Weechihitotan

'Let's help and support each other'

The Value of Aboriginal Health Research in Saskatchewan

SHRF
SASKATCHEWAN HEALTH RESEARCH FOUNDATION

www.shrf.ca

About SHRF

The Saskatchewan Health Research Foundation (SHRF) is the provincial agency responsible for funding, facilitating and promoting health research in Saskatchewan. SHRF works in partnership with other organizations locally, provincially, and nationally to foster leading-edge research. For details about SHRF's mandate and operations, visit shrf.ca.

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Introduction

Indigenous Peoples' Health Research Centre (IPHRC) Commentary

In 2001, the Globe and Mail published a series of articles under the headline "Canada's Apartheid," providing example after example of the silent division between Aboriginal and non-Aboriginal communities and the devastating effect on Aboriginal peoples' health. Canada's apartheid was evident in the Saskatchewan research community where there were few health researchers with knowledge of Aboriginal people, communities, and health issues and no Aboriginal health researchers working in Saskatchewan's universities.

As one of its first initiatives, the Canadian Institutes of Health Research (CIHR) Institute of Aboriginal Peoples' Health established the Aboriginal Capacity and Developmental Research environments (ACADRe) funding competition as a catalyst to create a network of supportive research centres across Canada that would facilitate the development of Aboriginal capacity in health research. CIHR recognized that the conventional model of health research was not reducing health disparities between Aboriginal people and other Canadians. In 2002, the First Nations University, the University of Regina, and the University of Saskatchewan successfully applied for ACADRe funding and created IPHRC. The Government of Saskatchewan, recognizing the need to build health research capacity in the province, invested in IPHRC by providing matching funds, which were administered by the newly formed SHRF.

To build capacity in Aboriginal health research, IPHRC launched annual competitions to provide funding for Masters and PhD students focusing on Aboriginal health and for under-graduate students engaged in summer research projects. IPHRC funded over 100 students, and 90% were Aboriginal.

An even greater challenge was to bring together university researchers and Aboriginal community members to work together to develop community-based research projects that addressed identified needs of Aboriginal communities. Since 2002, IPHRC has funded over 50 projects in Aboriginal communities across Saskatchewan, and almost all of the researchers highlighted in this publication benefited from IPHRC support.

Equally important has been IPHRC's success in building awareness in Aboriginal communities of the value of participating in research. Aboriginal communities across the province now consider research to be a valuable tool for bettering the health of their people through improved programs and evidence-based policies.

The Government of Saskatchewan's investment in IPHRC enabled IPHRC to fund double the number of students and community research projects that we would have had we only depended on federal funding.

Although CIHR has cancelled funding for the ACADRe program and its successor, the Network environments in Aboriginal Health Research (2007–2013), SHRF has increasingly supported Aboriginal health research in innovative ways. In 2012, SHRF created its Aboriginal Health Research Advisory Panel, and IPHRC researchers and community partners played a leading role. In 2013, SHRF, IPHRC, and the universities organized a workshop on community engagement in Aboriginal health research, and over 100 people attended. SHRF is increasingly funding research projects on Aboriginal health in its regular funding competitions.

IPHRC is proud to partner with SHRF on this publication, which we hope will bring awareness to the wise investment that Saskatchewan is making in Aboriginal health research.

SHRF Invests in Aboriginal Health Research

Since its creation in 2003, SHRF has invested over $50 million in Saskatchewan's health research enterprise. Of this total, over $5 million has been directly invested to support health researchers into subjects aimed at understanding and improving the health of Saskatchewan's First Nations and Métis populations.

Unique Health Research Needs

First Nations and Métis people have unique health needs, and an overall gap exists between the health status of Aboriginal people and that of the non-Aboriginal population. First Nations and Métis residents made up 15.2% per cent of the provincial population as of 2011, and that figure is increasing.

The idea of a government agency and Aboriginal communities working together in the healthcare field is not new. Many successful partnerships exist and the province's First Nations communities are leaders in delivering health services to their people, but in Saskatchewan, like the rest of Canada, there is a long way to go in bringing the health status of Aboriginal people in line with that of the general population. That's why for more than a decade, SHRF has supported partnerships with health researchers working with First Nations communities, Saskatchewan health regions, and other health organizations to improve the health status of Aboriginal people.

Health research for Aboriginal people requires strong community input; direct supportive links that include the community in all stages of the research and research funding cycle. Outcomes rely upon that sustained effort and partnership between researcher, their institution, and the community, if improvements to the standard of living and health care services for all Aboriginal people are to be addressed.

In addition to health specific priorities, other areas associated with health research require attention, which include communication and cooperation, jurisdictional barriers and funding, and cultural competence and respect in health institutions.

SHRF recognizes that Aboriginal community members, health workers, and researchers are at the front lines of health in communities and are, therefore, the experts in determining health research priorities. Over the past few years the input from Aboriginal health research institutes, Aboriginal and non-Aboriginal researchers, and most importantly, community partners, have informed SHRF's policies and programs to better reflect their needs and wishes.

This publication – and specifically the input from the six case studies and their community partners – continues SHRF's history of collaboration, informed health research funding, and impact analysis.

Measuring Investment – The Canadian Academy of Health Sciences (CAHS) Framework

Funders face unprecedented challenges in carrying out their mission and mandate given today's economic climate, increasing demands for public dollars, obligations for accountability and transparency, and the need to demonstrate the benefits of investments in health research. Making this process more difficult is the complexity

of the research environment and the numerous metrics and indicators used to assess the impact of health research. To make sense of these issues, SHRF has worked with other health research funding agencies and CAHS to develop a framework that measures returns on investment in health research. Through this framework the impacts of health research can be tracked using indicators within five categories:

1. Research Capacity – e.g. personnel, additional research activity funding, infrastructure

2. Advancing Knowledge – e.g. research quality, activity, outreach

3. Informing Decision-Making – e.g. pathway from research to health outcomes

4. Health Impacts – e.g. health status, determinants of health, health system change

5. Broad Economic and Social Impacts – e.g. activity, commercialization, health benefits, social benefits

The CAHS framework works through how capacity in research produces knowledge that can influence decision-making, resulting in improvements to our overall healthcare, and economic and social well-being. In addition, the framework demonstrates how the impacts of research can influence future research.

Purpose and Method

In 2013, SHRF used the CAHS framework to examine the outcomes and impacts of SHRF-funded research. The end result, *Measuring the Value of Saskatchewan's Health Research*, was the first attempt to take an in-depth look at the outcomes and impact of Saskatchewan health research using five case studies that represented the full range of provincial health research priority areas.

The Value of Aboriginal Health Research in Saskatchewan continues to use a case study platform to analyze the impacts of health research. SHRF identified six representative case studies of researchers and community partners with whom they had worked. An external consultant conducted interviews with both. The consultant also collected data on research productivity, leadership roles, and collaborations of the researchers, which is represented in the impact at a glance sections. The results were analyzed and reported using the CAHS payback framework.

Case Studies and Impact at a Glance

One of the strengths of the CAHS frameworks is its recognition of first-person story telling in addition to the "harder" side of data. Impacts and outcomes are valued whether they are quantitative or qualitative, and the nature of health research in the Aboriginal community lends itself strongly to first-person narrative. The role of community input in all aspects of health research – from topic selection through design, data gathering, analysis and knowledge translation – makes Aboriginal health research unique. The ability of communities to direct, gather, analyze, and incorporate the knowledge that results from health research places it intimately closer to the impact and outcome of health research activity than many other types of research.

The voices of researchers and communities echo throughout the following case studies and impact at a glance sections. They provide unique insight into the adaptability of the CAHS framework to demonstrate impact and analysis.

Dr. Carrie Bourassa

Associate Professor of Indigenous Health Studies, First Nations University of Canada, Regina, SK

CASE STUDY 1

Dr. Carrie Bourassa

Dr. Bourassa describes herself as a community-based researcher. It's a community the Saskatchewan Métis researcher knows well. Since 2010, she has been the Nominated Principal Investigator for the CIHR-funded Indigenous Peoples' Health Research Centre, the major collaborative research centre for Aboriginal health research in Saskatchewan. Her community-based and directed research has included projects that have looked at understanding neurological conditions among Aboriginal women, Aboriginal end-of-life care, tobacco use cessation, health survey of Métis people, and international Indigenous health risk assessment.

Research Focus

Community-based research in understanding neurological conditions among Aboriginal women, Aboriginal end-of-life care, tobacco use cessation, health survey of Métis people, and international Indigenous health risk assessment

"I take my direction from First Nation and Métis communities predominantly. When the community comes to me and says, 'We want to engage in this kind of research', that's what I do."

COMMUNITY OR HEALTH SYSTEM PARTNER

Karen Schmidt, **Health Educator, Five Hills Qu'Appelle Tribal Council, Fort Qu'Appelle, SK**

Karen Schmidt is a health educator for the Five Hills Qu'Appelle Tribal Council, working out of the All Nations Healing Hospital in Fort Qu'Appelle. She works with both acute care and home care staff that work in the community. Schmidt has worked with Dr. Bourassa on several projects, most recently the end-of-life care project. Schmidt was on an advisory committee for the project during the second phase where a website and learning materials were developed.

Research Outcomes

- Development of community-driven, culturally safe models for understanding and responding to neurological conditions among Aboriginal women.
- Creation of cross-cultural videos with healthcare providers on Aboriginal end of life.
- Working with Dr. Vivian Ramsden, developed first community-based health survey of Saskatchewan Métis people using trained Métis community members to administer the survey which resulted in new data on diabetes, high blood pressure, and high tobacco usage.
- Working with Dr. Vivian Ramsden, developed a peer-led community-based tobacco cessation program – the Green Light Project – where community members commit to non smoking in their houses and display a green light bulb in their porch to announce their commitment.
- Funded by the World Health Organization Collaborating Centre, health risk assessment tools specific to Indigenous people were developed.

IMPACT AT A GLANCE

What collaborations are you a part of as a result of your research?

I have collaborations with three communities in Saskatchewan and two in Alberta. Additionally, I have collaborations across the University of Regina, University of Saskatchewan, the First Nations University, and the University of Alberta. Partnerships are critical at both the community and institutional level. I highly value community entities such as Street Culture Kidz which involves Aboriginal representation, and my long-term relationship with Saskatchewan Population Health and Evaluation Research Unit (SPHERU) which has identified Aboriginal research as a focus.

Has your research contributed to the career paths of trainees?

Since 2003, I have involved undergraduate Aboriginal students in summer research employment opportunities. Some students have had extended involvement in ongoing projects. I have had two students from this group go on to Masters programs and one who continued her studies with me as her supervisor. For six years, one PhD student has worked with me at one of the Aboriginal communities and her work has shown progressive involvement with that community.

How has your research contributed to reducing or avoiding health care costs?

One community's Chief and Council told us that all the youth that participated in our study completed high school. In terms of social determinants of health, this is a significant health contribution. We believe that shows we have contributed to quality of life by addressing social determinants of health through education and culture. We are helping youth understand their individual and collective paths to living well.

Thinking of your research overall, what would be the dream impact of your research in five or 10 years?

My dream would be that a future research project would be lead by someone on the reserve looking at whether our work has changed the health of the next generation of children/youth, essentially the children of our participants.

Looking at the big picture, in what direction should Aboriginal health research go to have the most impact?

My first response is around method and methodologies. As researchers, we are often constrained by mainstream, western-based methods, and in these communities we are constantly seeking to challenge and even reveal Aboriginal research methods. Extensive work is needed in this area to ensure these methods are accepted, adopted, and appreciated. My second response is around capacities. I know we constantly talk about building capacity in individuals and communities, but I think this is quickly slipping into the level of rhetoric rather than reality. I would like to see movement in this area to truly develop areas, such as data visualization and two-eyed seeing. I do not see all the capacity building just coming from the Aboriginal side. Mutual learning as it relates to capacity building is imperative to my work.

"One community's Chief and Council told us that all the youth that participated in our study completed high school. In terms of social determinants of health this is a significant health contribution."

Dr. Pammla Petrucka
Professor, College of Nursing
University of Saskatchewan, Saskatoon, SK

Dr. Colleen Anne Dell

Professor, Research Chair in Substance Abuse, Department of Sociology and School of Public Health, University of Saskatchewan, Saskatoon, SK

CASE STUDY **2**

Dr. Colleen Anne Dell

Dr. Dell began her career with the Elizabeth Fry Society in Manitoba and as an academic, began her research with Aboriginal women at the Edmonton Institution for Women in Alberta. These early career steps heightened her awareness of First Nations and Métis women in the criminal justice system. After obtaining her doctorate, she came to the University of Saskatchewan to accept a research chair in substance abuse. Through that chair, Dell has been initiating projects with a large and diverse team that include the roles of stigma and identity in aggravating substance abuse and supporting healing; culture as an addictions healing intervention; holistic healing and animal assisted therapy; and the contribution of alcohol abuse to HIV infection.

Research Focus

Aboriginal identity and stigma, culture as an addictions treatment intervention, holistic healing with animal therapy, and alcohol abuse and HIV/AIDS

"If people are reunited for the first time with their culture, without a doubt that's addressing the determinants of health. Culture and identity are foundational to good health."

COMMUNITY OR HEALTH SYSTEM PARTNER

Ernie Sauvé, **Health Educator, Executive Director, White Buffalo Youth Inhalant Treatment Centre, Sturgeon Lake First Nation, SK**

Ernie Sauvé began working with Dr. Dell several years ago when he was Director of the White Buffalo Youth Inhalant Treatment Centre. The Centre was using equine therapy as their therapeutic model. Having used the therapy program for a few years, the Centre wanted to do research to demonstrate the effects. As a leading addictions specialist, Dr. Dell was recommended to the Centre as the principal in the research.

Research Outcomes

- Created a CIHR funded research video, *From Stilettos to Moccasins*, that addresses the role of stigma in substance abuse and criminalization, and the contribution of rediscovering cultural identity and its importance for First Nations, Métis and Inuit women for their health and well-being. The video has been viewed on YouTube 25,000 times and 25,000 copies of a DVD have been distributed. In addition, the Stilettos to Moccasins workshop has been offered at nearly 200 treatment facilities across Canada where attendees have been encouraged to share their stories.
- In collaboration with the Assembly of First Nations, the National Native Addictions Partnerships Foundation and the Centre for Addiction and Mental Health, are completing the first systematic review of cultural interventions.
- Developed an evaluation workbook to help treatment programs self-evaluate their work.
- Created a research interest in equine therapy as a healing strategy for addictions.
- Part of a national CIHR-funded team that includes elders and researchers working with 12 Aboriginal treatment centres across Canada to define and measure cultural components that relate to healing. This work started based on the requests of funding agencies for improved evaluation tools of cultural interventions.
- Recipe cards created with Aboriginal recipes to promote cultural traditions as part of the healing process from mental illness and addictions.
- Produced a professional recording, *Step by Step*, about healing.
- Contributed to the Toronto Star's Atkinson series on women and alcohol use and the Canadian Executive Council on Addictions, leaders Forum on Addictions and Mental Health Collaboration.

- Work with women in addictions treatment has highlighted the importance of cultural identity in the healing process.
- Research chair incumbent funded by the Government of Saskatchewan, with a mandate that includes increasing the effective use of research resources in substance abuse prevention, health promotion and treatment.
- Produced public service announcements about the relationship between alcohol use and access to health care delivery for Aboriginal persons living with HIV/AIDS.
- Develops art work with community partners to provide attractive summaries of research findings.
- Developed a DVD with over 100 Saskatchewan shared videos, songs, poetry, written narratives, drawings and music to offer clients hope on their healing journeys from substance abuse.

IMPACT AT A GLANCE

Has your research contributed to the career paths of trainees?

Yes it has, and with pretty great success so far. I've supervised three post doctorates, but they keep getting snapped up by institutions in other provinces and by international universities even though they wanted to stay here in Saskatchewan. We need more money in Saskatchewan to keep them here.

Has your research had any impact on prevention, diagnostics or reducing the cost of health care?

Through our research, I hope to change the way things are delivered. That's why we have a broad range of researchers affiliated with IPHRC from nephrology, ethno-musicology, and arts-based wellness, for example. Intuitively, avoiding illness and improving quality of life must have an impact. Connecting research to impact can only improve with strategic integrated knowledge translation, but researchers don't always know who the players are in government. It's more individual based at this point, with researchers working through partnerships with organizations such as the Johnson-Shoyama School of Public Policy for example, on an issue like child welfare. Evidenced-based recommendations for policy are needed.

Looking at the big picture, in what direction should Aboriginal health research go to have the most impact?

It needs to grow networks to inform other research. This is the way to reduce health disparities, but the health system and health researchers need to understand that it will take more than cultural sensitivity to address the issue. It's really about cultural safety, which means looking in the mirror and addressing racism.

Thinking of your research overall, what would be the dream impact of your research in five or 10 years?

Seeing the gap between Aboriginal health and the health of mainstream society eliminated.

What's the vision you have in your leadership role?

The study of innovative and culturally appropriate Indigenous health solutions that translate into positive, real community impacts are critical to delivering healthcare in the future. At a strategic planning level, our vision is to have healthy communities and we think research is the means to that end. At IPHRC, we'd like to be the authority that the government consults when it comes to Aboriginal health, and we'd like to be able to connect them to the appropriate people for policy planning.

"Growing networks to inform other research is really critical. This is the way to reduce health disparities, but the health system and health researchers need to understand it will take more than cultural sensitivity to address the issues. It's really about cultural safety, which means looking in the mirror and addressing racism."

Dr. Jo-Ann Episkenew
Director, Indigenous Peoples' Health Research Centre
First Nations University of Canada, Regina, SK

Dr. Mary Hampton

Professor of Psychology at Luther College, University of Regina, and Researcher affiliated with the Indigenous People's Health Research Centre, Regina, SK

CASE STUDY 3

Dr. Mary Hampton

Dr. Hampton came to Saskatchewan in 1999. As a non-Aboriginal researcher working in the area of sexual health, she was drawn into Aboriginal health research, because of requests from the Aboriginal community. She is part of an interdisciplinary research team that includes both Aboriginal and non-Aboriginal academic researchers, Aboriginal elders, and health care providers responsible for palliative care services. The project has addressed culturally appropriate end-of-life care for Aboriginal families, both in the hospital and the community. The significant areas of Dr. Hampton's interests centre around culturally appropriate end-of-life care and violence prevention.

Research Focus

Culturally appropriate end-of-life care, and violence prevention

"I consulted with Elders that I knew and they all said the same thing. They said end-of-life is [their] major concern. They also said they felt the healthcare system wasn't very responsive to their needs. So we developed a large team of researchers and community people to work on the end-of-life care project."

COMMUNITY OR HEALTH SYSTEM PARTNER

Betty McKenna, **Elder, Moose Jaw, SK**

Elder Betty McKenna has worked with Dr. Mary Hampton for many years in various research projects. She and the late elder Ken Goodwill helped guide the end-of-life care project, including how the videos would be made and how they would be distributed. Elder McKenna played a strong role in guiding the research process and its connection with the community.

Research Outcomes

- Developed an interdisciplinary research team including Aboriginal and non-Aboriginal academic researchers, Aboriginal elders, and health care providers responsible for palliative care services. The project addressed culturally appropriate end-of-life care for Aboriginal families, both in the hospital and the community.
- Phase one focused on developing relationships with the Aboriginal community and building the team, supported by SHRF and IPHRC. In phase two, supported by CIHR, the team developed videos, presentations, and information sheets to respond to community needs. The third phase, also supported by CIHR, focused on developing space and resources for Aboriginal families in a new bereavement centre.
- Developed participatory action research and student training that incorporates the Aboriginal concept of talking circles and inclusive participatory activity where every voice in the circle is valued.
- For public education and outreach, produced six videos (DVD and web-based), aimed at health care workers, on culturally appropriate end-of-life care for Aboriginal people.
- Workshops and presentations held on culturally appropriate care for healthcare workers across Canada.
- Presented on Aboriginal end-of-life care at Hospice Palliative Care conference; palliative care grand rounds, Regina Qu'Appelle Health Region; Coffee House Controversies, Regina, Saskatchewan; International Congress on Palliative Care, Montreal, Quebec; and Canadian Hospice and Palliative Care Conference, Banff, Alberta.

- Presented the end-of-life care videos across Canada and internationally approximately 150 times since 2004.
- Community partner asked as guest speaker for physicians and Registered Nursing students about culturally appropriate end-of-life care for Aboriginal people.
- Canadian Hospice website and the International Congress on Palliative Care have adopted some of her research in their work, which will inform palliative care policy for Aboriginal people.
- Impact of the end-of-life care presentations with front-line service providers have potential to increase awareness and understanding and may lead to some practice change in healthcare settings.

IMPACT AT A GLANCE

What collaborations are you a part of as a result of your research?

I am a co-investigator on a five-year grant from CIHR on respiratory health in First Nations. This involves an interdisciplinary team, all of whom have lung and respiratory health in First Nations as a key focus. We have been able to build community relationships and these are starting to create results in the communities themselves. From a collaborative aspect, these communities have informed decisions that affect them, and that we hope will influence policy decisions down the road. I am also a co-investigator on the Aboriginal Health Research Networks (AHRNets) catalyst grant funded by the CIHR.

How has your research contributed to the career paths of trainees?

I don't have any trainees in this area at the moment, but there is great potential for including trainees, absolutely. An important aspect to consider in the inclusion of trainees into the research program is the potential to leave skills in the community to improve lung and respiratory health on the local level.

Have you disseminated your research other than through academic publications?

Thus far, we only have preliminary results which have been presented at an international conference. It is important to remember that a key principle in collaborative research with First Nations communities is that the data is owned by the community as well as the researcher. My first responsibility is always to keep the community informed of the results.

Has your research had any impact on prevention, diagnostics, or quality of life?

Not yet. First, we need to finalize data collection and interpretation. Assuming that our hypothesis will be supported by the data, the outcomes of our research will have a direct impact on accurate prediction of lung function in First Nations people in Saskatchewan. This will, in turn, improve diagnostic accuracy in the evaluation of lung disease in an individual patient. From that perspective, our research also has the potential to reduce or avoid some health care costs. We only have preliminary data, but we are hoping that in a year from now we will be able to make more definitive statements.

Thinking of your research overall, what would be the dream impact of your research in five or 10 years?

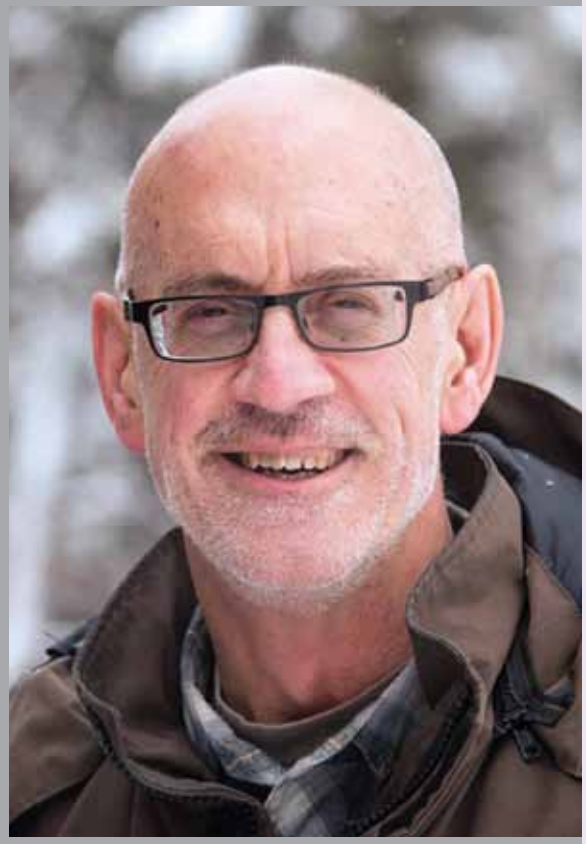
We hope to develop specific lung function equations for First Nations communities for use in clinical setting. Our overall goal is to improve individualized lung health information for any First Nations person with a respiratory problem in Saskatchewan.

"Our overall goal is to improve the health of Aboriginal people. We already know that the inclusion of Aboriginal people in health research results in perceptible and immediate changes in health status."

Dr. Mark Fenton
Associate Professor of Medicine, Program Director,
Respirology Training Program, Division of Respirology,
Critical Care and Sleep Medicine, College of Medicine,
University of Saskatchewan, Saskatoon, SK

Dr. James Irvine

Medical Health Officer, three Northern Saskatchewan Regional Health Authorities, La Ronge, SK and Professor Emeritus, University of Saskatchewan, Saskatoon, SK



CASE STUDY **4**

Dr. James Irvine

Dr. James Irvine arrived in La Ronge, SK, in 1981 as a family physician. In 1985, he became the Director of Northern Medical Services and the part-time Medical Health Officer for the north. NMS is a University of Saskatchewan (U of S) College of Medicine program funded through the federal and provincial governments and provides physician services in northern Saskatchewan. Dr. Irvine continued as an NMS physician and a faculty member of the U of S College of Medicine, but shifted his focus to working as the full-time Medical Health Officer for the three northern health regions in a combined Population Health Unit. His continued interest in research focuses on issues and concerns in northern Saskatchewan and Aboriginal communities.

Research Focus

Northern Saskatchewan, Aboriginal health, environmental health, health status reporting, communicable disease, genetic and metabolic conditions

"It was amazing to see the desire of communities to see their data and have an understanding of the health status in their communities. This information can foster a desire for change and assist with the development of community actions. Communities like Pinehouse have embraced the use of such information and have developed the capacity for dialoguing and strategizing about their own community health issues."

COMMUNITY OR HEALTH SYSTEM PARTNER

Vince Natomagan, **Executive Director, Kineepik Métis Local, Pinehouse, SK**

Vince Natomagan is the Executive Director of the Métis Local in Pinehouse, a Métis village of a 1,000 people in northern Saskatchewan along the Churchill River. Natomagan, along with others within the community of Pinehouse, use the information provided by Irvine and colleagues in the Population Health Unit for social and economic planning for his community.

Research Outcomes

- Various community health reports and the Northern Health Status Report are widely used for planning, priority setting, proposal development, evaluation and advocacy by health regions, communities, schools and other community and government organizations. Community partners like Pinehouse have been involved in creating a community profile and a visioning process to help plan the future using the health statistics to support this process.
- Following a multi-agency research project on antimicrobial resistance in northern Saskatchewan, rates of community-associated MRSA (staphylococcus aureus) were reduced in targeted communities. Further work included a position statement from the Canadian Paediatric Society on how the issue of MRSA impacts northern Indigenous communities and describes guidelines on the different strategies required for control and prevention.
- A research project by family medicine residents examined how to more efficiently target patients at risk for chlamydia infections.
- Previous work on hospitalizations for northern children later stimulated the development of a position statement on prevention of early childhood dental caries in Indigenous children in Canada and the US.
- The Community Vitality Monitoring Project reviewed long-term socioeconomic well-being and impact of uranium mine development.
- Community research on three serious congenital or metabolic conditions in newborns in northern Saskatchewan: Micromeliamicrocephaly syndrome causing neonatal deaths; Sandhoff Disease leading to death in childhood and Triple H Syndrome (hyperornithinemia-hyperammonemia-homocitrullinuria) which, if detected early, can be managed through dietary changes; this is now included in the newborn screening program.

- Public health, surveillance, and research activities related to environmental health with focuses on: country (or wild) foods, their nutrient value and assessment for potential environmental chemical contamination; and a northern Saskatchewan prenatal bio-monitoring project assessing over 200 environmental chemicals.
- Public education and outreach: Irvine has worked with a variety of communities including Pinehouse to provide statistics used for planning health, social and economic development strategies and programs.

IMPACT AT A GLANCE

How important is it to have a close connection with a health researcher?

When I need local or regional statistics - education, health, economic development, or socioeconomic - the first thing I do is pick up the phone to talk to the researcher.

How do you share the information you receive from the researcher?

Every first Thursday of the month we have what we call "Reclaiming Our Community" meetings. All the local agencies, including the health representatives, are there. Over time we've easily referenced some of the statistics that Dr. Irvine has provided us through health and other research reports. We easily reference them two or three times a year.

What do you do with the information you receive?

It gives us a chance to give our collective heads a shake and say, "Are we adequately meeting our goals here? Are we trying to decrease some of our social ills?" Over time we look at how these particular statistics are working for us and what kinds of information we still require. We can concern ourselves with seatbelt use or we could concern ourselves with addictions. Therefore, statistics are very useful at our weekly and monthly meetings for community decision-making.

What have you learned from the relationship you have with a researcher and the kind of information he can provide?

We've learned governments don't want to spend money without a business case. We've had to learn the hard way. If we want to go to the province or Federal government or Health Canada or health regions for support, we have to learn how to make a business case. For example, let's say 29 per cent of our youth under 16 are obese so we want to do some recreational and cultural components. We need to describe how long we are going to do it and how we're going to engage them. We need a benchmark and an ultimate goal. We need to demonstrate that with some money this is what we will achieve in about a year.

How important is the research information to you?

The health statistics are absolutely priceless. The more detailed stats we have, the better it is for us to react and to do our own strategic planning. I think the research information is invaluable.

"Outcomes of research give us a chance to give our collective heads a shake and say, 'Are we adequately meeting our goals here? Are we decreasing our social gaps by our actions?' We use the information from Irvine and team as benchmarks to monitor our community's progress."

Vince Natomagan
Executive Director, Kineepik Métis Local, Pinehouse, SK

Dr. Vivian Ramsden

Professor and Director, Research Division, Department of Academic Family Medicine, College of Medicine, University of Saskatchewan, Saskatoon, SK

CASE STUDY **5**

Dr. Vivian Ramsden

Dr. Ramsden has been involved in Aboriginal research in Saskatchewan since 1997, when she became involved in community-based research with Saskatchewan's Northern Medical Services. Her interest in Aboriginal health was sparked early in her career when she worked in a small hospital in northern Alberta that served First Nations and Métis people. A Registered Nurse, Ramsden now works as the Director of the Research Division in the Department of Academic Family Medicine in the College of Medicine at the University of Saskatchewan. She described her role as "an interesting opportunity" being a non-physician in a medical setting.

Research Focus

Participatory processes, primary healthcare in underserved communities, Aboriginal, inner-city and rural, health promotion and disease prevention with formerly incarcerated women

"I bring a different set of clinical skills. They are complementary to community interests because I'm interested in prevention, health promotion and disease strategies that are not focused on treatment but are focused on health promotion. The community needs to be very engaged in that process. I don't live there. They're the people who live there. They're the ones that are going to sustain the outcomes, whatever that looks like."

COMMUNITY OR HEALTH SYSTEM PARTNER

Shirley Bighead, **Health Director**

Norma Rabbitskin, **Senior Health Nurse and Homecare Coordinator, Sturgeon Lake First Nation, SK**

Health Director Shirley Bighead and Senior Health Nurse Norma Rabbitskin have worked closely with Dr. Ramsden in research initiatives in Sturgeon Lake since Dr. Ramsden first visited the community in 2006 when she supported residents in family medicine. The residency supervisor had brought medical residents to the community to do a research project on knowledge and awareness of the risk factors of diabetes and treatments using both traditional and nontraditional medicine.

In the last five years, Bighead and Rabbitskin have worked with Ramsden on the Green Light program aimed at tobacco misuse prevention, on community engagement in planning primary healthcare, and chronic disease prevention and management.

centre, Norma Rabbitskin

Research Outcomes

- Thirty poster presentations for communities and other organizations to share the results of research projects.
- Local partners have carried out presentations on the Green Light smoking prevention project to health care workers in other communities. The Health Director in Sturgeon Lake reports the community is about 67 per cent smoke-free in homes as a result of the community education program associated with the Green Light initiative. The band has introduced a policy keeping every band facility smoke-free. The Green Light Program was selected by Health Canada, SP Consulting, and the Whetsone group as one of the projects to be profiled in the form of a case study. When complete, this will be made accessible to the public.
- Community used information from research and leveraged additional funding from Health Canada.
- Point of care testing for HIV combined with a needle exchange program has reduced the number of new cases of HIV dramatically in the last three years.

- Existing fee-for-service primary care visits were enhanced through Health Canada coverage based on research in high-risk factors for obesity in the community. In addition the school changed its policy and eliminated junk-food machines and replaced them with healthy alternatives.

- The First Nations community in which Dr. Ramsden works implemented an electronic health record to allow it to benchmark against other communities. Its next goal is to link with TAPESTRY (Teams Advancing Patient experience: Strengthening Quality) in Canada.

IMPACT AT A GLANCE

Were you surprised that the researcher asked you to be part of the community input?

Well, I guess not really. I think I was more or less relieved that they wanted me to play that role. When I did get involved with research it was really enlightening to think that all of a sudden it was my people doing the research. The researchers were listening to what we had to say. They were paying attention and actually doing what we thought was how research should be done.

Can you describe the participatory action research and student training you have been part of delivering?

We have talking circles, which is absolutely wonderful. I facilitate them. We do a smudge – we burn sage or sweet grass and people will smudge themselves. I say a prayer, then we begin the process of talking. Guiding the talking circle keeps it on topic and focuses where you want the research to go. Every voice is valued. Everyone is heard. We pass a stone when we speak and only the person who holds the stone speaks. Everybody else listens. Everything that's said in the circle is recorded. Research students learn a process that they've never been introduced to before and they like it. They use it when they hold any type of meeting.

How do you approach non-Aboriginal researchers and students?

One of the first things I do is speak about where I come from, what I do, and why we do the things that we do so it's culturally based. It's a broad generic introduction, not particularly your own personal beliefs, but what First Nations people believe. I talk about our peoples' code of ethics and how we respect all things and all peoples', and that we believe we are not complete without all the other parts of the world with us. We talk of the four directions and the four different people coming from those directions. We have the yellow man, the red man, the black man and the white man. When we do talking circles we ask the four directions to come in to guide us. We believe that is the power of the world that we have that helps in our research.

What has been the impact of your presentations to health care workers?

I know it makes a huge difference when healthcare people begin to understand the differences that we have and how we see the world from a different viewpoint. I've personally had doctors say to me that it's made a difference to them. I know when I speak to young people who are going into the health field, it makes a difference. They feel more comfortable. They feel they have something that can help them work with my people.

What has been the impact of the research that you have been involved with?

The way I see it, people are able to live better. Healthcare workers have an understanding of how my people think, how my people feel comforted, and the things that make them feel better about themselves. When you feel better about yourself you're going to feel healthier. It just doesn't affect you spiritually but it affects you mentally, emotionally, and physically. When people know there's respect given to them, they're just naturally going to feel a lot better about who they are as a person. The better prepared we get the healthcare system to work with our people, the more our people will take care of their own health by accessing it sooner, before it gets to a critical point.

"In a Talking Circle, every voice is valued. Everyone is heard and we pass a stone when we speak and when the person holds the stone, only that person speaks. Everybody else listens."

Elder Betty McKenna
Moose Jaw, SK

Dr. Caroline Tait

Associate Professor, Department of Psychiatry, College of Medicine, University of Saskatchewan, Saskatoon, SK

CASE STUDY 6

Dr. Caroline Tait

Dr. Tait is a Saskatchewan-born Métis researcher who trained in medical anthropology and life history methods. After completing graduate studies in new reproductive technologies at University of California (Berkeley, California) and doctoral and postdoctoral studies in social and transcultural psychiatry at McGill University (Montreal, Quebec), she returned to Saskatchewan in 2004 to a position in the Department of Women's and Gender Studies at the University of Saskatchewan. Shortly after her arrival, Tait was seconded to the new IPHRC at the U of S to help build research and training capacity at the Centre.

Research Focus

Research ethics, the ethics of evidence-based policy and program development in addictions treatment and prevention, the ethics of child welfare and its subsequent adult health impact

"I became involved in a Supreme Court case with the Métis women of Manitoba and the Canadian Women's Health Network. It really started my career in Indigenous reproductive health, which then morphed into mental health because there's such an association between vulnerable women with addictions and mental health."

COMMUNITY OR HEALTH SYSTEM PARTNER

Kathie Pruden Nansel, Social Justice & Metis Community Advocate;
previously Community Development Officer, Saskatoon Indian and Métis Friendship Centre, Saskatoon, SK

Kathie Pruden Nansel, a Metis social worker by profession, is currently a Resolution Health Support Worker with the Saskatoon Sexual Assault & Information Centre. Kathie has also worked with STR8 UP an organization aimed at street gang prevention and former member rehabilitation. She was involved with Dr. Tait in her previous role as Community Development Officer at the Saskatoon Indian and Métis Friendship Centre. During that time she worked on several projects including the experience of transition of women from outlying Aboriginal communities coming to urban centres.

Research Outcomes

- Worked with a forensic psychiatrist doing life history work with 40 men with fetal alcohol syndrome and psychiatric disorders.
- Principal investigator of Technologies of Potential Change: Tracking the Impact of Saskatchewan's Child Welfare Reform using Theoretical and Applied ethics, funded by CIHR.
- With a filmmaker and the Saskatoon youth gang rehabilitation and prevention group Str8 Up, developed and presented a documentary on child welfare policy, "Child Welfare: The State as Parent". The documentary was screened to 200 people at the University of Saskatchewan.
- Work informed a change of policy at the Saskatoon Indian and Métis Friendship Centre to ensure the safety and comfort of women by giving them separate space to meet and separate access to that space.
- Community health service looking at the effects of drugs and alcohol on young mothers in Sturgeon Lake. Staff worked to assist several young mothers adopt a more positive lifestyle. Two of the mothers became involved in a documentary about how alcohol and drugs had affected their lives, their children, and their pregnancy.

Themes – what we learned

The six case studies and impact at a glance sections shared several common themes. Not only do they demonstrate a strong passion and commitment to community involvement and impact, the researchers foster a careful and deliberate approach to long-term relationship building with communities. Everyone interviewed in this publication involved communities in their research processes, including the decision making of subject matter. The result was that the research design, data collection, analysis, and dissemination processes were all closely intertwined and inclusive of community partners.

Previous Canadian and international studies on research impact have found that attribution of a specific health impact to a specific piece of research is impossible in most cases; that the time lag from knowledge production to health impact is measured in years, if not decades; and that health impact and return on investment is the product of a whole research and innovation system, not of any one researcher or research team. In these case studies, however, the close links between researchers and communities have led to examples of immediate and observable impact upon local communities.

This set of case studies of Aboriginal health research suggests it is possible to have an impact on decision-making. It is partly due to the nature of the research, which remains close to front-line health service delivery. These cases also illustrate that the involvement of decision-makers in selecting research topics, involvement of affected populations in the research process, and direct dissemination of results to the affected population may achieve early health system impacts.

Conclusions

Aboriginal health research is unique in many respects. Not only does it occur closely and in partnership with local communities, it also has the ability to change and improve the health of these communities through building trust and demonstrating commitment.

Where will Aboriginal health research go in the future to have the most impact? The researchers interviewed believe it is important to create teams that include Elders, and engage with the communities to ask the questions they want addressed by research.

From this review, a number of general conclusions can be summarized:

- Supporting community-based research may require changes in funding models in order to encourage the development of community relationships.
- Community-based research requires time to develop and maintain relationships, but those relationships are imperative for sharing knowledge and producing successful outcomes.
- Clinicians can connect to Aboriginal communities and conduct their health research by joining teams already working to develop and maintain longstanding relationships with Aboriginal communities.
- Community-based research can result in direct and relatively immediate benefits to communities.

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THANK YOU

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