



Saskatchewan
Health Research
FOUNDATION

Our Sense of Community Well Being:

The value of rural and remote health
services research in Saskatchewan

June 2007



Building a healthy Saskatchewan through health research



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Health Research
FOUNDATION

About SHRF

The Saskatchewan Health Research Foundation (SHRF) is the provincial agency responsible for funding, facilitating and promoting health research in Saskatchewan. This includes leading the implementation of Saskatchewan's *Health Research Strategy* (2004).

For details about SHRF's mandate, activities, board and staff, and the provincial *Health Research Strategy*, please visit our Web site.

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Introduction

In striving to solve or address issues and opportunities in health care in Saskatchewan today, we need to remember our roots.

From the voices of over 55 participants in recent roundtable discussions, the importance of this sense of place – this province we call Saskatchewan – is a critical success factor to its citizens' well being. It is something that drives the commitment thousands of professionals and health care providers demonstrate every day. And it is an important underpinning to the ongoing value health research should play in rural and remote areas of Saskatchewan.

Beginning with the Health Research Summit in 2004, through the writing and distribution of the Saskatchewan Health Research Foundation's (SHRF) discussion paper on identifying research priorities for rural and remote health services, and culminating in the roundtable discussions held in the summer of 2006, community stands out as the primary theme.

But what is community? In the context of health research priorities, what does this often repeated word mean?

In its simplest definition, community is how we work together. From comments received by participants throughout this two-year long journey, research priorities must look at how to nurture the connections with community, support inter-disciplinary health service provision, encourage dialogue, and encourage collaboration. Health research should not segment and isolate rural and remote Saskatchewan as a "laboratory" but enrich and integrate health care providers, researchers, and the people of Saskatchewan towards pragmatic solutions.

It sounds so simple and yet in the busy world of health care today, with service providers feeling extended sometimes beyond their capacity, participants say we have forgotten to share best practices and talk to each other.

Saskatchewan has something unique – call it a sense of community that can permeate research in many ways:

- Health status is linked to economics, community viability, and sustainable communities;
- Service delivery models, such as primary health care, depend not on more resources, but the more efficient integration of these resources – human, financial, and other – at the rural and remote level;
- Jurisdictional issues need more open dialogue and sharing to ensure they are not an impediment to community development and involvement in the provision of rural and remote health care; and
- Human and financial resources need to be maximized to effectively match resources to need and ensure strong health care outcomes.

"...sometimes there's an understanding and acknowledgement that people need to change what it is they are doing. There is not always the political will to allow that to happen – to let that evolve. And that can be a real hindrance to applying some of this research and applying some of the ideas that people have."

- Roundtable participant

"A collaborative approach engages consumers, clients, researchers, delivery organizations, even in terms of trying to move beyond the health sector. So, taking a collaborative approach and actually really focusing on a couple of areas and looking at how to make a big difference in those key strategic areas is the key; really saying five years from now we want a name in this province. We want to be the place that people come to learn about because we've done it so well."

- Roundtable participant

"It was also noted that there is a need to build capacity within the research community and at the local level, primarily within the health authorities that are responsible for the delivery of care in the province."

- Roundtable participant

All of these themes, which come directly from recently held provincial roundtables, demonstrate the overlap that exists with most other priority areas in Saskatchewan's *Health Research Strategy* – Aboriginal health; seniors' needs; health systems and health policy research; the determinants of health status; and public health, water safety, and food safety. The Strategy also emphasizes the importance of ensuring research knowledge is shared and leads to health and social benefits.

If Saskatchewan is to tackle health research of importance to rural and remote residents and be a leader in the field, how do we get there?

Participants perhaps say it best: *we need the will to evolve, we need to increase collaboration, and we need capacity at the local level to effect change.*

The Context of the Discussions

Definitions play an important role when it comes to the discussion of rural and remote health services research.

Rural and Remote

Saskatchewan's culturally diverse population is widely dispersed over a vast geography. Outside its urban centres, rural population densities and living conditions vary greatly – from agricultural areas to small towns and villages to remote and wilderness areas. Meeting the diverse health needs of people living in rural and remote areas and delivering health services across this vast geography presents unique and complex challenges.

Throughout the consultations, there was much discussion regarding the definitions of "rural," "remote," and "northern." This report does not examine those definitions in detail. For consistency, we have adopted definitions used by Statistics Canada. Rural and remote are areas with a population concentration of less than 1,000 and a population density of up to 400 people per square kilometre.

Based on this definition, 36% of Saskatchewan residents live in rural and remote areas. This is significantly higher than the Canadian average of 20% and more than both neighbouring provinces. Only the Atlantic Provinces and the Territories are more rural than Saskatchewan.

Saskatchewan's Population and Health Realities

According to Statistics Canada, Saskatchewan's population fell for the ninth consecutive time in the last 10 years. Annual demographic estimates indicate that as of July 1st, 2006 the population of the province was 985,386 people.

Other facts regarding Saskatchewan's rural and remote population which impact health services research include:

- In 2001, the total farm population was 123,385, down 15% from 1996;
- Saskatchewan's total rural population declined by 3.6% between 1996 and 2001;
- Total rural population continues to decline as a percentage of total population; and
- In 2001, our First Nations population was 13.5% of the total population, and remains the fastest growing population segment.

There is a lot of evidence regarding the challenges facing health service delivery in rural and remote Saskatchewan. Media reports, for example, routinely mention the erosion of rural communities and social supports such as transportation, school closures, the decline of the family farm, and extended distances to health services.

Comparing Saskatchewan to other places

Canada:

3 persons/square kilometre

Saskatchewan:

1.7 persons/square kilometre

Northern Administrative District*:

0.1 persons/square kilometre

United Kingdom:

239 persons/square kilometre

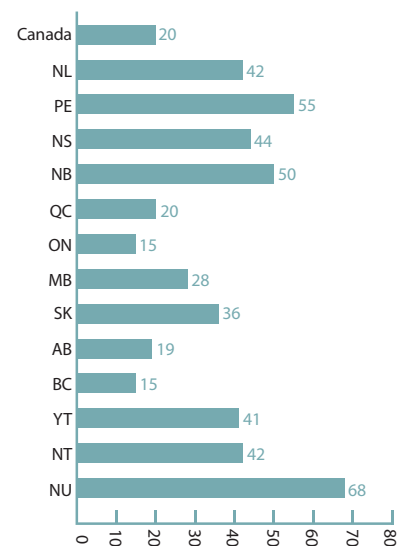
**The half of Saskatchewan north of its geographic centre (Montreal Lake).*

1966: 51% of Saskatchewan population living in rural and remote areas.

2001: 36% of Saskatchewan population living in rural and remote areas.

(Sources: Fung et al., 1999; Statistics Canada, 2002)

Figure 1: Percentage of Rural and Remote Populations by Province/Territory, Canada



Health realities in rural and remote areas

Saskatchewan (Source: Saskatchewan Health 2004)

- Geographic location has a large impact on the ability to access immunization services in Saskatchewan, particularly among the elderly in rural and remote regions.
- Saskatchewan residents in rural and remote regions are more likely to encounter barriers to accessing care, including information and advice, due to their location.
- Rural and remote areas pose problems for service delivery in terms of the difficulty and costs associated with arranging services at home.
- Hospitalization rates for preventable conditions tend to be higher in rural areas than urban areas due to differences in the extent to which preventative care and management are available and accessible in the community.
- Satisfaction with physician services is generally lower in rural and remote regions.

Canada (Sources: Statistics Canada, 2003; Pong et al., 1999)

- A lower proportion of people living in northern regions reported excellent or very good functional health (based on eight factors: vision, hearing, speech, mobility, dexterity, feelings, cognition, and pain).
- Compared to the national average, a lower proportion of people living in rural and remote regions rated their health as "excellent."
- Northern regions have higher unmet health care needs compared to the national average.
- Infant mortality rates are higher and expected life spans shorter in rural and remote areas.
- Agriculture involves hazardous working conditions and has been identified as among the most dangerous occupations.

Some examples of the health-related challenges associated with a substantially rural and dispersed population are listed in the side bar. Addressing these challenges, however, can create opportunities for innovation because of the need to explore and develop new models of service delivery, culturally sensitive practices and appropriate health indicators for specific groups or communities.

Health System Description

Saskatchewan's health system is comprised of 13 health authorities spanning major urban, rural, and northern areas of the province, and every region has a rural component. Health services for First Nations people in Saskatchewan are funded by the provincial and federal governments and are often provided by First Nations organizations. This adds a level of complexity for understanding governance and service access issues.

The system has been adapting to the changing demographic profile of the province. First Nations' health needs, differences in health requirements by gender, and diversity of cultural backgrounds and experiences all impact the need for pragmatic delivery of health services. Recognizing all aspects of the demographic nature of Saskatchewan has required the system to explore new ways to deliver health services, such as primary health care models and innovative technology. Some innovative steps to improve the health systems and health status of rural and remote populations are:

- Northern Health Strategy, a working group of 13 northern health organizations working together to improve the health status of all northern Saskatchewan residents;
- Telehealth Saskatchewan, providing clinical services (client to specialist) and continuing education to health providers and health information to patients and the public; and
- Programs to help recruit and retain physicians in rural Saskatchewan.

National Context

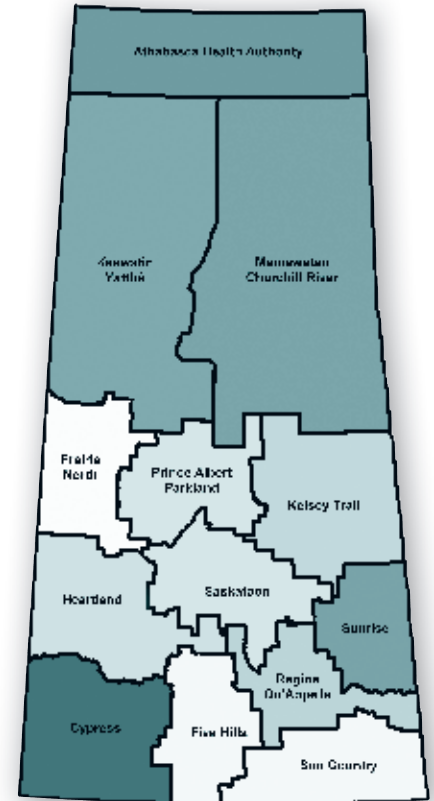
The *Commission on the Future of Health Care in Canada* (2002) pointed to a lack of rural and remote health research as a barrier to the development of policies and strategies in the field: "*Policies and strategies for improving health and health care in smaller communities have not been based on solid evidence or research. Until recently, Canadian research on rural health issues has been piecemeal in nature and limited to small-scale projects*" (Commission on the Future of Health Care in Canada, 2002: p. 164).

Listening for Directions I (2001) and *II* (2004) brought together a number of key national agencies interested in health services research (such as the Canadian Health Services Research Foundation, the Canadian Institutes of Health Research (CIHR), and the Canadian Institute for Health Information) in an effort to work

together in a consultative process to identify key research themes or questions. Rural and remote health services issues or questions identified included human resource needs, innovative models of care, and technological initiatives. The lead agencies have been implementing programs to advance these areas and evaluate progress.

Reflecting the emphasis on rural and remote health research noted above, CIHR – Canada’s main national health research funding agency – has substantially increased its investment in the area. From 2000-01 to 2004-05 CIHR spending on rural and remote health research increased from \$733,054 to \$10.4 million. Clearly there is opportunity for Saskatchewan researchers to secure funding for rural and remote health research.

Figure 2: Health Authorities in Saskatchewan



(Source: Saskatchewan Health, 2003)

What We Did: Scope of the Consultations

Health Research Summit

The process of engagement on rural and remote health services research really started in 2004, with the Health Research Summit. This SHRF-sponsored event brought together leading thinkers and decision-makers from Saskatchewan's universities, health system, government, charitable sector, community organizations, and private sector to reflect on the *Health Research Strategy* and identify key next steps for taking it from the vision stage to the action stage.

One of the summit discussion groups focused specifically on rural and remote health services. When it came to research, there were a number of next steps suggested by Summit delegates. There was a strong recognition that rural and remote areas present a unique context because of the heterogeneity of communities. Every community has its own strengths and challenges and the value of research would need to reflect a community development approach that engages the community in the research process and in developing new models of health care. A number of research priorities and critical action steps were suggested:

Research Priorities from Summit

1. Access vs. Quality

- Implementation of primary health care
- Integration of physical and mental health care and services
- Delivery of secondary and tertiary care

2. Transitions & Continuity of Care

- Current practices
- New models
- New pathways
- Ways to maximize continuity

3. Human Resources

- Resource base – professional and community (clients, family caregivers, allied health workers)
- Optimum use of health human resources
- Skill mix
- Continuing education
- Matching needs of community



Critical Action Steps from Summit

1. Clinical Services

- Evaluate existing models of care with attention to specific skills and the access issue
- Develop and evaluate new, innovative models of care that:
 - Respect 'unique' rural and remote issues
 - Are culturally appropriate
 - May cross jurisdictional barriers

2. Population Health

- Develop methods to communicate engagement in health research with an emphasis on the broader social context
- Nurture community and academic research partnerships

3. Systems

- Understand the skill mix in rural and remote areas, both historically and the current changes required to accommodate new and emerging roles
- Implement and evaluate continuing education to meet the needs in this unique context and to establish 'best practices'

Further Research

After the Summit, SHRF conducted additional research to identify potential challenges and subsequent opportunities in rural and remote health services research. We added a number of findings to the background knowledge:

- There is a shortage of research about elderly persons in rural and remote regions of Saskatchewan;
- The mental and physical well-being of rural and remote residents are both critical to understanding their health needs;
- The shortage of detailed, historical, provincial-level health indicators specific to rural and remote regions tends to hamper research;
- Enhancing knowledge translation capacity (or sharing and using health research) and sharing health-related information is vital to improving rural and remote health systems and health status; and
- Ongoing monitoring and evaluation of health service initiatives is important to ensure maximum effectiveness of resource allocation and client outcomes.

Roundtable Discussions

These background events became the starting point in exploring some of the complexities in setting priorities for rural and remote health services research. SHRF developed a discussion paper (*Rural and Remote Health Services in Saskatchewan: Identifying Research Priorities – April 2006*) that outlines some of the issues. The paper defines the current status of rural and remote



Table 1: Schedule of Regional Roundtable Discussions

DATE	HEALTH AUTHORITY	LOCATION
MAY/16/06	Prairie North	North Battleford
MAY/17/06	Prince Albert Parkland	Prince Albert
MAY/18/06	Mamawetan Churchill River	La Ronge
MAY/23/06	Sun Country	Stoughton
MAY/29/06	Regina Qu'Appelle	Regina
MAY/31/06	Five Hills	Moose Jaw
JUN/19/06	Cypress	Swift Current
JUL/11/06	Saskatoon	Saskatoon
JUL/12/06	Sunrise	Yorkton

health services research in Saskatchewan and was used to invite discussion on people's perceptions of the challenges, needs, and strengths in rural and remote health services research in Saskatchewan.

SHRF then undertook an extensive province-wide consultation consisting of roundtable discussions.

Roundtable discussions were held in nine health authorities and included rural residents, health service providers, researchers, municipal officials, and regional economic development officers. The discussion paper was sent to each participant prior to the event.

The roundtables focused on one key question:

If Saskatchewan is to tackle health research of importance to rural and remote residents and be a leader in the field, how do we get there?

To facilitate discussion, participants were invited to share their thoughts

and ideas about a series of questions:

- How can health services research help people living in rural and remote areas of Saskatchewan?
- Saskatchewan has a number of initiatives in place to address rural and remote health service needs.
 - ☛ What do we do well?
 - ☛ What do we need to do better?
 - ☛ Where are the gaps?
- How can research help address the gaps?
- Sharing health-related information/research is vital to improving health services for Saskatchewan residents in rural and remote areas.
 - ☛ What is working well now?
 - ☛ What are current road blocks?
 - ☛ What can we do to enhance this knowledge sharing?

The following pages provide an overview of what we heard and where SHRF believes this journey now needs to go.

What we Heard

Consultation participants overwhelmingly believe that research provides important value to the future delivery of health services in rural and remote areas of Saskatchewan (see *Appendix A for a more detailed outline of what we heard*). Based on changing demographics and continuing challenges in the delivery of health services, participants agreed that future service delivery must be designed and implemented based on the best possible evidence. Participants also felt strongly that for research to be pragmatic, it must be mindful of three key principles: involving the community; sharing and using the knowledge that is generated; and nurturing an interdisciplinary approach.

Refer to figure 3 on the following page.

Guiding Principles

Rural and remote health services research needs in Saskatchewan, according to participants, are unique. This report has already introduced some of the geographic and demographics aspects of this uniqueness. Perhaps partially because of these realities, participants clearly saw the need for some distinct guiding principles considered fundamental to all research into rural and remote health issues.

1. Guiding Principle – Community Involvement

Considering how to include local community as a vital component of research should be a key principle in the area of rural and remote health services research.

Involvement of community health professionals, residents, and other organizations cannot be token. Participants clearly voiced an opinion (in some areas, like Northern Saskatchewan, more than others) that they are tired of being “laboratories.” In addition, participants felt their involvement was not always included throughout the research cycle from the formulation of the research question to its outcome translation. Inclusion in a more committed manner would ensure that research undertaken builds understanding, support, and eventually improvements in research capacity.

2. Guiding Principle – Knowledge Sharing

SHRF has just completed a framework for increasing Saskatchewan’s capacity for knowledge translation. Knowledge translation, *Health Research in Action (2007)* is the process of sharing and using research for improvement. Participants often referred to their own awareness, or to their organizations’ awareness, of active research and/or the outcomes of that research. In addition, they often commented that even if research and its outcomes were known, there were often few mechanisms in place “at the front lines” to utilize this new knowledge.

Figure 3: Overview of What we Heard

Rural and Remote Health Services Research

Research provides important value to the future delivery of health services in rural and remote areas of Saskatchewan

Guiding Principles

Community Involvement

Knowledge Sharing

Interdisciplinary Approach

Research Themes

Determinants of Health

Service Delivery Models

Jurisdictional Issues

Human and Financial Resources

Research Examples

- Health comparisons to urban residents
- Access to emergency services and outcomes
- Impact of geography on access to diagnostic services
- Differences in services and the effects on health status
- Unique health stressors
- Impact of jurisdictional issues on the health of First Nations people
- Effect of transportation issues
- Access to primary health care and essentials for health
- Models of care delivery
- Economic realities of living in rural and remote areas
- Role of technology

Actions to Move Forward

- Create a Health Authorities Rural and Remote Health Services Research Network
- Hold a Biennial Summit on Rural and Remote Health Services Research
- Create a Chair in Rural and Remote Health Services Research
- Increase Research Funding for Community Collaboration
- Increase Capacity Investments

The framework mentioned above takes a very practical approach to building capacity for sharing and using health research that can be applied in many agencies and sectors. The framework consists of three parts: guiding principles; strategic directions and actions; and implementation guidelines. The three strategic directions will help agencies build capacity by:

- 1) explicitly acknowledging knowledge translation in job descriptions and work plans and rewarding these activities;
- 2) educating and supporting people to share and use health research; and
- 3) creating and enhancing structures, tools and policies that facilitate the process.

Using this framework in the rural and remote context is especially important given the many challenges in sharing and using health research among rural and remote communities.

3. Guiding Principle – Interdisciplinary Approach

When the people of Saskatchewan need health care, they turn to a primary health care provider. Visits to the local family physician, health clinic, nurse practitioner, pharmacist, or other health practitioner usually initiate the provision of a health care service. The interdisciplinary nature and importance of the quality of primary health care is perhaps even more critical to the health of people in rural and remote Saskatchewan because of the dispersed nature of population. The development of primary health care teams and the interdisciplinary approach allows for the provision of proactive, patient-centered care that extends beyond traditional professional or disciplinary boundaries, reaching out into the community for a more holistic approach.

Participants expect primary health care to be based on practical, scientifically sound, culturally appropriate, and socially acceptable methods.

Research Themes and Suggested Examples

It was expected that the content of the nine roundtable discussions would focus to some extent on unique regional issues. Regionalization did occur in the consultations. However, SHRF was able to define four general themes: determinants of health; service delivery models; jurisdictional issues; and human and financial resources.

Participants, to illustrate these themes, suggested a number of specific examples of research into rural and remote health. These examples follow this general introduction to each theme.

1. Theme – Determinants of Health

Consultations confirmed the health-related challenges associated with a substantially rural and remote population. Roundtable participants clearly outlined many of these challenges and expressed concern regarding the effect on long-term health status. As one participant stated, “It seems to be coming out that the farther away you are from the highway, the more unhealthy you are.”

Participants also noted that the health-related challenges are different for rural, remote and northern residents and that socio-economic status, availability of good drinking water and access to nutritious foods are equally important. A participant in La Ronge put it succinctly, "So, in some ways it's not just a health issue, it's an economic issue. It's all tied up together. When you're poor it's hard to be healthy – when you don't have a job or a place to live."

2. Theme – Service Delivery Models

Consultation participants generally agreed that initiatives in primary health care, for example, are important to the future delivery of health services in the province and expressed frustration that the implementation process appears to be slow. Primary health care, reflecting a new continuum of health care, encompasses such aspects as accessibility, health promotion, intervention, intersectoral and interprofessional co-operation, and the integration and coordination of health services. It is important to note that participants recognized that primary health care was a significantly different way of organizing the delivery of health services and that it shows great promise for rural and remote areas.

"(Primary health) is not necessarily about adding more, but it is a question of how you organize what you already have. It is not about wholesale change or doing something new. It is how you organize what you do and how you come at it. It's more process, which leads to an interesting question. Is research more about process or is it more outcomes based? And, if it is outcomes based, then what's the most efficient way to get at that outcome? Is it efficient and can we afford it?"

3. Theme – Jurisdictional Issues

Consultation participants expressed many concerns regarding the effect jurisdictional issues have on the delivery of health services in rural and remote areas. As one participant stated, "There's another issue that jumped out... and that's the issue of the boxes we continually work in." Concerns were raised regarding the sharing of information among government departments, government agencies, First Nations and health authorities. It was also noted that jurisdictional issues make it difficult for researchers to gather relevant data.

4. Theme – Human and Financial Resources

The theme of human and financial resources ran throughout the consultations. The theme was about capacity, but also about the effective and efficient use of resources. It should not be viewed as just "not enough people" or "not enough money."

Participants expressed concern and had considerable dialogue about how best to use resources – human and financial. One participant put it this way, "We can look at some of the things we do and determine whether or not they are effective so that we know whether we are spending our money in the right way, on the right things, for the right people, for the right reasons; and we could stop doing them if they are not effective."

Participants also expressed concern regarding the recruitment and retention of all types of health professionals in rural and remote areas and maintaining current levels of financial resources, but there was a balance in the discussion about effective use of current resources versus additional resources.

Examples of Research Ideas that Illustrate These Themes

Roundtable participants identified a number of ways health research could help people living and working in rural and remote areas of Saskatchewan and suggested a number of areas for study and action, including:

- Determining if residents of rural and remote areas are as healthy as residents of urban areas (*Determinants of Health*);
- Examining access to emergency services and determining outcomes based on place of residence (*Service Delivery Models*);
- Quantifying the impact of our geography on access to diagnostic services (*Determinants of Health, Service Delivery Models*);
- Studying the differences in available services and the effects on health status (*Determinants of Health, Service Delivery Models*);
- Determining the unique health stressors (i.e., pesticide exposure) inherent to living in rural and remote areas (*Determinants of Health*);
- Looking at what effect jurisdictional issues might be having on the health of First Nations people living in urban, rural, remote and northern areas (*Jurisdictional Issues*);
- Examining the effect transportation issues have on access to health services and overall health status (*Service Delivery Models*);
- Exploring the geographic differences in access to primary health care and the essentials for good health, including access to fresh foods (*Determinants of Health*);
- Researching various models of care delivery that recognize the shifting demographics of rural and remote areas and the availability of health professionals (*Service Delivery Models*);
- Examining the economic realities of living in rural and remote areas and the effect on health status (*Determinants of Health*); and
- Exploring what technologies might be working in other jurisdictions and how they might be utilized in Saskatchewan (*Human and Financial Resources*).

What's Already in Place

Agricultural Health and Safety

Recognized as “the father of agricultural medicine in Canada”, Dr. James Dosman formed the Centre for Agricultural Medicine at the University of Saskatchewan in 1986. The centre, now renamed the Canadian Centre for Health and Safety in Agriculture (CCHSA), has become a world leader in research, teaching, extension and service in agricultural safety and rural health. A current project by Dr. Debra Morgan is exploring better ways of caring for people with dementia in rural areas.

Community Research

Based at the Saskatchewan Population Health and Evaluation Research Unit (University of Saskatchewan and University of Regina), Dr. Bonnie Jeffery and Dr. Sylvia Abonyi are well-known for their collaborative approach to research in improving Indigenous peoples' health. In addition to their work in health services evaluation, both have made substantial contributions to understanding the unique health status and service access issues of First Nations and northern communities.

Before moving to suggested actions and next steps, it's important to keep in mind the current environment of health services research focused on rural and remote Saskatchewan. The response to issues in rural and remote health has been the subject of a number of reports and recommendations in previous years, and various levels of government as well as academic and health institutions have reacted and research is currently taking place.

There is considerable activity in rural and remote health services research in or about Saskatchewan. The Saskatchewan Health Research Foundation and the Canadian Institutes of Health Research both provide funding for health research in the province, as do various charitable agencies, such as the Heart and Stroke Foundation and the Saskatchewan Lung Association. Funds are provided to both individual researchers and to teams of researchers. Common current themes include First Nations health, northern health, access to health services, and health and safety in agriculture.

Research is also taking place in various institutes and centres throughout the province, including: the Canadian Centre for Health and Safety in Agriculture; the Indigenous Peoples' Health Research Centre; the Saskatchewan Population Health and Evaluation Research Unit; the Prairie Region Health Promotion Research Centre; the Prairie Women's Health Centre of Excellence; and the Vaccine and Infectious Disease Organization, among others.

Appendix B provides examples of grant-funded projects in Saskatchewan. Twenty-one research projects are listed dating back to 1999 that address issues of rural and remote health in or about Saskatchewan, covering a range of interests from health systems to determinants of health.

In addition to these successes, the future looks increasingly promising with developments including the addition of Schools of Public Health and Environment at the University of Saskatchewan, and the expanded School of Public Policy at both Universities in Saskatoon and Regina. A focus on rural and remote health services research continues to be a priority for these and other provincial agencies.

Health authorities in the province are home to research as well, either the externally funded research mentioned above or their own internally supported research. Research partnerships involving health authorities are critical to successful health services research. These partnerships are particularly important for making research relevant and for sharing and using research that can improve health services.

Important work is also being done to enhance the sharing and using of rural and remote health services research. SHRF recently consulted with individuals, organizations, and communities across Saskatchewan to identify the building blocks (strengths) and stumbling blocks (challenges) in sharing and using health research. The result is a *practical* framework, *Health Research in Action*, that agencies and individuals can use to increase their capacity for sharing and using health research. This is especially important given the many challenges in sharing and using health research among rural and remote communities identified during the roundtable discussions.

Building on the Success of What's Already Been Done

In reviewing all of the dialogue that has taken place from the 2004 Health Research Summit to the roundtable discussions of 2006, SHRF believes there are a number of scenarios and areas of interest and need in rural and remote health services research. Certainly SHRF cannot, and should not, lead or implement all of these suggested actions alone. Rather, building Saskatchewan as a recognized leader in this important, growing area of research will require the commitment and collaboration of numerous individuals and agencies throughout the province.

SHRF sees the following five actions as important stepping stones in building on the successes and strengths of our province. All follow the broader theme and interest in supporting and strengthening our sense of community well being.

1. Create a Health Authorities Rural and Remote Health Services Research Network

A Health Authorities Rural and Remote Health Services Research Network would support and encourage sharing best practices in rural and remote health service delivery through the health authorities and First Nations health services. The Network would encourage working together to identify potential areas of study that are directly related to the experience of delivering health services to a widely dispersed population. The Network would include researchers as well as individuals from health authorities and communities to ensure that potential research relates directly to current needs within the province.

This network needs to be more than a repository of information, it needs to be “peopled” and “promoted” actively to generate and sustain the synergy required.

2. Hold a Biennial Summit on Rural and Remote Health Services Research

A biennial summit led by the Health Authorities Rural and Remote Health Services Research Network would serve to bring together the various institutions, associations, researchers, and other stakeholders that have an interest in rural and remote health services research to facilitate ongoing collaboration and cooperation.

3. Create a Chair in Rural and Remote Health Services Research

The creation of a research chair could provide needed focus in this area, where consultation participants repeatedly expressed a need for a central nucleus of activity. It is anticipated that the infrastructure required to support the chair would play a critical role in the sharing and using of research among those with the responsibility for delivering health services in rural and remote areas. While there are various government and non-government organizations, associations, and individual researchers working in the field, more focus would foster community involvement and collaboration in the research agenda.

4. Increase Research Funding for Community Collaboration

More funding is needed to allow researchers and communities to work together to address health service and health status issues, particularly the sharing of best practices and innovative models of delivery. In addition, funding could be used to increase rural and remote communities' capacity to be able to contribute to the development of research questions. SHRF can play a pivotal role in leveraging other national and provincial resources to improve community/researcher collaboration.

5. Increase Capacity Investments

Invest in additional capacity improvements and efficiencies in Health Authorities and in First Nations run health services to undertake, understand, and apply research to improve services and practice. Focusing on areas like evaluation, best practices and comparative studies could enhance rural and remote health service delivery.

Continuing the Work

Upon reviewing and compiling the wealth of information from the Health Research Summit, SHRF's own background research, SHRF's discussion paper, and the nine regional roundtable discussions, SHRF released this report to roundtable participants and requested additional comments, clarification, and input. We then tested the themes and actions in a think-tank session with a widely representative group of rural and remote research leaders and incorporated their insightful comments and suggestions into this document.

SHRF would like to thank those who contributed to this project in varying capacities. A special thank you goes out to those who participated in the roundtable discussions of 2006. Additionally, the production of this report would not have been possible without the assistance of those who participated in the one-day think-tank session in March 2007 and the professional services provided by Gryphon Reputation Management. Thank you for your assistance.

To sustain this work, and ensure that key priorities in rural and remote health services research receive funding, SHRF will proceed down the following path:

1. Broadly share the results of this report with interested and invested stakeholders and partners.
2. Identify actions in which SHRF is the lead agency and those where external commitment and collaboration is required.
3. Work with our partners to explore ways to facilitate and encourage more research and knowledge sharing in the key areas identified.

With so much of our province's population dispersed over wide areas, investing more resources into rural and remote health services research will be an important contribution to the health and well-being of our citizens. It also provides Saskatchewan with an opportunity to continue building our leadership role in the area of rural and remote health services research.

References

- Canadian Health Services Research Foundation. (2004). *Listening for direction II: National consultation on health services and policy issues for 2004-2007*. Ottawa: Canadian Health Services Research Foundation.
- Canadian Health Services Research Foundation. (2001). *Listening for direction: A national consultation on health services and policy issues*. Ottawa: Canadian Health Services Research Foundation.
- Commission on the Future of Health Care in Canada. (2002). *Building on values: The future of health care in Canada*. Ottawa: Health Canada.
- Fung, K., Barry, B., & Wilson, M. (Eds.). (1999). *Atlas of Saskatchewan (2nd ed.)*. Saskatoon: PrintWest.
- Pong, R., Atkinson, A., Irvine, A., MacLeod, M., Minore, B., Pegoraro, A., Pitblado, J., Stones, M., & Tesson, G. (1999). *Rural health research in the Canadian Institutes of Health Research*. Sudbury: Centre for Rural and Northern Health Research, Laurentian University.
- Saskatchewan Health. (2004). *Health Research Strategy*. Regina: Saskatchewan Health.
- Saskatchewan Health. (2004). *Saskatchewan comparable health indicators report 2004*. Regina: Saskatchewan Health.
- Saskatchewan Health. (2003). Regional Health Authorities map. Retrieved March 21, 2006, from http://www.health.gov.sk.ca/ph_rha_map.html.
- Saskatchewan Health Research Foundation (2007). *Health research in action: A framework for building capacity to share and use health research*. Saskatoon: Saskatchewan Health Research Foundation.
- Saskatchewan Health Research Foundation. (2006). *Rural and remote health services in Saskatchewan: Identifying research priorities*. Saskatoon: Saskatchewan Health Research Foundation.
- Saskatchewan Health Research Foundation. (2005). *From vision to action: Health research summit 2004 report*. Saskatoon: Saskatchewan Health Research Foundation.
- Statistics Canada. (2003). *The health of rural Canadians: A rural-urban comparison of health indicators*. *Rural and small town Canada analysis bulletin*, 4(6), 1-23.
- Statistics Canada. (2002). Population counts, for Canada, provinces and territories, and census divisions by urban and rural, 2001 Census – 100% Data. Retrieved August 30, 2005, from <http://www12.statcan.ca/english/census01/products/standard/popdwell/Table-UR-D.cfm?PR=47>.

Appendix A

Detailed summary of what we heard during the roundtable discussions of 2006:

What do we do well?

- Expansion of Telehealth has been helpful for both staff education and in clinical applications.
- Some regions are effectively using a traveling team approach for mental health outreach.
- Visiting specialist programs are helpful.
- Primary health initiatives are starting to make inroads.
- Providing increased resources for addictions and mental health services in the north.
- Dissemination of health and safety information.
- Implementation of the provincial 911 system.
- First Responders.
- Farm Stress Line.
- HealthLine.

What do we need to do better?

- Understand what is needed to create “buy in” around health and safety information, particularly prevention.
- Expand Telehealth to reach more rural and remote areas, including Reserves.
- Address First Nations jurisdictional issues that are often a barrier to service provision.
- Recruit health professionals.
- Get people to the services they require.
- Offer more treatment facilities in the north so people do not need to travel south where they have limited or no social support.
- Provide pre- and post-natal care in the north.
- Benchmark what is working and develop effective implementation strategies.
- Maximize technology by creating an electronic health record.
- Implement primary healthcare faster.
- Look more closely at the health needs of children and young adults.

How can research help address the gaps?

- Ensure that current initiatives are evaluated.
- Focus on the most important needs.
- Focus on risk factors for each community.
- Determine best practices and share that information.
- Look at matching funds to actual population, i.e., by age.

- Look at the impact geography has on the health of rural and remote residents.
- Involve people from the communities

What is working well now?

- HealthLine (Saskatchewan Health).
- Health Clips (Health Quality Council).

What are current road blocks?

- There is no central repository of research related to rural and remote health services in Saskatchewan.
- Jurisdictional issues – federal/provincial, interdepartmental.

What can we do to enhance this knowledge sharing?

- Increase opportunities for health professionals to share information about current practices in their own areas.
- Enhance the communication and marketing of relevant research findings.
- Create a central repository for rural and remote health service delivery research findings.

Appendix B

Saskatchewan-based rural and remote health research projects, 1999-2006*:

- Cultural revitalization and identity negotiation in northern Saskatchewan First Nations communities.
- Improving HIV/AIDS support structures in northern Saskatchewan First Nations communities.
- Access to health care among northern residents.
- Obesity in northern Saskatchewan (including issues surrounding physical activity, healthy eating, and socio-environmental factors).
- Canadian rural and remote health study (including project building and area identification).
- Health and safety in agriculture.
- Relationship between diabetes mellitus and tuberculosis.
- Care of dementia in rural and remote areas.
- Antimicrobial resistant bacteria in northern Canadian communities.
- Impact and implications of health reform and renewal on rural women in Saskatchewan and Alberta.
- Health impacts of flexible organizational practices in Saskatchewan.
- Diabetes risk evaluation and microalbuminuria in Saskatchewan First Nations people.
- Mental health divide (including rural-urban and intra-rural differences).
- Community-based environmental contaminants research.

* Extracted from CIHR's online funding databases, accessible at: <http://www.cihr-irsc.gc.ca/e/825.html>



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