

# From Stroke Prevention to Health Gain

## Module 3: Current Approaches

### Research shows compelling results

When developing public health strategies, **policy-makers, managers and health practitioners** can take lessons from collaborative efforts in chronic disease prevention, both within Canada and abroad.

### Data source for this module

The authors used the following strategies to obtain information on approaches to stroke and chronic disease prevention in various jurisdictions.

- A web search for examples of chronic disease prevention frameworks and strategies, using the following keywords and phrases: (conceptual) framework; (analytic) model; strategy; strategic planning; public health; primary prevention; chronic disease prevention; health promotion; stroke; and guidelines.
- Feedback from knowledgeable public health and academic experts in Ontario, Canada and the U.S. regarding frameworks under development.
- A commissioned consultation with Ontario-based organizations to discuss what frameworks they use for health promotion or disease prevention planning, and whether they felt a chronic disease prevention framework would be useful and why.

### Full report

Mills, C., Manske, S., Dobbins, M., & Cameron, R. *From Stroke Prevention to Health Gain, Final Report.* CCS/NCIC Centre for Behavioural Research and Program Evaluation, University of Waterloo, Waterloo, Ontario, 2002.

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(Full report available at <<http://www.opc.on.ca>>.)

This research makes the case for integrating primary stroke prevention into a broader strategy for primary prevention of chronic disease. In exploring various approaches, it focuses on the following shared risk factors, which are both modifiable and amenable to a population-based approach.

- hypertension
- obesity
- smoking
- physical inactivity
- diabetes
- excessive alcohol use

### Other modules in this series

Module 1. Burden of Stroke and Scope for Prevention

Module 2. Effectiveness of Interventions

Module 3. Current Approaches

Module 4. Chronic Disease Prevention Models

Module 5. Rationale for Integrated Approach

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### General aspects of an integrated approach

**Level of Integration**—the breadth of the context within which health issues are framed, planning takes place, and programs delivered. A low level example is a program to reduce stroke risk by screening for hypertension and high cholesterol. A high level example is a chronic disease prevention and health promotion program addressing multiple risk factors shared by stroke and other chronic diseases.

**Strategy Content (What)**—focus of the strategy (e.g., prevent disease, reduce risk factors, promote health). While approaches vary somewhat (e.g., health promotion vs disease prevention), all address cancer and cardiovascular disease, and most address diabetes, injury and mental health. Among risk factors, the two almost universally addressed are tobacco and nutrition.

**Strategy Implementation (How)**— in implementation, consider both a) the operating principles (addressing broad determinants of health, being outcome-driven and evidence-based) and b) the specific activities by which it achieves its effect (education, social marketing,

environmental protection and screening). Within the operating principles, attention to broader determinants, populations, life course and the evidence base are seen almost throughout. Among the initiatives reviewed, all include activities such as education, social marketing, clinical preventive services and health sector reform, and almost all involve coalitions or alliances and environmental protection.

**Players (Who)**— The highest degree of congruence is seen here. Stakeholder involvement (government, NGO, professional associations, consumer groups, etc.), intersectoral collaboration and community participation are now recognized virtually universally as necessary to an effective health strategy.

**Infrastructure**— The greatest variability appears here. Most strategies acknowledge the need for surveillance, program evaluation, quality assurance and standards, training and workforce development, knowledge transfer, research, and legislation to inform and support strategy implementation.

**International initiatives**

There is a trend worldwide toward progressively higher levels of integration in disease prevention and health promotion. Here are some key examples.

The strategy of the **World Health Organization (WHO)** emphasizes integrated intervention at family and community levels to reduce common risk factors (tobacco use, unhealthy diet and physical inactivity<sup>\*90</sup>) for the four most prominent non-communicable diseases: cardiovascular disease (including stroke); cancer; chronic obstructive pulmonary disease; and diabetes.

A recent element in WHO discourse is the “life course approach,” developed in recognition of the fact that risk for chronic disease accrues with age and is influenced by factors acting throughout the life span.<sup>\*92</sup> In many jurisdictions in Canada, this concept has been common in organization and delivery of public health programming for some time. It is also part of the way many countries conceptualize their efforts in chronic disease prevention.

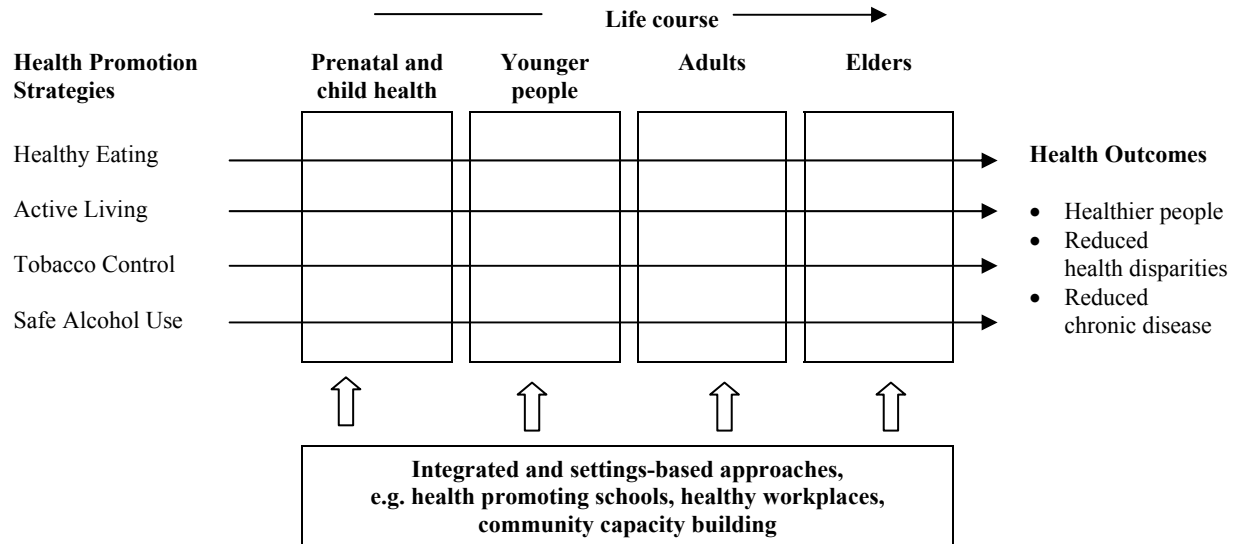


Figure A.4 [from full report]: A Life Course Approach to Chronic Disease Prevention (credit: Australia National Public Health Partnership)<sup>\*89</sup>

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In 1982, WHO created the **CINDI (Country-wide Integrated Noncommunicable Disease Intervention)** program.<sup>\*94</sup> Member countries in 24 countries integrate initiatives in chronic disease prevention and control, through collaborative mechanisms and methodologies.

In 1995, the Pan American Health Organization adapted the CINDI model and created **CARMEN (Spanish acronym for: Actions for the Multifactorial Reduction of Noncommunicable Diseases)**.<sup>\*95</sup> CARMEN aims to reduce risk factors for non-communicable diseases, particularly cardiovascular disease, by coordinating health promotion and disease prevention activities in communities and community health services. It assists member countries to build capacity for an interdisciplinary prevention model in primary health care. Hallmarks of the model include collaboration, coalition building, use of best practices supported by information exchange among countries, and management of hypertension and diabetes.

Several **OECD countries** have developed national strategies to address chronic disease prevention and health promotion, either as part of a broader portfolio of public health strategies or as specific initiatives.

**Australia’s National Public Health Partnership (NPHP) (2002-2004)**<sup>\*89</sup> is a rich source of conceptual, epidemiologic and developmental work on chronic disease prevention. Two very useful documents for any effort at developing integrated strategies for chronic disease control, whether at national or provincial levels, are: *Preventing Chronic Disease: A Strategic Framework — Background Paper (October 2001)*<sup>\*97</sup> and *Guidelines for Improving National Strategy Development and Coordination*.<sup>\*98</sup>

Based on the WHO’s global *Health 21* program, **Finland’s Health 2015** program is a longer-range plan for health improvement outlining targets extending up to around 2015. It sets out a broad framework for multi-sectoral and multi-stakeholder collaboration in health promotion addressing factors such as behaviours,

environments, product safety, and community factors. Settings and life course are key dimensions in the program.<sup>\*99</sup>

**Ireland's National Health Strategy**<sup>\*100</sup> (2000 – 2005) makes “Better health for everyone” the first of four goals. The second objective to help move toward the goal is intensifying promotion of health and well-being. Specific targets are set for major behavioural risk factors already targeted in the earlier National Cancer, Cardiovascular and Health Promotion Strategies: smoking, alcohol, diet and exercise. A National Health Strategy begun in 1994 included efforts to minimize the main causes of premature deaths, namely: cardiovascular disease, cancer, and accidents.<sup>\*101 102 103</sup>

The **New Zealand Health Strategy**<sup>\*105</sup> sets priority areas in three groups: population health objectives, objectives to reduce inequalities in health, and service priority areas. Eight of the thirteen priority objectives selected for implementation in the short to medium term are directly related to chronic disease prevention: reducing smoking, improving nutrition, reducing obesity, increasing the level of physical activity, minimising harm caused by alcohol and drug use, reducing the incidence and impact of cancer, cardiovascular disease and diabetes.

Since 1993, **Norway's** national health policy has focussed on primary health care, disease prevention and health promotion. There have been philosophical differences between the Ministry of Health and the National Board of Health, the former adopting WHO-based strategies and a health promotion ideology, the latter being more bio-medically oriented. The **National Programme for Health Promotion** (1994-1998) was closely modelled on WHO policy, as were two state-level programs: Health and Inequalities and Health and Children. All three focussed on increasing health promotion activities in municipalities through State-funded local projects.<sup>\*106</sup>

In the **United Kingdom**, the Government's White Paper, **Saving Lives: Our Healthier Nation** (OHN), (1999 – 2010)<sup>\*107</sup> set out a public health strategy to improve health and reduce inequities through action not only on behavioural exposures (such as diet, exercise, sexual behaviour), but on factors beyond individual control which affect their health: poverty, social exclusion, employment, housing, education, and the environment. It establishes four national priority targets for 2010: cancer, coronary heart disease and stroke, accidents [sic] and mental health. It is described as “the first comprehensive Government plan focussed on the main

killers: cancer, coronary heart disease and stroke, accidents, mental illness.” OHN proposes tough but attainable targets in priority areas: investment in and re-orienting the NHS; addressing potent social, economic and environmental factors leading to poor health; partnerships among governments, communities and individuals; and important infrastructural initiatives in workforce training and development, education, service delivery, public health standards, monitoring and research.

In the **US, Healthy People 2010** (HP2010)<sup>\*108</sup> provides a national prevention agenda through a statement of national health objectives and goals. Managed by the Office of Disease Prevention and Health Promotion of the Department of Health and Human Services, it proposes a list of leading health indicators, a mix of outcomes, risk factors and health system access indicators.

The National Center for Chronic Disease Prevention and Health Promotion (part of the Centers for Disease Control)<sup>\*109</sup> is a key partner in HP2010. It supports national and state-level initiatives to reduce the burden of chronic diseases through research, surveillance, technical assistance and partnerships with health and education agencies, major voluntary associations, the private sector, and other federal agencies. Its organization reflects a mixture of topics: disease- or condition-specific (cancer, diabetes, oral health, reproductive health), risk factor (smoking, nutrition, physical activity), and life cycle focus (adolescent and school health, adult and community health). NGOs and other extra-governmental stakeholders are involved in the Healthy People 2010 Consortium<sup>\*110</sup> and also through partnership with the Coalition for Healthier Cities and Healthy Communities.<sup>\*104</sup> The latter unveiled their CVD action plan on September 4, 2002 (website: <http://www.cdc.gov/cvh/hp2010.htm>).

**Wales' National Health Promotion Strategy** (2000)<sup>\*105</sup> is a component of a broader policy initiative called **Better Health - Better Wales**, “a new approach to preventing disease and promoting health and well-being through working together.”<sup>\*106</sup> Its key elements are helping communities (local coalitions, community development, healthy schools, workplace health promotion and other settings-based interventions), targeted programs directed at major behavioural risk factors, skills development, communication, healthy public policy and practice improvement, health impact assessment, research and evaluation

## Canadian initiatives

While Canada is a relative latecomer in the field of national disease prevention and public health strategies, there are nonetheless many elements on which to build, both nationally and provincially.

### **National**

The draft mission of **The Chronic Disease Prevention Alliance (CDPA) of Canada** is to “develop and help sustain a co-ordinated, country-wide movement for an integrated, population health approach to chronic disease prevention through collaborative leadership, advocacy and capacity building”. Important players include the Heart and Stroke Foundation of Canada, the Canadian Cancer Society, the Canadian Diabetes Association, the Canadian Council on Tobacco Control, Dietitians of Canada, the Coalition on Active Living and Health Canada.

The **Advisory Committee on Population Health** (to the Federal/Provincial/Territorial Conference of Deputy Ministers of Health) has established integrated chronic disease prevention as a strategic goal.

### **Provincial**

**Alberta**,<sup>\*108</sup> **Manitoba** and **Nova Scotia** each has a well-developed chronic disease prevention alliance or provincial government strategy.

**British Columbia** has a health goal for “Reduction of preventable illness, injuries, disabilities and premature deaths”.<sup>\*110</sup>

Many provinces have officially committed to developing a chronic disease prevention approach; **Alberta**,<sup>\*108</sup> and **Saskatchewan**<sup>\*109</sup> have explicitly included chronic disease prevention among their health goals.

**PEI**’s draft strategic plan calls for strategies to “...address rising demand for services through increased investments in wellness and children’s health.”<sup>\*112</sup>

In **New Brunswick**, the Wellness Plan includes a Strategic Framework for Wellness, of which the first key element named is health promotion and prevention.<sup>\*113</sup>

In **Atlantic Canada**, both the Canadian Heart Health Initiative and the Canadian Diabetes Strategy have supported a movement towards greater coordination of efforts in chronic disease prevention.<sup>\*114 115</sup>

### Ontario initiatives

To date the funding and positioning for health promotion in Ontario has tended to be through disease-based packages. Increasingly, however, strategies for cancer, diabetes, stroke, osteoporosis, alcohol and other drug use, and asthma are being developed, each with a prevention component. Similarly, the province has a mature tobacco control strategy, a physical activity strategy and is in the process of developing a nutrition strategy.

Multiple year funding has been in place to nurture the development of community coalitions, through initiatives such as the Ontario Heart Health Promotion Program (OHHP) and the FOCUS Community Program. These coalitions are funded to develop local partnerships to prevent disease and promote health in specific areas such as heart health, alcohol and drug abuse prevention, tobacco cessation, etc.

In addition, there appear to be parallel health promotion coalitions forming with support from NGOs and hospitals.<sup>\*117</sup> The province also has the advantage of a strong association of public health professionals, the Ontario Public Health Association.

The current situation within Ontario is well described in the following documents prepared for the MOHLTC or Ontario Prevention Clearinghouse as part of the Stroke Prevention Project.

- *Continuation Plan for 2003 and Beyond*, prepared for the Continuation Working Group of the Ontario Heart Health Network, February, 2002;
- *Report on Community Capacity for Integration of Stroke Prevention in Selected Regions of Ontario*,<sup>\*118</sup>
- *OHPRS & community capacity development. Year One Final Report*,<sup>\*119</sup>
- *Community Capacity to Incorporate Stroke Chronic Disease Prevention Issues and Opportunities*, Ontario Prevention Clearinghouse, Spring 2002.

In Ontario’s Mandatory Health Program and Services Guidelines, the program standards for chronic diseases<sup>\*120</sup> have a strong focus on prevention. They include both quantitative targets and requirements for specific activities in chronic disease control and health promotion. These, together with specific initiatives listed above, constitute an important base on which a coherent and integrated prevention approach could be built.

\* For all references in this module, please refer to “References” in full report.