Addressing the Non-medical Determinants of Health

A Survey of Canada's Health Regions

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ABSTRACT

Background: The Canadian health system is undergoing reform. Over the past decade a prominent trend has been creation of health regions. This structural shift is concurrent with a greater emphasis on population health and the broad determinants of health. In parallel, there is a movement toward more intersectoral collaboration (i.e., collaboration between diverse segments of the health system, and between the health system and other sectors of society). The purpose of this exploratory study is to determine the self-reported level of internal action (within regional health authorities) and intersectoral collaboration around 10 determinants of health by regional health authorities across Canada.

Methods: From September 2003 to February 2004, we undertook a survey of regional health authorities in Canadian provinces (N=69). Using SPSS 12.0, we generated frequencies for the self-reported level of internal and intersectoral action for each determinant. Other analyses were done to compare rural/suburban and urban regions, and to compare Western, Central and Eastern Canada.

Results: Of the 10 determinants of health surveyed, child development and personal health practices were self-reported by the majority of health regions to receive greatest attention, both internally and through intersectoral activities. Culture, gender and employment/working conditions received least attention in most regions.

Conclusion: The exploratory survey results give us the first Canadian snapshot of health regions' activities in relation to the broad range of non-medical determinants of health. They provide a starting data set for baselining future progress, and for beginning deeper analyses of specific areas of action and intersectoral collaboration.

MeSH terms: Health care systems; health care reform; regional health planning; collaboration

La traduction du résumé se trouve à la fin de l'article.

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In Canada and elsewhere, policy-makers, service providers and the general public have come to appreciate that the health of a population is linked to factors beyond the health care system.[1] An important aspect of this perspective focuses on the role of the *'determinants'* of health. Despite widespread commitment to a population health approach, many decision-makers are struggling to address health determinants beyond a narrow scope of illness-related causes. Most decision-makers and resources in the health sector are understandably focused on illness and disability-related issues. The health sector, however, has a potentially leading role to play in addressing a much broader range of determinants of health beyond medical determinants. Regional Health Authorities (RHAs), for example, have taken a lead or partnering role in developing a variety of housing options for aging populations and people with mental and physical disabilities to ensure that they have access to safe, supportive, and affordable places to live. These resources and activities move beyond traditional health care boundaries and span intersectoral responsibilities.

While many RHAs are large enough to influence the full range of determinants of health, meaningful positive change in population health outcomes requires intersectoral collaboration between the health sector and other sectors of government and Canadian society. For the purposes of this project, we defined intersectoral collaboration as:

"A recognized relationship between part or parts of the health sector with part or parts of another sector that has been formed to take action on an issue to achieve health outcomes…in a way that is more effective, efficient or sustainable than could be achieved by the health sector acting alone."[2]

Intersectoral action can include various participants and take diverse forms. The Public Health Agency of Canada notes that intersectoral action may encompass two components.[3] The first is the development of partnerships and action between different sectors (e.g., health, justice, education). The second is the development of partnerships at different levels (including geographic) of government or non-governmental organizations. The emphasis on intersectoral action recognizes that key factors that determine population health in

Canada fall within the purview of many sectors of government and society outside of the formal health care system or health ministry.

A major focus of health care reform in Canada has been the regionalization of health services administration. In the 1990s, 9 out of 10 provinces in Canada regionalized the management and provision of health services.* As such, health regions are a core organizing structure for most health service delivery in Canada. The prior funding system was from a central ministry directly to providers, programs and institutions.[4] It must be recognized however that some provinces (e.g., BC, AB, SK, PEI, NS) have continued to grapple with the types, scale and number of regions, some becoming more centralized and others becoming more decentralized. Moreover, with the rise in health policy prominence of the social determinants of health – most recently, the creation of a commission on such by the World Health Organization – RHAs are or will become responsible for enhanced action in relation to non-medical determinants of health (NMDH), and are the health sector partners involved in wider intersectoral collaborations targeting NMDH.[5-7]

Given this pivotal role, a team of researchers and practitioners from across Canada, supported by the Canadian Institutes of Health Research, systematically compared and contrasted what RHAs across the country are currently doing to support actions on the NMDH. This included assessing the self-reported level of activities and initiatives within the health region (what we shall refer to as "internal action"), as well as those undertaken through intersectoral collaboration.

METHODS

A combined methods approach was used across three years of research (2003-2005). This paper reports the results of the survey component of the research conducted in year one of the study. Survey construction was based on an extensive literature review, consultation with local and international experts, face validation by the mixed membership of the research team, and pilot testing in two health regions. We judged the survey to have a reasonable level of content and construct validity and, in September 2003, a survey package was sent out to RHAs in all ten provinces (N=107).

The survey package included an introductory letter requesting a representative to participate in a survey regarding their RHA's level of action around the NMDH (see Appendix 1 for definitions of levels of internal action and intersectoral collaboration). Surveys were faxed or emailed. In order to maximize the response rate, surveys were sent to public health and/or health promotion units of the RHAs. Participants were welcome to distribute the survey to other units within their health region. Regional representatives of the research team were responsible for the collection and follow-up of surveys.

For the purposes of this project, the research team identified 10 NMDH of interest. Descriptions of the determinants (see Appendix 2) were obtained from the Public Health Agency of Canada (formerly Health Canada) website and were provided in the survey package.[8] The survey contained two components. The first component asked respondents to self-report the level of action for each determinant of health that was occurring *within* their health region/organization (level of internal action). The second component asked respondents to self-report the level of intersectoral collaboration occurring for each determinant of health. Participants were asked to rate the activities for both components that had been undertaken over the past 24-36 months and provide an example, if possible, for each determinant.

Survey data were entered into an SPSS 12.0 database, which was used for the analysis. Descriptive statistics are reported as proportions for each category. Other analyses were done to compare rural/suburban with urban regions, as well as a regional (Western, Central and Eastern Canada) comparison. The outcome of interest was the self-reported level of action, as rated by the respondent. Ethics approval was obtained from the Research Ethics Board at the University of British Columbia.

RESULTS

Of the 107 surveys sent, responses were received from 69 health region areas in the ten provinces for a response rate of 64.9%. A total of 78 surveys were received as some health regions returned more than one survey. Response rates varied by province from a low of 36.7% in Quebec to a 100% response rate in Alberta. Respondents had an average of 62 months in their position. Surveys were completed by senior-level officials (director or manager) in departments such as population health promotion, public health, medical health, health planning, or community health.

Several cautions must be raised in relation to the response rate. First, given the exploratory nature of the study, we did not undertake an a priori *power* calculation to determine the overall sample size. Second, we relied on each RHA to self-identify the '*best*' respondent from their region. Although this was the best possible approach, we recognize that it remains difficult to identify *optimal* respondents. RHAs do not have specific staff who are responsible for overseeing action on the NMDH or the related issue of intersectoral collaboration. Our respondents, however, represent a group of individuals who could be expected to provide reasonable data, given their professional positions within their respective organization. Under- and over-reporting biases are possible, although we have no reason to expect that such biases – if they exist – would be systematic. We make no claims that the self-reported views of our respondents would be consistent with those of others from their region; nor should a self-reported low level of action in a given region be taken as a pejorative commentary on that region. Overall, the importance and innovativeness of our data balance the exploratory nature of the research.

Many health regions self-reported at least initial discussion *within* their organization for addressing determinants (Table I). Child development and personal health practices received the greatest amount of attention among the determinants. Seventy-five percent of regions reported at least short-term projects around personal health practices, and 72% of regions reported at least short-term projects around child development. On the lower

* The province of Ontario had "district health councils" rather than "regional health authorities" until 2005 when it created 14 Local Health Integration Networks that replaced 16 advisory District Health Councils to begin integrating their services across sectors and to local populations. The term regional health authorities will be used in this paper and is meant to include Ontario with the other nine provinces.

TABLE I

Proportion of Health Regions Engaged in Internal Action by Determinants*

	Income and Social Status	Social Support Networks	Education	Employ-ment and Working Conditions	Social Environ-ments	Physical Environ-ment	Personal Health Practices	Healthy Child Develop-ment	Culture	Gender
No Action	32.9	18.4	26.3	27.0	28.2	16.9	9.2	12.0	27.8	33.8
Initial Discussion	13.7	7.9	14.5	9.5	12.7	7.0	3.9	5.3	18.1	18.3
Plan or Priority (outlined in Strategic/Annual Plan)	19.2	17.1	17.1	14.9	15.5	18.3	11.8	10.7	15.3	16.9
Short-term Projects/Dedicated Resources	16.4	26.3	17.1	29.7	21.1	22.5	26.3	16	18.1	11.3
Long-term Programs/Core Funding	17.8	30.3	25.0	18.9	22.5	35.2	48.7	56.0	20.8	19.7

* Numbers may not add to 100.0 due to rounding.

TABLE II

Proportion of Health Regions Engaged in Intersectoral Collaboration by Determinants*

	Income and Social Status	Social Support Networks	Education	Employment and Working Conditions	Social Environ-ments	Physical Environ-ment	Personal Health Practices	Healthy Child Develop-ment	Culture	Gender
No Action	17.6	10.8	14.7	26.0	19.2	17.1	12.0	2.7	26.8	37.7
Informal Contact	13.5	9.5	17.3	23.3	12.3	14.3	6.7	5.4	18.3	18.8
Formal Structure	28.4	25.7	26.7	28.8	23.3	18.6	18.7	24.3	16.9	11.6
Action Plan Established	17.6	23.0	16.0	12.3	17.8	18.6	14.7	17.6	14.1	11.6
Programs Established	23.0	31.1	25.3	9.6	27.4	31.4	48.0	50.0	23.9	20.3

* Numbers may not add to 100.0 due to rounding.

TABLE III

Mean Level of Action for Determinants for which There Was Significant Difference Between at Least Two of Three Regions

		Western	Central	Eastern
		Significant Difference between Western and Central Regions only (not Eastern)		
Internal Action	Physical Environment	4.1	2.8	3.3
	Healthy Child Development (Internal Action)	4.4	3.3	4.0
Intersectoral Collaboration	Income	3.6	2.5	3.1
	Social Support	4.0	3.0	3.4
	Social Environments	3.6	2.5	3.3
		Significant Difference between Central Region and other Regions (Western and Eastern)		
Internal Action	Personal Health Practices	4.6	3.2	4.1
Intersectoral Collaboration	Personal Health Practices	4.4	2.9	3.9
	Healthy Child Development	4.3	3.5	4.3
		Significant Difference between Western Region and other Regions (Eastern and Central)		
Internal Action	Culture	3.6	1.8	2.5
Intersectoral Collaboration	Culture	3.8	1.9	2.3
		Significant Difference between Central and Eastern Regions only (not Western)		
Internal Action	Employment and Working Conditions	3.2	2.4	3.6

5-point scale / the higher the rating, the higher the level of action
Test of significance is Tukey HSD.

end, no action was self-reported for income/social status or gender by 33% of regions.

The results for self-reported intersectoral collaboration are reported in Table II. Similar to the internal action rating, both child development and personal health practices received most attention from health regions. Sixty-eight percent of regions self-reported a high level of intersectoral activities (i.e., action plan or programs established) around child development, while only 3% reported no intersectoral activities for child development. No intersectoral activities were reported by a larger number of regions around gender (38%), culture (27%), and employment/working conditions (26%). Examples of how health regions reportedly addressed the various NMDH are presented in Appendix 2.

We also classified the RHAs into suburban/rural and urban regions (the latter being a RHA which had a city with a population of 150,000 or more based on 2001 census) to determine if there was a difference between self-reported internal and intersectoral action on the NMDH based on the size of municipal jurisdictions and health regions. For all determinants, there was no statistically significant difference in either internal or intersectoral self-reported action between suburban/rural and urban regions, with the exception of intersectoral action on culture where urban regions reported a higher level of action (p=0.026, Mann-Whitney). The low number of regions surveyed in some provinces precluded provincial comparison. An analysis grouping of Western (BC, AB, SK, MB), Central (ON, QC) and Eastern (NB, NS, PE, NL) provinces using the Kruskal-Wallis test, however, did reveal some significant differences between geographic regions. We then conducted the Tukey HSD test to determine where the differences were between the three groupings of regions (see Table III). A significantly higher level of action was self-reported in the Western than Central region for internal action on physical environments and healthy child development, and for intersectoral action on income, social support and social environments. The level of self-

reported action in the Central region was significantly lower than Eastern and Western regions for internal and intersectoral action on personal health practices, and for intersectoral action on healthy child development. The Western region reported a significantly higher level of action on culture (both internally and intersectorally) than the other regions. A significantly higher level of self-reported, internal action was reported in the Eastern than in the Central region for employment and working conditions.

DISCUSSION

There is increasing concern and consensus that the Canadian health system is overburdened in meeting current and looming demands for health services. These demands leave few apparent resources to focus on health promotion and population health. These realities bring one to the pointed question of "*what is the role and capacity of the 'illness-care' system to address the 'non-medical' determinants of health?"*

The present survey results give us the first Canadian snapshot of health regions' self-reported activities in relation to the broad range of NMDH. They provide an exploratory baseline data set to chart future progress, and to begin deeper analyses of specific areas of action and intersectoral collaboration. As such, we can draw beginning inferences from these data and also suggest some additional next steps or strategic directions.

Within this context, we report on several interesting findings. First, and encouragingly, a high proportion of health regions claimed an interest in, and action on, determinants of health that ordinarily would be outside the purview of the health care system. A large number of health regions self-report devoting attention to the NMDH. At least two thirds of RHAs reported internal action on each of the 10 NMDH, ranging from initial discussion to core funding. Similarly, apart from gender, two thirds of RHAs self-reported some level of intersectoral collaboration on each NMDH. This implies that provinces and health regions view action on the NMDH as a legitimate role and responsibility of health regions. Child health and development is frequently addressed, probably because of its pervasive impact throughout life on physical and mental health, behavioural adjustment, literacy and educational attainment,[9] as are personal health practices. Both of these NMDH have received considerable historic attention, and both carry a degree of political expediency (in the sense of being less threatening to vested economic interests) than do other NMDH. The presence of infrastructure (including networks of personal connections and best practice protocols) established over many years in delivering programs, such as child immunization and healthy living, also makes it easier today to address these NMDH and to mobilize quickly to capitalize on short-term funding opportunities for programs in these areas provided by many federal, provincial and local governments and agencies.

Second, and less encouraging, it is clear that significant change may be required on many vertical and horizontal levels. There is a need for *vertical* connection and collaboration from the RHA-level to provincial/territorial jurisdictions up to the federal policy level, to effect meaningful change on some NMDH. This may be particularly true for determinants such as income and social status, employment and working conditions, gender and culture. Although recognized as important, these may be determinants for which actions by local agencies are perceived to have minimal or no impact. Removing barriers to gender and cultural discrimination in service or program access are obvious strategies, as might be advocacy on provincial or federal policies affecting income and employment conditions. Failure by the health sector to take some action on these determinants, however challenging, is likely to sustain their lingering negative effect on the health of Canadians.

In parallel, there is a need for *horizontal collaboration* across different ministries/departments (within each level of government) and across different sectors of society (i.e., public, non-profit, private). A further key question that remains is "*what policy/program decisions regarding action on the NMHD are best made in which sector or by which level of government or society?"*

Third, while the nature, form and function of health regions vary across Canadian provinces and territories, there are likely a number of factors affecting the degree of action on the NMDH. Rutten describes several elements of policy implementation that pose challenges for health region action on the NMDH, including: conceptualization, complexity, bureaucratization, organizational specialism and policy networks.[10] Conceptualization and complexity suggest that health regions may find the notion of action on NMDH difficult to operationalize and manage on a daily basis, in part because of organizational specialism and limited existing networks. The causal and intervention breadth of many NMDH, while accurately reflecting their impacts on health, can simultaneously appear overwhelming for policy-makers or program planners. Consequently, interventions with a more individual than social focus predominate, such as personal health practices and early child development, while conceptually broader determinants such as gender and culture see comparatively low levels of action. These results are similar to results in Prince Edward Island by Eyles and his colleagues,[1] and were noted as long ago as 1989 in a survey of Ontario public health units.[11] The bureaucratization process, organizational specialism and policy networks that Rutten identifies infer that health systems (and health regions) are inherently resistant to change.[12] Government decision-makers tend to operate through well-developed networks and feel most comfortable with familiar tasks and responsibilities. The desires for autonomy by most departments and agencies often impede intersectoral thinking and planning.[13] Despite regionalization, many health agencies and programs remain organized around specific diseases or conditions. Given that similar forces affect many diseases (as noted by the chronic disease prevention strategy), there is a need for better coordinated, cross-cutting policy initiatives, and in some cases, organization by population group or underlying problem, rather than by disease.[14]

Some regions are indeed reorganizing activity in this way and making progress. However, action by health regions on the NMDH still often represents an innovation that may be viewed as incompatible with existing patterns of decision-making. Further investigations of processes that encourage collaborative and positive change are needed.[15,16] Actions on the

Appendix 1

Definitions of Levels of Internal Action and Intersectoral Collaboration

	Definitions of Levels of Internal Action
1	We currently have **no action** for this determinant
2	We currently are **undergoing initial discussion** regarding this determinant
3	We currently have outlined action in **business and/or strategic plans** for this determinant, or we have a **stated priority in our annual plan** for addressing this determinant
4	We currently have specific **short-term projects** (i.e., demonstration projects) and/or **dedicated resources** for this determinant
5	We currently have a **long-term program and/or core funding** that address this determinant
	Definition of Levels of Intersectoral Collaboration
1	There is currently **no involvement** at all between our health organization and other agencies/groups for this determinant (e.g., our health organization has not contacted other agencies/groups, other agencies/groups have not contacted our health organization)
2	There has been **some (informal) contact** between our health organization and other agencies/groups for this determinant (e.g., there has been some correspondence between our health organization and other agencies/groups about working together in the future and/or about the sharing of some data)
3	A **formal structure** for collaboration has been developed between our health organization and other agencies/groups for this determinant (e.g., an ad hoc committee for collaboration has been created and/or our health organization and other agencies/groups have representatives on each other's committees)
4	Our health organization and other agencies/groups are developing or have completed a **plan of action** for this determinant (e.g., one or more of the following are being/have been developed collaboratively – vision, principles, goals, objectives and strategies)
5	Our health organization and other agencies/groups are **developing or have implemented programs** to address this determinant (e.g., our health organization or the agencies/groups have contributed one or more of the following resources to programs – data, staff, funding or facilities)

NMDH, that may not yield measurable outcomes for up to a generation after implementation,[9] are also incompatible with much shorter political cycles. Moreover, budgets both within and across government departments are siloed to compete with each other. This creates a situation wherein there are few or no incentives to motivate either internal or intersectoral collaboration toward the common social and economic good of enhanced impact on health by policy decisions. This is true regardless of whether such policies emanate from the acute care health care sector or the finance department.[9,12]

Fourth, and already well accepted in health sector policy, the breadth and nature of the NMDH demands intersectoral collaboration and involvement of multiple government ministries, local municipalities, NGOs and the private sector. Our findings indicate that some health regions are already active incubators of innovation. The goals of RHAs may be less susceptible to be diluted or diverted by either the immediacy of political conflict or competing priorities from other sectors.[17] RHAs have meant "the beginning of a more balanced emphasis between individual clients and the population."[11] At the same time, change at the provincial level may be more difficult to sustain since the (usually longer-term) goals associated with the NMDH do not conform to the electoral cycle. Moreover, if health regions advocate for changes, they are no longer apolitical and become entwined with provincial or federal-level politics.

Another fortuitous observation is that, as Eyles et al. noted,[1] the public have an intuitive grasp of the importance of non-medical factors to health and well-being. A concerted education and awareness campaign is warranted to expand this understanding of the symbiotic links between the health of individuals and that of populations. The establishment of the Public Health Agency of Canada may provide a level of national leadership that will allow faster and deeper gains to be made in the future.

Fifth, the lack of a scientific base for addressing the NMDH impedes progress. There is a need for further research regarding the nature and impact of upstream investments, and for better understanding of the health system in working with other sectors of government and society to address the determinants of health. Research should also begin to focus on the health consequences of tax-and-transfer policies, labour market policies, and social service policies.[18] There are many unanswered research and implementation questions. What types of interventions should we focus on? How multifaceted do interventions need to be? How long do they need to be in place? What effect does prioritizing specific population and subpopulation groups have on outcomes?

Finally, there is a need to make policymakers beyond the health care sector – particularly those in finance – aware of the broader determinants, so that policy and advocacy can be better linked between government departments and agencies. In a recent study in Hamilton, Collins found low levels of awareness of the social determinants of health among potential partners, and hence restrained possibilities for collaboration on the factors shaping health.[19] While the health sector can play a lead agency role, resource allocation to increase upstream strategies cannot succeed unless the concepts are more widely understood by providers and the public.[11] An inability to adopt a population health approach may be due as much to government directives to spend new monies elsewhere rather than the particular failings of RHAs. An increased emphasis on the NMDH requires a clear mandate, committed partners, outstanding leaders/champions and a vision that will mobilize providers and the public.[11] While health systems change slowly, regionalization appears to be providing opportunities to drive change through increased partnerships. However, our capacity to fully engage in an intersectoral approach has been limited to date (see special issue of *Healthcare Papers*, 2004, 5(1)).

CONCLUSION

There are limitations to the findings of the present study. The complexity of RHAs may have limited representatives' ability to disclose the full range of internal and intersectoral activities for some determinants. Activities that one program within a RHA undertakes, for example, may not permeate all levels and programs of the RHA. Also, provinces undergo changes in their regional structures that may hamper respondents' ability to provide complete information. Since the data are self-reports of respondents, they are very difficult to verify. Respondents' reports depended on how they interpreted the definitions and categories of NMDH. Some respondents noted that some definitions of the determinants, such as 'social environments', were too vague to score, or that definitions such as personal health practices were not consistent with their conceptualizations. Therefore, a lack of consensus in defini-

Appendix 2

Glossary for the Determinants of Health with Examples of Implemented Initiatives

Determinant	Description	Examples
Income and Social Status	Health status improves at each step up the income and social hierarchy. Higher income levels affect living conditions such as safe housing and the ability to buy sufficient and healthy food.	Fee waivers for childbirth education; dental care for adults living in poverty; poverty coalition coordinator position; homeless shelter; food security/poverty working group; subsidy program for home care clients; minimum wage advocacy; income security programs for mental health clients.
Social Support Networks	Support from families, friends and communities is associated with better health. The health effect of the support of family and friends who provide a caring and supportive relationship may be as important as risk factors such as smoking, physical activity, obesity, and high blood pressure.	Localized, issue and disease-specific programs (new parents, fetal alcohol syndrome, hepatitis C, mental illness); healthy aging; community kitchens; grief counseling groups; caregiver support program; 12 step addictions programs; "seniors healthy community project".
Education	Health status improves with level of education. Education increases opportunities for income and job security and gives people a sense of control over their lives – key factors which influence health.	Alternative high schools; health information at appropriate literacy levels; health centre helps clients with their grade 12 equivalency test; "stay in school" project; youth health centres in schools to provide health promotion and counseling services (sexuality, relationships, addictions); literacy assessment of residents; speech language and occupational therapy in schools.
Employment and Working Conditions	Unemployment, under-employment and stressful work are associated with poorer health. Those with more control over their work and fewer stress-related demands on the job are healthier.	Staff wellness programs (tobacco, physical activity, etc.); leave of absence/financial assistance to improve education and skills for staff; farm safety initiatives; occupational health and safety to private industry; employment equity policies; health centre assists clients with resumes and job search; low threshold employment services; mental health vocational rehabilitation program.
Social Environments	The values and norms of a society affect the health and well-being of individuals and populations. Social stability, recognition of diversity, safety, good relationships and cohesive communities provide a supportive society, which reduces or removes many risks to good health.	Safer cities program; in-home visitation program; language services program; mentoring programs; "caring communities project"; drug strategy; sports programs for vulnerable children; supportive environments coordinator; community health impact assessment; community suicide prevention team; development of a diversity lens to ensure that services meet the needs of the diverse population in the region.
Physical Environment	Physical factors in the natural environment (e.g., air and water quality) are key influences on health. Factors in the human-built environment, such as housing, workplace safety, community and road design, are also important influences.	Schools and public health inspection; occupational health and safety teams; tobacco reduction; water quality control and indoor air quality; food safety programs; agricultural health and safety council; smoke-free and scent-free policies; construction of playgrounds and trails; housing support services for people with mental health, addictions, and/or disabilities; traffic safety commission.
Personal Health Practices and Coping Skills	Social environments that enable and support healthy choices and lifestyles, as well as people's knowledge, behaviours, and coping skills for dealing with life in healthy ways, are key influences on health.	Health education initiatives (e.g., health fairs) for various health issues, such as cancer, mental health, heart health, HIV, diabetes, sexual health; methadone program; counseling and therapy programs; smoking cessation program; promotion of physical activity at the community level; anger management, suicide prevention and self-esteem programs.
Healthy Child Development	The effect of prenatal and early childhood experiences on subsequent health, well-being, coping skills, and competence is very powerful. For example, a low weight at birth links with health and social problems throughout a person's life.	Pre- and post-natal classes and visits; maternal/child nutrition programs; fetal alcohol syndrome programs; hearing and speech programs; preschool programs; breast feeding friendly workplace; well baby clinics; youth health centres in high schools; "kids first", "baby first", "early start", "growing healthy families", "nobody's perfect parenting" programs; child protection.
Culture	Culture comes from both personal history and wider situational, social, political, geographic, and economic factors. Multicultural health issues demonstrate how necessary it is to consider the interrelationships of physical, mental, spiritual, social, and economic well-being.	Interpreter services; diversity training and services; First Nations, French and immigrant liaison workers; youth/women's clinic; Aboriginal health strategy; gang awareness committee; kinship centre; discrimination policy; primary health care centres for underserved populations; HIV/AIDS services and programs for vulnerable populations.
Gender	Gender refers to the many different roles, personality traits, attitudes, behaviours, values, relative powers and influences which society assigns to the two sexes. Each gender has specific health issues or may be affected in different ways by the same issues.	Women's health programs; mom's groups; young girls groups (to develop a healthy body image); participating in development of provincial strategy; violence intervention programs; paternity/maternity leave policies; parenting classes for fathers; survey of rural women's health; gender-based analysis; men's wellness fair; transgender health program.

tions of NMDH may have affected how actions on determinants were rated. Respondents also noted difficulty in classifying initiatives under a single determinant since they are often cross-cutting. Often action on the NMDH was part of a larger provincial initiative or strategic plan, which made it hard to rate. The variability of response rates among the provinces lowers the confidence of combined results.

Despite these limitations, this survey provides useful baseline information for future developments. The present results will be combined with interviews of key informants from health regions and their

partners (i.e., NGOs, private sector, non-health ministries) to more fully understand the policy and practice experiences of intersectoral collaboration in addressing the broader determinants of health (to be reported elsewhere). What may underlie, for example, the greater attention to culture by RHAs in the West? Why is there a generally lower degree of action on several NMDH by Central region RHAs? Do regional differences in action on certain NMDH reflect local priorities shaped predominantly by local context, as Eyles suggested,[1] or are other factors at work?

We will analyze how various individual, interpersonal, organizational and structural factors limit or facilitate intersectoral collaboration. Finally, we will examine the nature of initiatives undertaken by health regions to address the NMDH. We also encourage others to extend and enhance this baseline knowledge of regional interest in and contribution to addressing the NMDH that are so critical to our population's health. Together, these analyses should provide a much-needed springboard to develop future research programs and policy initiatives in this important area of health promotion and population health. Finally, we intend to undertake more detailed case studies of selected RHAs on selected NMDH. An incremental, systematic approach will yield more precise, detailed information on specific determinants of health and actions of specific regions of Canada.

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RÉSUMÉ

Contexte : Le système de santé canadien fait l'objet de réformes. L'une des grandes tendances des 10 dernières années a été de créer des régions sanitaires. Ce changement structurel s'est fait en parallèle avec une concentration accrue sur la santé de la population et les déterminants généraux de la santé. Par ailleurs, on assiste à un mouvement en faveur de la collaboration intersectorielle (c.-à-d. entre les divers segments du système de santé et entre la santé et les autres secteurs de la société). Notre étude préliminaire visait à déterminer le niveau d'action interne autodéclaré (à l'intérieur des offices régionaux de la santé) et le niveau de collaboration intersectorielle entre les offices régionaux de la santé de tout le Canada par rapport à 10 déterminants de la santé.

Méthode : De septembre 2003 à février 2004, nous avons administré un sondage aux offices régionaux de la santé des provinces canadiennes (n=69). À l'aide du logiciel SPSS 12.0, nous avons produit des fréquences pour les niveaux autodéclarés d'action interne et intersectorielle par rapport à chaque déterminant. D'autres analyses ont été effectuées pour comparer les régions rurales et suburbaines aux régions urbaines, et pour comparer l'Ouest, le Centre et l'Est du Canada.

Résultats : Sur les 10 déterminants de la santé à l'étude, le développement de l'enfant et les pratiques d'hygiène personnelle ont été cités par la majorité des régions sanitaires comme étant parmi ceux qui reçoivent le plus d'attention, tant à l'interne qu'à la faveur d'activités intersectorielles. La culture, le sexe et l'emploi/les conditions de travail sont les déterminants qui ont reçu le moins d'attention dans la plupart des régions.

Conclusion : Les résultats de ce sondage préliminaire nous donnent un premier portrait pancanadien des activités des régions sanitaires portant sur les nombreux déterminants de la santé non médicaux. Ils constituent un ensemble de données de départ, à partir duquel on pourra évaluer les progrès futurs et amorcer des analyses approfondies de secteurs d'activité et de collaboration intersectorielle précis.