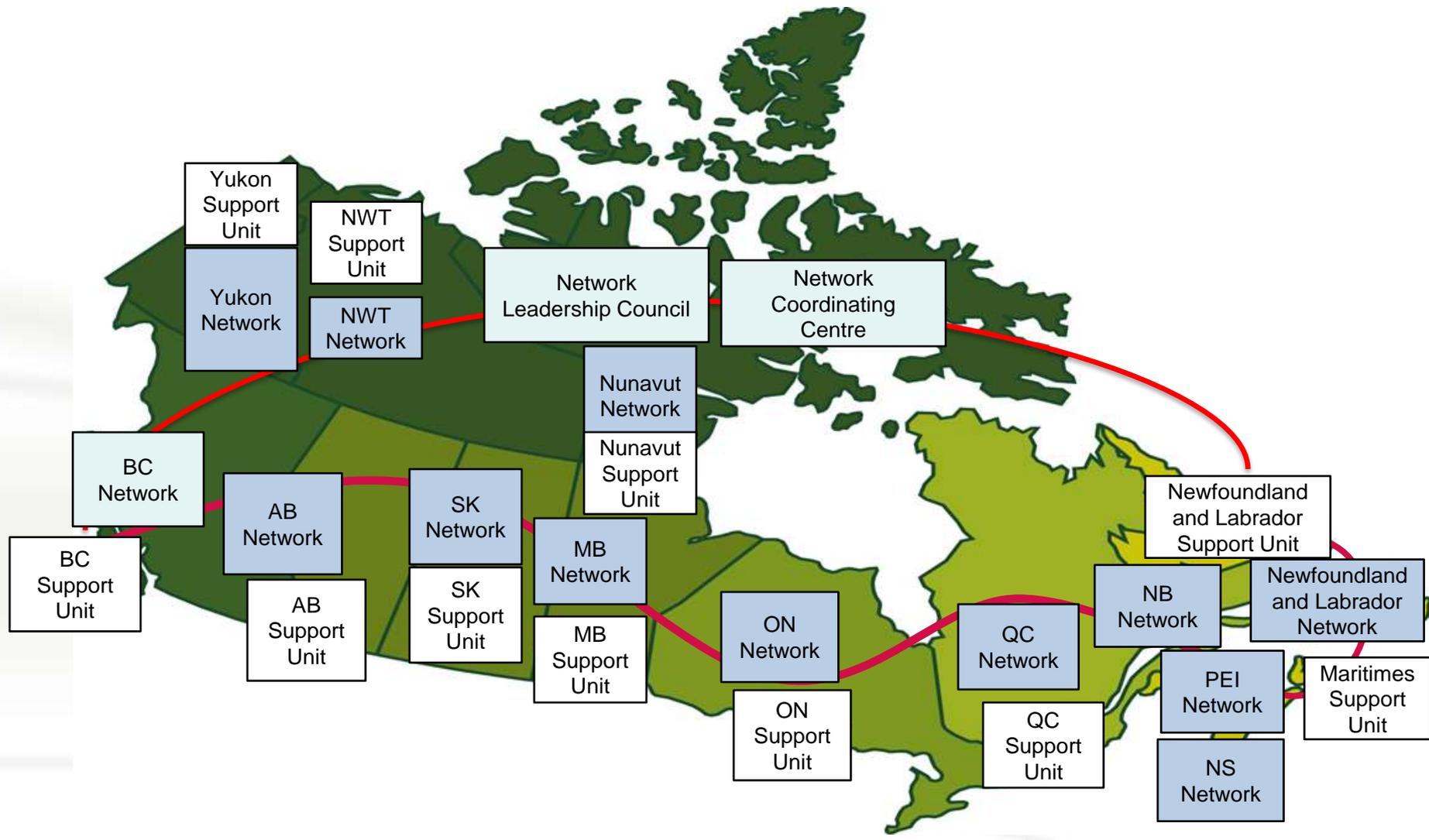
- To understand the impact of different models of CBPHC on (1) access to care for vulnerable populations and (2) chronic disease prevention and management
- To understand how structures (e.g., governance, financing) and context influence the success of PHC models of care

## How:

- Working group chaired by Dr. Sabrina Wong. Each team earmarked \$50K annually to support the common set of indicators.



# SPOR Network of Networks in Primary and Integrated Health Care Innovations



# Thank you

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