A Tool for Strengthening Chronic Disease Prevention and Management

Through Dialogue, Planning and Assessment

The Tool, Worksheets and Resources

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The Tool and supporting resources are available on-line at http://chronicdisease.cpha.ca.

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1.0 The Need for a Tool

Many Canadians are at risk of developing heart disease, diabetes, cancer and other chronic conditions. These diseases account for a large proportion of disability, death and health inequity among Canadians, much of which is preventable.

To prevent chronic disease and related health problems, investment is needed in a full set of strategies and actions that make it easier for people to take care of their health. This includes creating environments that promote and protect health, as well as shifting how we plan and manage our health services.

Chronic disease efforts in public health, primary care and community are important parts of a comprehensive approach, but have tended to move along parallel tracks. With growing interest in 'thinking like a system', this planning and assessment tool (the Tool) provides a structure and process for bringing together those working to prevent and manage chronic disease in health regions across the country. It helps us to think about, discuss and assess current practice, capacities and opportunities for action.

The Canadian Public Health Association (CPHA) began working with a national advisory committee in April 2006 to review what we know about public health capacity in Canada to prevent and control chronic disease. Based on the findings, a draft tool was developed and reviewed by key informants and focus group participants across the country.

In 2007/2008, four health regions began piloting the Tool. It is presented as a work- in-progress.

The Tool presents eight Critical Success Factors for strengthening chronic disease prevention and management, with guiding questions for each. The questions are designed to bring evidence-informed approaches into regional dialogue and planning.

Taken as a whole, the Critical Success Factors present a 'big picture' view to help guide a comprehensive approach to chronic disease planning. This view takes into consideration how the different parts of the health system connect to prevent chronic disease and related complications.

Thinking Like a System - Eight Critical Succcess Factors with Guiding Questions

1. Common Values and Goals
2. Focus on Determinants of Health
3. Leadership, Partnership and Investment
4. Public Health Capacity and Infrastructure
5. Primary Care Capacity and Infrastructure
6. Community Capacity and Infrastructure
7. Integration of Chronic Disease Prevention and Management
8. Monitoring, Evaluation and Learning.

2.0 Using the Tool

The Tool is intended to be a flexible resource for use by health regions across the country, adaptable to different contexts. It is one among many tools and resources available that may help you in collaborating with colleagues and community members to do this work.

The Tool helps to make connections among those doing chronic disease work, taking steps to build understanding, break down silos and better integrate prevention and management efforts. It does this by:

- Engaging stakeholders in dialogue
- Promoting information exchange
- Assessing current policy, planning and practice, and
- Identifying actions, roles and shared responsibilities for preventing and managing chronic disease

- For each Critical Success Factor, there are a series of guiding questions presented in worksheet format. Each worksheet includes:
- The question with a brief description or example
- A rating scale with indicators outlining the possible range of practice (0=nothing in place through to 4=better/promising practices in place)
- A space to note your own rating information or indicators
- A space for tracking comments, opportunities/ challenges or areas for follow-up identified through the assessment

The rating scale is intended to provide some general cues about what better/promising practices might look like for each component. The indicators in the scale are based on research and practice examples from academic and grey literature, and from input from key informants in the field.

To help you use the Tool, the following resources are available:

- An Introduction to the Tool
- The Tool, Worksheets and Resources
- A How-to Guide
- Case Studies from the Four Pilot Regions

3.0 Who Should Use the Tool

This Tool is intended for collaborative use by a range of stakeholders who influence and share responsibility for chronic disease planning. This includes organizational leaders, planners, managers and coordinators who work in:

- Regional health authorities and local health integration networks (responsibility areas for chronic disease, primary care, population health and health promotion)
- Public health services/programs (responsibility areas for screening, health promotion/ education, community epidemiology, health planning, assessment and disease surveillance)
- Community health centers, clinics (community and hospital-based)
- Chronic disease prevention and /or management programs (community and hospital-based)
- Communities of practice for health promotion, chronic disease prevention and/or management
- NGOs, coalitions and networks (disease-specific, risk factor-specific, age-specific)
- Community groups/members
- Non-health sector partners (school, workplace municipalities, recreation and community services, immigrant service organizations)

A range of activities and approaches are used by the many people involved in chronic disease prevention and management, illustrated in Figure 1.

Downstream actions, directed at individuals, are primarily carried out through the personal health services (primary care) system. These actions are primarily directed at modifiable common risk factors for chronic disease, such as smoking, healthy eating, physical activity and healthy weights. They aim to promote and support healthy behaviours to reduce disability and death, especially for those at risk for or living with chronic disease.

Upstream actions, directed at populations, are primarily carried out through intersectoral, collaborative approaches. These actions aim to create supportive environments for health through structural and policy interventions.

Figure 1. Framework for Health Promotion Action

INTERVENTIONS

Downstream		Upstream		
Disease Prevention	**Communication Strategies**	**Health Education & Empowerment**	**Community & Health Development**	**Infrastructure & Systems Change**
Primary	Health information	Knowledge	Engagement	Policy
Secondary	Behaviour change campaigns	Understanding	Community action	Legislation
Tertiary		Skill development	Advocacy	Organizational change
Primary Care Approaches		**Lifestyle/Behaviourist** Approaches		**Socioecological** Approaches

From Murphy, B. (2004). In search of the fourth dimension of health promotion: guiding principles for action. In, Understanding Health: A determinants approach, Keleher, H. and Murphy, B. (3ds) Oxford University Press: Australia.

4.0 Key Concepts Behind the Tool

The importance of shifting health services towards health promotion, disease prevention, community-based care and chronic disease management has been repeated in every major health report and consultation over the past 15 years.

However, system-wide change to better prevent and manage chronic disease is complex.

The Assessment Tool is based on the following key concepts:

- Building prevention into the system
- Integrated models for chronic disease prevention and management
- Collaboration
- Capacity-building

Moving in this direction, a number of provinces and health regions are working with the BC Expanded Chronic Care model, an integrated model for preventing and managing chronic disease. The model includes population health promotion, social determinants of health and enhanced community participation as integral parts of health system work on chronic disease issues.

The Critical Success Factors in the Tool build on this approach, bringing population health and prevention approaches into dialogue and assessment. Figure 2 illustrates the Critical Success Factors.

How Was the Tool Developed?

In April 2006, the Canadian Public Health Association began collaborating with a national advisory committee to research and document what we know about public health practice in the area of chronic disease in Canada. Funding was provided from the Public Health Agency of Canada, which was renewed for 2007-2008.

An evidence-based review and synthesis of literature from four areas was conducted:

1. Public health capacity and infrastructure
2. Governance and health service delivery models (focusing on the interface between public health and primary health care)
3. Evidence base and learning systems
4. Policy (focusing on population health approaches)

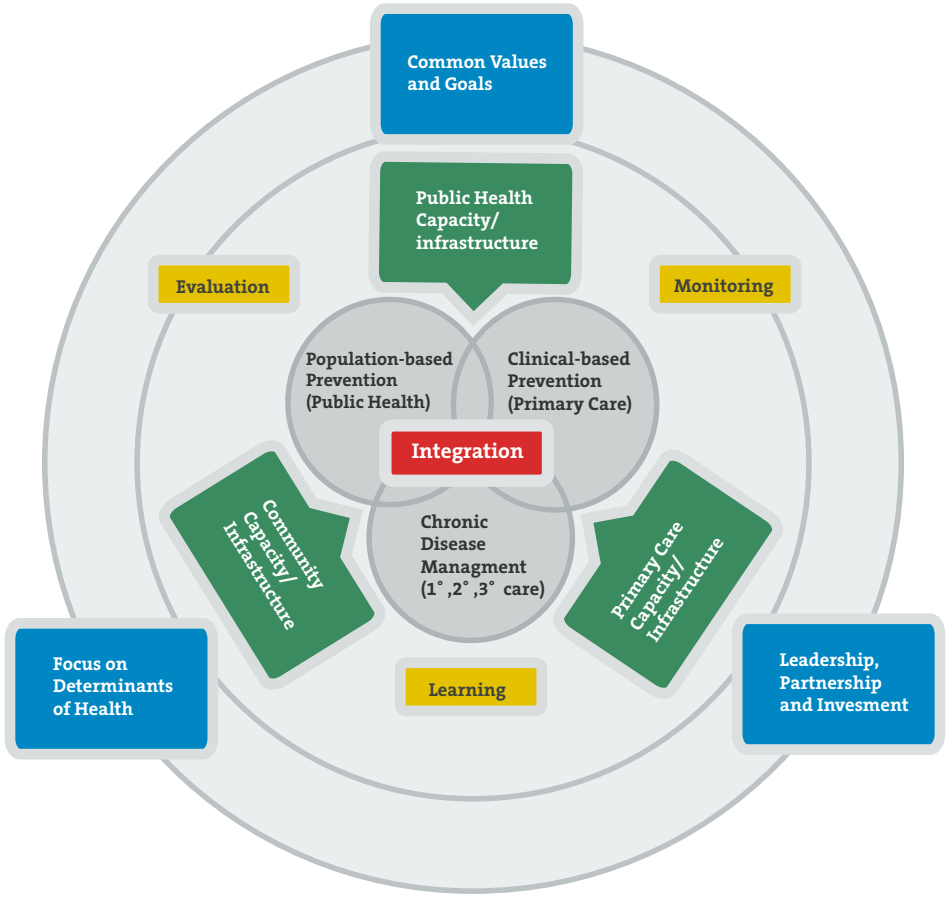
Based on this review, a preliminary planning and assessment tool was developed in response to the guiding question: "What are the critical success factors for integrating chronic disease prevention and management?" This preliminary tool was tested out in three regional focus groups held in Calgary, Ottawa and St. John's. Feedback was also collected through interviews with 24 key informants from across Canada.

The Tool was revised and piloted in four sites across Canada. These sites were:

- Cumberland Health Authority – Nova Scotia
- Capital Health Authority – Nova Scotia
- Champlain Local health Integration Network – Ontario
- Five Hill Health Region – Saskatchewan

The site experiences were carefully documented and lessons/reflections shared. These were used to revise the Tool into its current format. But the Tool is still considered to be a work-in-progress.

Figure 2. Critical Success Factors for Comprehensive Chronic Disease Prevention and Management Strategies



The blue factors around the outside of the circle provide the "foundation" for work on chronic disease prevention and management. They are required to move forward in other areas and include: Focus on Determinants of Health; Common Values and Goals; Leadership, Partnerships and Investment.

The green factors are the areas where adequate capacity and infrastructure are limited in our current health system. Building these areas up is necessary to strengthen chronic disease prevention and management. Capacity is needed in all parts of the system, including: Public Health; Primary Care; Community.

The other Critical Success Factors center on how stakeholders monitor, evaluate and improve their work and the mechanisms in place to better integrate efforts: Monitoring, Evaluation and Learning (yellow); and Integration of Chronic Disease Preventio++n and Management (red).

[1] Adapted from the Capital District Health Authority & IWK Health Centre Model *"Chronic Disease Prevention and Management"*

4.1 Building Prevention Into the System

To date there has been limited investment in the key components of the system, or "building blocks" that carry out the prevention work. A synthesis of key articles and reports confirms there is a limited capacity for prevention in both the public health and primary health care system infrastructures. Many community-based organizations working in chronic disease prevention and management are also vulnerable.

Important functional areas lack financial and human resource capacity, including:

- intersectoral policy development, legislation and regulation to promote and protect health
- comprehensive health promotion programs in schools, workplace and community
- meaningful, culturally appropriate community health information and supports
- a personal health service system that integrates wellness, prevention and self-care into standard practice
- coordinated systems that monitor health status, risk factors, determinants of health, and program effectiveness.

Building prevention into the system will require building up and better integrating these key parts of the system.

Figure 3. Chronic Disease Prevention and Management Continuum

Well Population Primary Prevention	At Risk Population Secondary Prevention	Established Disease	Controlled Chronic Disease
▮ Surveillance of diseases & risk factors ▮ Promotion of healthy behaviours ▮ Creation of supportive environments ▮ Universal & targeted approaches	▮ Screening ▮ Case finding ▮ Periodic health examinations ▮ Early intervention ▮ Medication to control ▮ Universal & targeted approaches	▮ Treatment and acute care ▮ Complications management ▮ Self-management	▮ Continuing Care ▮ Maintenance ▮ Rehabilitation ▮ Self-Management
Health Promotion	Health Promotion	Health Promotion	Health Promotion

Prevent movement to at-risk group

Prevent progression To established disease

Prevent progression to complications and/or hospitalizations

From the Nova Scotia Chronic Disease Prevention Strategy, presented at the "Accelerating CDPM" Forum, Cumberland District Health Authority, November 2007.

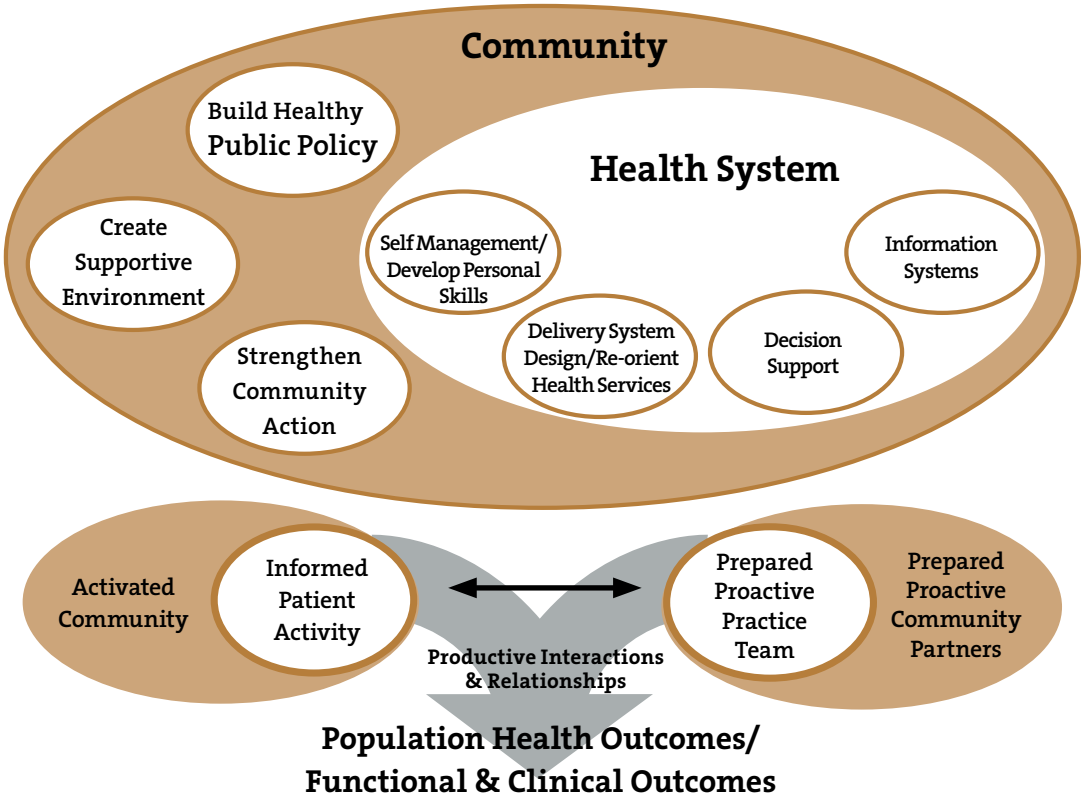
4.2 Integrated Models for Chronic Disease Prevention and Management

Although several models are being used across the country to guide prevention and management of chronic disease, the evidence-based Expanded Chronic Care Model is prominent within health system planning across Canada.

This model integrates a chronic care (management) model with a population health (prevention) approach. The main elements of this model are presented in Figure 4.

Where stakeholders are working with an integrated model for chronic disease prevention and management, building understanding and making clear links to the model can facilitate communication. It may help to identify the specific areas in which strategies need to be developed to create a system that supports effective chronic disease prevention and management.

Figure 4. B.C. Expanded Chronic Care Model



From Barr,V.J., Robinson, S., Marin-Link, B., Underhill, L., Dotts, A., Ravensdale, D., et al. (2003). The expanded chronic care model: An integration of concepts and strategies from population health promotion and the chronic care model. Hospital Quarterly, 7 (1), 73-82.

The model consists of a number of key elements within health care organizations and the broader community that contribute to the creation of productive relationships between individuals, communities and practitioners:

- Health Care Organizations make systemic efforts to improve the prevention and management of chronic diseases through strong leadership, alignment of resources and incentives, and accountability for results. Within the health care system are the following elements:
  - Personal Skills and Self-Management Support help individuals to empower themselves by providing skills for healthy living and coping with disease.
  - Delivery System Design includes a focus on prevention and improving access, continuity of care and flow through the system.
  - Provider Decision Support enables providers to better integrate evidence-based guidelines into their daily practice.
  - Information Systems are essential for enhancing information for providers to provide quality care, and for clients to support them in managing their disease on a day-to-day basis, and for integrating services across the health system.
- Elements in the broader community:
  - Healthy Public Policy, which includes policies at various levels of government, intended to improve individual and population health, and to address inequities. These policies are not restricted to the health sector, but can relate to all areas of government.
  - Community Action supports communities and community-based organizations to increase control over issues affecting health.
  - Supportive (Physical and Social) Environments removes barriers to healthy living and promotes safe, enjoyable living and working conditions.
- The key relationships include:
- A Prepared, Proactive Practice Team that has the capacity to deliver evidence-based clinical management, health promotion/ disease prevention, and self-management support to clients.
- Informed, Activated Individuals and Families are those that understand the disease process and realize their role in daily self-management (or in supporting the self-management process).
- Activated Communities and prepared, proactive community partners collaborate across sectors and with health care organizations to identify and meet the needs of their population. Individuals and families have effective links to community resources.

4.3 Capacity-building

Through the process of dialogue and assessment, this Tool is designed to help increase capacity for effective chronic disease prevention and management.

Capacity-building is the development of sustainable skills, organizational structures, resources and commitment. It can occur at many levels - individuals, groups, teams, organizations, inter-organizational coalitions and communities. Questions related to capacity-building are contained in the Eight Critical Success Factors.

An explanation of key elements and strategies of capacity-building is included in Figure 5.

Figure 5. Key Dimensions and Strategies of Capacity-Building

Dimensions of Capacity-Building	
Infrastructure	The capacity to deliver particular program responses to health problems. This includes the necessary structures, organizations, skills and resources.
Program maintenance and sustainability	The ability to sustain a particular program.
Problem-solving	The ability to identify health issues and develop appropriate mechanisms to address them by learning from experience.
Strategies of Capacity-Building	
Organizational development	Processes that ensure that the structures, systems, policies, procedures and practices of an organization reflect its purpose, role, values and objectives.
Workforce development	Processes that ensure people in the various systems have the abilities and commitment to contribute to organizational and community goals.
Resource allocation	The provision of all those things that are required to support a program (e.g. people, operating funds, space).
Leadership	The skills needed to think strategically and create the kind of environment that motivates, inspires and enables others to act.
Partnership development	The skills required to identify, establish and maintain the relationships with other groups, organizations and individuals that will be necessary.
Context	The range of physical, economic, political, organizational and cultural environments in which activities takes place. Particular strategies that may be appropriate in one context may be ineffective in another.

Adapted from New South Wales Department of Health. (2001). A Framework for Building Capacity to Improve Health.

4.4 Collaboration

Development of integrated strategies for chronic disease prevention and management requires collaboration. This collaboration can take many forms.

In some communities, those involved may collaborate through informal working groups to share information and approaches. In other cases, more formal coalitions may be in place or develop, where members have a defined commitment and structure to work together to achieve joint goals.

The structure and level of formality will vary. The process of developing a solid working relationship and supporting structure is dynamic, and generally evolves through a number of stages.

See How To Guide – Working Together

At a Glance - Eight Critical Success Factors with Guiding Questions

CRITICAL SUCCESS FACTOR	GUIDING QUESTIONS
Common Values & Health Goals	A common set of values and health goals contributes to effective collaboration, clear strategies and action plans. Diverse stakeholders can see more clearly where their work contributes to a more comprehensive strategy for preventing chronic disease and related health problems. 1. How are stakeholders engaged in working together to strengthen chronic disease prevention and management? 2. How have stakeholders addressed the issue of developing common values to guide their action for strengthening chronic disease prevention and management? 3. How have stakeholders addressed the issue of developing common goals for their work in strengthening chronic disease prevention and management?
Focus on Determinants of Health	A focus on determinants of health requires: (1) building intersectoral approaches that support basic needs and reduce inequities; (2) creating environments that support health. The health system can provide clear evidence for planning, leadership and collaborative mechanisms to facilitate action in these critical areas. A. Intersectoral Policies to Support Basic Needs and Reduce Health Inequities 1. How are the Social Determinants of Health (SDOH) assessed and monitored in the community? 2. How are SDOH recognized in the core business, planning and evaluation functions of the stakeholders? 3. How do the stakeholders incorporate an intersectoral approach to addressing SDOH issues with respect to chronic disease prevention and management? 4. What resources or other assistance is available to support community action on SDOH? B. Creating Environments that Support Health 5. Are there currently any legislation or regulations in your region to build health-supporting environments? 6. What mechanisms have been developed to partner with schools to promote health and prevent chronic disease? 7. What mechanisms have been developed to partner with workplaces to promote health and prevent chronic disease?

CRITICAL SUCCESS FACTOR	GUIDING QUESTIONS
Public Health Capacity & Infrastructure	For public health to carry out its core functions a well-resourced, well-trained workforce is required. Organizational capacity is needed to ensure meaningful, easy-to-access health information, supports and services are available in the community for prevention and self-care. 1. How does the public health organization assess health needs/demands in the community? 2. How does the public health organization plan for the human resources required for chronic disease prevention and management? 3. How does the public health organization support its staff in developing competencies required for effective chronic disease prevention and management? 4. What resources has the public heath organization allocated to implement the human resources plan and associated training activities? 5. What has been done to ensure that all services and programs have been developed or adapted to reach populations who face access barriers? 6. How are "root causes" taken into consideration in the development of programs to address chronic disease prevention?
Primary Care Capacity & Infrastructure	Primary care has a unique and essential role in chronic disease prevention and management, not often well-linked to other parts of the health system and community. A primary care workforce and systems are needed that are oriented to prevention, supporting self-care and effective chronic disease management. 1. What role does primary care play in the regional plan for chronic disease prevention and management? 2. How are health needs/demands for primary care assessed? 3. How does the region plan for the human resources required in primary care for chronic disease prevention and management? 4. How are primary care providers supported in developing necessary competencies for chronic prevention and management? 5. What resources have been allocated to implement the human resources plan and associated training activities? 6. What has been done to ensure that primary care services are accessible to the entire population? 7. How does the region take an evidence-informed approach to the development of a primary care plan for chronic disease prevention and management? 8. How are primary care providers supported in implementing clinical prevention guidelines and self-management approaches for chronic disease prevention and management? 9. What incentives are provided to primary care providers for developing competencies in chronic disease prevention and management? 10. What mechanisms are in place to support information and referral between primary care providers, public health, home care and acute care for chronic disease prevention and management?

CRITICAL SUCCESS FACTOR	GUIDING QUESTIONS
Community Capacity & Infrastructure	Community organizations/programs are important resources to people at risk or living with chronic disease, providing a direct channel for information and support. They form part of a comprehensive strategy for chronic disease prevention and management. Strategies to strengthen community capacity and build stronger links to the health system are needed. 1. How do community groups/organizations participate in a comprehensive regional strategy for chronic disease prevention and management? 2. How do community groups/organizations assess the demand for their services? 3. How do community groups/ organizations develop the capacity of their leadership in order to work effectively in chronic disease prevention and management? 4. How do community groups/ organizations mobilize the resources required to do their work in chronic disease prevention and management? 5. How do community groups/ organizations learn from their experiences and from the field of chronic disease prevention and management?
Integration of Chronic Disease Prevention & Management	Individual approaches in the care system are generally not well-linked with population-level prevention approaches aimed at the general population or vulnerable groups. Integration of prevention and management in chronic disease planning has the potential to strengthen collective efforts and improve outcomes. 1. What kind of understanding of a collaborative, systems approach to chronic disease prevention and management exists among key stakeholders? 2. How do stakeholders plan collaboratively to strengthen chronic disease prevention and management? 3. What mechanisms have been developed to support service integration across the continuum of chronic disease prevention and management services? 4. What systems are in place to facilitate data sharing for monitoring, surveillance and evaluation between stakeholders? 5. How do stakeholders collaborate on the development of key health messages to support healthy living and self-management of chronic disease?

CRITICAL SUCCESS FACTOR	GUIDING QUESTIONS
Monitoring, Evaluation & Learning	Systems to support planners and practitioners are needed to bring evidence-informed approaches into their work, to monitor and evaluate outcomes and to provide feedback for learning and improvement. 1. How is evidence used to guide planning and action in the regional chronic disease prevention and management system? 2. How do stakeholders develop their staff/volunteer capacity for monitoring, evaluation and learning with respect to chronic disease prevention and management? 3. What indicators and systems are used to monitor chronic disease prevention and management outcomes? 4. What is the regional capacity for regular analysis, interpretation and reporting of chronic disease prevention and management outcomes? 5. Are program allocations and expenses for chronic disease prevention and management accurately tracked?
Leadership, Partnerships & Investment	To be successful and sustainable over the long term, chronic disease prevention and management strategies are dependent on strong leadership, effective partnerships and consistent investment of resources. 1. How have stakeholders identified common priorities and actions for strengthening chronic disease prevention and management? 2. What resources have been committed to a comprehensive approach for prevention and management of chronic disease? Over what time period has this commitment been made? 3. Who coordinates the comprehensive regional strategy for chronic disease prevention and management? 4. What do stakeholders do to “model” health-promoting work environments? 5. What accountability mechanisms have been developed to monitor policy and program outcomes for chronic disease prevention and management?

5.0 Critical Success Factors

5.1 Common Values And Health Goals

Values are the set of beliefs and assumptions that drive the organizations that are working together. Values outline the reasons why stakeholders are working together, what they care about, who they work with and how they will accomplish their goals. They should be evidence-informed, and come from the stakeholders' understanding of the root causes of chronic disease.

Values are important in the framing of goals and strategies. The use of different value sets may result in very different approaches to chronic disease prevention and management. For example, using a value set that includes social determinants of health leads to goals and strategies that would address health inequities, including broad policy measures. Two types of goals are important to consider:

- Health goals focus on issues such as the prevalence of chronic disease, or the prevalence of risk factors in the community.
- Health system goals focus on specific areas which are the responsibility of the health system, such as preventative practices, e.g., screening, or referral mechanisms.

Goals describe more specifically what the group wants to achieve together. Goals provide the targets and the focus for the action plan, which might include separate activities by each stakeholder, as well as collective ones. They also form a standard against which the group of stakeholders can evaluate their progress.

Reflective Questions

1 How are stakeholders engaged in working together to strengthen chronic disease prevention and management?

2 How have stakeholders addressed the issue of developing common values to guide their action for strengthening chronic disease prevention and management?

3 How have stakeholders addressed the issue of developing common goals for their work in strengthening chronic disease prevention and management?

See Worksheets and Rating Scales – Common Values and Health Goals

See Example - Norsjo, Sweden: A Community-Wide, Coordinated Prevention Initiative

Why Are Common Values and Goals Important?

A comprehensive approach considers how the different parts of the health system connect to prevent chronic disease and its complications. Most health regions in Canada are in the early stages of working together in this way.

Developing a common set of values and goals is an important foundation for this work by helping to build understanding, break down silos and better integrate prevention and management efforts.

Key References and Resources

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5.2 Focus On Determinants Of Health

A population health approach to prevention addresses the range of factors that influence health and reduce inequities in health between population groups. These factors are known as the determinants of health. While the overall health of Canada's population is considered very good, a closer look at rates of disease, disability and death show that some Canadians are less healthy than others.

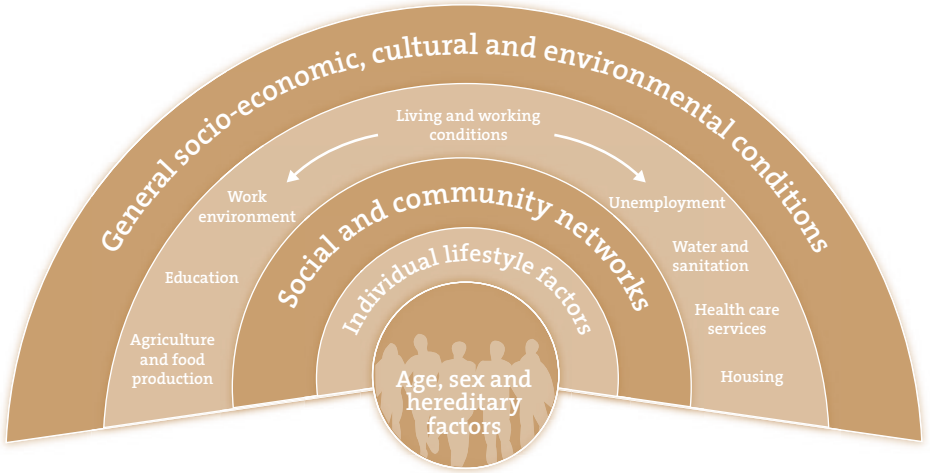
The Chief Pubic Health Officer's 2008 Report on the State of Public Health in Canada summarizes the factors influencing health and rates of chronic disease:

- Our genetic make-up which can result in a pre-disposition to certain diseases
- Age
- Our lifestyle choices related to nutrition, physical activity and the use of drugs and alcohol
- Social and economic influences, including poverty, early childhood development, education, income and housing
- Our social status and the work we do
- Where we live, whether in urban or rural areas
- Our social connections, whether we have close family and friends who are there for us when we need them
- How Canadian society is structured, from employment opportunities and working conditions, to the quality of our neighbourhood environments and even aspects of community design

There are two important aspects of this Critical Success Factor, which are closely linked:

1. Intersectoral policies to support basic needs and reduce health inequities
2. Creating environments that support health

FIGURE 7 Factors that influence our health



From Dahlgreen, G., Whitehead, M. (2006). European Strategies for Tackling Social Inequities in Health: Levelling Up Part 2. World Health Organization: 2006.

INTERSECTORAL POLICIES TO SUPPORT BASIC NEEDS AND REDUCE HEALTH INEQUITIES

There is a compelling base of evidence linking chronic disease to the social determinants of health. Groups with lower access to social determinants (such as income and food security) experience higher rates of chronic disease and related health problems.

Effective strategies for chronic disease prevention and management, therefore, need to include a social determinants of health perspective:

- to take into account the root causes of chronic disease
- to use strategies that are based on the best available evidence to develop policies and programs
- to identify the populations at greatest risk or who are living with chronic disease
- to ensure these populations have equitable access to prevention and management

Addressing SDOH effectively requires the involvement of sectors beyond the health sector. Intersectoral approaches to policy development will be required to effectively address issues such as adequate income, food security and affordable housing.

While much of the social determinants of health are outside the direct influence of the health system, there are concrete ways that health authorities and providers can take action to address the social determinants and reduce health inequities (see Figure 7).

Intersectoral approaches to service delivery will be required to ensure that the most disadvantaged populations receive adequate supports and services for chronic disease prevention and management.

Environmental and policy actions directed at the determinants of health have great potential to reduce the burden of chronic disease. International examples have demonstrated that shared goals and intersectoral action can reduce the risk of cardiovascular disease, and related death and disability.

Without this strong intersectoral policy foundation, other measures to promote health and reduce chronic disease will be ineffective and inequities in health will persist. Population groups who experience higher rates of poverty will continue to experience higher rates of chronic disease, including Aboriginal peoples, immigrants, lone-parent families headed by women, people with disabilities, people with low literacy and seniors.

What are the Social Determinants of Health (SDOH)?

The social determinants of health are the economic and social conditions that influence the health of individual, communities and jurisdictions. These determine the extent to which a person possesses the physical, social and personal resources to achieve aspirations, satisfy nteeds and cope with the environment.

Social determinants of health are about the quantity and quality of resources that a society makes available to its members, including – but not limited to – conditions of childhood, income, availability of food, housing, employment and working conditions, and health and social services.

From Raphael, D. (2004). Social Determinants of Health: Canadian Perspectives, Canadian Scholars Press Inc. Toronto: 2004.

Reflective Questions

1 How are the Social Determinants of Health (SDOH) assessed and monitored in the community?

2 How are SDOH recognized in the core business, planning and evaluation functions of the stakeholders?

3 How do the stakeholders incorporate an intersectoral approach to addressing SDOH issues with respect to chronic disease prevention and management?

4 What resources or other assistance is available to support community action on SDOH?

See Worksheets and Rating Scales – Focus on Determinants of Health

See Example – Reducing Poverty – An Action Plan for Newfoundland and Labrador

FIGURE 8 The Role of Health Authorities in Addressing Social Determinants of Health

Educator/watchdog	A combination of raising public awareness about health-determining social and environmental conditions, and monitoring those conditions for their effects on health status
Resource broker	Making internal resources (personnel, finances, material goods) readily available to groups working on health determinants, whether or not these actions are undertaken in the name of health
Community development	Supporting community-group organization and action on health determinants through dedicated community development/health promotion staff and grants program.
Partnership developer	Engaging in joint programming and policy development work – locally regionally and provincially – with those in the public, private and civil-society sectors with a stake in health determinants improvement.
Advocate/catalyst	Developing and advocating statements on policy options that influence health determinants, especially to more senior government

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- World Health Organization Commission on the Social Determinants of Health. Resources available on-line at: http://www.who.int/social_determinants/en/

CREATING ENVIRONMENTS THAT SUPPORT HEALTH

The creation of environments that support health has been demonstrated to be one of the most effective strategies for supporting heath promotion, and has great potential for the prevention and management of chronic disease. Environments that support health help make it easy for people to make healthy choices. These environments are created through a number of strategies:

- built environments that support healthy living, e.g., easy access to physical activity, networks of bicycle paths
- legislation and regulation, e.g., laws limiting tobacco sales, policies on providing healthy food in schools, linking social assistance rates to cost of living
- communications strategies, e.g., coordination of messaging re: tobacco use

Much of what has been learned about creating supportive environments comes from the experience of the anti-tobacco movement. This movement was able to effect great changes through intersectoral partnerships that developed combinations of strategies, including:

- legislation to limit tobacco sales
- legislation banning smoking in public places/ workplaces
- legislation re: labelling of tobacco products
- communications campaigns

Some of the most effective strategies have involved the targeting of specific settings for a coordinated approach to the creation of health-supporting environments, such as schools or workplaces. Many of the lessons learned from the experience with tobacco will be relevant for the prevention of other chronic diseases.

Mechanisms for consultation and collaboration are required to bring together a wide range of responsibility areas, both within and outside government, such as health, social services, culture and recreation, food and agriculture, transportation, and urban planning. The health system can provide clear evidence for planning, leadership, and collaborative mechanisms to facilitate action in this area.

Reflective Questions

5 Are there currently any legislation or regulations in your region to build health-supporting environments?

6 What mechanisms have been developed to partner with schools to promote health and prevent chronic disease?

7 What mechanisms have been developed to partner with workplaces to promote health and prevent chronic disease?

See Worksheets and Rating Scales – Focus on Determinants of Health

See Example - Mechanism to Support Intersectoral Action

Most health organizations are in the early stages of understanding the social determinants of health and what this means for their approach to chronic disease planning. We have included some additional discussion questions that may be helpful in exploring this important foundation for your work in chronic disease.

See More Discussion Questions – Focus on Determinants of Health

Key References and Resources

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5.3 Public Health Capacity & Infrastructure

The Chief Public Health Officer's Report on the State of Public Health in Canada 2008 talks about public health as a shared responsibility. While governments enact laws, develop policies and provide resources to fund public health activities, it takes the combined efforts of a variety of organizations, sectors, and people, both within and outside government, to address health challenges such as chronic disease.

Public health organizations require sufficient capacity and infrastructure to carry out their role in preventing chronic disease and its complications. This includes:

- a sufficient and competent workforce
- organizational capacity
- information and knowledge exchange systems

Capacity is required at all levels of the organization, from front-line staff responsible for service delivery through management and the Boards responsible for setting direction and priorities. Some examples of the human resource capacities required for doing effective work in chronic disease prevention and management include the following:

- health promoters/community developers who can help build capacity among community groups working with chronic disease
- health planners/epidemiologists with expertise in determinants of health
- program consultants for chronic disease prevention and management who can serve as resources to groups and organizations in the community

Some specific competencies that public health staff/organizations need to demonstrate in order to perform effective chronic disease prevention and management include:

- an understanding of health equity and the barriers that can prevent people from taking care of their health
- an ability to integrate a determinants of health approach into program planning, in order to understand and address root causes of chronic disease
- an ability to develop and deliver programs that are accessible to all groups in the community, regardless of language and culture
- an ability to work effectively with different types of health professionals, as well as different groups and organizations in the community

The formal public health system is typically comprised of three levels.

- Federal: Public Health Agency of Canada (PHAC)
- Provincial/territorial departments or agencies of public health
- Local public health departments: either stand alone (Ontario) or within regional health authorities (other provinces and territories)

To be effective, these public health organizations need to work together, to involve citizens, to work with other parts of the health care system and to collaborate with partners in the community and outside the health sector.

What Do We Mean by Public Health?

Public health can be defined in a number of ways, but a simple explanation is that it is the organized efforts of society to keep people healthy and prevent injury, disease and premature death. It is a combination of programs, services and policies that protect and promote the health of all Canadians.

While health care focuses mainly on treating individuals, public health targets entire populations to keep people from becoming sick or getting sicker. Both work to limit the impacts of disease and disability.

From Last, J. (2001). A Dictionary of Epidemiology. 4th Edition. Oxford University Press.

The population-wide approach of public health requires a combination of activities. These include education and skill-building, social policy, intersectoral partnership and collaboration, regulation, community development and the support of effective clinical preventive interventions.

These activities are delivered through six core functions: population health assessment, health surveillance, health promotion, disease and injury prevention, health protection, and emergency preparedness.

Reflective Questions

1. How does the public health organization assess health needs/demands in the community?
2. How does the public health organization plan for the human resources required for chronic disease prevention and management?
3. How does the public health organization support its staff in developing competencies required for effective chronic disease prevention and management?
4. What resources has the public heath organization allocated to implement the human resources plan and associated training activities?
5. What has been done to ensure that all services and programs have been developed or adapted to reach populations who face access barriers?
6. How are "root causes" taken into consideration in the development of programs to address chronic disease prevention?

See Worksheets and Rating Scales – Public Health Capacity and Infrastructure

See Example – Integrated Prevention Program for At Risk Families

See Example - Integrated Public Health Planning and Evaluation Focused on Determinants of Health

Key References and Resources

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5.4 Primary Care Capacity & Infrastructure

Capacity in primary care refers primarily to having a workforce with adequate skills and resources to address the primary care needs of the population. Capacity is required by individual primary care providers, as well as by the organizations responsible for providing primary care services.

Some examples of the capacities required for doing effective work in chronic disease prevention and management include the following:

- an adequate base level of primary care resources to address the needs of the population being served
- primary care providers who are aware of current clinical guidelines for chronic disease prevention and management, and are able to implement these guidelines in their practices
- primary care providers skilled in supporting their patients and their families in self-management of chronic disease and how to prevent complications
- good connections between primary care providers with other parts of the health care system (acute care, home care, public health) and supporting resources in the community

There has been some investment in primary care capacity across the country in priority areas such as:

- developing integrated chronic disease management teams
- training of physicians in self-management
- developing comprehensive public health information services via telephone and the Internet
- shifting to new models that better support prevention and interprofessional teams
- moving to electronic health records

What Do We Mean by Primary Care?

Primary health care refers to an approach to health and a spectrum of services beyond the traditional health care system. It includes all services that play a part in health, such as income, housing, education, and environment.

Primary care is the element within primary health care that focuses on health care services, including health promotion, illness and injury prevention, and the diagnosis and treatment of illness and injury.

Primary care is focused on individuals and families, but not the community as the unit of intervention. It is what Canadians think of as front-line care, traditionally in the form of a visit to the family doctor, involving immunization, preventative advice (stop smoking, get some exercise) and diagnosis and treatment of illness.

In Canada, the First Ministers' Accords of 2000, 2003 and 2004 state that primary care represents the first point of contact for individuals with the health care system, and is the key to efficient, timely quality family and community care based on continuity and coordination, early detection and action, and better information on needs and outcomes.

The management of both acute, episodic care and non-urgent, routine care have traditionally been core functions within primary care. Within the primary care sector, First Ministers agreed to enhancements of (among other things):

- health promotion
- disease and injury prevention
- chronic disease management

For the most part these positive developments remain localized and the primary care system is underdeveloped across the country. There are barriers to family doctors and other primary health care providers taking a fuller role in chronic disease prevention and management, including:

- a shortage of trained family physicians and other primary health care providers
- financial disincentives to building preventive measures into practice or participating in planning activities
- limited networks and information systems for communicating with physicians in private practice

Reflective Questions

1 What role does primary care play in the regional plan for chronic disease prevention and management?

2 How are health needs/demands for primary care assessed?

3 How does the region plan for the human resources required in primary care for chronic disease prevention and management?

4 How are primary care providers supported in developing necessary competencies for chronic prevention and management?

5 What resources have been allocated to implement the human resources plan and associated training activities?

6 What has been done to ensure that primary care services are accessible to the entire population?

7 How does the region take an evidence-informed approach to the development of a primary care plan for chronic disease prevention and management?

8 How are primary care providers supported in implementing clinical prevention guidelines and self-management approaches for chronic disease prevention and management?

9 What incentives are provided to primary care providers for developing competencies in chronic disease prevention and management?

10 What mechanisms are in place to support information and referral between primary care providers, public health, home care and acute care for chronic disease prevention and management?

See Worksheets and Rating Scales– Primary Care Capacity and Infrastructure

See Example - Montreal Health Region: Strengthening Clinical Prevention of Chronic Disease

See Example – Integrated Teams: Oxford Blood Pressure Education Program

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5.5 Community Capacity & Infrastructure

Building community capacity is an important strategy in preventing and managing chronic disease. There are a large number of community stakeholders working in this area, ranging from disease-specific groups (eg. diabetes, heart and stroke, cancer) with large national organizations and active local chapters to organizations such as home care providers, which provide an important role in chronic care management for individual clients and their families. Some organizations employ large numbers of health providers, while others may be primarily volunteer-led.

Collectively, these organizations are important resources that form part of a comprehensive strategy for chronic disease prevention and management. Because they tend to be smaller and more volunteer-driven than many organizations in the health sector, they sometimes face challenges of adequate resources and a stable leadership. Sometimes they are overlooked and health care providers do not have accurate information of what resources are available to support clients in their region.

Mapping community assets and involving community in assessing health needs and priorities is an important part of a population health approach.

What is Community Capacity?

Community capacity is a collection of characteristics and resources which, when combined, improve the ability of a community to recognize, evaluate, and address key problems.

From Bush, R., Dower, J., Mutch, A. (2002). Community Capacity Index Manual. Centre for Primary Health Care, University of Queensland: 2002.

It is now well-recognized that the most effective way to reach people to promote health and prevent disease is where they live, work and play in the community. In talking about community capacity, non-profit organizations, both large and small are included, as well as informal groups that bring people together for a common purpose. Some of these organizations and groups can play a role in preventing and managing chronic disease, such as:

- community recreation centres
- centres for youth, seniors and immigrant-serving organizations
- community health and social service centres and home care providers
- health charities, e.g., diabetes, heart and stroke, cancer
- community coalitions, e.g., anti-poverty or food security action groups, housing advocacy groups, community economic development groups

Schools, workplace, municipalities and academic institutions can also play different roles in building community capacity and in creating environments that support health. These actions ultimately help citizens to prevent and, in some cases, manage chronic disease.

Reflective Questions

1. How do community groups/organizations participate in a comprehensive regional strategy for chronic disease prevention and management?
2. How do community groups/organizations assess the demand for their services?
3. How do community groups/ organizations develop the capacity of their leadership in order to work effectively in chronic disease prevention and management?
4. How do community groups/ organizations mobilize the resources required to do their work in chronic disease prevention and management?
5. How do community groups/ organizations learn from their experiences and from the field of chronic disease prevention and management?

See Worksheets and Rating Scales – Community Capacity and Infrastructure

See Example - Manitoba Chronic Disease Prevention Initiative

See Example – Cardiovascular Health Awareness Program

Key References and Resources

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5.6 Integration Of Chronic Disease Prevention & Management

In Canada, chronic disease efforts in public health, primary health care and other parts of the care system have tended to move along parallel tracks. However, there is growing interest in "thinking like a system" to better align and coordinate efforts among those doing the chronic disease work.

"Thinking like a system" requires taking steps to build understanding, break down silos and better integrate prevention and management efforts. This includes exploring how the strengths of public health practice, grounded in prevention and population health approaches, can complement and enhance clinical prevention efforts and chronic disease management in the health care system.

Better aligning and coordinating efforts is a common sense approach. This approach is based on a solid evidence base which shows that the major chronic diseases share common risk factors and underlying root causes. Strategies to help people quit (or not start) smoking, increase physical activity and eat healthy foods may prevent a large portion of the death and disability from chronic disease.

When including action on the social determinants of health, prevention strategies can not only reduce the number of people at risk, but can help people live well with chronic disease, avoiding unnecessary health problems related to their condition. In this way, the success of chronic disease prevention and management efforts are closely linked.

Exploring integration of prevention and management efforts is part of a comprehensive approach to chronic disease planning with potential for improving population health and reducing health care costs.

Integration of chronic disease prevention and management takes place at many different levels. At the service delivery level, integration might include improving continuity of care; for example,implementing a formal mechanism for referral from a primary health care practice to a community-based diabetes education or self-management program. Alternatively, it may mean putting in place a community-oriented primary health care program that builds wellness into routine practice, emphasizing self-care for those at risk or living with chronic disease.

At the health system level, integration might include improving information systems to support community health needs assessment, planning and evaluation, or developing shared goals and a common framework to guide policy and planning for chronic disease prevention and management.

What Do We Mean by Integration of Chronic Disease Prevention and Management?

The term integration is used in many different ways. When talking about integration in the Tool, we mean:

- better aligning strategies, visions and goals
- linking individual and population-level approaches
- building prevention into chronic disease management initiatives
- shared planning to coordinate efforts and/or resources
- mechanisms to support information-sharing, communication and coordination
- service-level integration to improve comprehensiveness and continuity of care

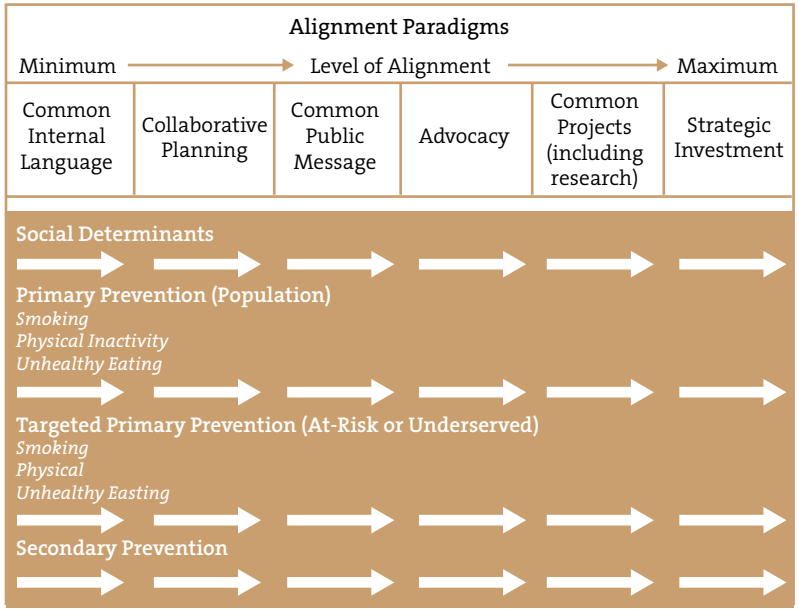
Adapted from World Health Organization Integrated Chronic Disease Prevention and Control at http://www.who.int/chp/about/integrated_cd/en/

In keeping with evidence-based strategies, integration of chronic disease prevention and management means including environmental and policy approaches in the framework used to guide action. Examples might include:

- regulation of unhealthy ingredients in food products, such as transfats or salt
- developing urban planning policies for active transportation as part of a healthy living strategy
- implementing poverty reduction strategies to ensure people have adequate income to take care of their health, e.g., for affordable housing, healthy food, child care

Figure 8 shows the many ways to better align and coordinate efforts. These range from collaborative planning and common messaging through to strategic investment of resources. While this figure focuses on prevention, the types of alignment hold true for chronic disease management, including strategies to support self-management of chronic disease.

FIGURE 9 Alignment Paradigms



From Krueger and Associates, Inc. (2007). Briefing report prepared for the Chronic Disease Prevention Alliance of Canada. Unpublished.

Reflective Questions

1 What kind of understanding of a collaborative, systems approach to chronic disease prevention and management exists among key stakeholders?

2 How do stakeholders plan collaboratively to strengthen chronic disease prevention and management?

3 What mechanisms have been developed to support service integration across the continuum of chronic disease prevention and management services?

4 What systems are in place to facilitate data sharing for monitoring, surveillance and evaluation between stakeholders?

5 How do stakeholders collaborate on the development of key health messages to support healthy living and self-management of chronic disease?

See Worksheets and Rating Scales – Integration of Chronic Disease Prevention and Management

See Example - Calgary Health Region: Infrastructure for Integrated CDPM

See Example - Capital Health (Edmonton) Regional Diabetes Program]

Key References and Resources

- Alberta Healthy Living Network. (2003). The Alberta Healthy Living Framework: An Integrated Approach. Available online at: http://www.uofaweb.ualberta.ca/ahln/pdfs/AHLFramework(Update2005).pdf
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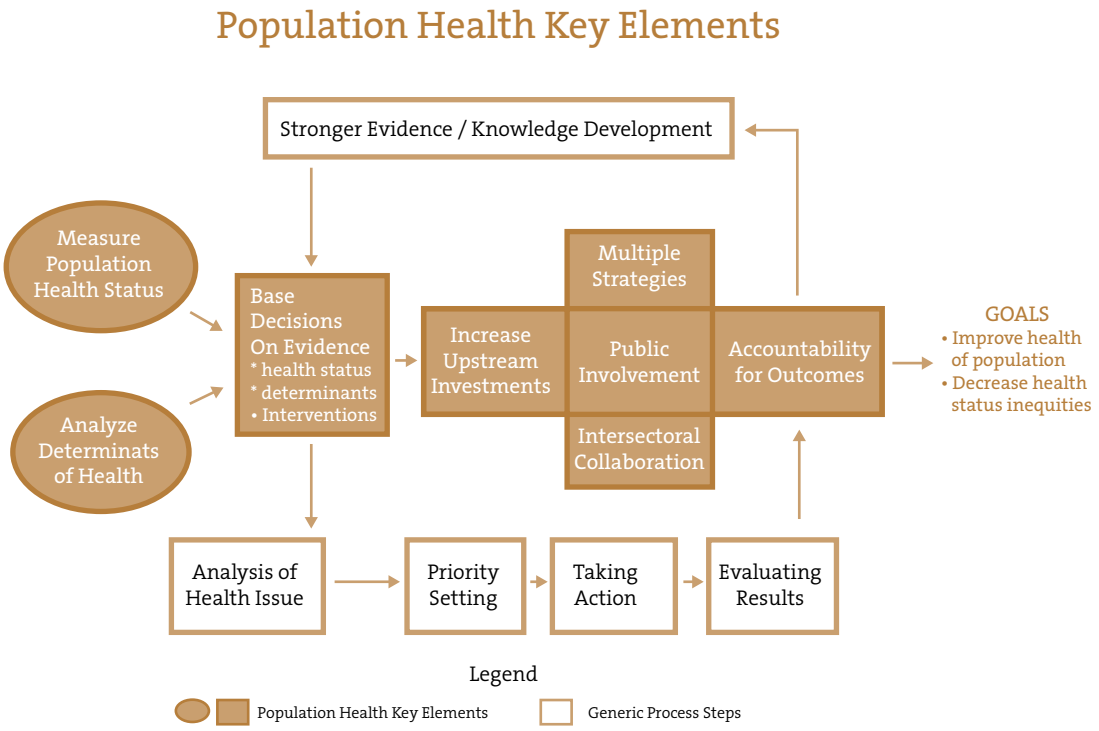
5.7 Monitoring, Evaluation & Learning

The development of a sustainable, effective system for chronic disease prevention and management requires mechanisms for monitoring, evaluation and learning. These mechanisms provide feedback that will allow for the continuous improvement of the system. Figure 9 provides a picture of monitoring, evaluation and learning in a population health framework.

Monitoring is a formal way to keep track of rates of chronic disease, risk factors and other key indicators of health in the community, both of health status and health behaviours. Effective monitoring keeps track of other important indicators of individual and community health, including social and economic determinants.

Evaluation involves tracking the outcomes of regional strategies to address chronic disease prevention and management, as well as the effectiveness of specific programs and services. Investing time and resources in monitoring and evaluation supports learning and builds a good understanding of what's working well and what needs to be improved. This knowledge can help stakeholders, decision-makers and service providers to set priorities and improve practice.

FIGURE 10 Population Health Key Elements



From Public Health Agency of Canada. Canadian Best Practices Portal for Health Promotion and Chronic Disease Prevention.

Systems for non-communicable disease surveillance are less well-developed and more complex than for communicable diseases. The need to improve capacity in this area has been identified. Efforts are underway to strengthen and extend data collection and availability of information at all levels. Important principles for monitoring systems include:

- involving community in generation and use of data
- aiming for low cost, sustainable systems
- building in effective knowledge translation

Putting evidence into practice has been identified as an important component of comprehensive chronic disease prevention. This requires providing practical tools and technical support for planning and evaluation, providing training and incentives for the use of evidence, and encouraging reflective practice.

Reflective Questions

1 How is evidence used to guide planning and action in the regional chronic disease prevention and management system?

2 How do stakeholders develop their staff/volunteer capacity for monitoring, evaluation and learning with respect to chronic disease prevention and management?

3 What indicators and systems are used to monitor chronic disease prevention and management outcomes?

4 What is the regional capacity for regular analysis, interpretation and reporting of chronic disease prevention and management outcomes?

5 Are program allocations and expenses for chronic disease prevention and management accurately tracked?

See Worksheets and Rating Scales – Monitoring, Evaluation and Learning

See Example – The Annapolis Valley Health Promoting School Project

See Example – Technical Support System for Policy and Environmental Changes

Key References and Resources

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5.8 Leadership, Partnerships And Investment

Taking action on chronic disease is a shared responsibility requiring active involvement of individuals and communities, the government and non-governmental sector, media, business and industry in creating supportive environments for health. A broad-based effort of this magnitude requires leadership, coordination and accountability to ensure that action is taken to protect and promote the health of Canadians.

A comprehensive range of strategies is required, ranging from the creation of physical, social and economic environments that promote health through to effective disease screening, treatment and rehabilitation through the health care system. All of the various stakeholders must be involved – public health, primary care, acute care, long-term care, community health/home care, and community-based non-governmental organizations.

To be successful and sustainable over the long term, chronic disease prevention and management strategies are dependent on strong leadership, effective partnerships, and consistent investment of resources. They require high-level organizational commitment, and a structure that allows them to be able to collaborate effectively.

Evidence indicates that a commitment of resources is needed over a sufficient period of time to see results at the population level such as meaningful changes in rates of chronic disease and risk factors. Basing chronic disease planning on more than a 2 – 3 year cycle and measuring intermediate outcomes are strategies that build a more solid foundation for chronic disease prevention and management efforts.

Champions are needed within government departments, health organizations, and professional networks to advocate for supportive environments for health and a reorientation to a more sustainable health care system that provides comprehensive, population-based prevention supported by strong primary health care services.

The government-funded formal public health system can have an important stewardship role. Ideally, this would include:

- providing effective direction, meaningful support, targeted monitoring, rigorous evaluation, and strategic intervention, where appropriate
- investing strategically, based on the best available research data and evidence of best outcomes
- facilitating best practice development and evaluation of legislation, policies, strategies, best practices, and performance expectations

A supportive governance structure is required to enable public health leadership to carry out this stewardship role.

Reflective Questions

1 How have stakeholders identified common priorities and actions for strengthening chronic disease prevention and management?

2 What resources have been committed to a comprehensive approach for prevention and management of chronic disease? Over what time period has this commitment been made?

3 Who coordinates the comprehensive regional strategy for chronic disease prevention and management?

4 What do stakeholders do to "model" health-promoting work environments?

5 What accountability mechanisms have been developed to monitor policy and program outcomes for chronic disease prevention and management?

See: Worksheets and Rating Scales – Leadership, Partnership and Investment

See Example: Leadership Infrastructure: Quebec Public Health System

Key References and Resources

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6.0 Examples

6.1 Common Values And Health Goals

Example: Norsjo, Sweden – A Community-wide Coordinated Prevention Initiative

The Norsjo community intervention program created a health-promoting environment to reduce common risk factors for chronic disease through partnership of primary care, community service, school, workplace, media, government and industry partners. Common goals and coordinated efforts led to improvements in population health.

Key Elements

- Combines a population-wide health promotion strategy with a primary care system approach
- Uses formal agreements with primary care providers for systematic risk factor screening and counselling
- Integrates efforts of community-based voluntary organizations, municipal government councils, primary care practitioners, and academic researchers
- Creates structural, long-lasting changes in food manufacturing and labeling practices and primary care system
- Engages community members through schools, workplace, and community services, including grocery stores and pharmacies
- Delivers simple health messages through multiple channels, including direct contact with practitioners and broad-based media campaign
- Sustains and evaluated activities over a 10-year period to show results
- Demonstrates changes in consumer behaviour in favour of healthy food choices

The Norsjo community intervention program was designed to prevent cardiovascular disease in a northern, primarily rural community in Sweden. It provides an example of a population strategy being combined with clinical prevention efforts where providers meet, examine and give advice individually about lifestyle changes.

A formal agreement between primary care providers and the county council was established which defined the long-term responsibility for carrying out comprehensive risk factor screening and participating in community-based public health activities. The individual counselling addressed eating habits, alcohol consumption, physical activity, and psychosocial conditions to the general public of the local community

Each resident aged 30, 40, 50 and 60 years was invited to be screened, and was provided with individual feedback on his/her personal biomedical measurements. During the first 10 years of the program, greater than 90% of those invited participated in the individual health screening and counselling.

Clinical prevention efforts were complemented by collaborative, community-based health promotion efforts of schools, workplace, community services and media, including:

- School lunch menus with more variety and healthier foods in schools and pre-schools
- Education materials about social life, local culture, health problems and healthcare, food traditions and traditional food were developed
- Health information meetings organized by local associations
- Community forums organized by the local coordinating committee to discuss health issues and activities
- Grocery stores provided low-fat cooking demonstrations

- Dental care providers included activities and information for children and youth about smoking, sweet and unhealthy foods
- The local pharmacy contributed information exhibitions and presentations
- Primary care providers, union and local businesses enabled program activities to take place during work hours
- Much media coverage to the program

Community-based health promotion strategies, risk factor screening and counselling were supported by environmental policy changes. These policy changes were developed through close collaboration of local grocery shops, the Norsjo health program, the Department of Nutritional Research at the university and the Swedish National Food Administration.

The Swedish National Food Administration decided on the criteria for "low fat" and "high fibre" for each of the eight relevant product groups and provided technical support. This eventually evolved into the joint national symbol: the green keyhole. There was an increase in the number of green keyhole products, indicating that new low-fat, high-fibre products were being developed parallel to the labeling system.

The program was able to show changes in consumer behaviour as a result of the food labeling strategy and other comprehensive intervention components. Sales statistics regarding dairy products showed a significant turnover of low fat products, and higher rates of consumption than reference communities. According to public opinion, the health screening and counselling were reported to be the most influential factors supporting lifestyle changes.

The authors reflected on the 10 years of experience of practicing individual-oriented preventive counselling, and noted the following:

- If the participant understands the whole preventive concept, then the advice persists for a long time
- Health advice can be a powerful "drug", the message should be short and in small doses
- Its better that many change a little rather than a few change a lot
- Preventive programs should not only be measured by means of risk factor outcomes, but also by their effect on enduring structures, behavioural changes, and environmental changes in the local community.
- Primary healthcare providers can enhance this required continuity

6.2 Focus On Determinants Of Health

Example: Reducing Poverty - An Action Plan For Newfoundland And Labrador

The Newfoundland and Labrador Poverty Reduction Strategy is a government-wide integrated approach based on the principles of social inclusion and collaboration. The Strategy is an integral part of the Provincial Government's overall policy development process and is expected to continue to be linked with major Government initiatives.

Key Elements

- Emphasizes education, economic development, employment generation and labor force development as being essential to poverty reduction and social inclusion
- Establishes a clear link between reducing poverty and improving overall health and wellbeing
- Supports an integrated approach to poverty reduction and includes the community-based sector and individuals living in poverty to ensure that programs and policies are working for those with low incomes

In June 2006, the Newfoundland and Labrador government released a background report to launch the formal consultation process. The government heard from hundreds of people through a series of workshop and focus group sessions as well as telephone and e-mail input. The submissions and advice guided deliberations and helped develop the Poverty Reduction Strategy.

Poverty is seen by the province as a multi-dimensional problem and this was reflected during the consultation process. Income support clients identified barriers to education and employment. Community stakeholders pointed to the need to better coordinate service delivery. Educational advocates and parents emphasized early learning and better preparation for postsecondary education and employment. The integrated approach being taken is viewed as being crucial to success. Poverty is complex and requires a variety of coordinated and interrelated actions. The integrated approach outlined in the strategy will be supported through a variety of ways, including:

- The ongoing work of the Ministerial Committee for the poverty reduction strategy and the corresponding Deputy Ministers' Committee and the Interdepartmental Working Group
- The analysis of combined impacts of existing and new programs as part of program development
- Consideration of the accessibility of programs and services to those in low income, including application processes and eligibility criteria, with the goal of creating streamlined, easy, accessible and fair processes
- Consideration of low-income residents in the development of new policy directions, including making links to other government social and economic strategies to ensure poverty is considered in the development of all government policy

Ongoing dialogue with partners, including the community-based sector and individuals living in poverty to ensure that programs and policies are working for those with low incomes.

The poverty reduction strategy is supported by a background paper and workbook for use by citizens and community groups.

6.3 Focus On Determinants Of Health

Example: Mechanism To Facilitate Intersectoral Action

Saskatoon Regional Health Authority's capacity for action on the determinants of health is strengthened by active partnership in a regional intersectoral committee and a provincial-level intersectoral forum.

Key Elements

- A regional health authority representative co-chairs the regional intersectoral committee (RIC) with the City of Saskatoon's recreation services
- A paid coordinator for the RIC helps build community capacity
- A provincial-level interdepartmental Human Service Integration Forum (HSIF) helps to identify and remove barriers
- Community funding is provided through prevention support grants

The Associate and Assistant Deputy Ministers' (ADMs') Forum on Human Services was formed in the fall of 1994 to develop more holistic and integrated human services and was renamed in 1999 the Human Services Integration Forum. The HSIF is led by a Steering Committee of seven provincial government departments and Executive Council. Provincial level membership includes:

- Learning
- Justice
- Health
- Community Resources & Employment
- Corrections & Public Safety
- Culture, Youth & Recreation
- First Nations and Métis Relations
- Executive Council

The provincial supports regional efforts in a number of ways:

- Establishing and maintaining mechanisms to promote interagency collaboration and integrated planning and delivery
- Identifying and addressing barriers to integrated approaches
- Providing funding and policy support
- Providing education and training supports to human service providers

6.4 Public Health Capacity & Infrastructure

Example: Integrated Prevention Program For At-risk Families

There is evidence that integrated promotion and prevention services for families at-risk can improve health outcomes. For example, the program Naître égaux - grandir en santé works with women living in poverty, either under 20 years of age, with low education or who are immigrants. The program supports women during pregnancy and their children in the early years.

Key Elements

- Builds on the strengths of families and communities
- Provides skills and practical supports for healthy living
- Improves access to services for those at-risk by helping women connect with and navigate community supports
- Focuses on prevention and intersectoral action to improve system-level supports
- Integrates both individual and population-level approaches through home visits by public health nurses, early childhood education, and policy-level action to strengthen community supports

Naître égaux - grandir en santé is a good example of an intersectoral, collaborative approach between formal public health services and community resources. Together, the program builds skills and provides practical support to improve access to services, nutrition and other health-promoting practices.

The program was successful at reaching women living in poverty, in improving nutrition during pregnancy, reducing stress, and improving access to practical supports for healthy living. This type of upstream intervention illustrates one way that public health is moving upstream to focus on the root causes of chronic disease.

6.5 Public Health Capacity & Infrastructure

Example: Integrated Health Planning and Evaluation Focused On Determinants of Health

The Region of Waterloo Health Department created its Health Determinants Planning and Evaluation Division in 1999 to provide policy, research, and evaluation support to other Public Health divisions and the community. Their work focuses on the social, economic and environmental conditions that determine health.

Key Elements

- Invests in public health infrastructure to support integrated planning, program and policy development
- Builds the capacity of staff and citizens
- Focuses efforts on policies and programs that take action on social, economic and environmental conditions that affect public health
- Strengthens collaboration across divisions and departments

The Health Determinants Planning and Evaluation Division collaborates with other departments and the community to work in the following areas:

- The Epidemiology and Knowledge Management focus area aims to increase the capacity of staff and the community to effectively manage and use health data and information.
- The Planning and Evaluation focus area aims to increase evidence-based and integrated planning and evaluation that is relevant to public health.
- The Access and Equity focus area aims to reduce educational, social, and environmental barriers to accessing mandatory public health programs.
- The Health and the Built Environment - Increasing Liveability focus area aims to improve the design of the built environment in order to improve related health outcome.
- The Citizen and Community Engagement focus area aims to increase institutional and community capacity to engage citizens toward the creation of public health programs and policies.
- The Community Food Systems area aims to increase access to safe, nutritious food that is grown in a sustainable way.

There have been concrete outcomes resulting from the efforts of the program teams. The collaborative work of the Community Food Systems area has resulted expanded markets for local produce, improved access to healthy food in underserved areas and trained community volunteers to improve healthy eating.

6.6 Primary Care Capacity & Infrastructure

Example: Montreal Health Region – Strengthening Clinical Prevention Of Chronic Disease

The Montreal Health Region has created a local governance structure to support integrated service delivery. Improved chronic disease prevention and management outcomes are among the organizational priorities supported by the new structure.

Key Elements

- Health regions have access to a tool kit which provides access to information about local disease rates as well as lifestyle issues such as nutrition, smoking physical activity and mental health. This local data is used to help inform decision-making.
- Key stakeholders are involved in planning and program development, including primary care providers, health care organizations, community and social services, municipal government, and education
- A range of intervention strategies are supported along the continuum, from wellness through to case management for persons living with complex chronic conditions
- Service agreements are in place between the local health authority and a wide range of health and social services to support collaboration, coordination and better continuity of care
- Partnership is a strong component of the management process. For example, in the development of the counselling program for clinical prevention, over 80 selected physicians were visited and consulted.
- Program evaluation tools are in place to monitor results and support organizational learning

Montreal is a strong public health environment. Recently, the health system has undergone change through the establishment of local health authorities. Some of the features of the new governance and management models include:

- Neighbourhood hospitals and other services regrouped and integrated under a single board of directors
- local health and social service centres established to provide 24/7 primary health care, clinical prevention and to take action on the non-medical determinants of health
- Public Health Vice President positions established within regional health authorities

Under the new model, planning takes a multi-sectoral approach which includes consultation with municipal government, the health care system, the educational system and other stakeholders. The region also consults with community groups about their needs. Organizational priorities in the 3-year plan focus on two chronic disease prevention and management objectives:

- Provision of counselling at the primary care level to promote healthy living and reduce risk factors
- Reorganization to a chronic disease management model, based on the Expanded Chronic Care Model

The clinical prevention program is based on a brief survey filled out by patients in the waiting room to identify which health areas they would like to improve (e.g. nutrition, physical activity, and smoking). During the physician visit, they are provided with a "prescription" of how they can improve their lifestyles. They are also referred to health education centres where health "coaches" help with personal goal-setting and plan.

The program is based on a community development approach, with a solid program connection to

local resources and close attention paid to access issues for the multicultural population.

Evaluation will track program implementation, health behaviour change and how resources are being used. Baseline studies have been carried out to support program evaluation. One survey focuses on the clinics themselves and the other survey on the perception of the population what they see as the role of their physician in prevention. Descriptive tools exist for process evaluation, and indicators have been developed (both administrative and clinical).

The program represents a major cultural shift for physicians, but has been met with great enthusiasm and success in the community (even politically). In some areas, facilitators and nurses have been hired to support the program.

There are some challenges with the shift to the local health authority structure and the implementation of the new program. This includes exploring the role of population-level public health approaches to non-medical determinants of health within the health system planning and management structure.

6.7 Primary Care Capacity & Infrastructure

Example: Integrated Teams – Oxford Blood Pressure Education Program

The Oxford Blood Pressure Education Program (OBPEP) has improved the management of high blood pressure and its complications by using evidence-based guidelines, supporting self-management, and strengthening linkages of hospital-based, public health, primary care and community services.

Key Elements

- Targets those with increased cardiovascular risk due to high blood pressure
- Based on current, evidence-based clinical guidelines for effective management of hypertension
- Uses public health best practice guidelines for healthy eating, physical activity and smoking cessation
- Builds referral mechanisms between the OBPEP, primary care practitioners, public health and community services
- Uses nurse coordinator for base-line and follow-up assessment of high blood pressure, medication use and lifestyle questionnaire, and for regular monthly contact with program participants
- Includes supports for self-management through education and counselling from a multi-agency team of health professionals
- Demonstrates reductions in blood pressure, and other risk factors

The Oxford Blood Pressure Education Program (OBPEP) is a pilot project designed and implemented in 2005-2006. The OBPEP aimed to improve blood pressure control for those recently diagnosed, including those taking anti-hypertensive medication.

The OBPEP used a community-oriented approach to better manage high blood pressure and prevent its complications. The pilot project tested the effectiveness and feasibility of a 6-month education and counselling intervention delivered by a multi-agency team consisting of pharmacists, public health nurses, hospital nurses, nurse practitioner, dietician and psychologist.

Clients were referred to the program from an emergency, walk in clinic, or doctor's office visit and participated in an initial individual assessment. The clients participated in three, 2-hour education sessions focused on:

- a general understanding of high blood pressure and how to manage it;
- healthy eating, and smoking as a risk factor (with referral to community smoking cessation programs), and
- stress management, relaxation and exercise.

Clients were shown how to monitor their blood pressure at home, and provided with a blood pressure monitor and home diary. The nurse coordinator made monthly calls to clients to evaluate and support their progress and conducted a final assessment at six months.

An electronic database was used to track blood pressure reduction, weight reduction/waist circumference/BMI, perceived status of general health, smoking cessation, and self-reported exercise participation.

The OBPEP was associated with significant and clinically meaningful decreases in blood pressure over six months. Those who did not take blood pressure medications also significantly reduced their blood pressure. This means that lower blood pressure resulted from education and behavioural or lifestyle changes alone and in combination with use of blood pressure medication.

Men and women with a range of education levels and employment participated in the program. Both men and women were able to lower their blood pressure; however, the men had larger decreases than women. The reason for the difference was unclear, but will be an important consideration for future program planning.

6.8 Community Capacity And Infrastructure

Example: Manitoba Chronic Disease Prevention Initiative (CDPI)

Manitoba's Chronic Disease Prevention Initiative is building the capacity of communities to promote health and reduce chronic disease through partnerships and investment in public health infrastructure.

Key Elements:

- Uses a community-led approach to developing and carrying out action plans
- Builds accountability through a signed charter agreement between the Ministry of Health/ Healthy Living and regional health authorities (RHAs)
- Provides grants to high risk communities aimed at addressing health disparities
- Involves RHA health promotion staff in resourcing a regional committee, helping to identify partners, developing action plans and facilitating community development/engagement
- Includes provincial Ministry of Health technical support, requirements and process guidelines for population-based action plans for primary prevention of chronic disease
- Provides training, information and resources to support community activities through the Healthy Living Resource Institute

For the five years between 2005 & 2010, communities participating in Manitoba's Chronic Disease Prevention Initiative (CDPI) will develop and implement one-year action plans to address smoking, physical inactivity, unhealthy eating and their determinants, evaluate their successes and identify future needs. The CDPI aims to improve the health of Manitobans and reduce the number of people who become ill or die from chronic diseases through local partnerships, citizen engagement and community development.

More than 50 communities in 11 health regions across the province are participating in the CDPI. CDPI initiatives are being integrated into existing programs to make them more effective and better able to address inequalities in health status. Regional health authorities and the provincial Ministry of Health are active partners in the community-led process aimed at building more supportive environments for primary prevention of chronic disease. Other partners include the Manitoba Alliance for the Prevention of Chronic Disease and the Northern Aboriginal Population Health and Wellness Institute.

A wide range of local action plans have been developed, taking into account local realities such as poverty, isolation and access challenges. Among others, activities include building effective partnerships with primary health care, enhancing the work of a healthy child coalition, supporting a neighbourhood resource network for community gardens, and providing outreach to recently-immigrated, stay-at-home caregivers.

The CDPI is based on research, consultation and learning from the Manitoba Heart Health Project. The strength of the approach lies in maintaining a community-led approach, fostering effective, broad-based collaborative partnerships and networks, and providing clear accountability & clarity of roles for partners. Evaluation of the CDPI is ongoing and built into all activities. The evaluation will assess CDPI's impact on promoting sustainability through partnership structures, integration, capacity building and collaborative actions.

6.9 Community Capacity And Infrastructure

Example: Cardiovascular Health Awareness Program

The Cardiovascular Health Awareness Program (CHAP) connects community-based health promotion and prevention activities for seniors with the care provided by their family physician and pharmacist.

Key Elements:

- Provides community-based pharmacy CHAP sessions for education and blood pressure measurement
- Uses public health nurses to train peer health educators
- Links public health, pharmacy and primary care providers to strengthen community capacity for cardiovascular prevention
- Creates a formal mechanism for sharing reliable blood pressure measurement and cardiovascular health information between family physicians, pharmacists and program participants
- Uses practice-based research and evaluation to guide program development through collaboration of a community-based health research institute, family medicine centre, public health and community partners
- Engages and advocates for provincial investment to sustain and expand the program
- Bases large-scale evaluation outcomes on routinely collected, population-based administrative data housed at the Institute for Clinical Evaluative Sciences (ICES).

Cardiovascular Health Awareness Program (CHAP) was developed through pilot studies, scientific trials and community-wide demonstrations. CHAP aims to:

- Raise awareness and improve management of high blood pressure for seniors
- Improve on-going monitoring and clinical management of modifiable risk factors and blood pressure

Seniors participate in pharmacy-based cardiovascular health sessions and blood pressure measurement. Peer health educators trained by community health nurses provide participants with a take-home copy of their cardiovascular disease and stroke risk profile, as well as resources on modifiable risk factors. Program results are sent to each participant's family physician and regular pharmacist for further monitoring and assessment.

Program outcomes tracked through piloting include:

- Detection of new cases of high blood pressure
- Presence and frequency of blood pressure readings in physician charts
- Positive responses from peer health educators, pharmacists and family physicians

In one pilot study, six-month follow-up in a small Alberta community found that all program participants with high blood pressure had a substantial decrease in systolic blood pressure, regardless of whether antihypertensive medication had been changed.

Evaluation of a large-scale roll-out of the Program in 39 communities across Ontario is underway. The approach has also been adapted and tested as a feasible way to selectively identify patients at risk of type 2 diabetes for further family physician-initiated diabetes screening.

6.10 Integration Of Chronic Disease Prevention And Management

Example: Calgary Health Region – Infrastructure For Integrated Chronic Disease Prevention And Management

The Calgary Health Region has implemented the Expanded (Wagner) Chronic Care Model by building four basic infrastructure requirements (people and processes):

1. Nurse case management
2. Exercise program
3. Self-management program
4. Electronic information system

Key Elements:

- Employs home care registered nurses to act as community care coordinators
- Provides family physicians with support in the management of patients with chronic conditions through office site visits and telephone follow-up
- Trains nurse case managers to link patients with regional and community programs, to provide care plans, to coordinate specialty clinic staff involved in patient care and to track care
- Provides community-based exercise programs run by exercise specialists and other providers, e.g., physiotherapists and occupational therapists where needed.
- Includes a one-on-one assessment and tailored exercise prescription based on functional ability
- Trains volunteers to lead the self-management program, adapted from the
- Evidence-based Stanford model
- Uses the regional health authority's centralized chronic disease information system to support disease management, program design and evaluation

The self-management program is a lay-led program to support patients in the day-to-day management of their chronic condition. The program includes goal-setting, developing practical skills for self-care, problem-solving to overcome barriers and challenges, and communication. There is a strong psychosocial support component.

The Electronic Information System includes a unique patient record with different pathways for each condition. The electronic record can be accessed by all providers involved in patient care, and has clinical practice guidelines embedded within the record. Reports and prompts can be generated for missed appointments or abnormal test results.

The initial program focus was on diabetes, high blood pressure, high cholesterol, chronic obstructive pulmonary disease, asthma, congestive heart failure and chronic pain. As of 2005, over 200 family physicians had participated in the program, supported by 19 nurse care coordinators. Exercise programs were offered in 12 community locations with 1500 patients participating. Sixteen lay leaders were trained to run self-management programs, with 150 participants. Improvements were noted in blood glucose (HA1c levels) for diabetes and 6 minute walk test scores for Chronic Obstructive Pulmonary Disease.

There are a number of challenges identified for the program, including:

- The need for financial incentives to encourage physician participation
- Integrating chronic disease management (CDM) strategies into regional operations and family physicians offices, e.g., systemic change to support the program
- Customizing CDM strategies to fit with available resources and the way providers work
- Adapting the program to the needs of diverse cultural groups and rural areas

Important factors for success identified through the program include the need for strong organizational leadership, a small group of internal champions to get started and sustained program funding.

A review of CDM programs has identified some promising evidence for cost-effectiveness for this type of approach. This is supported by specific outcome evaluation of the self-management model on its own. The Stanford self-management model, on which the program is based, demonstrated 6-month improvements in self-rated health, functional ability, social and role activities limitations, energy/fatigue and distress with health state, fewer days in hospital and fewer outpatient and emergency room visits, with an estimated cost of intervention of only US $100-200 per participant.

A successful, community-based multicultural outreach program has also been implemented to extend the reach of the program to high risk groups.

6.11 Integration Of Chronic Disease Prevention And Management

Example: Regional Diabetes Program At Capital Health (Edmonton, AB)

The Capital Health Region in Alberta has strengthened screening, early identification and effective chronic disease management for people at risk or living with type 2 diabetes. The regional diabetes program provides routine primary care-based screening for those at risk, supported by a centralized diabetes registry and system of referral, assessment, monitoring, education, and self-management.

Key Elements:

- Identifies people with diabetes and pre-diabetes early through routine primary-care screening
- Provides single point of entry and referral to diabetes services through Capital Health Link, the region's 24-hour health advice and information line
- Engages a range of trained public health professionals, including primary care nurses, dieticians and physicians in identifying those at risk
- Links primary care providers with accessible regional supports for prevention, education and management of type 2 diabetes and its complications
- Supports client self-referral to standardized education modules, including self-management and supports for changing diet and exercise
- Uses up-to-date, standardized clinical guidelines adopted from the Canadian Diabetes Association and approved by a regional specialist
- Provides consistent assessment, education and management of diabetes and pre-diabetes, including regular monitoring and follow-up through family doctors or public health services
- Reduces wait time for specialist services
- Increases system capacity for early identification and management of type 2 diabetes and its complications
- Strengthens public health surveillance and monitoring of type 2 diabetes using a central disease registry and information systems

Whenever someone in Edmonton visits a doctor, hospital or walk-in clinic, their blood-sugar information is recorded in a central database. This information is used to identify and treat anyone with diabetes or at risk. Pharmacists, doctors and nurses are engaged in encouraging those at risk due to excess weight or inactivity to get the voluntary blood test.

The screening and surveillance component is one piece of a comprehensive Regional

Diabetes Program of the Capital Health Region first introduced in April 2003 to provide integrated, system-wide services for adults with diabetes.

Building on the evidence-based Wagner chronic care model, the program provides a template for a public health approach to screening, early identification, surveillance and management of other chronic diseases.

Since the Regional Diabetes Program was introduced in Capital Health, wait times to see a specialist have been reduced from several months to several weeks or days, depending on urgency, and the number of new referrals has almost tripled as the capacity of the system has increased. On the screening side of the program, more than 90% of the estimated people with diabetes have been identified to date, and 59% of them reach their diabetes treatment goals. Within two years, the region hopes to be able to identify 100% of the population with diabetes.

Evaluation of the cost and benefits of population-wide screening is not yet available, but will be an important factor in future strategies for prevention and management of type 2 diabetes.

6.12 Monitoring, Evaluation And Learning

Example: Annapolis Valley Health Promoting School Project

The Annapolis Valley Health Promoting School Project enhances capacity of schools and partners through skill-building, providing practical tools and actively involving participants in program development, monitoring and evaluation.

Key Elements:

- Supports schools as the voice and the leaders to guide the project's direction
- Involves members from education, health, sport & recreation, and food industry in supporting and evaluating the schools' health promoting initiatives
- Uses a participatory, empowering approach to evaluation with simple tracking tools and opportunities for schools and partners to reflect and share learnings
- Provides resources, support and skill-building to schools and partners, including a "How-to" manual and assessment tool (innovation configuration) to look at current practice and next steps for a health-promoting school environment
- Partners with an academic centre for population health to develop a logic model and evaluation plan
- Uses a population health approach aimed at improving the health of the entire student population
- Acts on the social determinants of health including income, social environment, social support networks & healthy child development to reduce health inequities
- Uses multiple strategies, including policy, education, awareness, leadership development, program implementation, advocacy for supportive long term funding, multisectoral partnership development, and project evaluation

Several schools in the Annapolis Valley Regional School Board (AVRSB) are changing how they work so that the learning and health of their students can be improved. They are doing this by adopting a Health-Promoting School approach to create supportive school environments.

The Annapolis Valley Health Promoting School Project (AVHPSP) was a 2½ year project funded through the Canadian Diabetes Strategy, Health Canada. Eight schools in the AVRSB took this opportunity to make it easier for their students to make healthy choices in physical activity and healthy eating as one way to contribute to the prevention of Type 2 diabetes.

The Annapolis Valley Health Promoting School program is based on three guiding principles that shape program development, implementation and evaluation:

- The people who are most affected need to be involved in the planning and implementation process - students, staff, parents and the community at large
- A population health approach is the foundation for improving the health of the entire population and reducing health inequities among population groups
- Evidence must be used to support project activities

Evaluation was built into the program in its early stages, guided by an evaluation sub-committee including members with research, health, education, and sport/recreation backgrounds. Evaluation tools were piloted with students and schools provided advice on how best to implement each different type of survey.

The evaluation results were shared back to the schools and students through presentations, workshops, distribution of information, and newsletters. Schools were also encouraged to conduct their own surveys, needs assessments, and evaluations.

A program assessment tool (innovation configuration map) guides schools in assessing their current practice and identifying next steps for building a more health-promoting school environment. A clear program structure identifies roles, responsibilities and centres of activity, including:

- Health-Promoting School Teams at each school that assess needs and develop a strategic plan (made up of school staff, food service workers, students, parents, Home and School, community members e.g. dietitians, recreation directors)
- School capacity-building opportunities where schools gather to share ideas and problem solve
- An evaluation committee to develop and guide the evaluation process
- A policy/management committee to advocate and influence decisions to enhance the provision of daily physical activity and affordable healthy food to all students in the region (comprised of local agency representatives Annapolis Valley Health, Annapolis Valley Regional School Board, Nova Scotia Health Promotion and those who have influence on budget and policy decisions)
- Annual stakeholder forum for all schools/ partners who support the AVHPSP
- A program manager to coordinate key aspects of the program, working closely with the program implementation team (includes the local active healthy living consultant, sports animator, public health nutritionist and education sector lead)
- Ad hoc committees as needed, e. g. local producers/suppliers committee

6.13 Monitoring, Evaluation And Learning

Example: Technical Support System For Policy And Environmental Change Strategies

A structured statewide approach was developed to provide technical assistance for local communities to support and develop health promotion capacity.1 The goal was to improve local infrastructure with the capacity to address the underlying causes of chronic disease.

Key Elements:

- Sets clear goals for policy and environmental change
- Addresses common risk factors for chronic disease
- Creates a system for monitoring progress
- Provides technical assistance and training opportunities to local programs

Over the last two decades, the North Carolina Statewide Health Promotion program had supported local approaches to the prevention and control of chronic disease. In 1999, a major change in the program required local health departments to focus on policy-change and environmental-change strategies for addressing three major risk factors: physical inactivity, poor diet, and tobacco use.

State program consultants provided technical assistance and training opportunities to local programs on effective policy-change and environmental-change strategies and interventions, based on needs defined by a statewide monitoring and evaluation system.

The percentage of health departments in North Carolina with interventions addressing at least one of three targeted risk factors in 2004 approached 100%; in 2001, this percentage was 62%. Additionally, between 2001 and 2004, the number of health departments reporting policy or environmental outcomes related to these risk factors almost doubled.

Requiring local programs to implement policy-change and environmental-change interventions that address the three major behavioral risk factors provides an organized framework for accountability. An established reporting system guides technical assistance efforts and monitors their effectiveness based on standardized objectives that address the full scope of creating health-promoting environment that support healthy living.

6.14 Leadership, Partnerships & Investment

Example: Leadership Infrastructure – Quebec Public Health System

Public health functions and programming in Quebec promote health, provide support for social and community development, contribute to the reduction of health inequalities, and formally establish "moral authority" of the health sector over other governmental sectors, mandating healthy public policy.

Key Elements

- Mandates health surveillance as well as prevention and promotion
- Acknowledges that various laws and regulations of other government agencies can affect population health and well-being
- Empowers the Ministry of Health and Social Services to undertake intersectoral action to support public policy development favorable to health
- Ensures decision-making for all government activities takes into account potential impacts on the population's health and well-being of all legislative and regulatory actions
- Establishes the Minister of Health and Social Services as the government advisor on public health issues
- Sets a requirement to consult the Minister on matters that impact on the health of the population
- Creates a Health and Well-Being Council to give voice at the Ministry level to community sector representatives and socioeconomic groups and a Medical Council, which strengthens the physician voice in the health care system

Quebec has gone further than any other Canadian province in setting up an integrated public health system infrastructure. In 2001, Quebec adopted the Public Health Act, which replaced the 1972 Public Health Protection Act.

Earlier legislation had not specified how Ministry officials and regional public health authorities were to carry out their obligation to protect public health and did not lay out how public health authorities could gain access to information allowing them to fulfill this obligation. Current legislation supports all public health interventions, beyond a focus on essential public health functions.

A 10-year public health program was initiated in 2003 which included core functions of public health, plus support for:

- Regulations
- Legislation and public policy that affect health
- Research, innovation and skills development

The core functions aimed for similar service standards in all regions. Interventions were designed to:

- Reduce health and well-being inequalities
- Strengthen individual potential
- Support community development
- Encourage intersectoral action to foster health and well-being
- Support vulnerable groups and encourage effective preventive clinical practices

The Quebec public health approach is embedded within the province's health structures at all administrative levels and supported by mobilization of professionals in the health sector (not merely in the bureaucracy).

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8.0 Worksheets

1. How are stakeholders engaged in working together to strengthen chronic disease prevention and management?

Stakeholders can usually benefit from some structure or mechanism to support their work together. This structure could facilitate information exchange, common planning, and common action. One important area for collaboration is for stakeholders to recognize the differences in resources, capacity and expertise that may exist between them, and be willing to accommodate these differences (e.g. larger, well-resourced organizations like hospitals or public health could provide meeting space and administrative support).

0	1	2	3	4
Chronic disease stakeholders in the region are working in isolation of each other.	Various networks of stakeholders (possibly working on different chronic diseases) exchange information with each other on a regular basis.	Some stakeholders meet regularly; start to plan together.	Plan to actively engage all stakeholders; Stakeholders meet regularly together.	Stakeholders agree to work together on comprehensive strategy for chronic disease prevention and management; Efforts made to use some resources collectively to support the work of the group.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How have stakeholders addressed the issue of developing common values to guide their action for strengthening chronic disease prevention and management?

A common set of values provides a strong base for stakeholders who wish to work together on chronic disease prevention and management.

Stakeholders have not discussed their values with respect to chronic disease prevention and management.	Stakeholders have discussed their values but have not developed a common statement.	Stakeholders have agreed on a statement articulating their common values.	Stakeholders use these values to inform their work together.	Stakeholders develop strategies and action plans based on common values.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. How have stakeholders addressed the issue of developing common goals for their work in strengthening chronic disease prevention and management?

Common, evidence-informed goals for health status and health system performance for their region should inform the strategies and action plans of the stakeholders.

0	1	2	3	4
Stakeholders have not developed common goals for chronic disease prevention and management.	Stakeholders have gone through a formal process of setting evidence-informed common goals.	Common goals have been endorsed by the leadership of each of the stakeholders.	The goals are reflected in the action plans and strategies of the participating stakeholders (i.e. each stakeholder identifies specific actions that contribute towards achievement of the goals).	Stakeholders review progress towards achievement of the goals on a regular basis; goals are updated as required, based on these reviews.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. How are the Social Determinants of Health assessed and monitored in the community?

Information on SDOH and health inequities can be important in designing programs and activities for prevention and maintenance of chronic disease. Individuals experiencing problems with food, housing and income, for example, may be at higher risk of developing some chronic diseases, and may have more difficulty is accessing health services.

Stakeholders do not collect information on SDOH.	Stakeholders recognize the importance of collecting information on SDOH.	Stakeholders identify which SDOH indicators are most relevant for their work.	Stakeholders develop partnerships/systems necessary for the collection of the SDOH information.	Stakeholders regularly collect information on SDOH and use it in program design and priority-setting.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How are SDOH recognized in the core business, planning and evaluation functions of the stakeholders?

To ensure that a SDOH approach is institutionalized in each organization, stakeholders should formally recognize SDOH in key places e.g. organizational mission statement, planning processes, and evaluation of programs.

Assessing the impact of a program on SDOH can be difficult to because of the numerous factors involved. Programs which specifically address SDOH require evaluation strategies that recognize the causal links behind each of the determinants, based on best evidence and most current theories.

Stakeholders do not consider SDOH as part of their core business.	Stakeholders are aware of the importance of SDOH, but have not developed activities with this specific focus.	Stakeholders include SDOH as a foundation for their planning process (including involvement of community representatives from these groups), but have not yet developed specific activities.	Stakeholders have developed specific activities with a focus on addressing SDOH.	Stakeholders evaluate activities based on addressing SDOH.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. How do the stakeholders incorporate an intersectoral approach to addressing SDOH issues with respect to chronic disease prevention and management?

Many issues related to SDOH/health inequities require approaches beyond the health sector. The ability to do effective intersectoral work – at the service delivery level as well as at the policy level – is, therefore, an important skill for doing this kind of work. Ongoing structures such as coalitions can help to institutionalize intersectoral approaches to dealing with SDOH.

0	1	2	3	4
Stakeholders do not incorporate an intersectoral approach.	Stakeholders know which sectors should be involved and coordinate with other agencies (beyond the health sector) at the front line level on an ad hoc basis.	Stakeholders coordinate intersectoral front line work on a routine basis.	Stakeholders have developed an ongoing structure to support intersectoral work on SDOH.	Stakeholders work together through the structure to influence policy (at municipal, provincial/territorial or federal level) related to SDOH.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. What resources or other assistance is available to support community action on SDOH?

Groups experiencing problems with SDOH also do not tend to participate fully in society. Community groups that help to develop the capacity of disadvantaged members of society to participate fully, organize themselves and advocate for their rights can make an important contribution to SDOH. Organizations in the community can support these groups by providing access to resources (e.g. seed funds, meeting space, community developer/health promoter time, etc.), community and expertise.

0	1	2	3	4
No support is provided for community action on SDOH.	Stakeholders provide ad hoc support to community groups to address SDOH.	Stakeholders routinely support community groups by providing access to meeting space, etc.	Stakeholders allocate staff time to support community groups in SDOH work.	Stakeholders have a well-developed policy for supporting community development, supported by resources. Community groups are partners in identifying priorities.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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5. Are there currently any legislation or regulations in your region to build health-supporting environments?

No legislation/ regulation is in place.	Stakeholders identify legislative/ regulatory strategies for creation of health-supporting environments as a priority issue.	Intersectoral partnership has been developed to start to work on these strategies.	Advocacy to appropriate level of government regarding these strategies. Communications campaigns to public.	Implementation of legislation/ regulations by government.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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6. What mechanisms have been developed to partner with schools to promote health and prevent chronic disease?

Schools are obviously key sites for initiatives to prevent chronic disease as there is a "captive" population of young people who are in the process of forming their ideas and habits related to healthy living. Partnerships with schools could involve areas such as the following:

- Curriculum, incentives and regulations to support health-promoting school environments
- Tools to support action.

No mechanisms exist for partnership with schools.	Stakeholders engage schools in discussion regarding partnership possibilities.	Schools and stakeholders identify priority issues for partnership.	Schools and stakeholders develop and implement specific activities.	Schools and stakeholders set up structure for ongoing collaboration.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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7. What mechanisms have been developed to partner with workplaces to promote health and prevent chronic disease?

Workplaces are where people spend many hours of their lives, so are tremendously important in terms of being health-supporting environments. Potential partners could include the employers and unions. Partnerships with workplaces could involve areas such as the following:

- Curriculum, incentives and regulations to support health-promoting work environments
- Tools to support action.

0	1	2	3	4
No mechanisms exist for partnership with workplaces.	Stakeholders engage workplaces in discussion regarding partnership possibilities.	Workplaces and stakeholders identify priority issues for partnership.	Workplaces and stakeholders develop and implement specific activities.	Workplaces and stakeholders set up structure for ongoing collaboration.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. How does the public health organization assess health needs/demands in the community?

Community health assessments should include information on health status, as well as a profile of social determinants of health (SDOH). The assessment process should also engage key community groups as part of the process. The community health assessment provides the context for the development of a human resource/training plan.

0	1	2	3	4
No community health assessment is done.	Epidemiological information is collected on an irregular basis.	Epidemiological information is collected on a regular basis.	Community groups are engaged in the community health assessment process. SDOH information is collected.	Community health assessment identifies vulnerable populations that are priorities for intervention and is used as the basis for program planning and resource allocation.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How does the public health organization plan for the human resources required for chronic disease prevention and management?

Human resource assessments should be based on recognized standards (e.g. public health core competencies, community health nursing standards of practice). Based on this assessment, the organization can develop a plan to recruit or develop the human resources capacity required.

No plan has been developed.	Assessment of workforce requirements for chronic disease prevention and management has been completed.	Human resource plan has been developed.	The human resource plan has been implemented.	The human resource plan has been evaluated and modified, based on the evaluation.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. How does the public health organization support its staff in developing competencies required for effective chronic disease prevention and management?

Based on the type of human resource assessment described above, a professional development plan can be created to develop the required competencies.

A number of strategies may be used to support professional development, including: training, consultation, mentoring/coaching, providing access to materials and professional libraries, communities of practice, etc. Incentives to support professional development (e.g. financial incentives, time for participation) are an important part of an effective strategy.

No professional development plan has been developed to support capacity development in chronic disease prevention and management.	An assessment of competencies has been done.	A professional development plan has been created.	The professional development plan has been implemented.	The professional development plan has been evaluated and modified, based on the evaluation.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. What resources has the public heath organization allocated to implement the human resources plan and associated training activities?

A sustained commitment of dedicated resources is required to support the human resources and professional development plans.

0	1	2	3	4
Resources have not been sought for human resources and professional development plans.	Resources for human resources and professional development are provided on an ad hoc basis.	The organization has developed a plan for how to acquire the necessary resources.	There is political/community support and engagement to advocate for the necessary resources.	Adequate resources available and used to implement the human resources and professional development plans.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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5. What has been done to ensure that all services and programs have been developed or adapted to reach populations who face access barriers?

Certain populations encounter greater challenges in accessing public health programs and services by virtue of factors such as language, culture, ethnicity, socio-economic status, and disability. The organization is aware of these accessibility issues and takes them into consideration in the development of its initiatives. It has developed specific measures to ensure that its programs and services are accessible to all of the population for which it is responsible.

0	1	2	3	4
Services and programs have been developed without specific consideration of accessibility issues.	Accessibility issues are included in the community needs assessment.	The organization is aware of current research and practices related to accessibility.	The organization develops clear standards for accessibility of its programs (e.g. translation practices, literacy levels)	The program planning processes involve communities in identifying health issues and developing and delivering health promotion programs and health messages. Strategies in place to improve access to health promotion, screening and chronic disease management. Funds are allocated to support community involvement and outreach strategies.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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6. How are "root causes" taken into consideration in the development of programs to address chronic disease prevention?

A "causal theory" approach is important in the development of effective programs in chronic disease prevention. Such an approach links current theory and evidence relating to causal factors related to chronic disease, and uses this information to develop strategies to address root causes.

As an example, the organization might work with others to address such factors as food and income security – which have been demonstrated to be linked to some chronic diseases.

Root causes are not taken into consideration in program development.	The organization is aware of current theories and research related to root causes of chronic disease.	The organization supports staff in developing skills to do planning based on "causal theory" approach.	Program planning is done routinely using a "causal theory" approach. Intersectoral work is supported to address root causes.	Impact on root causes is included in program evaluations.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. What role does primary care play in the regional plan for chronic disease prevention and management?

Effective regional plans recognize primary care as having a unique and essential role in chronic disease prevention and management. These plans define a specific role for primary care, and its relationship to other parts of the health and community sectors.

0	1	2	3	4
No recognition of the role of primary care in regional strategies for chronic disease prevention and management.	Primary care sector initiates some activities on its own in chronic disease prevention and management.	Other stakeholders engage primary care sector in discussions regarding regional strategies.	Specific roles are identified for the primary care sector.	Strategies and resources for strengthening the sector's capacity in chronic disease prevention and management are developed.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How are health needs/demands for primary care assessed?

Community health assessments include information on health status, as well as a profile of social determinants of health (SDOH). The assessment process should include epidemiological information and also engage key community groups as part of the process. The community health assessment provides the context for the development of a human resource/training plan.

Primary care organizations should do an assessment of the specific communities they serve to inform their work.

0	1	2	3	4
No community health assessment is done.	Epidemiological information is collected on an irregular basis.	Epidemiological information is collected on a regular basis.	Community groups are engaged in the community health assessment process. SDOH information is collected.	Community health assessment identifies vulnerable populations that are priorities for intervention and is used as the basis for program planning and resource allocation.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. How does the region plan for the human resources required in primary care for chronic disease prevention and management?

Recognized competencies in chronic disease prevention and management for primary care should be used as a standard against which the human resource capacity of the region can be assessed. Based on this assessment, the organization can develop a plan to recruit or develop the human resources capacity required.

No plan has been developed.	Assessment of workforce requirements for chronic disease prevention and management has been	Human resource plan has been developed.	The human resource plan has been implemented.	The human resource plan has been evaluated and modified, based on the evaluation.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. How are primary care providers supported in developing necessary competencies for chronic prevention and management?

A range of competencies are necessary for primary care providers to do effective prevention and management of chronic disease. These include:

- Ability to work in interprofessional, integrated practice models
- Cultural competency
- Community leadership and effective advocacy
- Supporting for self-management

Regions should work with their primary care organizations and other appropriate partners (e.g. health professional organizations) to develop a plan to ensure that their primary care providers have access to training to develop these competencies.

0	1	2	3	4
No plan exists to support competency development.	Regions and primary care providers are aware of competencies for chronic disease prevention and management.	There has been an assessment of competencies of primary care providers in the region.	Primary care providers, stakeholders in chronic disease prevention and management, and educational/professional groups discuss training needs and resources.	A regional plan in place to support competency-based training, with institutional support and resources allocated.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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5. What resources have been allocated to implement the human resources plan and associated training activities?

A sustained commitment of specific resources is required to support the human resources and professional development plans.

0	1	2	3	4
Resources have not been sought for human resources and professional development plans.	Resources for human resources and professional development are provided on an ad hoc basis.	The organization has developed a plan for how to acquire the necessary resources.	There is political/community support and engagement to advocate for the necessary resources.	Adequate resources available and used to implement the human resources and professional development plans.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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6. What has been done to ensure that primary care services are accessible to the entire population?

Access to primary care services includes the following components:

- Geographic access
- Temporal access (services available 24/7)
- Socio-cultural access (i.e. services are able to address the needs of different socio-cultural and linguistic groups in the community).

0	1	2	3	4
Primary care services have been developed without specific consideration of accessibility issues.	Accessibility issues are included in the community needs assessment.	The region is aware of current research and practices related to accessibility.	The region develops clear standards for accessibility of primary care services (e.g. translation practices, 24/7 access).	Accessibility plan has been implemented and evaluated.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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7. How does the region take an evidence-informed approach to the development of a primary care plan for chronic disease prevention and management?

Research has shown that different primary care models offer different levels of performance with respect to chronic disease prevention and management. Regions, which largely have the responsibility to design primary care systems for their populations, can use the mix of models, the location of services, and development of human resource plans to ensure that their residents receive the best coverage.

0	1	2	3	4
Provincial and regional authorities do not consider the effectiveness of primary care models in addressing chronic disease prevention and management when they develop their strategies.	These authorities are aware of evidence relating to effective primary care models.	Regions have performed needs assessment and developed evidence-informed strategies for development of their primary care systems.	Regions advocate to province for support for primary care models that address chronic disease prevention and management most effectively.	Regions are able to implement primary care systems and models which allow providers to work to their maximal capacity in chronic disease prevention and management.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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8. How are primary care providers supported in implementing clinical prevention guidelines and self-management approaches for chronic disease prevention and management?

Primary care providers have easy access to the most current information relating to best practice in chronic disease prevention and management, and integrate these practices into their work. Some examples include:

- Easy-to-use tools for risk-factor assessment, counseling and referral;
- Decision-support systems with prompts;
- Resources to assist with self-management.

Access may take many forms, ranging from electronic access to on-line tools to continuing education sessions.

Primary care providers receive no support to implement clinical prevention guidelines and self-management approaches.	Primary care providers are aware of these resources and access them independently.	Region develops a needs assessment to determine how primary care providers access these resources.	Region develops a plan to support primary care providers in accessing these resources.	Primary care providers actively access these resources. They are supported through having the necessary time for professional development.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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9. What incentives are provided to primary care providers for developing competencies in chronic disease prevention and management?

Primary care providers are more likely to participate in programs to develop their competencies in chronic disease prevention and management when provided with support/ incentives. This support may include time and resources for professional development. This support might be provided at the provincial level, regional level, or by primary care organizations themselves.

0	1	2	3	4
Primary care organizations have no policies to support training to develop competencies in chronic disease prevention and management.	Primary care organizations are aware of competencies required.	Primary care organizations assess level competency of their providers.	Primary care organizations have developed plans to provide access to competency-based training.	Primary care organizations work together to develop a coordinated plan and providers actively access training.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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10. What mechanisms are in place to support information and referral between primary care providers, public health, home care and acute care for chronic disease prevention and management?

Information and referral mechanisms are important for enhancing continuity of care. There are mechanisms to support primary care providers to know what other resources are available for their patients in the community, and enable them to make easy referrals to these resources (and to allow providers to follow-up on the status of the referral).

0	1	2	3	4
No formal mechanisms exist to support information and referrals for chronic disease prevention and management.	An inventory of community resources exists and is updated regularly.	The inventory of resources is in a form that is easily accessible to primary care providers.	A formal referral mechanism has been established and implemented.	Primary care providers actively use the information system/inventory; referral system is integrated into patients electronic records system.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. How do community groups/organizations participate in a comprehensive regional strategy for chronic disease prevention and management?

Because of their relatively small size and (often) volunteer-based structure, some community groups/ organizations may face challenges in participating fully in regional strategies. Regional strategies should be sensitive to these challenges and enable the groups to participate to the fullest extent possible (e.g. larger groups may offer to share resources such as meeting or office space to smaller groups to support their participation).

0	1	2	3	4
Community groups/ organizations do not participate in the regional strategy for chronic disease prevention and management.	Community groups/ organizations participate on an ad hoc basis.	The regional group develops a full inventory of community groups/ organizations working in chronic disease prevention and management, and invites them to participate.	Community groups/ organizations participate in regular communications with other stakeholders.	Senior management of community groups/ organizations participate as full members in a regional strategy.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How do community groups/organizations assess the demand for their services?

Community health assessments include information on health status, as well as a profile of social determinants of health (SDOH). The assessment process should include epidemiological information and also engage key community groups as part of the process. Community health assessments could be done collaboratively between organizations. The assessment provides the context for the development of a human resource/training plan.

Assessments of the specific communities in which they work permits community groups/ organizations to adapt their activities/ programs/ initiatives to meet local needs.

0	1	2	3	4
No community health assessment is done.	Community health assessment is done, but information is not collected at the regional/community level.	Community health assessments systematically collect information about regional/ community conditions.	Local community members participate in community health assessment. SDOH information is collected.	Community health assessment forms the basis of planning and priority setting for community groups/ organizations. These groups have the capacity to adapt their activities to address local needs.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. How do community groups/ organizations develop the capacity of their leadership in order to work effectively in chronic disease prevention and management?

Leadership is critical to the success of these organizations, but there are often few resources to invest in leadership development. Leaders need to have the capacity to direct their groups and organizations, to facilitate partnerships with other organizations, and to mobilize resources. It may be possible for smaller organizations to work together to collectively develop the capacity of their leaders, especially if resources are limited.

0	1	2	3	4
Community groups/ organizations have not developed a strategy to strengthen the capacity of their leadership.	Individual leaders pursue opportunities for leadership development.	Community groups/ organizations regularly assess the capacity of their leaders.	Individual groups/ organizations develop plans to support capacity development for their leaders.	Community groups/ organizations in a region develop and support a collective plan for leadership development.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. How do community groups/ organizations mobilize the resources required to do their work in chronic disease prevention and management?

Community groups/ organizations are often heavily dependent on volunteer involvement and fundraising in order to obtain the resources they require. Organizations are most effective when they have specific plans and resources allocated to these areas.

An important resource contribution of community groups/ organizations is that they are often able to involve individuals/families who have been affected by the specific chronic diseases. These people can be passionate advocates and contribute considerable energy to the group.

0	1	2	3	4
Community groups/ organizations have no plans in place to mobilize resources.	Community groups/ organizations do ad hoc initiatives to secure resources.	Community groups/ organizations have completed an assessment of resources required, based on the community health assessment.	Community groups/ organizations have developed strategies for resource mobilization and have allocated resources to carry them out.	Community groups/ organizations in a region collaborate on resource mobilization strategies.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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5. How do community groups/ organizations learn from their experiences and from the field of chronic disease prevention and management?

Like other organizations, community groups/organizations are more effective when they have a system that supports knowledge development and learning.

0	1	2	3	4
Community groups/ organizations do not have a learning strategy.	Individual staff/volunteers pursue their own learning.	Community groups/ organizations have a system for staying current with best practices in chronic disease prevention and management.	Community groups/ organizations routinely evaluate their programs and staff/ volunteer capacities against best practices and have a system to support adoption of these practices.	Community groups/ organizations develop collaborative strategies to support adoption of best practices.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. What kind of understanding of a collaborative, systems approach to chronic disease prevention and management exists among key stakeholders?

A common understanding of a collaborative, systems approach to chronic disease prevention and management, based on a shared set of values, is an important foundation for system integration.

0	1	2	3	4
No common understanding exists among key stakeholders.	Sub-groups of stakeholders have experience in working together on common projects.	Stakeholders identify an integrated approach as a priority and start discussions to identify common values and approaches to guide their work.	Stakeholders agree on common values and approaches.	Stakeholders use common values and approaches as a base for joint priority-setting and planning.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How do stakeholders plan collaboratively to strengthen chronic disease prevention and management?

A joint plan, developed collaboratively, describes priorities, strategies and actions. In particular, the identification of shared goals across disease-specific, age-specific and/or risk-factor-specific initiatives can facilitate collaborative action. This provides a common focus for action among the stakeholders, and clarifies the responsibilities of each stakeholder. Finally, an appropriate structure (e.g. coordinating committee) will be able to facilitate ongoing collaboration among the stakeholders.

0	1	2	3	4
No collaborative planning is done.	Stakeholders agree to collaborate on community health assessment.	Stakeholders agreed to common priorities, strategies and action plan.	Stakeholders agree to collaborate on common disease-specific, age-specific and/or risk-factor-specific interventions.	Stakeholders agree to participate in on-going joint planning and coordination mechanisms to oversee implementation and evaluation of the plans.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. What mechanisms have been developed to support service integration across the continuum of chronic disease prevention and management services?

Service integration is particularly important to facilitate continuity of care for clients. Several strategies and tools may be useful for facilitating services integration:

- Developing and maintaining an up-to-date inventory of chronic disease prevention and management programs. This inventory needs to be readily accessible to health providers in order for it to be useful;
- Developing joint protocols to facilitate referrals between different parts of the health system;
- Developing electronic referral mechanisms linked to patients' charts.

No coordination mechanisms have been developed	An up-to-date inventory of chronic disease prevention and management programs has been developed.	Priority areas for service integration have been identified.	Protocols and tools have been developed to facilitate integration.	Wait times and other indices related to continuity of care are monitored routinely to monitor integration of services.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. What systems are in place to facilitate data sharing for monitoring, surveillance and evaluation between stakeholders?

Progress towards system integration can be monitored through the collection of specific data. This system-wide data collection will require specific protocols to be developed to allow data sharing, as well as electronic mechanisms to make this possible.

No systems are in place.	Stakeholders agree on health system indicators to be tracked.	Stakeholders develop plan for data sharing.	Stakeholders agree on protocols for data sharing.	Stakeholders acquire resources and implement system for data sharing.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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5. How do stakeholders collaborate on the development of key health messages to support healthy living and self-management of chronic disease?

Development of common messages and collaboration between stakeholders on communication strategies can create a greater combined effect for the general public by providing messages through multiple channels. This could be especially effective when regional, provincial and national social marketing campaigns are also coordinated.

0	1	2	3	4
No collaboration on common messages.	Stakeholders share information on communications campaigns on an ad hoc basis.	Stakeholders designate representatives to be responsible for discussing communications plans.	Stakeholders agree on joint communications priorities and develop action plan.	Stakeholders implement plan and conduct joint evaluation. Stakeholders look for ways to combine resources to achieve larger impact.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. How is evidence used to guide planning and action in the regional chronic disease prevention and management system?

Current evidence from research provides important information to assist in the development of regional plans, including the most effective intervention strategies and strategies for integration.

0	1	2	3	4
The development of the regional chronic disease prevention and management system is not evidence-informed.	Evidence is used to develop clear goals and performance indicators for the regional system.	Logical planning models are developed to support system evaluation.	Regional initiatives are evaluated based on the logical planning models.	Regional system planning is modified based on the evaluation results.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. How do stakeholders develop their staff/volunteer capacity for monitoring, evaluation and learning with respect to chronic disease prevention and management?

Strategies for developing individual and collective capacity for monitoring, evaluation and learning include:

- Ensuring staff have adequate knowledge and skills
- Providing technical support (e.g. from provincial or regional centres for health promotion or disease prevention)
- Providing access to tools (e.g. on-line access to community health data, evaluation templates, access to systematic reviews, grey literature and key informants)
- Providing training opportunities (workshops, on-line courses, communities of practice networks)
- Networking opportunities and systems to support interprofessional communities of practice and shared learning

0	1	2	3	4
Stakeholders do not have a plan to develop their capacities in monitoring, evaluation and learning.	Stakeholders assess the capacities of staff/ volunteers in these areas.	Stakeholders identify priorities for capacity development.	Stakeholders develop plans for capacity development.	Stakeholders develop and implement a collective plan for capacity development, sharing resources and learning.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. What indicators and systems are used to monitor chronic disease prevention and management outcomes?

Several types of indicators are important to consider:

- Individual and community-level health outcomes (e.g. prevalence of risk factors and chronic disease; social determinants)
- Intermediate program outcomes (e.g. community engagement, coalition-building, policy development)
- Program outputs (e.g. specific activities)
- Program allocations and expenditures
- Qualitative indicators (e.g. information from specific client and community groups)

No indicators are being used to monitor outcomes.	Stakeholders identify priority outcomes to be monitored.	Stakeholders identify evidence-informed indicators	Stakeholders develop systems required to gather information on indicators, including a consistent data collection system.	Stakeholders use information from monitoring system to modify programs.
0	1	2	3	4
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. What is the regional capacity for regular analysis, interpretation and reporting of chronic disease prevention and management outcomes?

In addition to the work by specific stakeholders, there is a need for regional capacity for analysis, interpretation and reporting. The regional level capacity can provide specific expertise, and facilitate collection of data from multiple sources. Regional capacity is often found in organizations such as public health units, planning bodies/regional health authorities, and universities.

0	1	2	3	4
There is no regional capacity for regular analysis, interpretation and reporting of chronic disease prevention and management outcomes.	There has been an assessment of regional capacity in these areas.	Stakeholders work with regional resources to identify priorities for developing capacity in these areas.	Stakeholders and regional resources agree on a strategy for developing capacity.	Stakeholders and regional resources develop an ongoing mechanism to coordinate capacity development in this area.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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1. How have stakeholders identified common priorities and actions for strengthening chronic disease prevention and management?

Common priorities and actions are important to create a basis for stakeholders to work together on a comprehensive, coordinated strategy.

0	1	2	3	4
No strategic priorities and associate action plans exist for strengthening chronic disease prevention and management.	Strategic priorities have been articulated, but no associate action plan has been developed.	Strategic priorities have been articulated, and stakeholders are engaged in developing associated action plans.	Strategic priorities have been articulated, stakeholders are engaged, and an action plan has been developed for some key areas.	Strategic priorities have been identified; shared goals and measurable objectives have been developed; Fully-funded action plan has been developed with roles and responsibilities identified for key stakeholders.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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2. What resources have been committed to a comprehensive approach for prevention and management of chronic disease? Over what time period has this commitment been made?

Successful chronic disease prevention and management strategies have included an allocation of specific resources (e.g. paid staff, volunteers, financial) sustained over the medium – long-term (5-10 years) in order to demonstrate results.

0	1	2	3	4
No funding commitment to a comprehensive approach to chronic disease prevention and management.	No funding commitment, but specific activities have been undertaken to raise awareness of the issue with decision-makers.	No funding commitment, however awareness has been raised and strategies/actions are in place to influence decision-makers to achieve sustained funding.	Short-term funding exists for a comprehensive approach; there is ongoing engagement with decision-makers.	Long-term funding is committed as part of a long-term strategy to address all of the critical success factors listed in this tool.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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3. Who coordinates the comprehensive regional strategy for chronic disease prevention and management?

A regional committee of senior managers is a useful mechanism to guide the comprehensive chronic disease prevention and management strategies. The committee should include representation from:

- public health
- community health and home care services
- primary care services
- long-term care
- acute care
- community-based non-governmental organizations

The regional committee of senior managers is intended to bring together decision-makers from across the service continuum of chronic disease prevention and management, including both the health and community sectors to make decisions on behalf of their agencies.

0	1	2	3	4
No funding commitment to a comprehensive approach to chronic disease prevention and management.	No funding commitment, but specific activities have been undertaken to raise awareness of the issue with decision-makers.	No funding commitment, however awareness has been raised and strategies/actions are in place to influence decision-makers to achieve sustained funding.	Short-term funding exists for a comprehensive approach; there is ongoing engagement with decision-makers.	Long-term funding is committed as part of a long-term strategy to address all of the critical success factors listed in this tool.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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4. What do stakeholders do to "model" health-promoting work environments?

Health-promoting work environments are important strategies for prevention and management of chronic disease.
Health organizations can provide leadership to the community when they model how health-promoting work environments can be created.

Stakeholder organizations can "model" health-promoting work environments by implementing policies such as: flexible work arrangements (e.g. starting and finishing times), on-site child care, telecommuting, providing healthy eating options in cafeterias, supporting physical activity (e.g. allow time for physical activity, provide facilities on-site).

0	1	2	3	4
No organizational policies are in place to create health-promoting work environments.	Leadership in health organizations are becoming aware of need for supporting health-promoting work environment and are investigating possible strategies.	Organizational cultures supports some individual initiatives, but no formal workplace policies are in place to support healthy choices.	Initial development of policies to support health-promoting work environments.	Comprehensive organizational policies implemented to support health-promoting work environments.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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5. What accountability mechanisms have been developed to monitor policy and program outcomes for chronic disease prevention and management?

Two types of accountability systems are required to measure the effectiveness of comprehensive chronic disease prevention and management strategies:

A system to monitor health status will be able to measure changes in areas such as the prevalence of risk factors and prevalence of specific chronic diseases in different populations.

A system to monitor health system performance will measure the ability of the health system to implement specific practices (e.g. screening of risk factors by primary care providers; effective referrals).

Accountability measures are most effective when they are communicated to decision-makers and the general public, in terms that are meaningful to them (e.g. annual report on chronic disease prevention and management priorities and outcomes), and which ultimately influence decisions and resource allocation.

0	1	2	3	4
No accountability mechanisms are in place to monitor policy and program outcomes.	Evaluation plans and key indicators have been developed but not implemented.	Systems have been implemented to support evaluation, data collection and preparation of base-line and ongoing reports.	Base-line and ongoing regular reports are being produced and presented in a usable format to decision-makers and the public.	Regular reports are being incorporated into planning processes, and used to set policies, priorities and resource allocation decisions.
Other indicators from your region/experience?				
Comments/Areas for Follow-Up				

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