

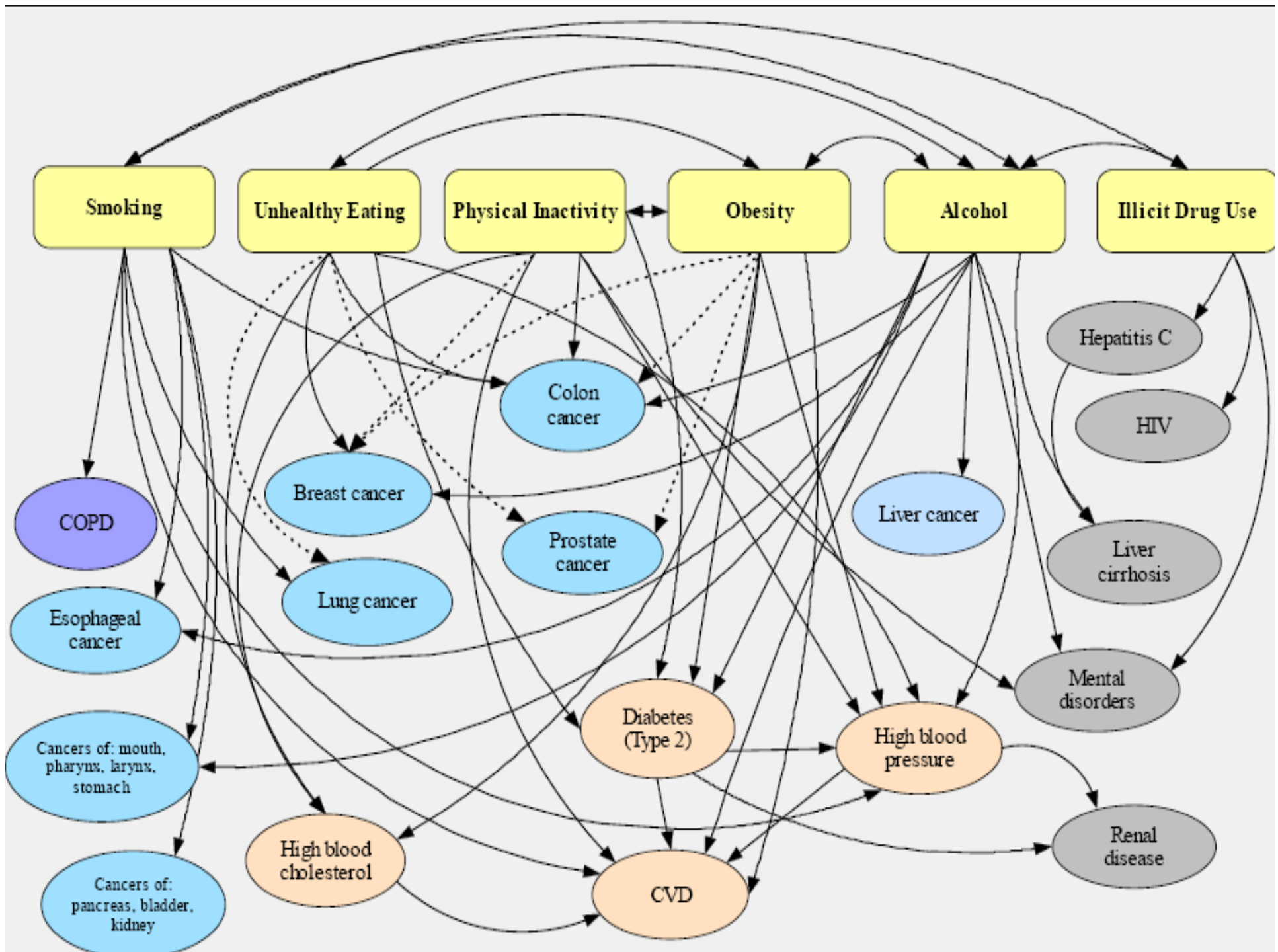


Ontario's Chronic Disease Prevention Management Framework

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Chronic Disease - the Issue

- In Ontario, the economic burden of chronic disease is estimated at 55% of total direct and indirect health costs
- Almost two-thirds of Ontarians over the age of 45 have a chronic condition, and of those, about 55% suffer from two or more chronic conditions
- Left untreated, chronic diseases like diabetes and depression are causally related to other diseases, including heart attack and stroke
- Yet... the current system is designed to treat and cure acute illness, not prevent or manage chronic illness that individuals must live with daily
- Ontario could avoid approximately 29,000 emergency department visits and 67,300 hospitalizations annually with effective prevention and management of diabetes, asthma, congestive heart failure and depression, resulting in hospital cost avoidances of \$200 - \$350 million annually



Preventing Chronic Diseases Improves Outcomes

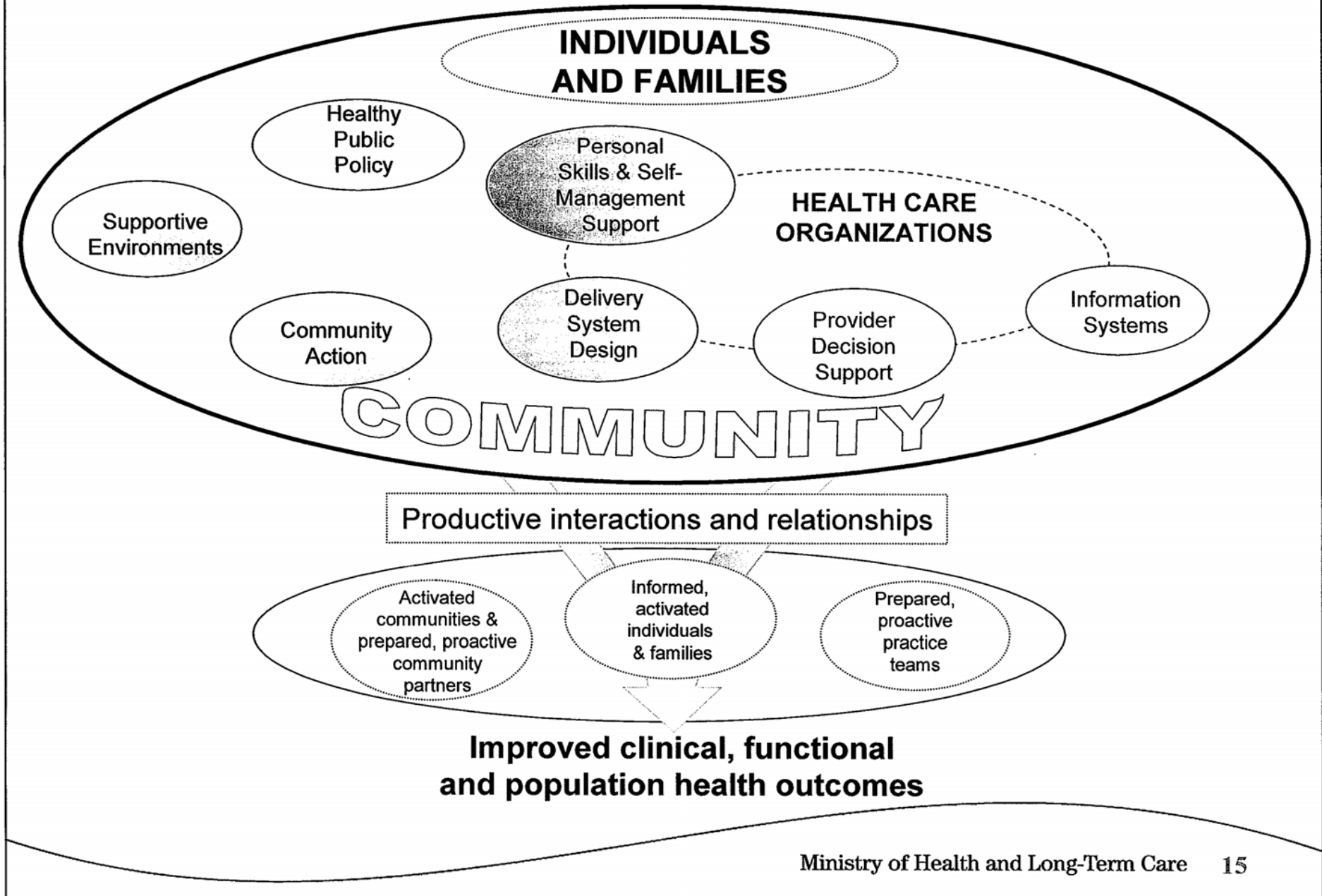
- Over 90% of type 2 diabetes and 80% of coronary heart disease would be avoided with good nutrition, regular exercise, elimination of smoking and stress management (WHO, 2002)
- Daily diets high in vegetables and fruit reduce cancer incidence by an estimated 20%
- If 70% of women between ages 50 and 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

Managing Chronic Diseases Improves Outcomes and Decreases Costs

- 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)
- Community-based breast health program reduced time to diagnosis by more than 50% through coordination of imaging services (Group Health Centre, Sault Ste Marie)
- Congestive heart failure discharge program reduced number of readmissions by 68% in first 9 months by coordinating care & educating clients, families (Group Health Centre)

The CDPM Framework



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, IT support for providers)
- accountability for results (e.g., set goals, measure effectiveness in improving outcomes for clients, population and system)

Framework Components *(continued)*

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

- Interdisciplinary teams (e.g., Family Health Teams)
- health promotion, wellness focus (e.g., nutrition and physical activity counselling)
- planned interactions, active follow-up (e.g., regular blood glucose testing)
- adjustments, innovations in practice (e.g., group office visits for arthritis patients, central appointment booking service)
- surveillance systems (e.g., patient registries; population health data)
- outreach (e.g., Latin American Diabetes Program)
- culturally competent care (e.g., Aboriginal health and wellness programs)

Framework Components *(continued)*

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

- provider education (e.g, how to work 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 to conduct eye examinations)
- access to specialist expertise (e.g, team social worker; cardiologist at tertiary care centre)
- measurement, evaluation, routine reporting feedback (e.g., target blood glucose levels in client population with diabetes)

Framework Components *(continued)*

Information Systems -enhance information for providers and clients and integrate services across health system:

- electronic health records case management software (e.g., tracking systems, automated reminders)
- client registries (e.g., clients suffering from diabetes)
- 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)

Framework Components *(continued)*

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

- shared decision-making and involvement in care planning
- education (e.g., diabetes education programs, asthma action plans)
- behaviour modification programs (e.g., smoking cessation)
- counselling and support services (e.g., osteoporosis self-management support groups)
- integration of community resources (e.g., referral to community physical activity programs)
- follow-up (e.g., reminders, self-monitoring assistance)

Framework Components *(continued)*

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 that ensure consistent approach to chronic disease (e.g., Health Canada food guidelines)
- organizational change (e.g., flex hours and day care in the workplace)

Framework Components *(continued)*

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)

Framework Components *(continued)*

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 and agencies providing school nutrition programs)

Summary

We Know That:

Chronic Diseases e.g., heart disease, cancer, diabetes, depression, osteoporosis, arthritis are prolonged; do not resolve spontaneously, rarely cured completely

From a **system perspective** they pose a significant burden in terms of mortality, morbidity and cost

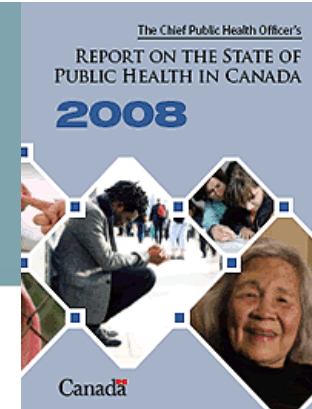
Prevention can reduce a significant portion of the incidence of chronic disease: poor nutrition, inadequate physical activity, smoking and alcohol cause risk factors such as high cholesterol, high blood pressure and obesity

Management of most chronic diseases leads to better health outcomes, decrease in hospital usage and lower health care system costs

Reports of Interest

Report of the State of Public Health in Canada 2008

<http://www.phac-aspc.gc.ca/publicat/2008/cpho-aspc/index-eng.php>

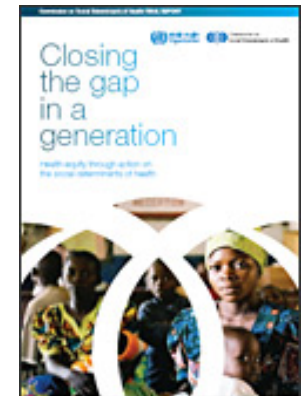


WHO Commission on the Social Determinants of Health 2008

http://www.who.int/social_determinants/en/

Ontario Health Quality Council - annual report 2007 & 2008

<http://www.ohqc.ca/en/index.php>



POWER - Project for an Ontario Women's Health Evidence Based Report - Li Ka Shing Knowledge Institute, St Michael's Hospital

Chap 1,2,3 to be released December 2008

The Case for Business action on the Socio-economic Determinants of Health - Conference Board of Canada

To be released December 2008