

# Implementing and Measuring a Chronic Disease Management Model: Experiences from the US and UK

**David Colin-Thomé**, National Clinical Director for Primary Care,  
Department of Health, National Health Service (UK)

**Michael Hindmarsh**, President, Hindsight Healthcare Strategies;  
Former Associate Director of Clinical Improvement, MacColl Institute  
(USA)

**CIHR Health Care Summit  
Toronto, ON  
January 18-19, 2010**



# Chronic Illness in America: Sound Familiar?

---

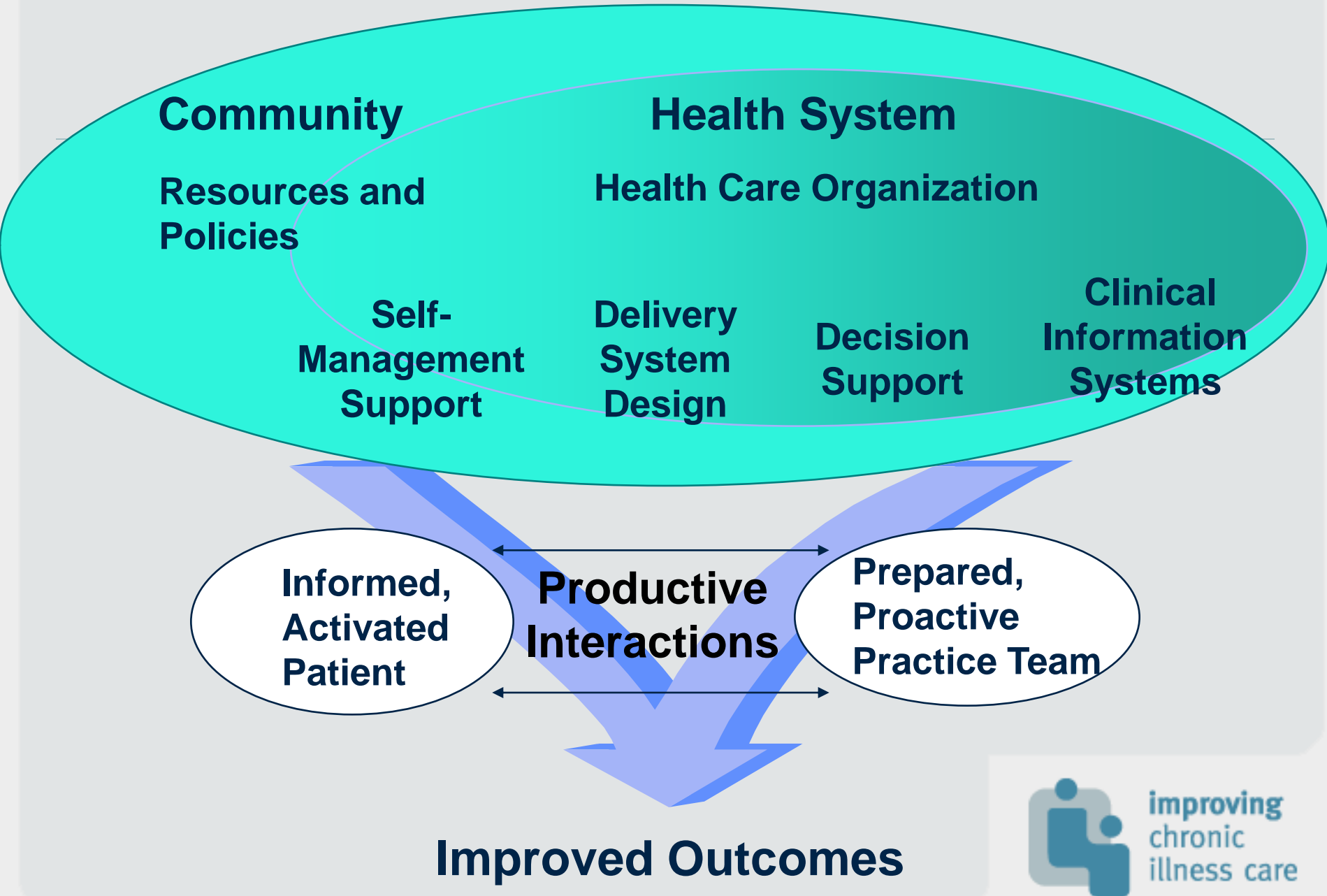
- More than 125 million Americans suffer from one or more chronic illnesses and 40 million limited by them.
- Despite annual spending of more than \$ 1 trillion and significant advances in care, one-half or more of patients still don't receive appropriate clinical care.
- A much larger percentage receive little useful assistance in their self-management
- Gaps in quality care lead to thousands of avoidable hospitalizations and deaths each year..
- Patients and families increasingly recognize the defects in their care.

# Chronic Illness and Medical Care

---

- **Primary care dominated by chronic illness care**
- **Clinical and behavioral management increasingly effective and increasingly complex**
- **Inadequate reimbursement and greater demand forcing primary care to increase throughput—the hamster wheel**
- **Nurses are becoming an endangered species in primary care**
- **Unhappy primary care clinicians leaving practice; trainees choosing other specialties**
- **Loss of confidence in primary care by policy-makers and funders**
- **But, there is a growing interest in changing physician payment to encourage and reward quality**

# Chronic Care Model



# Model Development 1993 --

- **Initial experience at Group Health Cooperative**
- **Literature review**
- **Robert Wood Johnson Foundation Chronic Illness Meeting -- Seattle**
- **Review and revision by advisory committee of 40 members (32 active participants)**
- **Interviews with 72 nominated “best practices”, site visits to selected group**
- **Model applied with dozens of chronic conditions**

# What Does Successful Implementation of the CCM Look Like?

---

- ✓ **Teams function as TEAMS**
- ✓ **Practice moves from the reactive, acute care model to proactive, planned, population-based care**
- ✓ **IT/IM is leveraged for population management, decision support, performance reporting and care coordination across agencies**
- ✓ **Some level of self-management support is delivered at EVERY encounter**
- ✓ **Levels of care delivery are based on risk stratification**
- ✓ **Clinical Practice Guidelines are used**
- ✓ **Community partnerships are leveraged to enhance patient self care**
- ✓ **Leadership is engaged and “walk the talk”**

# Examples at the Practice Level

Key Changes	Frontline Examples
Team Functioning	Morning huddles to manage schedule and plan for chronic visits
Moving from Reactive to Proactive Care	Team reviews registry data and reaches out to patient for planned visits
IT/IM leveraged for pop-based care	Team pulls performance data of target populations and reviews for needed/missed care
Self-mgmt Support at every encounter	RN/RPN trained in 5As and sets goals and action plans with patients after medical portion of visit
Risk Stratification	Electronic data reviewed at team meetings to target high risk sub-populations
Guidelines are used	Algorithms on walls or easily accessed in electronic record. Joint visits with specialists
Community Partnerships	Teams work with public health for community preventive care screenings
Leadership	Leaders profile successful teams and reward quality through money or infrastructure



# Challenges in Implementing the CCM

- Many changes are made in absence of a vision of care
- Changes made in ways that were not sustainable logistically or financially
- CCM elements implemented as “special events” rather than part of routine care
- Requires “epic whole practice re-imagination and redesign”, and dedicated time, not small changes.
- IT often more of a problem than a solution.
- Implementing the CCM requires “personal transformation of physicians.”
- Change fatigue is a serious concern as the participants build a new plane while flying to old one!

# RAND Evaluation of the Chronic Care Model in 1999

---

Pre-Post Controlled Design

Does implementing the Chronic Care Model  
improve processes of care and patient health

– <http://www.rand.org/health/ICICE>

# RAND Findings Comparing Collaborative Participant Patients with Controls

---

- Decreases in HbA1c for patients with diabetes
- Significant increase in patient reports of counseling, education and improved lifestyle for Congestive Heart Failure
- Significant improvement in Quality of Life for patients with asthma
- Significant increase in patients on controller medications
- Teams that implement in all components of the CCM more successful at practice transformation



# Does the CCM Work?



## The Evidence Base

Coleman et al., Health Affairs, Jan. 2009

# Implementation in the U.S.

---

- **Veteran's Health Administration**
  - Began in the late 1990s
  - Complete system overhaul based on the CCM
  - Information systems leveraged immediately
  - Patient-centered care and “happy” providers the focus
  - Improved population outcomes
  - Best kept secret in America!

# Implementation in U.S.

---

- **Bureau of Primary Health Care**  
(10 years of improvement)
  - 850 federally funded health centers (FQHCs)
  - Mandate to participate in at least one year long learning collaborative using the CCM
  - National registry platform developed
  - National outcomes reporting system
  - Despite limited resources most FQHCs successful in transforming care



# Efforts in Canada

---

- British Columbia – The Expanded Chronic Care Model, learning collaboratives, IMPACT BC
- Alberta – The Calgary and Edmonton Health Regions, learning collaboratives, IT initiatives, self-management support programs
- Saskatchewan: The Health Council Learning Collaboratives and provincial registry
- Manitoba: Chronic Disease Prevention Initiative
- Ontario: The Chronic Disease and Prevention Management Framework, QIIP, P4H, centers of excellence
- Quebec: Public-Private partnerships based on tenets of CCM
- Atlantic Provinces: local uptake mostly



# Why is Canada Lagging Behind?

- No vision from the Federal Government (regardless of party affiliation!); there is no will from our leadership
- No performance measurement and accountability structures to ensure quality care.
- Health care thrown to the winds of 13 disparate provinces and territories (and one national program)
- No mandate/incentive to collaborate across the country
- Provincial governments endorse the work with “ink” only; commitment to long-term programmatic implementation is lacking (with a handful of exceptions)
- Reimbursement continues to support a care delivery system designed to manage infectious disease, short-term illness and injury only
- Incentives to improve care while well-intentioned are short-sighted and have serious unintended consequences



# Why is Canada Lagging Behind?

---

- Professional organizations/associations are entrenched in the past and change adverse
- Disease-specific organizations promote a culture of siloed care; as a result care remains disease and procedure focused versus patient focused.
- Efforts to redesign care are numerous but locally based; we do not know how to learn from them and are doomed to repeat history
- We cannot commit to a national data repository and medical record system of care
- Too many demonstration projects and not enough system-wide implementation...we know what works!
- **The realization that Primary Care must be the Medical Home for Canadians has yet to be embraced.**



# AMBITION

THE JOURNEY OF A THOUSAND MILES SOMETIMES ENDS VERY, VERY BADLY.

# What Can We Do?

---

- Long-term policies that support fundamental system change and a recognition of primary care as the central care coordinator for Canadians (Medical Home)
- Reimbursement policies that recognize the different care system needed to deliver effective chronic care and prevention
- Removal of reimbursements and incentives with perverse outcomes (Fee-for-service, procedure-focused incentives)
- Standardize performance measures across all conditions and reward based on quality versus quantity
- Increased translational research that takes the epidemiological and health services knowledgebase and “translates” it into viable frontline applications

# What Can We Do?

---

- Create clear accountabilities for Ministries involved in healthcare
- Have the will to build a national program for quality improvement and create the IT systems to capture data and report.
- Train medical students, residents and administrators toward a new system of care
- Build interdisciplinary teams comprised of family practice and community partners and reward coordinated care
- Insist on provider accountability to engage in effective population-based care (and pay them to do it!)
- Provide easy access training and continuous support to frontline providers to engage in quality improvement on a daily basis.

---

Contact us:

[www.improvingchroniccare.org](http://www.improvingchroniccare.org)

Or

[hindsighthealthcare@rogers.com](mailto:hindsighthealthcare@rogers.com)

Thank You

