

Knowledge Translation and Indigenous Knowledge

Symposium and Consultation Sessions

May 16, 2005 Wanuskewin Heritage Park, Saskatchewan

June 15, 2005 Fort Qu'Appelle, Saskatchewan

June 20, 2005 Prince Albert, Saskatchewan

Indigenous Peoples' Health Research Centre

Final Report

August 28, 2005



1.0 Introduction

The following report represents the response of the *Indigenous Peoples' Health Research Centre* (IPHRC) to the Canadian Institutes of Health Research – Institute of Aboriginal Peoples' Health (CIHR-IAPH) call for ACADRE statements on enhancing research efforts in the area of knowledge translation. As noted in the IPHRC proposal (see Appendix 1) knowledge translation, which is understood to be a key link between academic health sciences research and improved health outcomes, is currently a priority of national health research agencies. The high levels of ill health among Indigenous peoples create a sense of urgency in articulating how knowledge translation links can be enhanced to positively influence health outcomes. Knowledge translation efforts to date have been aligned with mainstream approaches that either do not adapt to Indigenous community contexts or take a 'pan-Indigenous' approach then tends to disregard geographic, language, and cultural divides.

The IPHRC initiated a series of dialogues in the spring and summer of 2005 aimed at addressing these shortcomings in mainstream knowledge translation approaches by bringing together health practitioners, health researchers, community members, and Elders to determine what knowledge translation means from an Indigenous standpoint in Saskatchewan.

The stated objectives of the IPHRC knowledge translation initiative were as follows:

- A. Gather together key academic and community stakeholders in three locations in the province;
- B. Provide an opportunity for academics, Aboriginal health researchers, and communities to network/forgo relationships with each other
- C. Conduct panel discussions with Indigenous researchers working in the area of KT in each of these locations to facilitate networking, knowledge gathering, and capacity building;
- D. Conduct discussions/focus groups with key community and academic stakeholders regarding their KT priorities, ideas, and recommendations for further research;
- E. Contribute to capacity building in the area of KT through hiring one or two research assistant(s) to coordinate and participate in the KT program, and including IPHRC Graduate students in the KT program;
- F. Produce a report based on the input and recommendations gathered from the community and academic stakeholders;
- G. Gain a comprehensive picture of the current state of the art with respect to knowledge translation in Saskatchewan, including coverage and gaps, in order to contribute to a national knowledge translation synthesis.

The primary success of the current IPHRC knowledge translation initiative was in further developing the networks between community members and health researchers in

Saskatchewan, and in highlighting knowledge translation as an issue of mutual concern and interest.

2.0 Background

Knowledge translation is currently a priority of the Canadian Institutes of Health Research (CIHR) as a way of bridging the gap between health research and health outcomes (CIHR, 2004). Other health agencies and programs in Canada – including the Canadian Strategy for Cancer Control, the Canadian Tobacco Control Research Initiative, and the Canadian Cardiovascular Society – are similarly targeting knowledge translation initiatives as critical tools for improving health outcomes and increasing the uptake of innovative health information. However, it is unclear whether knowledge translation practices, as understood and promoted in mainstream western health research, are compatible with Indigenous community health contexts. In this report, we will preface the findings of our consultations with Indigenous scholars and community members on the subject of knowledge translation in health research with an overview of the current literature in this field.

2.1 Knowledge Translation in Theory

Knowledge translation in the western sphere of health research has been described in a number of different ways by various authors. Grunfeld *et al.* (2004) suggest that knowledge translation is geared towards “improving the adoption of an innovation, e.g., research results.” Tremblay *et al.* (2004) describe knowledge translation simply as “the process of turning best evidence into best practices.” Ohlsson (2002) proposes that “knowledge translation is the process of bridging the gap between the overwhelming amount of research data/information/evidence and its critical appraisal, synthesis, dissemination, and application as knowledge by influential role models.” The CIHR defines knowledge translation as “the exchange, synthesis and ethically sound application of knowledge – within a complex system of interactions among researchers and users.” (CIHR, 2004).

In terms of knowledge translation strategies, Baker (1991) has proposed four different levels of “knowledge utilization,” ranging from simple dissemination of information to the integration of information in contextually specific policies. Larsen (1980) suggests that situational factors at the individual and group level will impact the effectiveness of knowledge translation and utilization, thus cautioning against generic knowledge translation strategies. Lester (1993) has pointed to the role that differing worldviews of health researchers on the one hand, and health policy makers on the other hand, play in effective knowledge translation. Smylie *et al* (2003) point out that, increasingly, health policy makers are found within Indigenous communities, thus adding further to the complexity of worldviews involved in knowledge translation.

According to Choi (2005), knowledge translation activities fall under the categories of integration and simplification. Integration involves gathering data from multiple sources and synthesizing that information. Simplification is the process whereby the synthesized information is translated into a form readily understandable by policy makers and other

health information users. A similar multi-step model of information synthesis and simplification is proposed by Boissel *et al.* (2004) in translating the results of clinical trials to physicians so that new drug therapies may be prescribed according to the best available evidence. According to Choi, McQueen and Rootman (2003), “From time to time, scientists who are effective translators must stop simply generating scientific evidence and instead recommend specific public health actions for decision-makers.” These authors point out that due to the volume and complexity of new health information generated through research activities, there is a gap in putting that knowledge into effective practice.

According to the mainstream model, knowledge translation activities occur when research findings are contextualized and transferred to knowledge users (such as health care practitioners, policy makers, community wellness groups, and individuals) and applied to improve health outcomes. According to this framework, knowledge translation occurs at the completion of a research project, and is a one-way flow of information from health researchers to health information users. There is some scope for input by health users into the development of new research questions; however, the health information users remain largely outside the process of knowledge generation (Ohlsson, 2002). This model of knowledge translation does not appear to fit with either participatory action research approaches, or with the understandings and concerns of community members (see Section 4.0 below) which prioritizes the generation of knowledge *within* a community, and promotes a two way (or multiple path) sharing of information. This potential shortfall in mainstream knowledge translation approaches is beginning to be recognized in the literature. For example, Grunfeld *et al.* (2004b) suggest that there are various stages in the research process where knowledge translation activities can occur: during the initial development of the research question and methodology, during the implementation of research (for example, through participatory action research approaches), during dissemination of research findings, during the application of research results, and through influencing areas of future or additional research. Similarly, in its *Knowledge Translation Strategy* document, the CIHR (2004) describes knowledge translation as a “dialogic and iterative” process, where users and creators of knowledge come together during all stages of the research process. This multiple entry point view of knowledge translation activities provides a more active and engaging model of knowledge translation.

2.2 Knowledge Translation in Practice

Grunfeld *et al.* (2004b) note that knowledge translation strategies have typically focused on traditional academic venues such as publication in scholarly journals, presentations at conferences, or mail-outs to practitioners. They suggest, however, that more creative strategies are required in order to effectively communicate health information in a usable way. They propose drawing on communication theories, which suggest that effective knowledge translation must take into account four key dimensions: source (how credible the source of the information is), content (the degree to which the innovation is superior to current practices and feasible to implement), medium (the format in which knowledge is disseminated) and user preferences. Other authors are beginning to look at the ways in

which information and communication technology can enhance and facilitate knowledge translation activities (Ho *et al.*, 2004).

There are currently very few published clinical guidelines for health practitioners that distinctly address the needs of Indigenous populations (Smylie *et al.*, 2003; for an example see Meltzer *et al.*, 1998). Where culturally relevant health practices are implemented, they show some marked success in terms of health outcomes. This was demonstrated, for example, in the implementation of a chronic disease screening program designed specifically for Aboriginal populations in Australia, and in the on-going success of the Kahnawake Schools Diabetes Prevention Project in Canada (Weeramantthri *et al.*, 2002; Macauley *et al.*, 1997).

2.3 Conceptual Mapping of Knowledge Translation and Transfer – Working in the Ethical Space¹

It has been proposed that in order to have ethical and honorable interactions between western and Indigenous communities, engaging in dialogue about our common humanity is a necessary process (Ermine *et al.*, 2004). The space of meeting and dialogue, referenced as the ethical space, is necessary because two entities with different backgrounds, worldviews, and knowledge systems may have different intentions and understandings regarding issues of mutual concern. Dialogue in the ethical space will create a field of human possibility, a sacred space of knowing, where exchanges and understandings between communities take form. Conceptual and practical development of “knowledge translation and transfer” will require voices that speak for disperse human communities, particularly as we try to capture and incubate notions that will impact the health Indigenous populations.

A situation arises when the mindsets of two societies encounter each other. Misunderstanding may occur. On the superficial level where the Indigenous and western worlds meet, the two entities may acknowledge each other, even name each other, and interact on the basis of mutual agreement. However, there is a deeper level of thought and attitude that influences and drives the way that the two will interact with one another. It is this deeper force, the unseen, often unconscious undercurrent formed in each by distinct histories, knowledge traditions, language, cultural interests, and social, economic and political realities that needs to be recognized as the more substantive and cumulative force that determines how the two entities will sustain relationships with one another over time.

It is important that the differences in knowledge production and dissemination between Indigenous and western knowledge systems be clearly articulated on the outset because it provides a foundation for the discussion of knowledge translation and transfer. Cajete (2000: 287) cautions that “Western and native science traditions are very different in terms of the ways in which people come to know, the ways in which knowledge or

¹ This section summarizes the information that was presented by Willie Ermine at the Fort Qu’Appelle and Prince Albert knowledge translation consultation sessions, and which provided the context for those discussions.

understanding is shared, how knowledge is transferred from one generation to another, and how knowledge is handled legally, economically, and spiritually.” As much as western knowledge production is guided by cultural principles, the Indigenous knowledge system similarly operates under its own principles and processes that are internally and collectively agreed upon. Given that there may be two distinct knowledge traditions with different ways of constructing meaning and practice, it is crucial that voices that can articulate the various contours of knowledge from each tradition be brought to a venue of dialogue regarding sustained population health. According to Bohm (1996), dialogue enables inquiry into processes that can fragment and interfere with real communication between individuals, nations, and even different parts of the same organization. Dialogue is concerned with providing a space for exploring the field of thought, and attention is given to understanding how thought functions in governing our cross-cultural behaviors. It is a way of observing, collectively, how hidden values and intentions can control our behavior, and how unnoticed cultural differences can clash without our realizing what is occurring. Cross-cultural research and transfer of knowledge has been problematic because of this neglect for the unseen, unstated influential undercurrent of hidden values and intentions.

There are certain elements in the concept of knowledge translation and transfer that need particular and immediate focus; for example, disparities in worldviews and knowledge contexts. The worldviews that guide the western and Indigenous knowledge traditions are sufficiently different that we not only have to understand and interpret the respective views of life, but we have to also translate the language that is the description of that world. How does one reconcile a nebulous, metaphysical worldview to a scientific based community that does not acknowledge this crucial touchstone of Indigenous thought and practice? In this sense, translation, interpretation and transfer of knowledge from one sphere to another becomes problematic.

To be certain, there are some concerns regarding the scope and implications of the concept “knowledge translation and transfer” particularly as it relates to the relationship between the West and the Indigenous. To have a meaningful understanding of the intent of knowledge translation and transfer, it is important to clearly identify the reference points between which knowledge translation is situated. These reference points or locations of knowledge need clear identification in order to help us sort out the different configurations that knowledge translation can take form. To provide some measure of clarity, several models of knowledge translation and its intended transfer route are presented below as a starting point for discussion and understanding.

Models

1. Model A: Mono-Culture
(Western) Research ⇒ Synthesis ⇒ Policy ⇒ Application (Masses)

This model assumes universality, only one worldview, one system of knowledge, one way: one size fits all. This model would presume a consensus about voice, ethical research, and appropriate interpretation in construction of knowledge. It assumes one

culture of understanding, one way to research and assumes one model of humanity. All the questions about the ethics of western research and the critique about its relevance in cross-cultural settings stem from this configuration. This model also assumes a framework of imposition and infusion of questionable practices into cross-cultural settings. This is an established consciousness in the western world that only western ideas, practices and conventions will receive the light of day and be supported by discourses and the appropriate funding for their formation. What that states to Indigenous peoples is that their ideas do not register nor have value in the national health consciousness.

2. Model B: Colonial Model

(Western Knowledge) research \Rightarrow synthesis \Rightarrow policy \Rightarrow application

i.e. translate knowledge \Rightarrow transfer (to Indigenous community)

This model displaces (once again) Indigenous knowledge and health practices based on Indigenous paradigms. Indigenous peoples are continually wary of western conventions and practices that intrude into their lives. This model dispossesses Indigenous communities' ownership and self-determination of their own health. This includes western biomedical practices that work to displace and disrupt Indigenous systems of health and healing still practiced in communities. In many instances Indigenous peoples still practice a system of health knowledge that is tied to their philosophies and science regarding their lands. The western biomedical system has not supported this system as part of its health regime. Indigenous community research has not been done, simply because Indigenous community research by competent community researchers has not been funded. As a result, Indigenous concepts of health and healing have not been researched, largely because of broader issues such as the application of exclusive frameworks in the biomedical establishment and the privileging of resources that has left Indigenous communities at a disadvantage.

3. Model C: Appropriation Model

(Indigenous knowledge) research \Rightarrow synthesis \Rightarrow policy \Rightarrow application

i.e. translate \Rightarrow transfer (into Western system)

This model reflects a problematic process of knowledge appropriation and sets conditions for a new wave of opportunistic research by western institutions setting off alarm bells in Indigenous communities about research ethics and knowledge appropriation and exploitation. Results of this format have been the ownership of the Indigenous image by western scholarship whereby the Indigenous peoples are constructed under pathological lenses. Research results are only as good as the researchers' knowledge and the paradigms that are used. Western trained researchers have not had the capacity to understand Indigenous systems of knowledge nor the ability to translate Indigenous understandings and ideas.

4. Model D: Indigenous Framework

(Indigenous based development of knowledge / institutions)

\Rightarrow research \Rightarrow synthesis \Rightarrow policy \Rightarrow application \Rightarrow

(Within Indigenous community)

Indigenous communities do not currently have adequate access to resources such as research funding to do the necessary developmental work that is required in these communities, relative to health. Communities would like to do research that compliments their memory work to reclaim, and rebuild their health knowledge base and supporting institutions in the wake of colonial imposition into their lives. Research would be the catalyst in this community development model. It is proposed that once Indigenous communities reclaim their health knowledge base and have made significant progress in recapturing control of their lives and supporting institutions, then knowledge translation and transfer can begin in earnest because the playing field would have been somewhat leveled. Dialogue and the ethical space theory may provide the cornerstones in this future development.

2.4 Moving Beyond the Literature

Smylie *et al.* (2003) concluded that knowledge translation strategies needed to be developed and evaluated within Indigenous community contexts. Similarly, it has been suggested by Jacobson *et al.* (2003) that implicit goal of knowledge translation is to make the researcher part of the context of health information users. Ermine (above) has proposed a new model of knowledge translation set within an Indigenous framework, that emphasizes Indigenous based knowledge development, and benefit to Indigenous communities. The current IPHRC initiative is an attempt to assess knowledge translation within Indigenous community contexts in Saskatchewan. In order to achieve this re-evaluation of knowledge translation from an Indigenous community standpoint, a series of knowledge translation workshops were held in Saskatoon, Fort Qu'Appelle and Prince Albert, Saskatchewan. These workshops were designed to bring forward international, regional, and local understandings of knowledge translation on the part of Indigenous scholars, health practitioners, Elders, and community members.²

3.0 Methods

The IPHRC held a series of three stakeholder meetings to conduct consultation on knowledge translation within the Saskatchewan ACADRE region. The consultation sessions were held in Saskatoon (Wanuskeewin Heritage Park, May 16, 2005), Fort Qu'Appelle (June 15, 2005) and Prince Albert (June 20, 2005). These sessions brought together First Nation and Metis academic and community stakeholders, IPHRC funded students, and local health leaders and Elders who are involved in aboriginal health research activities. In total, approximately 70 people participated in the three consultation sessions.

The session in Saskatoon was in the format of a symposium, and was intended to set the foundation for the follow-up discussions in the north and south regions. Invitations were extended widely to individuals from all areas of the province. In order to provide an

² It is anticipated that the national perspective in Indigenous health knowledge translation will be highlighted by the synthesis report produced by the ACADRE centres engaged in knowledge translation activities across Canada.

appropriate mix of backgrounds and perspectives, designated spaces at the symposium were allocated for academic researchers, students, and community members. The symposium was held at the Wanuskewin Heritage Park, an Indigenous-directed cultural and natural heritage site operated in partnership with the University of Saskatchewan. Located on the native prairie on the outskirts of Saskatoon, adjacent to an important historical buffalo hunting site of the Cree people, this location provided an appropriate setting to discuss knowledge translation and Indigenous knowledge. The agenda for the day (see Appendix 2) included an opening pipe ceremony in accordance with Cree cultural protocols, welcoming remarks from the Director of IPHRC Dr. Janet Smylie, and presentations by two panels of Indigenous scholars that work in the areas of health research and knowledge translation. The morning panel highlighted the work of international Indigenous scholars Dr. Sue Crengle (New Zealand), Dr. Ian Anderson (Australia) and Dr. Mihi Ratima (New Zealand); while the afternoon panel session highlighted the work of Saskatchewan scholars Dr. Marie Battiste, Maria Campbell, Willie Ermine and Elder Danny Musqua.³ The tradition of gift giving was honoured when Dr. Smylie presented a blanket to every presenter. Following the panel presentations, the symposium participants were divided into three break-out discussion groups to reflect on the information that had been shared, and contribute their own insights in response to the following two questions:

1. What is your experience and understanding of the sharing and use of health information in Aboriginal communities?
2. Please discuss your perspective and share your recommendations about bridging the gap between western science and Indigenous knowledge in the area of health research and health services delivery in Indigenous communities.

Reports from the small group sessions were then shared with the larger group. In accordance with University of Saskatchewan ethical protocols, participants in the Saskatoon knowledge translation symposium were asked to sign consent forms (see Appendix 3) in order for the information they shared in small group discussions to be integrated into the final report, and to ensure consent for the video-taping of the proceedings.

The follow-up sessions in Fort Qu'Appelle (south) and Prince Albert (north) followed a slightly different format. These sessions were designed to be small focus group sessions with an emphasis on community and Elder participation. In both cases, participants in the consultation sessions were selected based on previous working relationships established between the IPHRC and Aboriginal health organizations and communities. Many of the invited participants were community partners in IPHRC funded partnership/network development grants for community-based Aboriginal health research. Participants were invited to represent various levels of health services delivery including: individual First Nation communities, Metis and First Nations health organizations, tribal council health

³ The panel presentations were video-recorded, and a DVD with highlights from the presentations was later prepared for sharing in the follow-up consultation sessions in the northern and southern regions.

departments, regional health authorities, educational institutions, third level health service provides, and community Elders.

The agendas for the small group discussions (see Appendix 4) included opening remarks by Dr. Janet Smylie and Willie Ermine to provide background information on knowledge translation and set the context for the discussions. Following this, the DVD with highlights from the Saskatoon symposium (approximately 1 hour long) was shared with the participants. This facilitated the sharing of information from the international and regional Indigenous scholars with community members who were unable to attend the Saskatoon session. Following the video presentation, a focus group session was conducted with the participants, addressing the same two questions that were posed in the break out sessions in Saskatoon. In Prince Albert and Fort Qu'Appelle, consent forms were also used as per the University of Saskatchewan ethical guidelines. The focus group sessions were recorded, transcribed, and sent to the participants for review prior to being incorporated into the final report.

4.0 Results

The results from the knowledge translation symposium held in Saskatoon, and the focus group sessions held in Fort Qu'Appelle and Prince Albert are presented below, organized according to the salient themes that emerged from these sessions. The themes were identified through a process of qualitative data analysis and coding. There was a certain amount of confusion and uncertainty over what exactly was meant by “knowledge translation” in the consultation sessions. It was not a term that found easy resonance with community members. As noted by Dr. Marie Battiste at the Saskatoon knowledge translation symposium, it is important to go through a period of incoherence before transformation of any system can occur. The symposium and follow-up consultation sessions were largely exploratory in nature, and reflect the current state of uncertainty in respect to knowledge translation, and what it means for Indigenous communities.

4.1 Drawing on Traditional Knowledge

So I had to break myself into the past, in order to begin to obtain the knowledge and wisdom of the Elders and that's a lifetime event. It's one event but it takes a lifetime to fully, fully understand it.

(Participant in Prince Albert session)

As noted by Marlene Brant Castellano (2004): “Fundamental to the exercise of self-determination is the right of peoples to construct knowledge in accordance with self-determined definitions of what is real and what is valuable.” Throughout the consultation sessions, speakers referenced the teachings and contributions of their local Elders, and placed priority on Indigenous constructions of knowledge. As one participant in the Prince Albert session observed:

We have our doctors, you know what's really amazing though is we have our general practitioners, our specialists, our internists... all in one person, sometimes...there's certain ones that are very gifted.

Elders were described to operate within an Indigenous context which is grounded in a spiritual reality. Traditional healers are acutely aware that they are not in control of the healing process and that connection with the Spirit World is paramount. One of the participants observed that when he is speaking to an Elder, "It's not just this man or woman that's sitting in front of me. It's the Elders' spirit behind them in the past, the Grandparents, those are the Elders I'm speaking to, or should be speaking to." This participant also noted that Elders' knowledge is not always welcomed and appreciated in his own community, let alone in western society. He questioned how Indigenous knowledge could be transferred to another society when there did not seem to be respect or a place for Elders in the modern western world.

An Elder at the Prince Albert consultation session explained that drawing on traditional knowledge means that one has to respect the Indigenous context of carrying out tasks. For example, his Grandmother taught him how to gather certain medicines and he was told that the time of day and season had to be considered when picking the plant life in order for the healing powers to be most effective. The Elder shared that healing should be undertaken in the Spring; when the Earth starts to move and when new life starts to grow. The summertime was the best time for the body to be released of toxins at the same time plant life grows. In contrast to western medical approaches, the cycles of the Earth influence the healing process, and may factor into the success of certain health programs in Indigenous communities.

Elder Danny Musqua, who participated in the Saskatoon symposium, noted that traditional learning shares some similarities with formal education in the western sense – it takes many years to acquire ones credentials, and a deep commitment to the lessons being learned. Over the years, knowledge is built up to the point where a person can begin to put it into practice. He described traditional learning strategies as participatory and experiential in nature, observing that people acquired knowledge through ceremonial activities and through daily life. He placed the core of traditional knowledge in understanding the relationships that exist between all living things.

4.2 Interface between Indigenous Knowledge and Western Medicine

It's difficult because we do have our traditional healers within the community and medicine women, but to try to validate our way of healing is a struggle because the funders... only want to fund the Western ways so we're trying to find different avenues to try to revitalize our way of healing, our ways of using our medicines and our ceremonies...we need to bring our Elders with us, our guiders and supporters...we need the healers to promote healing which is very different compared to the Western model where the healer will look at the client in a holistic manner and then it always goes back to that individual, that individual has to take

responsibility of oneself and that commitment to looking after him or herself, and so the Elders said it's a lifelong journey.

(Participant in Prince Albert session)

On a broad level, it was pointed out often that there are great differences between the Indigenous and western ways of understanding, practicing and sharing knowledge. There are distinctions made and recognized in the Canadian Constitution between French and English Canada. Canada prides itself in its respect for multiculturalism. However, discussion around the table at the three sessions revealed that not enough is done at the regional and local levels in terms of acknowledging and respecting culturally diverse knowledge and practice in the a field of health services. In the case of Indigenous peoples of the Saskatchewan region, there are members of Metis, Cree, Assiniboine, Saulteaux, Dene, and Dakota cultural groups. Diverse expressions of knowledge exist within these cultural groups. For example, assumptions cannot be made that the Cree of the Prince Albert region are in need of the same resources as the Dene of Northern communities. The diversity that exists both between and within Indigenous communities needs to be recognized in developing strategies for knowledge translation.

Several participants shared personal stories about the use of traditional and western modes of healing. The stories were told to exemplify the strength in Indigenous medicine, and highlight cross-cultural difficulties in implementing western health programs in Indigenous communities. Some participants used metaphors in their story telling to illustrate ideas that were of special significance. Others used humor to lighten the very serious mood and nature of the discussions. One participant surmised that his academic training and scientific reasoning was in direct conflict with Indigenous ways of understanding. The challenge for people who have experienced healing in an Indigenous context is a reluctance to share the story with members of the western society who have a tendency to be skeptical of such disclosures.

The Elder at one consultation session firmly proclaimed his respect for the strength and power of Indigenous medicine. The Elder stated that at this point in time something has to be bridged because “we have to have that Indigenous knowledge, the broader society has to understand that Indigenous knowledge, Indigenous understanding, the teachings that come from nature.” Yet, at the same time, the Elder noted the difficulties in transferring Indigenous knowledge and understandings to people who were not raised in that cultural context. He emphasized that the process of learning in an Indigenous context was a lifetime event. Therefore, how could true knowledge transfer occur in a western context of research?

One participant from the North noted that his parents had been raised on the land and through this they had learned skills, knowledge and values about healing to the extent that he did not see a doctor until he was about sixteen years old. He noted that self-sufficiency in healing, as in other aspects of livelihood, was an important aspect of traditional life in the North. He noted that a belief in the strength and importance of traditional medicines had been passed on to his generation to a certain extent, but that

some of the technical information had been lost due to language disruption through the residential school experience.

One participant related her story about her son who had passed onto the Spirit World as a result of brain cancer. Although she was grateful for the guidance she received from the Oncologist who treated her son, in retrospect she concluded that there really was not much known about the disease nor how to cure it. Another participant observed that Elders and other traditional healers may not have the knowledge to heal people of new and emerging diseases such as AIDS and Hepatitis C. In such cases, the patient and family require culturally appropriate supports from the western medical system. These stories both highlight the belief that there is a place for both western and traditional medicine in Indigenous communities, and the recognition that in some cases neither system currently holds the answer to some health problems.

4.3 Bridging the Gap between Indigenous Knowledge and Western Health Research

Bridging the gap, I think that's very important because right now we're an invisible minority. We are asked, but we are not heard...so we become invisible. We've become the soundless people, and yet we make sound. So...how can transfer take place, genuinely, in a very understanding way?

One of the common themes expressed in all three consultation sessions was the recognition that significant challenges exist in terms of bridging the gap between Indigenous community knowledge and western health research. Interestingly, the primary concern of many participants was not in how to translate western health research results into Indigenous community contexts, but rather in how to secure recognition for Indigenous knowledge and healing practices within the western mainstream. It was suggested that this process was important, so that Indigenous approaches to health and healing be maintained and supported in their community contexts, in parallel with the western medical system.

Despite the fact that many participants expressed a need to impress upon mainstream health professionals the importance and validity of Indigenous community-based health knowledge, there were serious reservations expressed over how this might successfully occur, and even whether the sharing of some kinds of knowledge was appropriate. Authority for the transfer of Indigenous knowledge was seen to rest in the land and the Creator, rather than in individuals. Some participants observed that there was a deep suspicion in Indigenous communities regarding western interest in Indigenous knowledge; particularly in regards to traditional medicines. There was a perceived danger in sharing this information beyond its cultural context – recognizing that the healing powers of traditional medicines rested in more than just particular formulas and active ingredients, and that there was concern over potential exploitation of native plant resources and Indigenous knowledge by pharmaceutical companies. Several participants agreed that the medicines would not work unless they were honored properly with prayer and offerings. It was proposed that certain kinds of knowledge are meant to be contained within specific cultural regions: not all knowledge is meant to be transferred. This point

was raised by Dr. Marie Battiste, one of the speakers at the Saskatoon symposium. She suggested that knowledge translation should be about recognizing where knowledge is located and realizing that some concepts and knowledge sources can not be translated across cultural borders. Thus, one vision of the interface of the two knowledge systems was for them to remain separate and distinct, with each being supported and validated in its own context.

4.4 Communication

The language that we bear, comes from the Earth. It's Earth language; it's not based on time and speed, if you know what I mean. We're not controlled by the clock, were not controlled by how many miles per hour we're going. It's a lifetime study. (Participant in Prince Albert session)

Communication, or the lack thereof, was a recurrent theme in the various sessions in regard to knowledge translation strategies. It was noted that there is often a disconnect between health professionals trained in the western biomedical model, and community members (in particular Elders) who are seeking medical assistance. This disconnect is due to a variety of factors, and is not solely related to language barriers, although that came be a significant issue in some communities where the Indigenous language is prevalent. Dr. Ian Anderson, an Indigenous health researcher from Australia who participated in the Saskatoon knowledge translation symposium, spoke of the importance of language in terms of communicating health information. He observed that the English language is inherently tied to colonial histories, and highlighted the importance of using the right words to convey health information, taking into account the cultural connotations of even English words. As an example of appropriate language use, Anderson observed that when his team was choosing a new name for their Koori (Australian Aboriginal) health research centre, they relied on the advice of an Elder who proposed the *woi wurrung* word *Onemda*, which translates loosely as “love,” as a way of conveying the goals and values of their Centre.

The disconnect between health professionals and Indigenous communities may also be due to cross-cultural differences in communication methods. One of the stories shared at the consultation sessions illustrates difficulties in cross-cultural communication, and how this can impact health services delivery. A story was told about a Cree Grandmother who once held a key role in her northern community as the local midwife and healer. Once the hospital was built in La Ronge, she was displaced of her status and found that at times she herself was consulting with the medical doctors about her ailments, although with some reluctance. Her Granddaughter took her to the hospital one day after the Grandmother had suffered pain from broken ribs for three days prior. During the visit with the doctor, the Grandmother did not respond immediately to the physician's questions, even though she was fluent in English as well as in Cree. When she did not immediately respond, the doctor assumed she did not understand English and used rude and vulgar language that she might understand. This situation illustrates how a figure of authority can create fear and misunderstanding, and how the quality of knowledge transfer can suffer in this type of power dynamic.

As noted by Dr. Sue Crengle at the Saskatoon knowledge translation symposium, dissemination of information is a key activity in translating research results to the multiple end-users of health information. Crengle observed that approaches to knowledge translation will depend on the intended audience for the information, which may include community members, policy makers, service funders, health professionals, and other researchers. She highlighted an example of knowledge translation activities in New Zealand regarding Sudden Infant Death Syndrome (SIDS) where a blanket approach to communicating messages about high risk behaviours was effective in the general population, but not among the Maori population, resulting in increased disparities in SIDS rates between Maori and non-Maori populations. After several years of tracking the success of the SIDS intervention, a Maori-specific SIDS prevention team was formed to develop culturally appropriate ways of communicating high risk behaviours in the Maori population. Beginning in 1994, this team spent considerable time traveling to Maori communities and speaking with community members and health professionals about SIDS. As a result of the consultations, they developed some culturally sensitive approaches to information dissemination focusing on appropriate sites for knowledge sharing, appropriate messages which clarified risks and provided alternatives, and appropriate staff to implement the programs. The program was found to be effective in reducing SIDS rates in the Maori population.⁴

The ways in which knowledge is shared in Indigenous communities may be quite different than, for example, in western urban settings, where written materials and formal education are the primary sources of information and knowledge. From an Indigenous standpoint, access to knowledge can come in the form of prayer, dreams, ceremony and fasting. Such mediums of communication are considered vital and valid sources of information. In Indigenous communities, Elders may fill the role of oral historians, translators, and knowledge keepers in the form of stories and teachings. The language itself may be an importance repository of information and wisdom. A number of participants suggested that the loss of language through colonialism and the residential school experience had had a significant impact on the retention of Indigenous knowledge in respect to health and healing. Many participants suggested that the Cree language, for example, is intimately tied to the land and shapes the way people understand health and healing. The Cree language holds both animate and inanimate characteristics, and some entities that are considered to be inanimate in western culture are in fact viewed as animate and possessing life and spirit in the Indigenous context. One Elder suggested that when a plant is reduced to chemicals and contained in capsules, it is no longer a living medicine: “The traditional healing powers of the medicine will heal, whereas man-made medicines such as painkillers are dead.”

At the Saskatoon symposium, Dr. Janet Smylie proposed the following insights into the nature of communication and knowledge sharing within Indigenous communities:

⁴ As a caveat to the success of this program, Dr. Crengle pointed out that the disparity between SIDS rates in Maori versus non-Maori populations had not decreased, but had at least stabilized. She also noted that decreases in SIDS rates may have been due in part to coroner’s behaviour in identifying more Maori deaths as suffocation, rather than SIDS.

- Valuing of experiential knowledge
- Influence of community structure on information flow
- Oral spread of information through family and community networks
- Preference for “within community” messages
- Influence of colonization on message and medium
- Valuing of community leadership and participation

Knowledge translation strategies which take these characteristics into account may have a greater likelihood of success in Indigenous community contexts.

4.5 Caution and Concern

I know that the information he’s going to gather is not going to be right, because we have to understand those medicines in order to obtain them.

A serious concern was raised regarding research in Indigenous communities and the manipulation of community members to carry out the research of western institutions. Indigenous peoples have become wary of the motives of university researchers. One participant shared her experience in carrying out research for university projects. She critiqued the design of research and suggested that the questions were not always practical or sensitive to an individual’s situation. She had noticed that some of the questions were based on preconceived notions prior to data collection and felt that there was an undercurrent of preconceived answers or expectations before the research was actually conducted in the Indigenous communities. Even though research has been described in the language of participatory or community based research, often the hidden agenda remains and community people are hired to carry out the work of the academics to ensure acceptance and cooperation in the community.

As mentioned above, research into traditional medicines is an area of significant concern to community members. One individual observed that research on medicinal properties of plants had been carried out in his traditional territory in northern Saskatchewan. The research was undertaken from a scientific standpoint and was designed to isolate the active ingredients of traditional herbal medicines. Although the healing qualities of the plants work within the Indigenous context, participants suggested that these medicines would most likely not be effective in the same way when reduced to chemicals. There was also fear of exploitation of knowledge and that harvesting medicinal plants would lead to desecration of the land.

Many of the Indigenous participants expressed trepidation in regard to knowledge transfer. People feared that community based knowledge would not be accorded the same respect as western knowledge because it would not be understood in its holistic context. It was feared the Elders and traditional healers would not be accorded the same respect as medical doctors, scientists and academics.

4.5.1 Lessons from the Fort Qu’Appelle Consultation Session

Critiques of the concept of knowledge translation and the practice of research were clearly communicated to the researchers in the session held in Fort Qu'Appelle. The university consent forms for this session were felt to be culturally inappropriate. As a result, no recordings or transcriptions took place. Rather, the participants agreed upon a number of statements through an informative and meaningful dialogue:

- It is not the time or place for giving/sharing knowledge as the community systems have been disrupted.
- If you want knowledge give support first for systems recovery in the communities
- First Nations community defined processes of knowledge and learning need to be supported and empowered.
- Learning takes a lifetime and is based on self-discipline.
- Knowledge is to be earned. It is a personal quest.
- Knowledge is sacred (not secret).
- Knowledge cannot be sold out for bribes.
- Being told information does not mean there is permission to share or act.
- People asking for information need to be clear regarding why they want the information and what they are going to do with it.
- The benefits to the community from sharing information need to be clear.
- Processes that involve outsiders taking traditional knowledge away from First Nations will not help the wellness of anyone (First Nations and non-First Nations) and will result in misinterpretation.
- Detailed protocols and processes are already in place in First Nations communities to govern knowledge and learning systems.

These statements provide an important critique of the concept of knowledge translation, the lack of clarity in its definition and what it means for Aboriginal communities. A clear definition and explanation of the intentions of knowledge translation dialogues need to be communicated to the communities for further discussion to take place in this region. It is also essential to strengthen and support local knowledge systems in order to derive mutual benefit from this information sharing.

What is clearly evident from the session statements is that in the Aboriginal worldview, there is a great responsibility that comes with earning and keeping knowledge. This needs to be respected and understood throughout the research process, from initiation to community-approved dissemination.

4.6 Community Development, Control and Capacity Building

These people cannot give us power, it's never happened. Indian Affairs has never come to our communities and says here, here's power. Here's funding. Here's policy, here's legislation that promotes you. They've never done that. Anytime we've ever done anything good, it has come from within here, from within the knowledge of the community people. We've had to fight for it. That's how growth has always happened. Nowhere else.

(Participant in Prince Albert session)

It was noted by several participants that the playing field is currently not level in terms of establishing a process for knowledge translation and transfer. The emphasis in research and from funding agencies is to look at ways to transfer or implement western health research results and programs into Indigenous communities. Many participants asserted that Indigenous knowledge could in many cases provide a more appropriate pathway for healing in certain areas, but that these solutions were not given the same level of support or funding. One community in northern Saskatchewan is currently working on developing a system for offering both western and Indigenous healing practices in their health centre; however, they are experiencing significant challenges in finding the resources to support the development of the Indigenous system, and a resistance to recognizing the validity of Indigenous healers and healing practices. They are also discovering that there are very few successful models in place that they are able to draw upon for best practices. By putting more resources into the development of capacity at the community level, a more solid foundation will be laid for both fostering Indigenous knowledge, and for accessing and implementing western medical research results.

Often, participants spoke of the control they felt by the western world and especially the challenges associated with accessing government funding for community based research and health services. There was much criticism expressed regarding the rules set forth by government before money is granted to the communities for health research or programs. It was felt that the government failed to recognize the ability of Indigenous peoples to determine the best use of money in health services and delivery. One nurse alluded to the difficulty in implementing traditional healing as part of the health services in her community because it is a struggle to validate their own traditional healers and medicine people to the funding agencies.

A powerful metaphor of ‘stealing horses’ was applied to the very difficult task of acquiring money to fund Indigenous research. In traditional times, one who was good at stealing horses was seen as honorable for it was a brave and difficult deed to bring home wealth from another territory. The horse allowed the Plains cultures to grow, to cover more territory, to acquire more buffalo, to provide the basic needs of food, clothing and shelter. As in the time of stealing horses and hunting buffalo, securing funding for the development of Indigenous health knowledge is about the survival of the people, and requires brave effort on the part of individuals and communities to break new ground and acquire resources.

An Aboriginal nurse from a northern community suggested that an important step in improving health outcomes is for individuals and communities to take responsibility and ownership for their own health, while at the same time developing the partnerships and networks that will provide advice and guidance to communities to develop their own solutions to health challenges. Thus, some attention should be paid to facilitating the transfer of knowledge *between* Indigenous communities so that best practices and successful models can be highlighted and shared. According to this participant, “It’s a

matter of revitalizing and taking ownership and working together as best as we possibly can.”

4.7 Involvement of Non-Indigenous People

For me, one of the main comments that is the need for respect and for people to treat each other as human beings that has to be the number one thing. And the prerequisite of treating each other with respect is to not come with predetermined ideas of what one another is thinking or what ones experiences are.

(Participant in Prince Albert session)

Questions were often raised throughout the proceedings on how Non-Indigenous people would work with Indigenous peoples in regards to the knowledge translation process. One participant in the Prince Albert consultation session spoke reflectively on the proceedings and proposed the possibility of merging the knowledge systems in a respectful manner so that this crucial link be made towards building a strong understanding and forming a base for recognizing each other’s strengths. In the small group discussions at the Saskatoon symposium, it was proposed that Indigenous health researchers have an important role to play in both informing and engaging the non-Indigenous population in terms of Indigenous health issues. It was noted that there are numerous stereotypes that exist around health issues in Indigenous communities, and that these stereotypes in turn work to set priorities for government funding for health programs and research. According to one of the participants in the small group discussions “We need to engage the non-Aboriginal community at a certain point – both to inform them and to challenge them.” This sentiment was echoed in the Prince Albert consultation session, where one participant observed:

That is a prime example of how other people will manipulate our image. Where did that negative view come from? Go in the library here, or any Health Centre and take those nice high gloss books and read through them and see how many problems we have in our communities. How many people have diabetes? How many people need healing?...we have all these problems. Every time I read them ...I look for a Medicine man, just in case I’m sick. But that information is coming from somebody else who is manipulating our image. You see, that’s what I mean about image manipulation. As long as they hold sources of information, they can continue to manipulate us.

There are a number of initiatives in northern Saskatchewan that are supporting the development of networks between Indigenous and Non-Indigenous communities. For example, the Regional Health Authorities in the northern regions are inclusive of First Nations and Metis Board members. One participant described an example of the recent research project in northern Saskatchewan that was governed by a community-based steering committee, and emphasized the intimate involvement of the community members from formulating the questions to carrying out the research. The development

of these networks and collaborative approaches are conducive to more effective knowledge translation through better understanding and cooperation.

4.8 Indigenous Understandings of Knowledge Translation

I think we all recognize that there's some element of danger in the term itself, the concept [of knowledge translation]. We know that it comes from established kind of a mindset and it probably doesn't mean very [much] if we apply it to ourselves and our communities...I think what we need to do is really work to empower our own community developers... before we have important dealings with knowledge transfer or sharing of knowledge, first we need to come to a certain level of reconstruction in our communities. (Participant in Prince Albert session)

As part of her introductory remarks at the Saskatoon knowledge translation symposium, Dr. Janet Smylie proposed the following definition of knowledge translation:

Knowledge translation is Indigenously led sharing of culturally relevant and useful health information and practices to improve Indigenous health status, policy, services and programs.

This definition places emphasis on Indigenous leadership in both generating and disseminating health information, and measures success by observed improvements in health outcomes. Smylie proposed that the Metis Red River cart (see Figure 1) can be used as a metaphor for understanding Indigenous knowledge and knowledge translation. She pointed out that the Red River cart was a uniquely Indigenous adaptation of a European technology. Metis people transformed the European cart by replacing metal parts with materials that could be obtained while traveling across the land. The shape of the cart was altered to suit the rough terrain and trails that would be encountered in the Canadian Northwest. In the same way the cart was transformed into an Indigenous form, so too might health information be transformed to suit the cultural terrain and context of Indigenous communities.



Figure 1: Metis Red River Cart – a metaphor for Indigenous Knowledge Translation

Willie Ermine, IPHRC Ethicist and Researcher, proposed a Plains Cree approach to understanding the role of researchers and knowledge translation at the Saskatoon symposium. He noted that in Cree culture, certain people are trained from a very early age to act as servants for Elders in a ceremonial context. These individuals are called *oskapiwis*, loosely translated as “servants,” and are, in effect, servants to the Cree knowledge system. Ermine proposed that researchers might also view their role as being one of a servant to the knowledge systems they are studying and to the communities in which they are working. This approach would place emphasis on community benefit, and would work towards equalizing power relationships between researchers and community members.

Dr. Mihi Ratima, a Maori health researcher who presented at the Saskatoon symposium, suggested that knowledge translation in general may be defined as “a process through which scientific evidence is accessed and assessed for its quality and relevance, and then used to guide the most effective and efficient practice in order to achieve optimal health outcomes.” She proposed that effective knowledge translation strategies, from a Maori standpoint, might include the following features:

- Māori-prioritised information
- Critical mass of senior Māori academics
- Multidisciplinary approach
- Focus on socio-economic determinants of health
- Incorporate both Māori and Western intellectual traditions
- Draws on known Māori frameworks
- Strong Māori community links
- Focus on practical outcomes

Ratima shared some of the current initiatives in New Zealand surrounding effective knowledge translation, which include placing emphasis on developing senior Maori researchers, supporting Maori community development with appropriate funding, initiating community gatherings (*Hui*) which include both researchers and community members meeting in appropriate community contexts, and facilitating greater links and accountability between researchers and communities. As observed by Ratima, knowledge translation is not a new concept for Indigenous communities. She shared a Maori traditional story about an ancestor who went on a quest for three baskets of knowledge, which he brought back for the betterment of his people. Thus, from time immemorial, Indigenous peoples have been seeking out new knowledge and information from outside of their territories, and adapting it to meet the needs of their communities.

This point was echoed by Maria Campbell, a Metis Elder and scholar who presented at the Saskatoon symposium. Campbell proposed that the Grandmothers and Grandfathers who traditionally shared their knowledge through the medium of storytelling were adept at the art of knowledge translation. They would adapt their stories to meet the needs of individual listeners and different audiences according to lessons that needed to be learned. Thus, one story could be told in multiple ways to get different kinds of messages

across. Campbell suggested that storytelling has an important role to play in contemporary community health and healing, and could be an effective mechanism for translation of health information. Following this point, it was suggested in the small group discussions in Saskatoon that creative approaches to sharing knowledge, including poetry, literature, and theatre might be explored in Indigenous community contexts.

Dr. Ian Anderson contributed to the development of Indigenous models of knowledge translation at the Saskatoon symposium by suggesting that frameworks for health research be informed by traditional Indigenous values. In the case of Australian Aboriginal populations, he noted that the concept of reciprocity was highly valued in traditional culture as a way of sharing resources and forging ties between groups of people. Thus, by framing health research results in terms of reciprocity – emphasizing giving back, sharing, and mutual benefit – the relationship between health researcher and health information user may be more in-line with cultural norms and more likely to be accepted and acted upon.

5.0 Discussion

The collective experiences of knowledge translation and transfer among the participants at the consultation sessions were articulated in stories of strength and survival. Local, national and international visitors to the gatherings held in Wanuskewin, Fort Qu'Appelle and Prince Albert all turned toward their respective cultures as sources of power. Participants told stories of strength and of the impact of colonization on local and personal histories. People shared experiences of how Indigenous and western groups had at different times attempted to interface knowledge systems and how the two systems of understanding were often incompatible. Numerous gaps were identified in the flow of health information between the Indigenous communities and the Western world. Conflicting messages have resulted in health information that does not adequately serve the needs of Indigenous communities. Therefore, the primary findings of the consultations resulted in the desire for Indigenous peoples to nurture the strength in their existing knowledge systems and practices. The most often stated concern of the knowledge translation consultations was that the recommendations be actualized in the form of resources to develop Indigenous health sciences and healthy communities.

CIHR (2004) has proposed to undertake “the exchange, synthesis and ethically sound application of knowledge – within a complex system of interactions among researchers and users” through knowledge translation activities. This effort to improve population health is predicated upon a number of assumptions. It assumes that a normative consensus has been achieved about processes that would contribute to the effective application of health research results. Taken from the Indigenous perspective, this concept becomes questionable and encounters resistance relative to its applicability in cross-cultural contexts, particularly as it relates to Indigenous peoples.

The themes that emerged from the discussions clearly give body to a perspective that emanates from Indigenous thought regarding how knowledge translation and transfer is perceived with a mind to the implications thereof. What emerges is a perspective from

the Indigenous community that speaks of the Indigenous experience being grounded to the knowledge system of the community. This perspective is a 'gaze' from the Indigenous mind that looks back at the western world and which holds a memory that witnessed oppression prior to becoming a fixed image in western thought. Participants to the discussion highlighted this gaze on the west by speaking about the various contours of Indigenous knowledge and its contribution to community health and vitality. They spoke of philosophies and sciences founded on precepts of Indigenous systems of knowledge that refuse to be dislodged by impositions of health paradigms from the mainstream. Being grounded to community means having memory not only to the Indigenous systems of health that sustained the community over time, but also of the impositions and omissions that compromised those states of being.

For many of the participants, the community and its systems of knowledge becomes the space of retreat, with hope and possibility for reclaiming Indigenous voice and vision for their health. For many Indigenous communities, what is imperative at this moment of history is the memory work that needs to happen in order to recapture the sense of ownership for health and to do the necessary reclaiming, renaming and development of community knowledge and supporting systems. Many Indigenous peoples are feeling lost because they are losing their culture and the wisdom of the Elders, yet they cannot identify completely with western cultural models. However, Indigenous communities do not have access to resources such as health research funding to do the necessary developmental work that is required in these communities. For participants, research takes on new meaning when it compliments community developmental work to reclaim and to rigorously reestablish a health knowledge base grounded to Indigenous paradigms.

The concept of knowledge translation and transfer becomes a very loaded idea in cross-cultural contexts. At the minimum, the concept of knowledge translation and transfer is problematic when examined from the Indigenous mind where, because of past experiences, resistance can easily form to western initiatives, particularly as they relate to knowledge production and reproduction. Participants cautioned against models of knowledge creation that left open possibilities of dispossession of Indigenous ownership and self-determination of health.

Many participants spoke of a mystification of health knowledge. Participants spoke of a flux in knowledge where they feel lost when they encounter unhealthy situations. Many spoke of losing sight of their culture and not receiving the practical wisdom of the Elders, yet they cannot identify completely with the western culture either. Many community people are not as knowledgeable about illnesses, diseases, and treatments with the result that there is a lot of misinformation on health related issues. In some communities with strong traditional backgrounds, it was difficult for community health nurses to sell the western model to First Nation clients, especially the Elders, when they have been used to taking their own medicines. Many communities are therefore in a state of flux in terms of their search for appropriate frameworks of health, to name health in its various dimensions in a way that is congruent with their community identity. Many participants had accessed both western and Indigenous systems of health and spoke of the experiences encountered that would weigh heavily in terms of their comfort and allegiance to a

particular system. Most criticisms lay with the Western medical systems' invasiveness and its inability to meet the needs of the whole person. Apart from criticism of the western system of health, many participants voiced sincere call for a higher order of health care that respected diverse perspectives of being. Within this context, knowledge translation is just as confusing.

As it now exists, it is a huge struggle trying to intersect the two models of healing without an adequate formula for dialogue and collaboration between the west and Indigenous communities. Attempts to unite the two knowledge systems of health services are only in the initial stages in some communities. The challenge for community medical practitioners is to try to find alternate avenues for funding in order to revitalize healing, ceremonies and medicine based on Indigenous epistemologies. Dialogue, entertained in the ethical space, has started to create new paths for the development of health models that are respectful and inclusive of diverse traditions. New thought emerges as a range of participants from academia, Indigenous community, research sites, and health practitioners convene to discuss the confluence of western and Indigenous systems of health. New ways of thinking emerge that start to conceptually dismantle the old ways of practice. From the dialogues emerges the need for new paradigms for health and the suggestion that knowledge translation and transfer may happen when Indigenous peoples have adequately developed their own knowledge base and other supporting systems in concert with the national health agenda.

6.0 Conclusions and Recommendations

The current emphasis on knowledge translation activities by national health research agencies is based on a sense of urgency to translate health research results into positive health outcomes. The IPHRC dialogues in the spring and summer of 2005 addressed shortcomings in mainstream knowledge translation approaches by bringing together academics, health practitioners, health researchers, and Elders to determine what knowledge translation means from an Indigenous standpoint in Saskatchewan. Taken from the Indigenous perspective, the concept of knowledge translation is based on notions of normative consensus that have not been attained in diverse communities. As a result the idea is questionable and encounters resistance relative to its applicability in cross-cultural contexts, particularly as it relates to Indigenous peoples where resistance can easily form to western ideas. Participants cautioned against models of knowledge creation that left open possibilities of dispossession of Indigenous ownership and self-determination of health.

The concept of knowledge translation and transfer will remain problematic to the Indigenous mind until contested issues endemic to knowledge creation are adequately addressed at broad levels. Issues of research, interpretation of crucial culture specific data and consideration of knowledge contexts are areas in need of reconciliation. In the interim, Indigenous resistance and a general mistrust of western paradigms will continue to compromise effective application of ideas to improve population health.

The primary success of the current IPHRC knowledge translation initiative was in further developing the networks between academics, community members and health researchers in Saskatchewan, and in highlighting knowledge translation as an issue of mutual concern and interest. These partnerships and collaborations will allow for dialogues that start to create spaces for the expression of diverse worldviews and perspectives in relation to health. Research is inextricably linked to the notion of knowledge translation. Indigenous peoples see research playing the role of catalyst for the development of community systems that compliment their visions for health. New efforts in partnerships and collaboration for research, and the inclusion of the indigenous voice in knowledge creation and its dissemination is a prescription for ethical practice.

The following recommendations flow from the results of the knowledge translation symposium and consultation sessions.

- 1) In a cooperative spirit between western institutions and Indigenous peoples, develop Indigenous health knowledge systems based on Indigenous philosophies and native science paradigms.
- 2) Fund Indigenous health research and apply knowledge translation and transfer theories within Indigenous contexts for the benefit of those systems and communities.
- 3) Compare western and Indigenous knowledge translation and transfer strategies, processes, and outcomes.
- 4) Over time, as the playing field is leveled and each knowledge system is articulated and affirmed, further explore how cross-cultural knowledge translation and transfer may effectively and respectfully take place.
- 5) Avoid attempts to universalize knowledge, whether Indigenous or western health knowledge, and recognize that diversity in knowledge is the norm and should be respected and nourished.

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Appendix 1
IPHRC Knowledge Translation Proposal

IPHRC Statement on Enhancing Knowledge Translation

Introduction

The *Indigenous Peoples' Health Research Centre* (IPHRC) team is pleased to respond to the Canadian Institutes of Health Research – Institute of Aboriginal Peoples' Health (CIHR-IAPH) call for ACADRE statements on enhancing research efforts in the area of 'knowledge translation' (KT). This brief proposal outlines a series of activities designed to initiate a KT research dialogue between key Indigenous academic and community stakeholders in Saskatchewan.

Smylie, Kaplan-Myrth, Steele, Tait, and Hogg (2004)⁵, authors of the sole publication related to Indigenous KT in Canada, inform us that knowledge translation, a key link between academic health sciences research and improved health outcomes, is a priority of national health research agencies. The high levels of ill health among Indigenous peoples create a sense of urgency in articulating how knowledge translation links can be enhanced to positively influence health outcomes. Knowledge translation efforts to date have been aligned with mainstream approaches that either do not adapt to Indigenous community contexts or take a 'pan-Indigenous' approach then tends to disregard geographic, language, and cultural divides (*ibid.*). The authors express concern about the lack of research that explicitly links the broader cultural processes of knowledge creation, dissemination, and utilization to current health knowledge translation efforts.

Accordingly, emerging Indigenous KT experts in Canada, Drs. Smylie and Tait, in their current research, emphasize the importance of research activities focused on teasing out cultural beliefs and practices which influence the effective translation of health knowledge into effective health policy and practice. The IPHRC, therefore, intends to take this timely opportunity to build upon the knowledge translation research of its incoming director, Dr. Janet Smylie, utilizing the proffered funds to initiate a dialogue regarding of knowledge translation research. The three key activities will focus on building the KT knowledge base, supporting KT networks, and enhancing KT research capacity among key academic and community stakeholders in the Saskatchewan region.

Objectives

- A. Gather together key academic and community stakeholders in three locations in the province;
- B. Provide an opportunity for academics, Aboriginal health researchers, and communities to network/forgo relationships with each other
- C. Conduct panel discussions with Indigenous researchers working in the area of KT in each of these locations to facilitate networking, knowledge gathering, and capacity building;
- D. Conduct discussions/focus groups with key community and academic stakeholders regarding their KT priorities, ideas, and recommendations for further research;

⁵ Smylie, J., Martin, C., Kaplan-Myrth, N., Steele, L., Tait, C., Hogg, W. (2004). Knowledge translation and Indigenous knowledge. *International Journal of Circumpolar Health*. In Press.

- E. Contribute to capacity building in the area of KT through hiring one or two research assistant(s) to coordinate and participate in the KT program, and including IPHRC Graduate students in the KT program;
- F. Produce a report based on the input and recommendations gathered from the community and academic stakeholders;
- G. Gain a comprehensive picture of the current state of the art with respect to knowledge translation in Saskatchewan, including coverage and gaps, in order to contribute to a national knowledge translation synthesis.

Activities Plan and Value

The IPHRC intends to hold a series of 3 stakeholder consultation meetings to conduct consultation within the Saskatchewan ACADRE region; one in the south of the province, one in the central region, and one in the north. The stakeholder consultation meetings will bring together First Nation and Metis academic and community stakeholders, IPHRC funded graduate students, and local health leaders and Elders who are involved in aboriginal health research activities. Each stakeholder meetings will consist of several sessions to facilitate 1. KT information sessions; 2. KT information gathering and networking; and 3. capacity building among stakeholders, graduate students, and research assistant(s). The information sessions will consist of a panel of local/regional scholars versed in the theoretical and practical aspects of KT. We will bring in to each meeting a renowned Indigenous scholar or mainstream scholar whose area of expertise is relevant to Indigenous knowledge translation. The information gathering sessions will be based on a consultation/focus group format where specific questions are posed to key stakeholders representing academic and community interests. Capacity building will take place through the dissemination of KT information, networking, and student involvement in the process.

The value of the proposed activities includes expanding the dialogue on knowledge translation among First Nations and Metis communities and Aboriginal health researchers in Saskatchewan. Implementing KT specific activities will coordinate knowledge translation activities and synthesize current KT ‘knowledge’ among health researchers in the province. Most importantly, bringing together KT stakeholders to generate KT specific input facilitates the collaborative determination of the research agenda in the area of knowledge translation. IPHRC anticipates that these research activities will enhance our contribution to the synthesis of knowledge translation research at the national level.

Timeline

ACTIVITY/DELIVERABLE	WHO	DATES
Recruiting Research Assistant(s)	KT Project Coordinator	January 2005
Research assistants survey literature; preparation for gatherings; making community and key academic stakeholders contacts, KT experts, administrative tasks (80 RA hours)	Research Assistant(s)	Jan-Feb 2005
Stakeholder Meetings to be held in Regina, Saskatoon, and a northern location. (60 RA hours)	IPHRC team Research Assistant(s)	March-April 2005
Analysis and drafting of Final Report (50 RA hours)	Team Research Assistant(s)	May-June 2005
Final Report (20 RA hours)	Team	July 2005

Budget

The following budget is proposed to conduct the Knowledge Translation activities:

ITEM	AMOUNT
Research Assistant(s) 420 total hrs x \$15.00/hr x 10% benefits	\$ 7,000.00
RA Travel to Stakeholder meetings	\$ 2,000.00
Office supplies, photocopying, postage, telephone, internet access, phone conferencing, and other administrative costs – 10%	\$ 3,000.00
3 Stakeholder/Network Meetings (south, central, north) with key academic and community stakeholders, IPHRC Students, Elders 1 Final report consultation with key Stakeholders	\$ 14,000.00
Mainstream KT Consultants/Experts x 4 Meetings/consultations	\$ 4,000.00
National Synthesis participation	\$ 5,000.00
TOTAL	\$ 35,000.00

Appendix 2
Agenda for Knowledge Translation Symposium
Wanuskewin Heritage Park, Saskatoon, SK
May 16, 2005



INDIGENOUS PEOPLES' HEALTH RESEARCH CENTRE

AGENDA

Indigenously Led Sharing of Useful and Relevant Health Information
Knowledge Translation and Indigenous Knowledge Symposium
Wanuskewin Heritage Park, Monday May 16, 2005

Master of Ceremonies – Willie Ermine

- | | |
|----------------|--|
| 8:00 AM | Pipe Ceremony |
| 9:00 AM | Breakfast and Opening |
| 9:15-9:45 AM | Introductions and Welcome:
Willie Ermine and Dr. Janet Smylie |
| 9:45-10:45 AM | International Panel:
Dr. Sue Crengle, Dr. Ian Anderson, Dr. Mihi Ratima |
| 10:45-11:00 AM | Break |
| 11:00AM-Noon | International Panel |
| Noon-1:00 PM | Lunch and Speaker: Danny Musqua |
| 1:00-2:30 PM | Turtle Island Indigenous Scholars Panel
Dr. Leroy Little Bear, Dr. Marie Battiste, Maria Campbell |
| 2:30-2:45 PM | Break |
| 2:45-3:45 PM | Breakout groups/discussion |
| 3:45-4:45 PM | Reports from breakout groups/Discussion |
| 4:45-5:00 PM | Wrap-up |
| 5:00 PM | Closing |

Appendix 3
Consent Form



CONSENT FORM

You are invited to participate in a consultation entitled *ACADRE Knowledge Translation Consultation Project*. Please read this form carefully, and feel free to ask questions you might have.

Researchers Dr. Janet Smylie, MD, CCFP, MPH
Nicole Stevenson, Community Facilitator
Indigenous Peoples' Health Research Centre
B103 College of Medicine, 107 Wiggins Road
Saskatoon, Saskatchewan S7N 5E5
(306) 966-1925 (306) 337-2510

Purpose and Procedures

The *Indigenous Peoples' Health Research Centre* (IPHRC) Knowledge Translation consultation project, funded by the Canadian Institutes of Health Research – Institute of Aboriginal Peoples' Health (CIHR-IAPH), will undertake to enhance research efforts in the area of 'knowledge translation' (KT) by bringing together key academics and community stakeholders for three one day consultations in three locations in Saskatchewan to provide an opportunity for participants network and share information. Participants will participate on one day-long session. Panel sessions and focus groups will comprise the consultations to explore knowledge translation priorities, ideas, and recommendations for research directions. The information will be synthesized into both a written and video report on knowledge translation theory and processes that will be submitted to the CIHR/IAPH and may be publicly released by the IPHRC at a future date.

The potential benefits of this study include enhancing networking and knowledge sharing about Indigenous knowledge translation as well as the development of knowledge translation theory and practice in order to contribute to better health outcomes in Aboriginal communities. While these benefits are not guaranteed, we anticipate positive outcomes from the consultation processes that will lend additional information to the national knowledge translation discourse.

There are minimal risks to participation in the Knowledge Translation project beyond a disruption to daily routine or emotional responses individuals might have to the sharing of information pertaining to their experiences of knowledge translation priorities, ideas, and recommendations.

This project was reviewed by the University of Saskatchewan Behavioural Research Ethics Board in May 2005

I, _____, have read the information and I agree to participate in the ACADRE Knowledge Translation consultation project hosted by the Indigenous Peoples' Health Research Centre. I understand that the purpose of the project as stated and understand the following:

- I understand that my participation in the consultation will consist of a one-day gathering on either May 16th, 2005 (Saskatoon), June, 15, 2005 (Fort Qu'Appelle), or June 20, 2005 (Prince Albert);
- I understand that there is minimal to no risk to my wellbeing through my participation although participation may disrupt my daily routine;
- The consultations may be recorded and portions will be videotaped; the information gathered from the panels and the break-out sessions will be synthesized into a report for submission to the CIHR/IAPH and future publication, and the video will be made available for public dissemination;
- The information that I share will remain anonymous in the written report and I have the right to veto any video recording of my participation. I will inform the Investigator of my wishes;
- Unedited audiotapes and written notes will be held in a confidential locked cabinet in the IPHRC Saskatoon office. The raw data may be used from time to time in the development of knowledge translation theory. The information will be kept for a period of five years after which time, it will be destroyed;
- The final report and final edited video will be available for my review and feedback prior to dissemination, and a final copy of the written report will be available upon request;
- I have the right to withdraw from the consultation at any time before or during the consultation gathering and any of my information recorded or reported will be destroyed or deleted. I can also refuse to participate and refuse to respond to questions;
- There are two copies of this consent form, one of which I may keep for my records.

If you have any questions concerning the study, please feel free to ask at any point; you are also free to contact the researchers at the numbers provided above if you have questions at a later time. This study has been approved on ethical grounds by the University of Saskatchewan Behavioural Sciences Research Ethics Board in May 2005. Any questions regarding your rights as a participant may be addressed to the Behavioral Research Ethics Officer of the University of Saskatchewan at 966-2084 or curtis.chapman@usask.ca. Out of town participants may call collect.

I have read and understood the description provided above; I have been provided with an opportunity to ask questions and my questions have been answered satisfactorily. I consent to participate in the study described above, understanding that I may withdraw this consent at any time. A copy of this consent has been given to me for my records.

Signature

Date

Appendix 4
Agenda for Prince Albert Consultation Session
June 20, 2005



INDIGENOUS PEOPLES' HEALTH RESEARCH CENTRE

AGENDA

**Knowledge Translation:
Bridging the Gap between Research and Health Services Delivery
First Nations University of Canada, Prince Albert
Monday, June 20, 2005**

- | | |
|-------------------------|--|
| 10:00 AM | Opening Prayer
Welcome and introductions |
| 10:15 – 11:15 AM | Opening remarks – Willie Ermine
Introduction to knowledge translation – Dr. Janet Smylie |
| 11:15 – 12:00 | Highlights from the May 2005 Knowledge Translation
Symposium (video) |
| 12:00 – 1:00 PM | Lunch (provided) |
| 1:00 – 2:30 PM | Facilitated small group discussion <ol style="list-style-type: none">1. Please discuss your experience and understanding of the sharing and use of health information in Aboriginal communities.2. Please discuss your perspective and share your recommendations about bridging the gap between health research and health services delivery in Indigenous communities. |
| 2:30 – 3:00 PM | Summary of information from small group discussions |
| 3:00 – 3:15 PM | Closing remarks – Willie Ermine
Closing prayer |