7 Rural and Remote Communities

Directions for Change

- ***Establish a new Rural and Remote Access Fund to support new approaches for delivering health care services and improve the health of people in rural and remote communities.***
- ***Use a portion of the Fund to address the demand for health care providers in these communities.***
- ***Expand telehealth to improve access to care.***

The Case for Change

Given its geographic makeup, Canada faces unique challenges in the delivery of health care. The vastness of the Canadian landscape, combined with the fact that many Canadians live in isolated and remote communities, makes it difficult to ensure that all our citizens have access to health care services regardless of where they live.

Canada may, in fact, have a very good health care system with health outcomes that are generally among the best in the world. But there are growing signs that this is not the reality for Canadians living in smaller or more isolated communities across the country.

During the Commission's consultations, Canadians living in rural and remote communities spoke directly about their serious concerns. They spoke of the need for good health and good access to health care not only because it is essential to sustain their own quality of life, but also the quality of life in their communities (CPRN 2001).

People's choice of whether or not to live in smaller communities is affected by whether or not they can get reasonable access to health care (Association des régions du Québec 2002). That view was echoed by rural physicians who said, "geography is a determinant of health" (Society of Rural Physicians of Canada 2002).

Information on disparities in health confirms that view – geography is, in fact, a determinant of health. People in rural and remote communities have poorer health status than Canadians who live in larger centres. Access to health care also is a problem, not only because of distances, but because these communities struggle to attract and keep nurses, doctors and other health care providers.

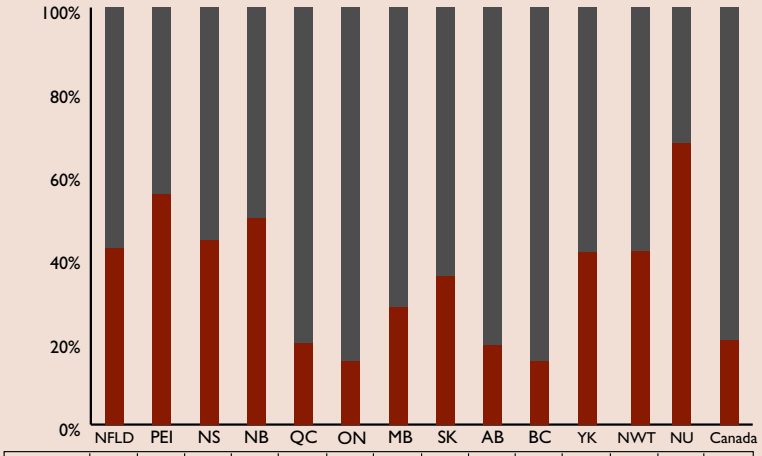
Recommendations in other chapters of this report – to expand primary health care, expand coverage for home care and prescription drugs, or shorten waiting times – will have an impact on people in smaller communities. But the focus of this chapter is squarely on two pressing issues: improving health and improving access to health care for people in rural and remote communities.

Identifying the Issues

Using the Statistics Canada definition of "rural," Figure 7.1 shows that there are wide variations in the proportion of rural to urban populations in each of the provinces and territories. The proportions range from just over 15% in British Columbia and Ontario to 68% in Nunavut. However, these proportions tell only part of the story. While the percentages in provinces like Ontario may be small, because of the size of the population, the numbers are actually quite large.

Rural Canada is not a single, homogeneous population. Diversity is a characteristic of Canada and it applies to smaller communities just as it does to the largest cities. Some rural communities are relatively close to major urban centres while others are not. Some are located in large agricultural regions, while others are coastal communities or located in the remotest regions of Canada's north. Both the health needs and the way in which they should be addressed vary for different communities. As with many other issues in health care, there is no "one size fits all" solution.

Figure 7.1 Population Counts (Thousands) for Canada, Provinces and Territories, and Census Division by Urban and Rural, 2001 Census – 100% Data



	NFLD	PEI	NS	NB	QC	ON	MB	SK	AB	BC	YK	NWT	NU	Canada
Urban	296	61	507	368	5,817	9,663	805	629	2,405	3,310	17	22	9	23,908
Rural	217	75	401	362	1,420	1,747	314	350	570	598	12	16	18	6,099

Note: Statistics Canada defines rural population in terms of the rural fringes of census metropolitan areas (CMAs) and census agglomerations (CAs), as well as populations living in rural areas outside CMAs and CAs. A CMA or CA is an area consisting of one or more adjacent municipalities situated around a major urban core. To form a CMA, the urban core must have a population of at least 100,000. To form a CA, the urban core must have a population of at least 10,000. Yukon and the Northwest Territories have high urban percentages because of the concentration of population in Whitehorse (CA = 21, 405 in 2001) and Yellowknife (CA = 16,541 in 2001).

Source: Statistics Canada 2002b, 2001b.

While there are clear distinctions between "rural" and "remote" communities, to simplify the language in this chapter, the terms "rural" or "smaller communities" are occasionally used to refer to all types of rural and remote communities. Issues specific to these communities also overlap with Aboriginal health issues (addressed in more detail in Chapter 10) since many Aboriginal peoples live in smaller communities.

Rural communities may be diverse, but they share some common problems in health status, in access to health care, and in approaches that have typically been taken in the past to address those issues.

Disparities in Health

Health indicators have consistently shown that the health status of people living in rural communities, especially people in northern communities, is not as good as the rest of the Canadian population.

Statistics Canada and the Canadian Institute for Health Information (CIHI) developed health indicators for 139 health regions in Canada. They grouped health regions into three categories: predominantly urban, intermediate and predominantly rural (see Table 7.1). This information shows that:

- Life expectancy for people in predominantly rural regions is less than the Canadian average;
- Disability rates are higher in smaller communities;
- Rates for accidents, poisoning and violence are also higher in smaller communities; and
- People living in remote northern communities are the least healthy and have the lowest life and disability-free life expectancies.

Table 7.1
Health Status for Populations in Predominately Urban, Intermediate and Predominately Rural Health Regions in Canada, 1996[1]

Indicator of Health Status	Predominantly Urban	Intermediate	Predominately Rural
Life expectancy at birth: years	78.8	77.7	77.0
Infant mortality rate per 1,000 live births	5.1	6.3	7.1
Total mortality: age-standardized rate per 100,000 people	657.0	704.8	748.3
All circulatory disease-related deaths: age-standardized rate per 100,000 people	243.4	260.5	269.6
All cancer-related deaths: age-standardized rate per 100,000 people	181.1	193.0	194.6
Unintentional injury-related deaths: age-standardized rate per 100,000 people	25.9	34.7	45.4

1 The health regions are grouped according to proportion of total population located in rural and small town (RST) areas in a manner similar to the OECD classification of rural and urban. Predominately urban health regions contained less than 15% RST population; intermediate health regions contained 15-50% RST population and predominately rural health regions contained over 50% RST population. The rates are the average values for the health-region groups. Data are as of 2001.The data also have not been adjusted to take into account the gender distribution of people in the different regions.

Source: Statistics Canada 2001c.

The health of a community also appears to be inversely related to the remoteness of its location. In Quebec, for example, there is "a trend toward a progressive deterioration in health as one moves from [the] area bordering urban centres into the very remote hinterland" (Pampalon 1991, 359). The situation is similar in most other provinces and territories. In fact, these challenges are not unique to Canada. Other countries such as the United States, Australia, and even relatively small and compact countries like the United Kingdom, have similar challenges (Gamm et al. 2002; Humphreys et al. 1996; Braden and Beauregard 1994; Fearn 1987).

Disparities in Access to Health Care

Canadians in rural communities often have difficulty accessing primary health care and keeping health care providers in their communities, let alone accessing diagnostic services and other more advanced treatments. In some northern communities, the facilities are limited and in serious need of upgrading.

People in rural communities also have the added burden of paying for the high costs of travel in order to access the care they need. This often means days or weeks away from family and social support as well as the added cost of accommodation and meals.

In the 1990s, many provinces took steps to rationalize the delivery and administration of health care as part of health care reforms. As a result, some services were centralized into larger centres. Partly because of these changes, provincial and territorial ministries of health and regional health authorities have used a number of different approaches to improve access through outreach programs, financial assistance for people who need to travel to access care, and new delivery approaches like telehealth. These efforts, to greater or lesser degrees, have helped improve access. But the problem is far from solved. In fact, some would say that there is an "inverse care law" in operation. People in rural communities have poorer health status and greater needs for primary health care, yet they are not as well served and have more difficulty accessing health care services than people in urban centres.

Disparities in Access to Health Care Providers

Problems in access to health services quite often stem from serious shortages in health care providers in rural communities.

Access to physicians and specialists varies significantly across the country and some communities do not have access to even the most basic health care services because they lack the necessary health care providers. In 1993, there was less than one physician per 1,000 people in rural and small town areas, compared to two or more physicians per 1,000 people in larger urban centres. The average resident in rural communities and small towns was 10 km from a physician, compared to less than 2 km for a resident in larger urban centres (Ng et al. 1999).

In northern communities, the problems are stark. About 16,000 people live in the most northern part of Canada, at 65-69 degrees north latitude (northern parts of Yukon, Northwest Territories and Nunavut). About two-thirds of them live more than 100 km from a physician. And no physicians normally live above 70 degrees north latitude to serve the 3,300 people living there (Ng et al. 1999).

Given the shortages of nurses across the country, it is safe to assume the problems of recruiting and retaining nurses in smaller communities are serious indeed. According to the Canadian Health Services Research Foundation, "It's not just a question of having a lot of people to work in the healthcare system; it's also about making sure healthcare workers are well distributed through the provinces and among urban, rural and remote areas" (CHSRF 2002b, 3).

> *"… What community wants an uncommitted doctor who practices there for a few years before decamping to a more desirable locale?…"*
>
> CANADIAN FEDERATION OF MEDICAL STUDENTS 2001. WRITTEN SUBMISSION.

The problem of attracting health care providers to rural communities is exacerbated by competition among individual provinces and territories. Keeping health care providers in rural areas is an ongoing problem, and territories compete to attract and retain the supply of health care providers they need.

The problems with the supply of physicians in rural and remote communities demand solutions. But the experiences of many provinces and territories as well as OECD countries suggest that short-term solutions aimed at increasing the overall supply of physicians do not necessarily translate into improvements in their supply in these communities. Provincial and territorial governments have tried providing incentives to encourage physicians to move to rural areas through higher pay or other financial incentives. In other cases, governments have tried to limit where new physicians can practice in order to encourage more of them to work in rural communities.

> *"The more exposure you have in training and post-graduate training programs to rural settings … the more likely we are to have people who want to work in rural communities."*
>
> BRITISH COLUMBIA MEDICAL ASSOCIATION. PRESENTATION AT VANCOUVER PUBLIC HEARING.

Physicians typically object to measures that limit their ability to choose where they practice. Part of the answer certainly lies in increasing physicians' exposure to rural settings as part of their education and training. With increased exposure to, and experience in, rural settings, the likelihood of graduating doctors wanting to practice in rural settings increases (BCMA 2002). Recent efforts by the Society of Rural Physicians of Canada and the College of Family Physicians of Canada to develop national curricula and guidelines are a step in the right direction. But there is much more to be done.

Differences in Approaches

Currently, there is no coherent national approach for addressing issues specific to rural communities. Provinces and territories are developing different ways to address the issues, but they are doing so in isolation, without enough attention to co-ordination or the overall picture.

A review of current approaches points to the following issues:

- **The lack of consensus on what "adequate" access should include** – There is no consensus today on what constitutes adequate access and what services are most important for people to be able to access. One approach is to identify a basic core of services for different types of rural communities. This approach would clearly distinguish between the core services that would be available to people in their own communities and the services they would have to access from other centres. Key stakeholders, including health care providers and community members, should be involved in identifying and agreeing on the core services to be available in each community or region.

- **The need for effective linkages with larger centres** – While some health care services can be delivered in smaller communities, some form of networked system that links those communities with urban centres is inevitable. Smaller communities simply cannot sustain a full range of services. Ontario's "Rural and Northern Health Care Framework" (Ontario. Ministry of Health 1997) is an example of linkages between rural facilities, hospitals in regional centres and tertiary-care institutions in metropolitan areas, but it is by no means the only model. Similar linkages were proposed by Saskatchewan's Commission on Medicare (Fyke 2001). Specialized services will continue to be concentrated in larger centres, but their linkages to rural communities should be improved.
- **The challenges of serving the smallest and most remote communities** – These communities are the most difficult to serve because they have too few people to sustain anything but the most basic services, and even that can be difficult. Other countries face similar challenges and the models they have developed may be worth examining in Canada. For example, Australia developed a "Healthy Horizons" framework for improving access and health in small and remote communities (Australia 1999). This and similar models in other countries should be explored to see if they could be adapted to suit the unique Canadian context.
- **A focus on symptoms rather than causes** – With few exceptions, strategies and programs have focused on how to deliver services and how to recruit and retain more health care providers. Although lack of access to health services as well as physicians and nurses are undoubtedly very serious problems, resolving these issues may not be enough to improve the health status of people in rural communities in a significant way. Instead, more emphasis needs to be placed on addressing the fundamental causes of the "rural health deficit."
- **The predominance of "urban" approaches applied to rural communities** – Many health care administrators, planners and providers rely on urban-focused approaches instead of developing alternative models to suit the unique circumstances of those communities. These primarily urban models make it difficult, if not impossible, for smaller communities to catch up to their urban counterparts. There is an increasing understanding that rural health problems are unlikely to be adequately addressed by mainstream programs alone (Humphreys et al. 2002). Unique rural health problems require urgent attention and unique rural conditions need to be taken into account in addressing those problems. The situation for health care providers is a case in point. Trends point to increasing specialization in skills and training. This might meet the needs of "high-tech" and research-intensive medicine in large hospitals in major urban centres, but the needs are almost the opposite for rural communities. They need a different kind of "specialist" – namely, well-trained and experienced generalist practitioners who "specialize" in delivering high quality primary health care in rural communities.
- **The lack of research** – Policies and strategies for improving health and health care in smaller communities have not been based on solid evidence or research. Until recently, Canadian research on rural health issues has been piecemeal in nature and limited to small-scale projects. To make matters worse, despite the wealth of health-related data at

the federal, provincial and territorial levels, most data collected or released are frequently not presented in a manner that supports meaningful rural health research and analysis (Pitblado et al. 1999). Furthermore, as with health research in general, there is little connection between decision makers and researchers. As a result, rural health policies, strategies, programs and practice have not been as effective as they could have been.

Setting a Clear Vision and Principles

Clearly, there are important challenges to address. The place to start is with a vision where Canadians residing in rural and remote regions and communities are as healthy as people living in metropolitan and other urban centres. This vision was echoed by Jose Amaujaq Kusugak at the Montreal public hearing who said, "I believe that … the success of our Health Care System as a whole will be judged not by the quality or service available in the best of urban facilities, but by the equality of service Canada can provide to its remote and northern communities" (Inuit Tapiriit Kanatami 2002).

This vision should guide all rural health initiatives including policy development, program planning, clinical practice, research, and health human resources development. It should be supported by the following principles:

- Rural health initiatives should be designed to provide equity in both access to health care and in health outcomes.
- No single strategy is appropriate for all communities. Unique approaches are needed to address the diverse health needs and different circumstances of different communities.
- Both short-term, immediate issues (such as access to nurses and doctors) and long-term, more fundamental issues (such as economic and living conditions) must be addressed.
- Health strategies should be focused on outcomes. Different approaches can be used as long as the objective is to improve health and access to health care.
- Policies, strategies and programs should be based on evidence and informed by research. The outcomes of various approaches also need to be objectively assessed.
- Strategies developed for urban centres may or may not be appropriate for rural communities. Rural communities may need to adapt urban-based approaches or may have to design their own strategies to meet their unique needs.
- Community members, federal, provincial and territorial governments, regional health authorities, health care providers and other stakeholders need to be involved in finding solutions and taking necessary actions.

> *"The future is grounded in the present. A keen appreciation of how rural health care is unique is important in determining possible models that will work and can be sustained."*
>
> Society of Rural Physicians of Canada 2001. Written submission.

A truly national approach is needed to address the serious health challenges in rural health and to complement local or regional initiatives. Although many of these health issues have regional or local characteristics, they share common features and common problems – problems that require a national response. The provinces have constitutional responsibility for

administering provincial health care systems and delivering health services to their citizens. However, the federal government could play a co-ordinating and facilitating role by working closely with the provinces and territories, as well as other stakeholders. Taken together, the following cluster of actions recommended in this and other chapters of this report will ensure that people in rural communities have better access to health care and better health.

Improving Access to Health Care

Expanding the Supply of Health Care Providers in Smaller Communities

RECOMMENDATION 30:

The Rural and Remote Access Fund should be used to attract and retain health care providers.

RECOMMENDATION 31:

A portion of the Rural and Remote Access Fund should be used to support innovative ways of expanding rural experiences for physicians, nurses and other health care providers as part of their education and training.

Improving access in smaller communities is tied directly to their ability to attract and retain health care providers. The immediate injection of additional funds from the Rural and Remote Access Fund should be directed to addressing this serious problem. Provinces and territories should decide which approaches are most appropriate for their communities, including the short-term option of using financial incentives to attract doctors and nurses to rural and remote communities.

A more promising solution over the longer term lies in the education and training of health care providers. As noted by the Association of Canadian Medical Colleges, a number of rural initiatives are taking place in Canadian medical schools (ACMC 2002). However, more work needs to be done to expand training opportunities for a range of health care professionals in rural and remote settings. Collaborative approaches to rural health practice are needed to get the maximum benefits from the skills of multidisciplinary teams and networks. More flexible use of health care providers should be encouraged, and training and support should be given to informal caregivers to support the role they play in rural settings.

Expanding Telehealth Approaches

RECOMMENDATION 32:

The Rural and Remote Access Fund should be used to support the expansion of telehealth approaches.

A number of innovative approaches can be used to improve access in smaller communities. Telehealth is a prime example. It uses information technologies to link patients and health care providers to a spectrum of services that can be brought together to provide higher quality care.

It offers tremendous possibilities for overcoming the obstacles of distance and improving access to health care in rural communities (Pong 2002). People in rural and remote locations can be linked to family physicians, specialists and other health services in major centres. Health care providers can diagnose, treat and provide consultations at a distance. Patients and health care providers can have access to information about illnesses and the approach can also be used both for educating patients and providing professional development for health care providers in more remote locations. A variety of approaches can be used ranging from tele-triage to tele-education, and more recently, to tele-homecare. Several provinces have done extensive work on telehealth initiatives, particularly Newfoundland and Labrador.

Telehealth is particularly promising for northern Canada. The Honourable Edward Picco, Minister of Health and Social Services in Nunavut, noted that telehealth has the potential to be a lifesaver in Nunavut (Nunavut 2002). Ensuring access to health care is a daunting challenge when some people live in communities more than 2,000 km apart. Recognizing the potential benefits, the Government of Nunavut has signed agreements with the governments of Australia and Newfoundland and Labrador to share information and new developments in telehealth. In their view, increased use of telehealth technology will result both in cost savings and in improved health for territorial residents (Nunavut 2002).

Similarly, conditions in the north have required Yukoners to find innovative ways of providing effective and accessible health care. Telehealth applications have been used to facilitate increased mental health services, professional and continuing education, and family doctor visits. Most communities in the Yukon are a five- to six-hour drive away from Whitehorse and many are in locations that often are inaccessible by road or plane, especially in bad weather. There are instances where Yukon residents must rely on out-of-territory hospitals for specialized services. The cost of a single flight can be more than $10,000. Consequently, the costs of the Yukon medical travel plan have increased by 26% over the last five years (Yukon 2002).

The situation in the Northwest Territories is similar. People in the Northwest Territories face serious health issues including high rates of certain illnesses combined with a number of social factors that affect health. These challenges are exacerbated by the fact that health care services are stretched thin and access is seriously limited by the interplay of geographical expanse and limited health human resources and health care facilities. As a result, the government spends 6.5% of its budget for health and social services on transportation (NWT 2002).

With better evidence and evaluation, more effective choices can be made about the best use of telehealth technologies in specific settings. Actual evidence of the benefits of telehealth is minimal (Roine et al. 2001) and one study (Whitten et al. 2002, 1437) concluded that “there is presently no persuasive evidence about whether telemedicine represents a cost-effective means of delivering health care.” This is not to suggest that telehealth initiatives should not proceed. Rather, it points to a need for increased attention and effort in the evaluation of telehealth applications.

Because of the potential for telehealth to improve access to health care, the Rural and Remote Access Fund should be used to expand telehealth applications. Funds should be used to support both the necessary equipment within smaller communities as well as the necessary education, training and support to allow these technologies to be used and managed effectively.

Early experience in the provinces is pointing to the immense value of telelearning and continuing education using information and communication technologies. Individual investments in telehealth should reflect the needs in individual communities and ensure that:

- The necessary policies are in place for licensing health care providers to deliver health services at a distance (in particular, cross-jurisdictionally);
- Privacy and security issues for patients have been adequately addressed;
- Training and support is available to facilitate effective and efficient use of telehealth applications; and
- The impact of telehealth applications on health outcomes in rural and remote communities is assessed.

Implementation of telehealth is hampered by the fact that many smaller communities do not have high-speed connections to the Internet. These connections depend on having access to technology known as basic broadband infrastructure. According to a recent report by the OECD (2001c), Canada ranks second in terms of overall broadband access, behind Korea, but ahead of Sweden and the United States. Despite this relatively high ranking, the National Broadband Task Force estimates that there are approximately 5,000 communities (79% of all Canadian communities) that fall into the "harder-to-serve" category. In their view, "the most revolutionary aspect of broadband is its potential to reduce … distance and time as cost factors – in economic activity and in providing public services" (Canada. Industry Canada 2001, 3). The Task Force recommended that broadband facilities and services be extended to all Canadian communities by 2004, with priority given to First Nations, Inuit, rural, and remote communities.

Priorities for future expansion of Canada's broadband infrastructure should take central account of how telehealth care can improve access to health care in rural and remote communities across the country.

Improving Health

RECOMMENDATION 33:

The Rural and Remote Access Fund should be used to support innovative ways of delivering health care services to smaller communities and to improve the health of people in those communities.

In the past, innovative approaches have been funded primarily through pilot projects. The problem with this approach is that projects tend to be limited in both size and scope. Full-scale demonstration projects, supported by the Rural and Remote Access Fund, would allow provinces and territories to test not only innovative approaches to delivery of health care services and initiatives but also to explore the underlying causes of health problems in smaller communities.

Our experience in addressing a full range of factors and conditions that affect people's health at the community or regional level has been limited. As a result, the relationship between health determinants, health behaviours and health status is largely unknown (Roussos and Fawcett 2000). Lower educational attainment, higher unemployment and poorer access to health care undoubtedly have an impact on the health status of people in smaller communities, but the specific impact of these factors has not been studied in a comprehensive way. Similarly, the

impact of living in smaller communities on health behaviours and health status needs much more study. It is even less clear how adverse conditions in rural and remote communities can be ameliorated or reversed.

Multi-faceted approaches to strengthen social capital, enhance community resilience, build a viable economic base, and foster positive health behaviours are also limited. But there are some good models to follow such as the Canadian Heart Health Initiative, the Healthy Community Movement, and Better Beginnings Better Futures. These approaches take a broader approach, not just focusing on a particular illness but also including a number of factors that affect people's health.

The population health demonstration projects envisioned in this report should be much larger in scale than previous pilot projects and involve different partners in different sectors of the economy and society in those communities. The objective is to find the best approaches to strengthen community resiliency, social capital and local capacity, improve healthy behaviours and lifestyles, and improve the overall health status of people in rural and remote communities.

The Rural and Remote Access Fund should support provinces, territories, communities and health authorities in developing and implementing a variety of models and approaches. For the Fund to be successful, a process must be in place to monitor, evaluate and disseminate the results of these demonstration projects, and, in particular, to highlight best practices and enable Canadian communities to learn from each other's experiences. Funding should be based on demonstrated needs in communities, the use of innovative approaches to address those needs, and the potential of demonstration projects to result in overall improvements in the health of people in smaller communities across the country.

What Does This Mean for Canadians?

For people living in rural and remote communities, it means that some of their most pressing health needs will be addressed. It means that deliberate, decisive and immediate action can be taken to address severe shortages in health care providers in many smaller communities. It means the potential of new approaches like telehealth to literally bring health care to the doorstep of people in rural and remote communities can be realized. And over the longer term, it means the disparities between the health status of people in smaller communities and the rest of the Canadian population can be appreciably reduced.