Quality of Care Model for Chronic Conditions

CARMEN Biennial Meeting
Lima, Peru
October 27, 2009

Where is Calgary ?

Rocky Mountains

Beef Cattle

Oil

Stampede

Winter

Hockey

Hockey

Hockey

Chronic Conditions

Preventing and improving care for the chronically ill is one of the most pressing health needs of our time

- Chronic conditions are steadily becoming the leading cause of disability and health care costs around the world

Chronic care: It's time for smarter solutions

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SECOND OPINION
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Between 1996 and 2006, health-care spending in Canada almost doubled, increasing to $148-billion from $75-billion.

Virtually all of that increase was due to the treatment demands of people with chronic illnesses such as cardiovascular disease, chronic obstructive pulmonary disease, diabetes, depression, cancer and arthritis.

Yet political attention to our health-care system continues to focus on the delivery of episodic, acute care while chronic care, which should be delivered in an organized, consistent manner, is highly fragmented and inefficient.

While we focus on relative trivialities such as wait times for acute-care procedures and the proper balance between private and public delivery of services, a care chasm is growing that threatens the very viability of our publicly funded health insurance system.

The importance of the issue is laid out in a new essay titled *An Inconvenient Truth: A Sustainable Healthcare System Requires Chronic Disease Prevention and Management Transformation* published in the Canadian journal HealthcarePapers.

The trio of authors – Matthew Morgan and Nicholas

» An estimated 16 million Canadians are living with a chronic illness;
» About half of adults over the age of 65 are being treated for five or more chronic conditions;
» While life expectancy is on the rise, Canadians, on average, live the last dozen years of their lives with one or more chronic illnesses.

More troubling is that, as Dr. Morgan and his colleagues make clear, our efforts to deal with these challenges are abysmal. In a study published last year by the Commonwealth Fund, Canada ranked dead last in the prevention and management of chronic disease.

Why? Because Canada's health-care system lacks vision, direction and, to a certain extent, funding. (We don't necessarily need to spend more money, but we definitely need to spend it more efficiently.)

Treating patients as a whole, not an aggregated collection of diseases.

Peter Sargious, medical leader of chronic disease management in the Calgary Health Region

Decent care of patients with chronic illnesses requires continuity of care. It starts with thoughtful prevention programs, good primary care (an area in which Canada does particularly badly, largely because of our fee-for-service model), investment in electronic medical records, involving

program, they would spend 1.5 million fewer nights in hospital, and $1.6-billion in medical costs as well as 22,360 deaths would be avoided each year.

Such a program, of course, costs money. The team estimated there would be a need for $1-billion in upfront costs and an additional $780-million in annual operating costs for a decent chronic disease management program.

But still, by year seven, the program would break even. More importantly, tens of thousands of Canadians would receive better care.

The authors suggest that Canada needs a funding commitment for chronic disease that mirrors the strategy for wait times.

This is appropriate and timely, a call that should be heeded, particularly by a federal government struggling to make its mark in health care and for provinces reeling from ever-increasing costs and demands.

But, be careful.

As Peter Sargious, the medical leader of chronic disease management in the Calgary Health Region, notes in a related commentary, governments have made large investments in primary care before (about $800-million) with no appreciable effects aside from some excellent pilot projects.

This occurred largely because the money was spent in the absence of a cohesive national strategy, and with no accountability. Chronic disease management and prevention requires sustained, community-based efforts, but this will occur only with a national vision and infrastructure.

Chronic Conditions

- Populations are aging and patients are living with one or more chronic conditions for decades

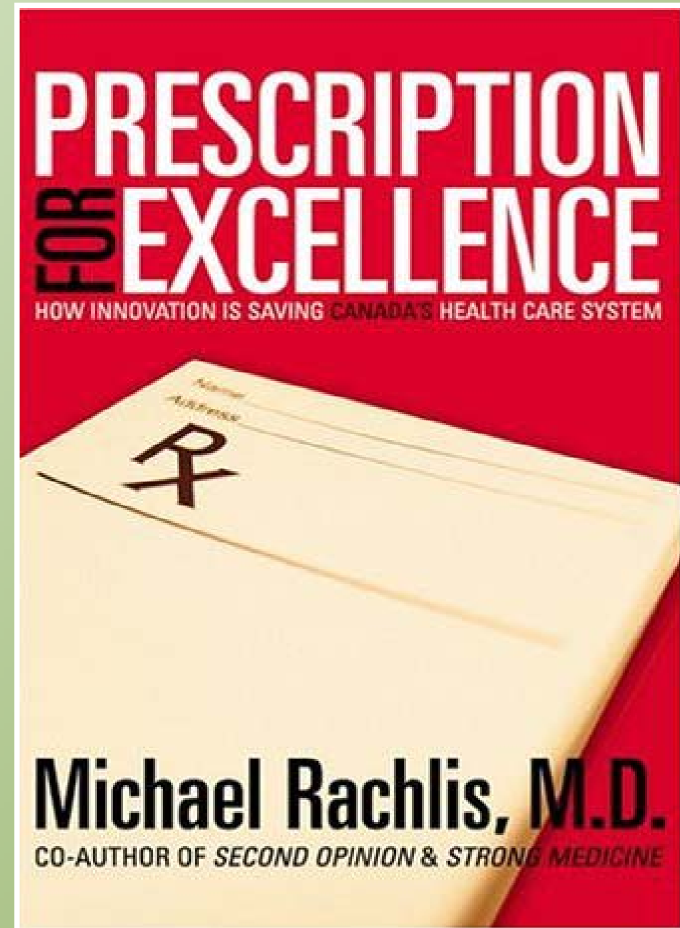
How can we minimize the impact of the tsunami that is about to hit us?

Health Care System Redesign

- Our health system is designed to manage acute illnesses, not manage (much less prevent) chronic ones
- Each system is perfectly designed to get the results it achieves (*W. Edwards Deming*)

Chronic Illness in Canada

" Surveys across a variety of diseases including high blood pressure, diabetes, coronary artery disease, asthma and congestive heart failure have shown that 40 to 80 percent of patients are inadequately treated."

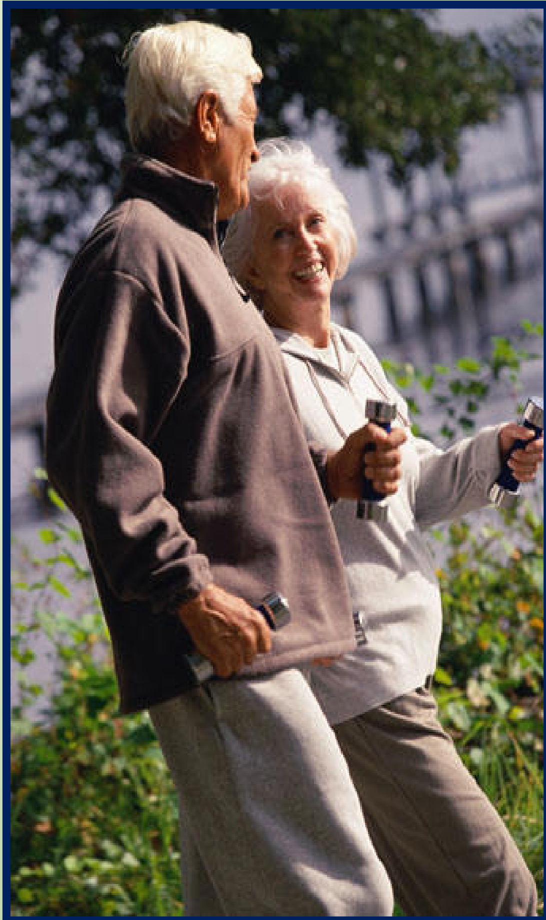


System needs to change

“There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new order of things…”

- Nicolo Machiavelli, The Prince

Expectation $\neq$ **Experience**



What must be done?

To evolve from acute focused ‘find it and fix it’ health care system towards one that is proactive, provides comprehensive and coordinated care and is designed to meet the long term needs of patients.

‘ Trying harder will not work. Current health systems cannot do the job. Changing care systems will ’.

US Institute of Medicine, 2001

Top 10 deficiencies in current system

- Treat immediate symptoms not manage illness
- Provide short term care vs. long term monitoring and support
- Care is fragmented
- Restricted role for patients and families
- Focus on disease not whole patient

Top 10 deficiencies in current system

- Failure to optimize information technology
- Workforce shortages
- Lack of training in chronic illness care
- Misaligned financial incentives
- Coverage gaps

Chronic Care in Calgary

To better address the problem of chronic disease, Calgary:

- Formally began a chronic disease program in 2002
- Focused on secondary prevention
- Targeted diabetes and hypertension
- Provided operational dollars

Key to Success

Chronic disease management can't be an add-on to someone's current job

Underlying Principles

- Use a ‘proven’ model of Chronic Care
- Focus on building infrastructure rather than management of individual diseases
- Be patient-centered and community-based
- Start small and go slow
- Be flexible with implementation
- Monitor progress

Key to Success

At developmental stage need people who can think outside the box

Key to Success

Don’t need everyone involved in the initial planning

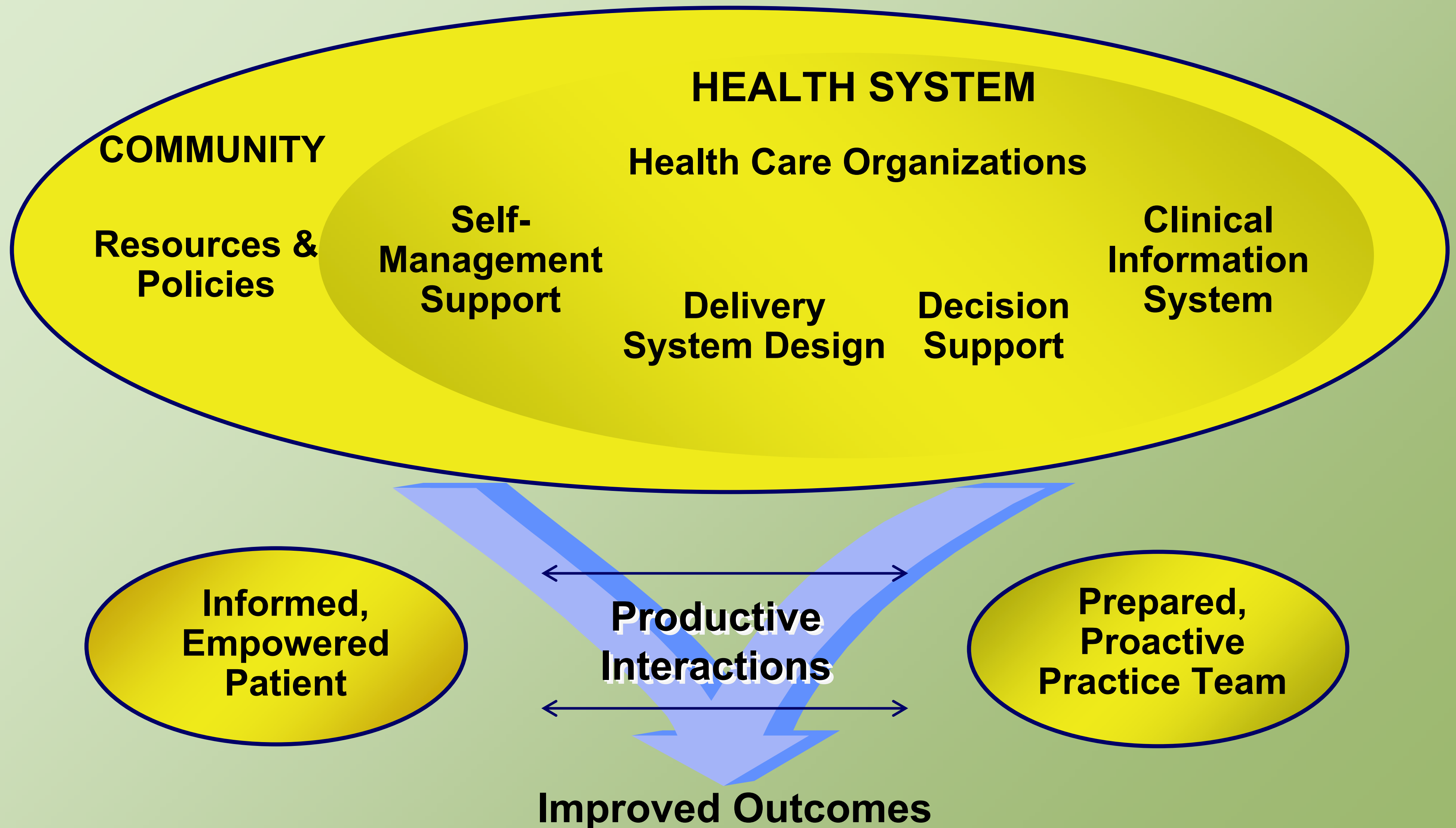
Guiding Framework

Initially adopted Wagner Model as guiding framework:

- Is used in many countries and health care organizations around the world
- Has been shown to improve patient outcomes and reduce costs for many chronic conditions

www.improvingchroniccare.org

Chronic Care Model



Guiding Framework

Today using Expanded Chronic Care Model developed in Canada (British Columbia):

— Includes disease prevention and health promotion

- Recognizes social determinants of health
- Involves enhanced community participation

www.health.gov.bc.ca/cdm/cdminbc/chonic_care_model.html

BC Expanded Chronic Care Model

Two Key Components of Calgary's Chronic Care Program

- Chronic Disease Nurses
- Living Well Program (a community exercise and education program)

Chronic Disease Nurses

Role:

- Support family physicians in management of patients with chronic conditions
  - Work out in community in family physicians offices

Chronic Disease Nurses

Initially, nurses:

- Focused on a few diseases
- Received intensive disease education
- Provided in-depth disease management
- Saw all patients face-to-face
- Spent much time entering data

Chronic Disease Nurses

The Result:

- Improved patient clinical outcomes but also…
  - Few patients being seen (caseloads of 50-70)
  - Patients did not feel they were being listened to
  - Stressed out nurses juggling new role, entering data, learning IT system
  - Dissatisfied doctors as too few diseases were being addressed

Chronic Disease Nurses

Today, nurses:

- More focused on patient than disease
- Receive ‘need to know’ disease education
- Focus on issues patient wants to address
- Provide different levels of care according to patient need
- Only enter key data elements

Chronic Disease Nurses

The Result:

- Improved patient clinical outcomes but also…
  - More patients being seen (caseloads of 200-300)
  - Patients feel their needs are being addressed
  - Much happier nurses – less juggling, more working to full scope
  - More satisfied doctors – more patients being supported

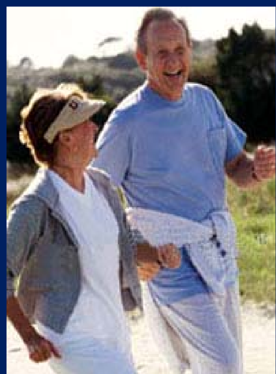
Key to Success

Paradigm shifts take time

Living Well Program

Living Well *with a Chronic Condition* program provides:

- Supervised exercise classes
- Disease-specific education



Aim of Program

- Be accessible. Offered in community settings, e.g., gymnasiums and community centres
- Provide ‘one stop shopping’ for participants
- Be sustainable – link with community organizations to expand reach
- Be appropriate for people with a range of chronic conditions

Living Well Program

Initially:

- Exercise program had a set start date
- Patients needed physician's permission to participate in exercise program
- Disease education was didactic/expert driven
- Free charged for exercise classes

Living Well Program

Result:

- Patients lost interest having to wait for program to start
- Patients sent for unnecessary stress tests
- Disease education was too long, too much information
- Program fee was not collected for 50% of patients

Living Well Program

Today:

- Patients can join exercise class at any time; home programs also available
- No physician's approval required for exercising, patients assessed by program staff for stress test
- Disease education incorporates self-management principles
- Exercise fee under review

Useful Tools

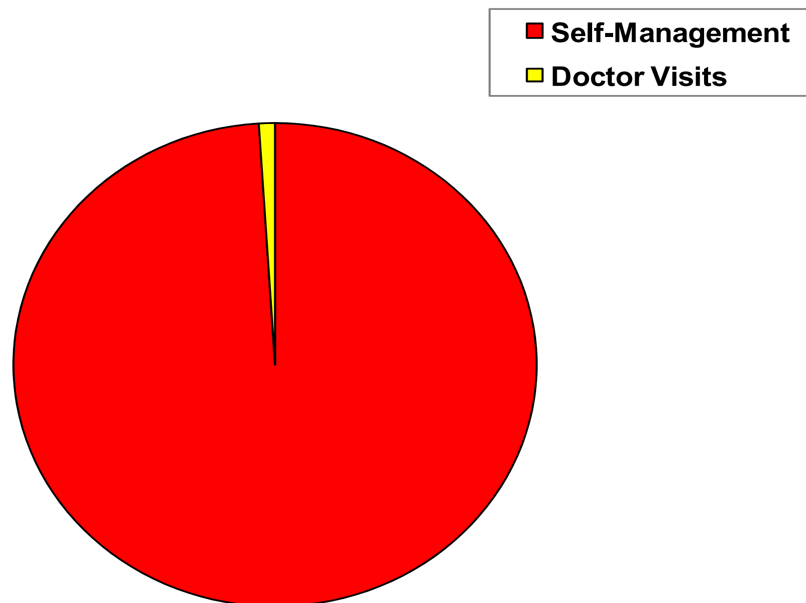
- Stanford Chronic Disease Self-Management Program
- Flinders Care Plan
- Flinders Preventive Care Program

Common Characteristic of Tools

- All focus on enhancing and supporting patients self-management ability

Why is patient self-management important?

Patients spend less than .1% of time in doctor's office (about six hours per year)



Six Principles of Self-Management

- Know your condition
- Have active involvement in decision-making with family physician and other health providers
- Follow the Care Plan that is agreed upon with family physician and other health providers

Six Principles of Self-Management (cont'd)

- Monitor symptoms associated with the condition(s) and respond to, manage and cope with the symptoms
- Manage the physical, emotional and social impact of the condition(s) on your life
- Live a healthy lifestyle

Stanford Chronic Disease Self-Management Program

- Developed by Dr. Kate Lorig, Professor at Stanford University in early 1980’s

  http://patienteducation.stanford.edu

Characteristics of Chronic Disease Self-Management Program

- Generic program opened to anyone with a long term illness
- Taught in small groups
- 6 weeks / 2.5 hours per week
- Taught by lay leaders
- Standardized training for leaders
- Highly structured teaching protocol
- Standardized participant materials

Core Assumptions

- Patients with different chronic diseases have similar self-management problems and disease-related tasks
- Patients can learn to take responsibility for the day-to-day management of their disease(s)
- Trained lay people can teach self-management skills

MEDICAL MODEL

PUBLIC HEALTH MODEL

SELF-MANAGEMENT MODEL

How Self-Management Differs From Patient Education

	Self-Management	Patient Education
Purpose:	To manage life with disease	To manage disease
	To increase life skills/ self-confidence	To increase knowledge of disease
	To problem solve and make decisions	To use specific tools

How Self-Management Differs From Patient Education

	Self-Management	Patient Education
Based on:	Patient Problems	What Patients Need to Know
Content:	Role and Emotional Management	Disease Knowledge and Behaviors

How Self-Management Differs From Patient Education

	Self-Management	Patient Education
How Taught:	Several Topics Per Week	One Topic Per Week
	Leader is Guide and Role Model	Leader is Expert
	Limited Lecture Peers Learn From Peers	Lecture/ Questions

Evaluation of Program

- Outcome research using randomized control trials and longitudinal designs
- Focused on 3 outcomes:
  - Health Behaviours
  - Health Status
  - Health Care Utilization
    - Benefits in all 3 domains have been demonstrated, and some of these benefits persist for at least 2 years

Additional Points

- Some evidence that when taught by professionals, patients knew more, while when taught by lay persons, patients did more…and a higher average attendance rate when taught by lay persons
- Patients don't need to be able to read to take the course

Care Plans

- A way for providers and patients to work together to manage a patient's chronic conditions
- Typically care plans outline the patient's goals, upcoming interventions and the role of all the providers involved in care
- Flinders Care Plan is the only care planning approach with evidence that it works

  www.som.flinders.edu.au/FUSA/CCTU/self_management.htm

Care Plans

Why is care planning important?

- Takes focus away from disease to patient as a whole
- Addresses all chronic conditions and takes into account the person’s psychosocial issues
- Assesses the patient’s self-management skills
- Facilitates communication between patient and providers
- Specifies role of multiple providers
- Is motivational for patients

Questions in Care Plan

- Knowledge of condition & treatment
- Understanding and taking of medication
- Sharing in decision making
- Keeping appointments
- Monitoring and managing symptoms
- Managing impact of condition on physical activity, emotions and social life

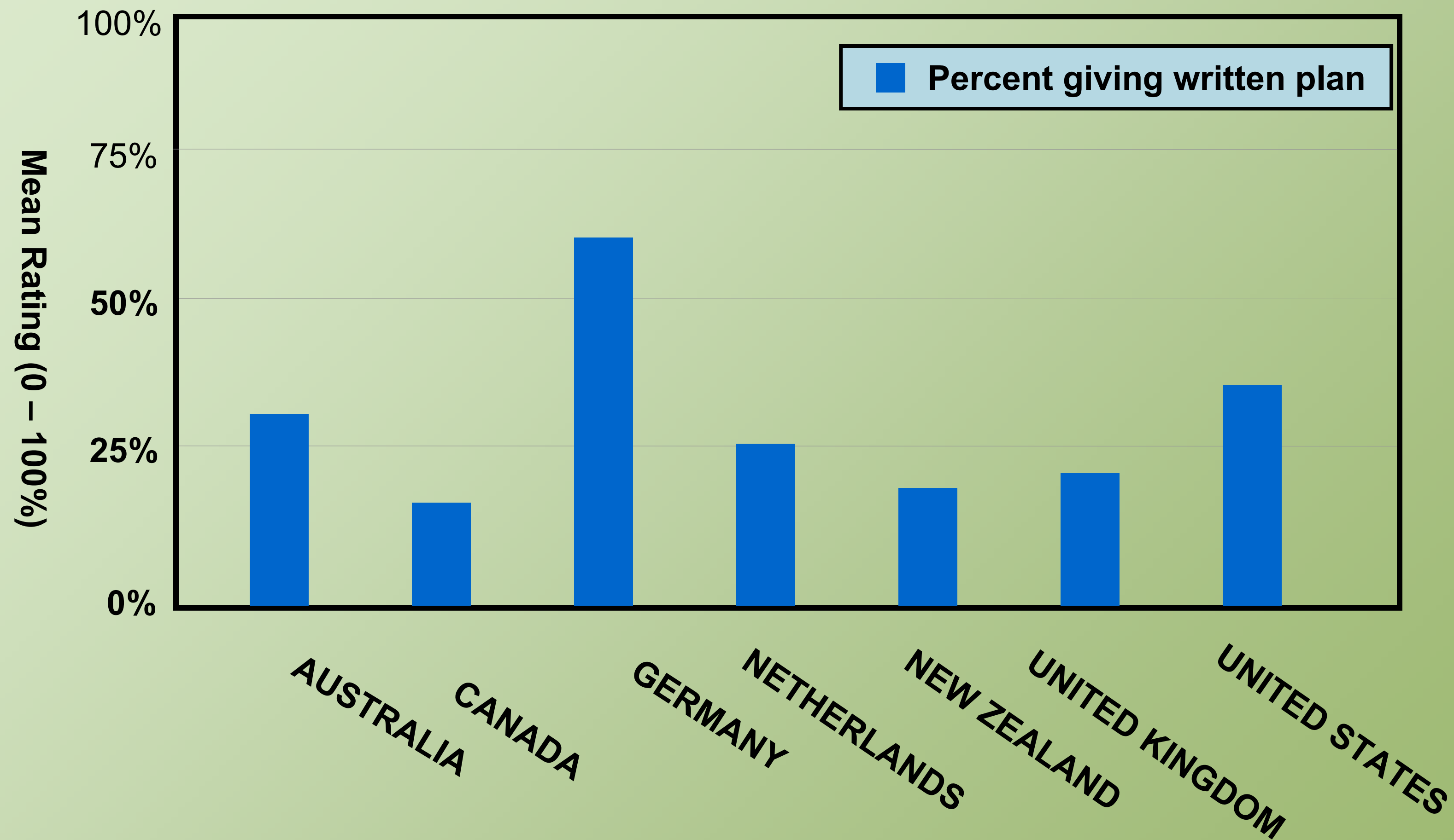
www.som.flinders.edu.au/FUSA/CCTU/contact.htm

Evidence for Care Plans

- Better clinical outcomes
- Improved quality of life
- Reduced hospital admissions, unplanned physician visits, emergency visits
- Increased self-efficacy
- Increased satisfaction with service
- More efficient clinical practice

www.som.flinders.edu.au/FUSA/CCTU/contact.htm

Canadian MD's don't use Care Plans



Source: Rachlis 2008

New Fee Code for family physicians – Complex Care Plan – launched April 1, 2009

MONDAY, MARCH 16, 2009

Care of chronic patients boosted

Billing change buys time for family doctors

MICHELLE LANG
CALGARY HERALD

Albertans with chronic diseases such as diabetes and asthma may get more face time with their doctor under a new

College of Family Physicians.

"We know this approach results in better outcomes for patients and it's good for the family doctor."

Calgarian Ellnor Fesik, whose husband John has high blood pressure, welcomed the program.

She suggested, however, that doctors and patients might have a tough time sticking with the changes.

"Like any man, he doesn't want to go to the doctor," Fe-

Source: Calgary Herald, March 16, 2009

Complex Care Plan Fee Code

- For the development, documentation and administration of a comprehensive annual care plan for a patient with complex needs
- Patients must have at a minimum, either:
  - 2 from **A**; or
  - 1 from **A** and 1 from **B**

Column A
Hypertensive Disease (ICD-401)
Diabetes Mellitus (ICD-250)
COPD (ICD-496)
Asthma (ICD-493)
Heart Failure (ICD-428)
Ischemic Heart Disease (ICD-413-414)

Column B
Mental Health Issues (ICD-290-319)
Obesity (ICD-278)
Addictions (ICD-303-304)
Tobacco (ICD-305.1)

Critical Success Factor

The patient and all of his/her health care providers are aligned

Ongoing Challenge

Ensuring balanced roles

Flinders Preventive Care Program

- Developed in Australia in 2006
- A set of tools to assist patients at risk of developing chronic conditions to self-manage their risk behaviours
- Currently being tested using randomized control trials

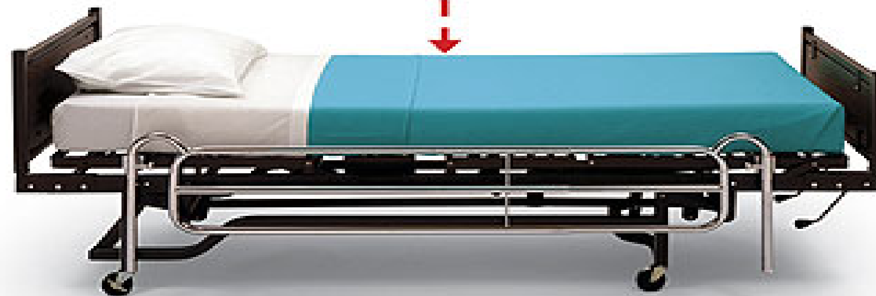
DOUBLE ISSUE

JUNE 22, 2009

THE HEALTH ISSUE

TIME

How Not To End Up Here



It's All About Prevention.

The first step toward containing health-care costs is to avoid getting sick. Here's what it takes

www.time.com

Flinders Preventive Care Program

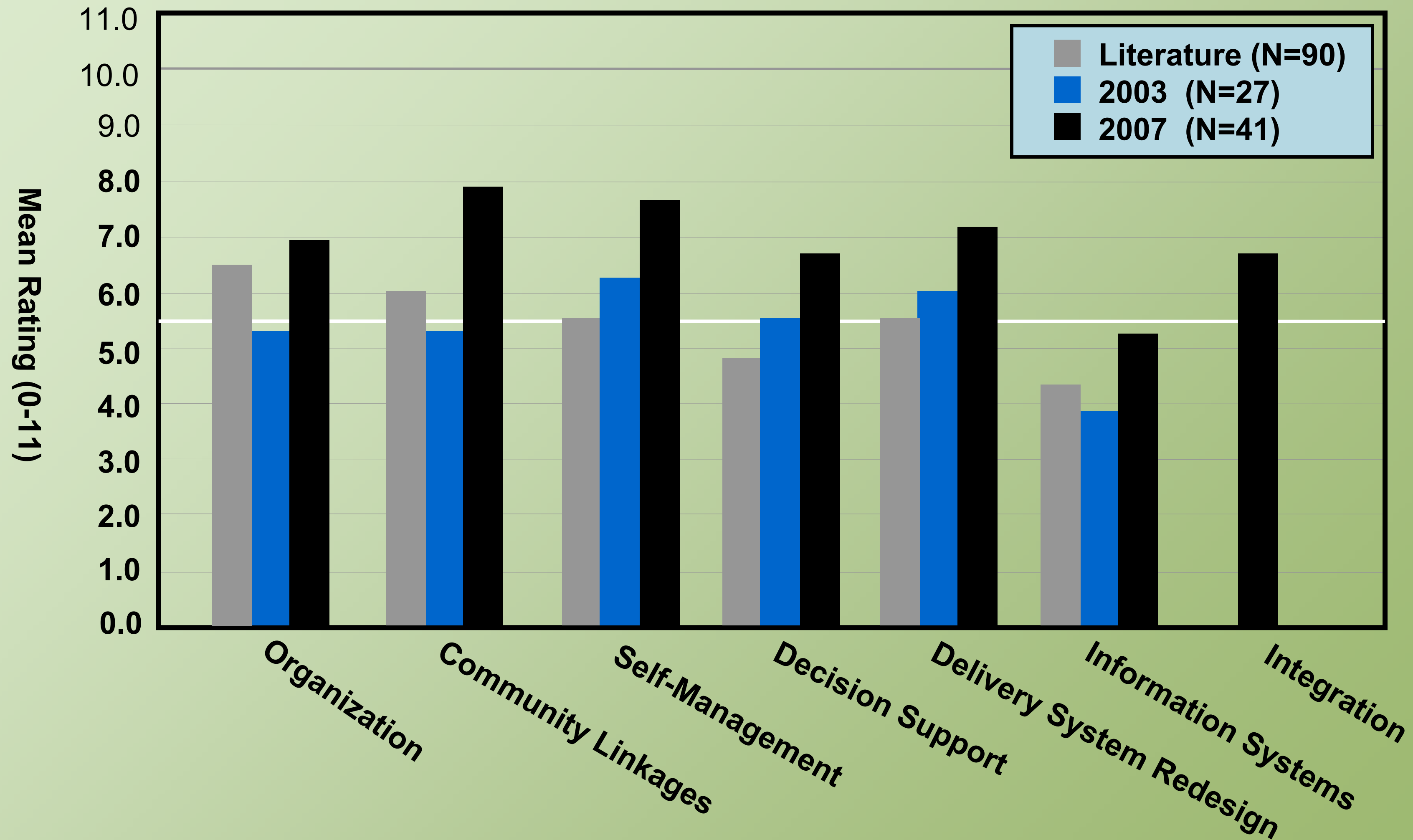
- Tools identify and assess the key modifiable risk factors of smoking, nutrition, alcohol, physical activity and stress
- Provide a way for practitioners to help individuals to make the lifestyle changes necessary to reduce their risks by maximizing their self-management potential
- Can be used with diverse and disadvantaged populations
- Can train lay people to use tools

Process

- Tools assess:
  - Knowledge of risk factor(s)
  - Knowledge of how to reduce risk factor(s)
  - Impact of general health on ability to change the risk factor(s)
  - Impact of social aspects of life on ability to change the risk factor(s)
  - Impact of living situation on ability to change the risk factor(s)
  - Impact of emotions on ability to change the risk factor(s)
- Patient and clinician:
  - Develop an action plan to address risk factor(s)

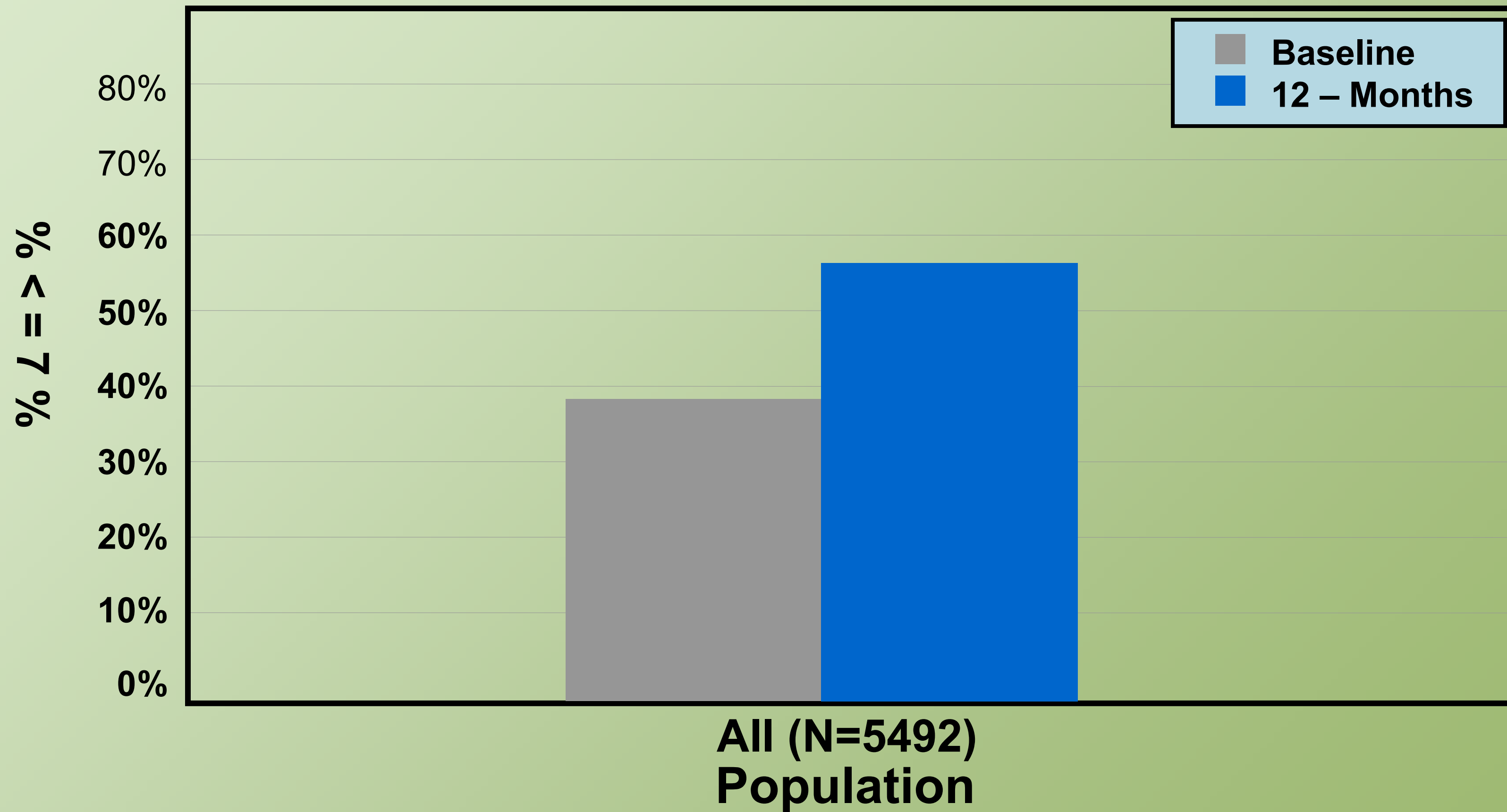
Calgary Results

Assessment of Chronic Illness Care (ACIC)



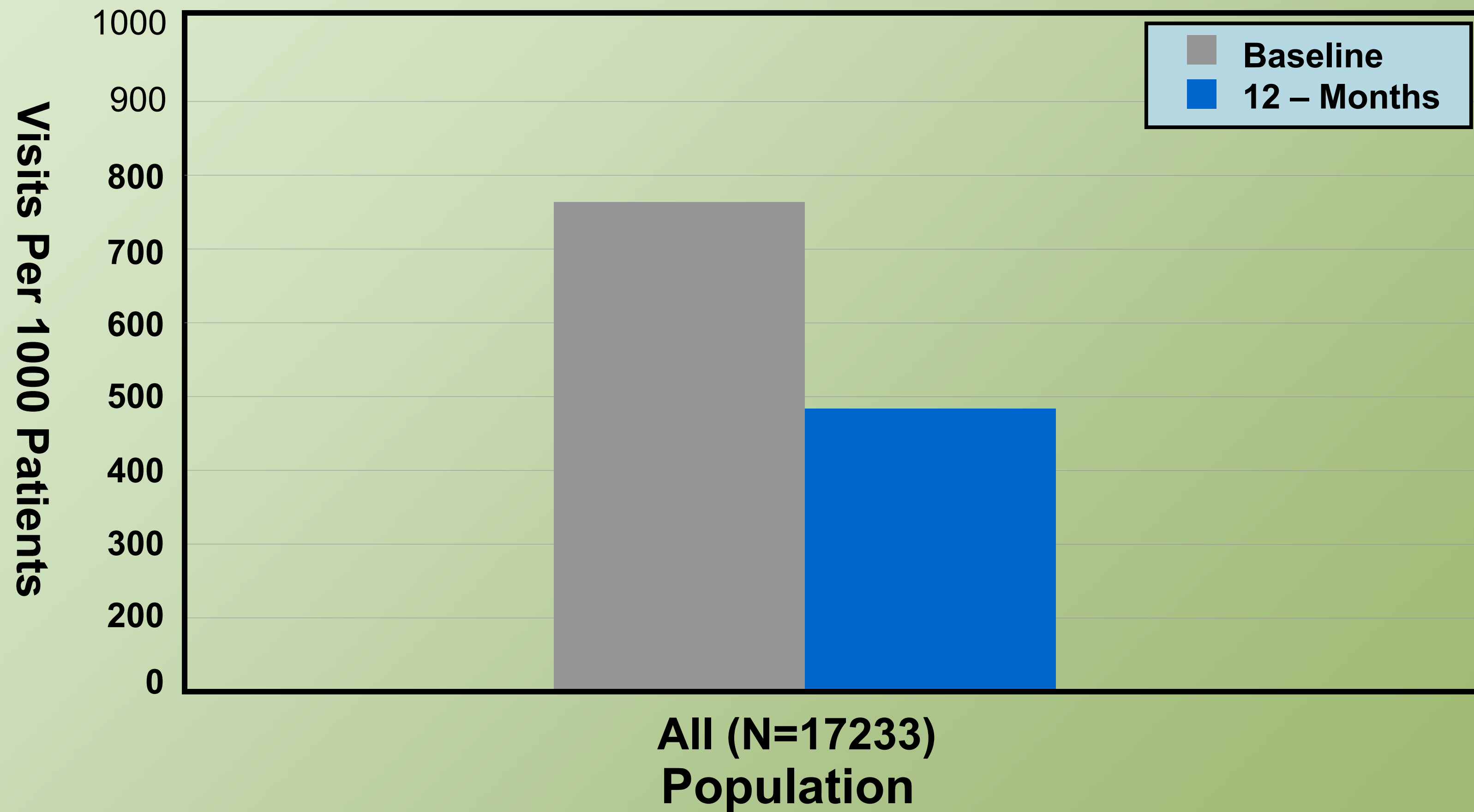
Clinical Outcomes – HbA1c Control

17% more patients with diabetes had blood sugar under control, p < .001



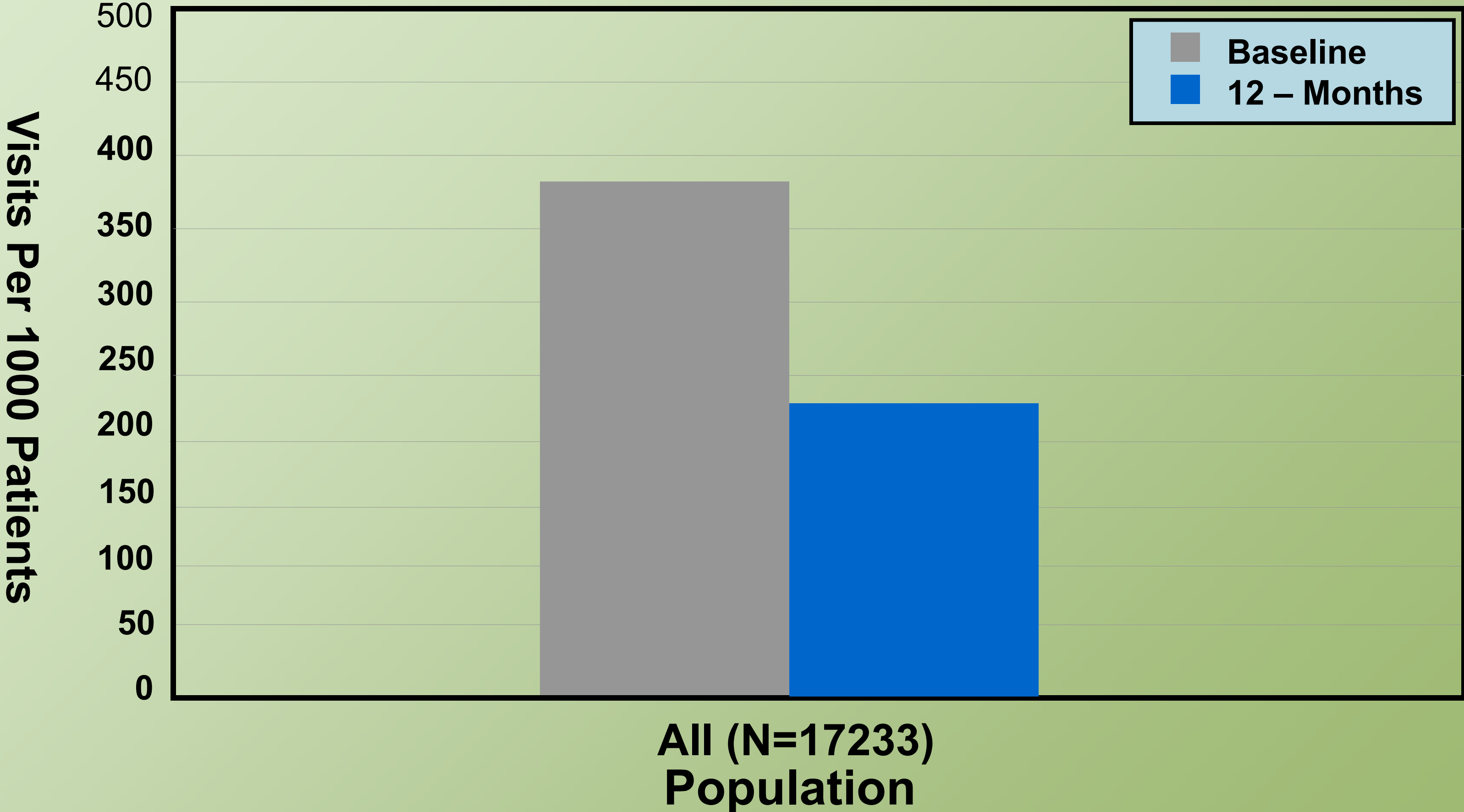
Utilization – ED Visits

ED visits dropped by 34%, $p < .001$



Utilization – Inpatient Admissions

Inpatient Admissions dropped by 41%, $p < .001$



Key to Success

Stay below the radar while testing different approaches and ideas

‘Nothing is more powerful than an idea whose time has come’

Victor Hugo

YES
WE
CAN