

Ontario's Chronic Disease Prevention and Management Framework

Work of a Steering Committee, MOHLTC, 2005

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Outline

- **CDPM Framework** - The Purpose
- **Chronic Disease** - The Issue
- **Chronic Disease Prevention and Management: The Evidence**
- **The Transformation** to Chronic Disease Prevention and Management
- **Ontario's Framework for CDPM**



CDPM Framework - Purpose

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- To provide a common policy framework to guide efforts toward effective prevention and management of chronic diseases
- To guide Ministry transformation initiatives with a focus on CDPM, such as:
 - Primary Health Care Renewal, Family Health Teams
 - Public Health Renewal - health promotion and prevention initiatives
 - Local Health Integration Networks, e-Health strategy,
 - CDPM strategy and specific chronic disease strategies
- To engage ministry stakeholders in a systematic approach to addressing chronic disease

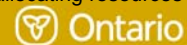


Chronic Disease - The Issue

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"Chronic disease is defined as a disease that has a prolonged course, that does not resolve spontaneously and for which a complete cure is rarely achieved"

- Chronic diseases are widely prevalent, a major cause of disability and death and very costly to the health care system
 - Almost 80% of Ontarians over the age of 45 have a chronic condition, and of those, about 70% suffer from two or more chronic conditions. (CCHS 2003)
 - In Ontario, the economic burden of chronic disease estimated at 33% of direct health care costs and 55% of total costs that include premature mortality and disability costs.
 - Left untreated, one chronic diseases predisposes to another e.g. diabetes and heart disease and usually coexist.
- Current approach to health care is oriented to the treatment of episodic acute illness in isolation. It is not oriented to identify, treat or prevent co-morbid conditions and prevent their progression to complications
- Ontario has funded disease-specific initiatives, e.g. stroke, diabetes, osteoporosis, however, there is no one evidence-based approach for prioritizing or allocating resources



Chronic Disease - The Issue of Management

Although our health care system has developed excellent responses to acute situations, there is some evidence that our approach to disease management tends to be less than optimal. For example:

- 49% of diabetics have gone without an eye exam for over 1 year after diagnosis in Ontario,¹
- 7.2% of AMI patients in Ontario are readmitted within 28 days compared to 4.8% in Alberta,²
- less than 20 percent of those who experience a fracture after age 40 are assessed for osteoporosis, and
- in Canada, only 16 percent of hypertensives have their blood pressure treated and properly controlled³

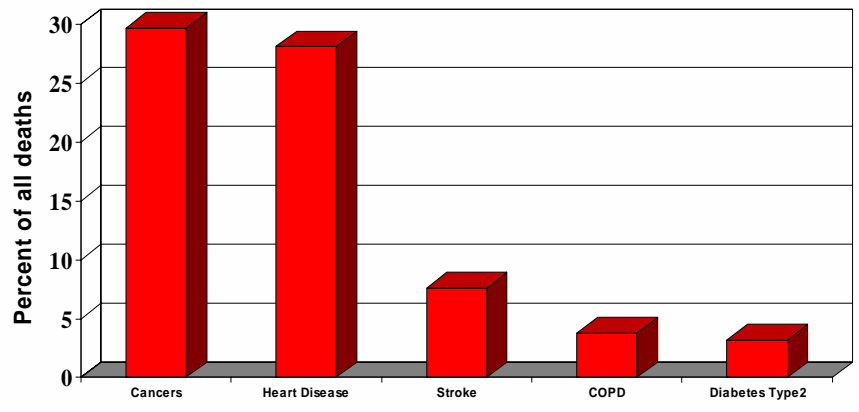
1 Diabetes in Ontario: Practice Atlas, ICES 2004, P 10.195.

2 CIHI 2006

3 Joffres MR, Ghadirian P, et al. Awareness, treatment, and control of hypertension in Canada. *American Journal of Hypertension* 1997;10:1097-1102.

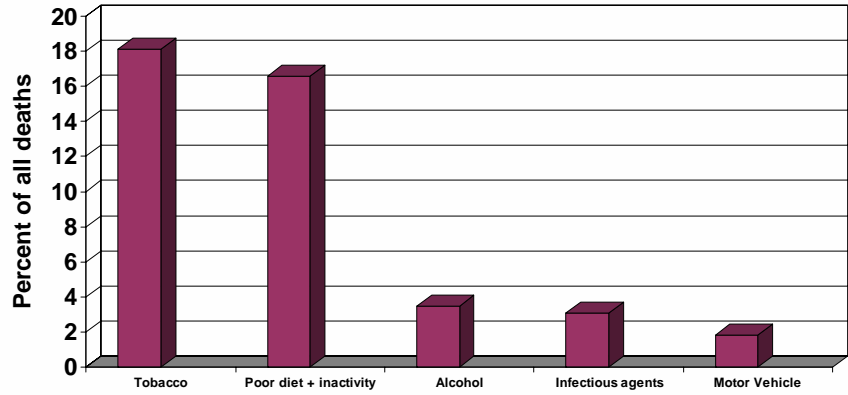


Causes of Death in Ontario, 2000-01



Real Causes of Death

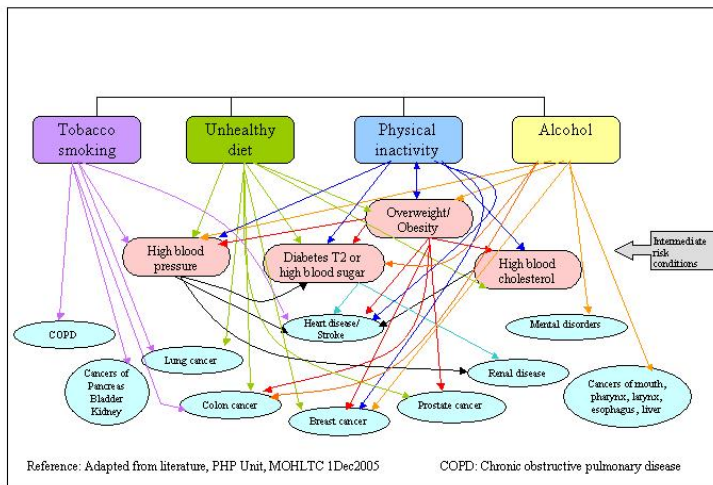
(JAMA 2004;291:1238)



Poor diet to Inactivity ratio: Approximately 1.5 : 1

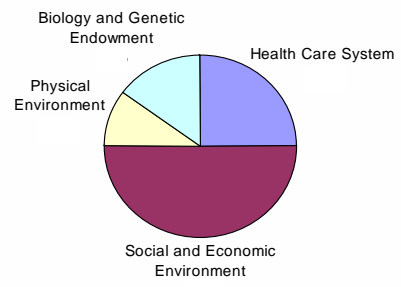


Chronic Disease Risk Factors are Common to Many Conditions









What Makes People Healthy / Unhealthy?

Estimated Impact of Determinants of Health on the Health Status of the Population



The Transformation

FROM **Illness orientation**  **TO** **Wellness orientation**

- | | | |
|--|---|---|
| • prevention not a priority |  | • prevention at all points of continuum |
| • a solo provider approach |  | • an integrated, interdisciplinary care team approach |
| • Provider, disease centred |  | • patient centred |
| • reactive and episodic care |  | • proactive, complex, continuing care |
| • limited role for individuals in management |  | • individuals empowered for self-management and part of care team |

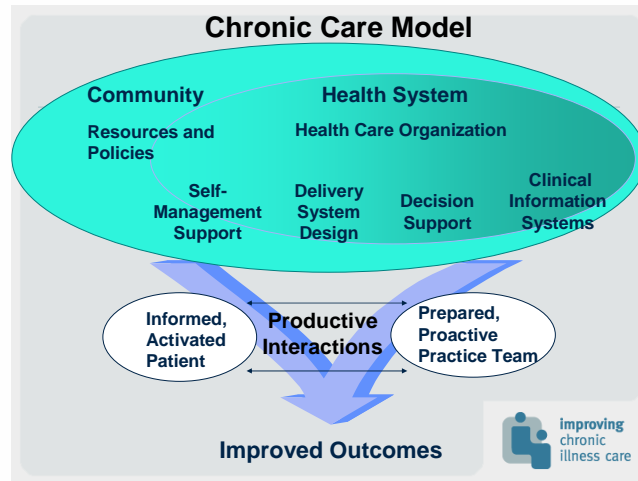
A System Involving
 Health Care Organizations
 Individuals and Families
 Communities



A CDPM Systems Approach Has the Potential to Achieve

- Fewer people with chronic diseases
- Better clinical outcomes, longer more functional life
- Increased efficiency in the system, quality care in the appropriate setting by the appropriate provider at the right time
- Reduced hospitalizations, reduced use of emergency departments and reduced duplication of services
- Increased healthy behaviours

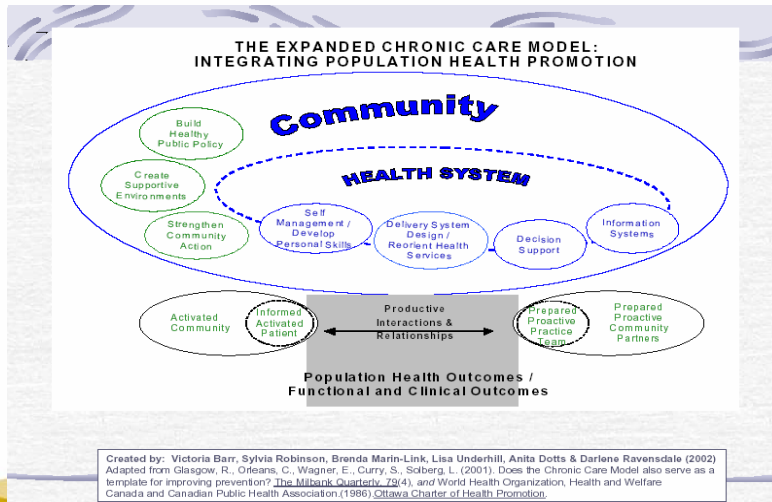
The Chronic Care Model



Reference: Wagner EH. Chronic disease management: What will it take to improve care for chronic illness? Effective Clinical Practice 1998;1:2-4.

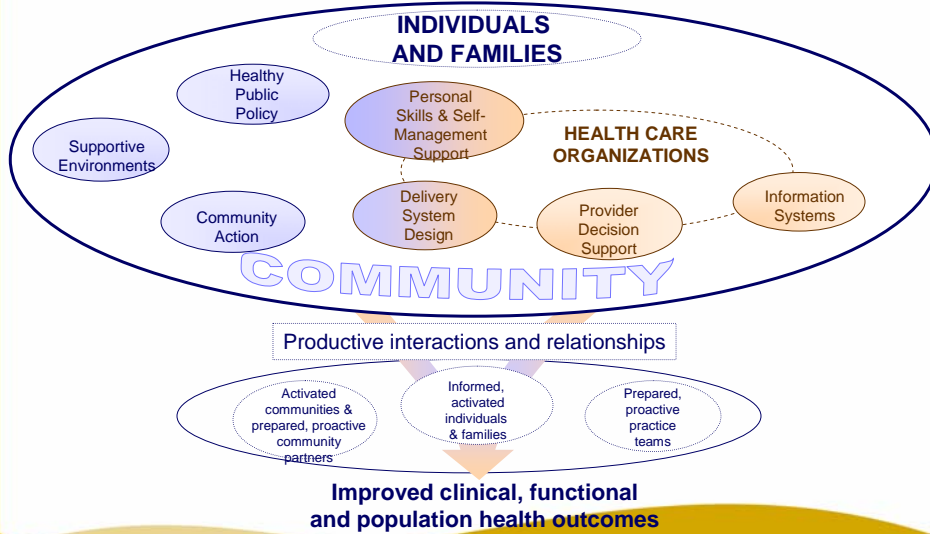
The Expanded Chronic Care Model (Developed In B.C.)

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Ontario's CDPM Framework

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Framework Components

Health Care Organizations - make systematic efforts to improve prevention and management of chronic disease:

- strong leadership (e.g., CDPM champions)
- alignment of resources, incentives (e.g., OMA agreement, Admin support, IT support for providers, etc.)
- accountability for results (e.g., set goals, measure effectiveness in improving outcomes for clients, population and system)

Delivery System Design - focus on prevention and, improve access, continuity of care and flow through the system:

- interdisciplinary teams (e.g., FHTs with defined roles & responsibilities)
- integrated health promotion and disease prevention (e.g., nutrition and physical activity counselling)
- planned interactions, active follow-up (e.g., care paths, case management)
- adjustments, innovations in practice (e.g., group office visits, central appointment booking service)
- information systems (e.g., EHR; population health data, surveillance)
- outreach and population needs-based care (e.g., Latin American Diabetes)

Provider Decision Support - integrate evidence-based guidelines into daily practice:

- provider education (e.g., guidelines, working in interdisciplinary teams)
- tools (e.g., disease assessment and management flow sheets)
- clinical information systems (e.g., drug interaction software)
- provider alerts and reminders (e.g., reminders for tests, examinations)
- access to specialist expertise (e.g., team social worker; cardiologist at tertiary care centre)
- measurement, routine reporting/feedback, evaluation (e.g., continuous quality improvement loop for target blood glucose levels in client population with diabetes)

Information Systems – are essential for enhancing information **for providers** to provide quality care; **for clients** to support them in managing their disease on a day to day basis; and for integrating services across health system:

- electronic health records (e.g. test results, treatment, interactions, health status)
- case management software (e.g., tracking systems, automated reminders)
- client registries integrated with EHR to identify patient subpopulations for proactive care (e.g., clients suffering from multiple chronic conditions)
- web support (e.g., interactive clinical practice guidelines)
- information for clients (e.g., health care advice, access to records)
- links (e.g., between team members, care centres)

Personal Skills & Self-Management Support - empower individuals to build skills for healthy living and coping with disease:

- emphasizing the individual's and families' central role in their health, and as a member of the care team
- engaging them in shared decision-making, goal-setting and care planning
- providing access to education programs & health information (e.g., asthma education programs, consumer information)
- behaviour modification programs (e.g., smoking cessation)
- counselling and support services (e.g., self-management support groups)
- integration of community resources (e.g., referral to community physical activity programs)
- follow-up (e.g., reminders, self-monitoring assistance)

Healthy Public Policy - develop and implement policies to improve individual and population health and address inequities:

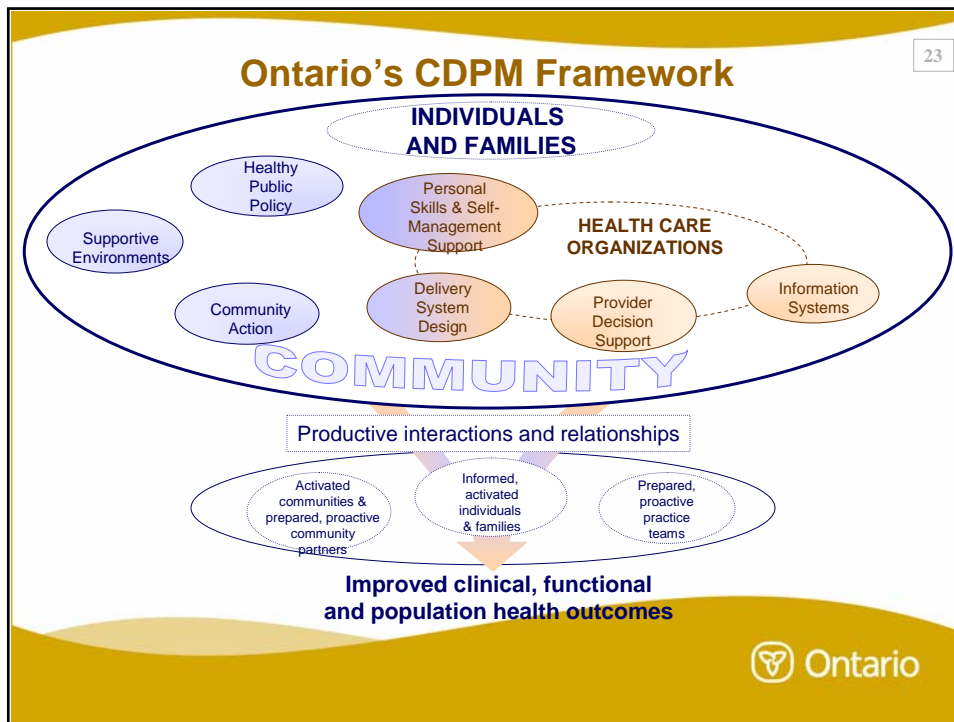
- legislation, regulations (e.g., smoking by-laws)
- fiscal, taxation measures (e.g., lowering duty on imported fruit)
- guidelines (e.g., Health Canada food guidelines, screening)
- organizational change (e.g., flex hours, day care in the workplace)

Supportive Environments - remove barriers to healthy living and promote safe, enjoyable living and working conditions:

- **physical environments** (e.g., safe air, clean water, accessible transportation, affordable housing, walking trails, bicycle lanes)
- **social and community environments** (e.g., daily physical activity in schools, seniors programs in community centres, on-site health promotion programs in the workplace)

Community Action - encourage communities to increase control over issues affecting health:

- **collaboration between the health care sector and community organizations** (e.g., Latin American Diabetes Program, London ON)
- **effective public participation and intersectoral collaboration** (e.g., community members, private sector and schools providing breakfast nutrition/physical activity programs)



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What Characterizes a "Prepared, Proactive Practice Team"?

**Prepared,
Proactive
Practice
Team**

At the time of the visit, they have the consumer information, decision support, people, equipment, and time required to deliver evidence-based clinical management, health promotion/prevention, and self-management support*

*adapted from MacColl Inst. for Healthcare Innovation, Group Health Cooperative of Puget Sound

Ontario

What Characterizes “informed activated individuals & families”?

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**Informed,
Activated
Individuals &
Families**

Individuals understand the disease process, are part of the care team, and realize his/her role as the daily self manager. Family and caregivers are engaged in the individual’s self-management. The provider is viewed as a guide on the side, not the sage on the stage*

*MacColl Inst. for Healthcare Innovation, Group Health Cooperative of Puget Sound



What Characterizes “Activated Communities & prepared, proactive community partners”?

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**Activated
communities &
prepared, proactive
community partners**

Communities are collaborating across sectors and with health care organizations to identify and meet the needs of their population. Individuals and families are linked to community resources



Managing Chronic Diseases Improves Outcomes and Decreases Costs (continued)

- Veterans Health Administration by focusing on primary and ambulatory care reduced hospitalizations, leading to a reduction in acute operating beds from 52,000 to 19,000 over a 7-year period and a drop of about 60% in average daily inpatient population. (Department of Veterans Affairs, Program Statistics April 2003)
- Kaiser Permanente achieved the following results over a 10 year period by using: a multidisciplinary steering group, physician champion for each guideline; registries, reminders, outreach programs, and empowering local clinicians:
 - 30% lower heart disease mortality than other plans
 - 15% decrease in death rates from CHF between 1996-2001
 - smoking rate among N. California KP members was 12% compared to 18% for state as a whole (Kaiser Permanente)

Managing Chronic Diseases Improves Outcomes and Decreases Costs (continued)

- Multi-disciplinary, community-based Latino diabetes self-care clinic delivered with Latino health professionals licensed outside Ontario yielded 14% absolute reduction in blood glucose levels within one year (London InterCommunity Health Centre)
- A COPD self-management education program reduced hospital admissions by 40%, emergency room visits by 40%, and improved health related quality of life (Bourbeau J, et al. *Arch Int Med* 2003;163:585-91)
- Congestive heart failure discharge program reduced number of readmissions by 68% in first 9 months by coordinating care & educating clients, families (Group Health Centre, Sault Ste. Marie)

Preventing Chronic Diseases Improves Outcomes

- One study showed that 90% of type 2 diabetes and 80% of coronary heart disease could be avoided with good nutrition, regular exercise, elimination of smoking and stress management (WHO, 2002)
- 80%-90% of COPD could be avoided by the elimination of cigarette smoking
- Daily diets high in vegetables and fruit reduce cancer incidence by an estimated 20%
- If 70% of women between ages 50 and 69 had mammography screening, approximately one-third of breast cancer deaths in Ontario could be prevented over a 10-year period
- Colorectal screening by fecal occult blood testing could reduce mortality by 15%-33% in the 50-75 year age group, and 90% of cervical cancer is preventable with regular screening

Keeping people well and preventing disease is the most cost-effective, affordable and sustainable strategy for coping with chronic disease