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*Understand to Prevent and Cure*



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**CIHR Team in Aboriginal Anti-Diabetic Medicines**  
**Équipe IRSC sur les médecines autochtones antidiabétiques**

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## EXECUTIVE SUMMARY

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In fulfillment of their commitment to open communication, the CIHR Team in Aboriginal Anti-Diabetic Medicines (CIHR-TAAM) and partners meet annually to discuss the progress of the project and determine future direction. The 2010 Annual Retreat, held in August 2010 in Mistissini, included a full-day workshop session on the theme of *Establishing Best Practices for Offering Cree Healing Ways Into Diabetes Care*.

Participants in the full-day workshop included traditional healers, elders, helpers and administrators from participating Cree Nations, representatives of the Cree Board of Health and Social Services of James Bay, and researchers from partner universities. The morning session was comprised of presentations on the *“Validation of Traditional Medicine in a North-South Indigenous Collaboration”* and on *“Best Practices in Inter-Cultural Health”*, followed by a panel discussion by resource people involved in the CIHR-TAAM project on the theme of *“Lessons learned from the CIHR-TAAM ‘Putting Traditional Medicine First’ studies and other community based activities”*.

In the afternoon session, small group Round Table discussions were held to identify best practices and develop terms of reference for integrating Cree healing ways and clinical healthcare. Ten small Round Table groups discussed three aspects of how to successfully offer Cree healing ways along with clinical diabetes care:

- What should choice in diabetes care mean in practice?
- How are traditional knowledge and traditional medicine to be protected in a system offering a choice?
- How can community buy-in and control be promoted?

Following their discussions, all of the Round Table groups reported back to the full workshop on their suggested terms of reference and recommendations for future initiatives and actions. All groups agreed that traditional healers and western medicine need to work in collaboration. Some of the key recommended action steps for follow-up included establishment of a traditional healers association, setting up of a traditional medicine centre, continuation and ongoing funding for the CIHR-TAAM project, protection of areas where traditional medicinal plants are collected; and a future symposium bringing together both traditional healers and clinical care providers to increase understanding and cooperation between the two systems.

A complete summary of the terms of reference and follow-up action items suggested by the Round Table discussion groups is provided in the body of this report.

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## INTRODUCTION

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### Background

Researchers from Université de Montréal, McGill University and the University of Ottawa have an agreement to work with the Cree Board of Health and Social Services of James Bay, the Cree Nation of Mistissini, the Cree Nation of Whapmagoostui, the Cree Nation of Waskaganish and the Cree Nation of Nemaska, as well as healers and elders from those Nations to study anti-diabetic medicines from Cree traditional plant uses.

This unique collaboration was initiated in 2003 with funding from the Canadian Institutes of Health Research (CIHR). The first project received a New Emerging Team Grant for *“Rigorous scientific evaluation of selected ant-diabetic plants: Towards an alternative therapy for diabetes in the Cree of Northern Québec”* for April 2003 to March 2006. The current project, *“Rigorous evaluation and integration of traditional medicine in aboriginal diabetes care”*, is being funded by the Aboriginal Institute of Health of CIHR and from April 1, 2006 to March 31, 2011.

### Objectives

In fulfillment of their commitment to open communication, the CIHR Team in Aboriginal Anti-Diabetic Medicines (CIHR-TAAM) and partners meet annually to discuss the progress of the project and determine future direction. The 2010 Annual Retreat was held from Sunday, August 15<sup>th</sup> to Wednesday, August 18<sup>th</sup> in Mistissini. In addition to scientific updates on the study provided at the Retreat, organizers, who are the Steering Committee members of CIHR-TAAM, proposed holding a workshop on Tuesday, August 17<sup>th</sup> to examine best practices for collaboration between Cree healing ways and clinical diabetes care. The agenda for the workshop and retreat is provided in Appendix 1.

### Participants

Participants in the workshop session included participants and visitors (healers, elders, helpers and administrators from the Cree Nations of Mistissini, Whapmagoostui, Waskaganish, Nemaska Oujé-Bougamau, Eastmain, Wemindji and Chisasibi. ); representatives from the Cree Board of Health and Social Services of James Bay, the Cree Regional Authority, the Cree Trappers Association; and researchers from Université de Montréal, McGill University, and the University of Ottawa. Additional resource people provided presentations or participated in panel discussions as outlined below. See Appendix 2 for a list of participants.

### Process

The overall theme for the day-long workshop was: **Establishing Best Practices for the Integration of Cree Healing Ways into Diabetes Care.**

Following the opening prayer, the morning session of the workshop began with an introduction and welcome from the Project Team Director, Dr. Pierre Haddad, followed by three presentations outlining

the experience in other countries of collaboration between Indigenous healing ways and clinical health care. Dr. Todd Pesek and Victor Cal both provided presentations on the “Validation of Traditional Medicine in a North-South Indigenous Collaboration”. This was followed by a presentation by Dr. Judith Bartlett on “Best Practices in Inter-Cultural Health”.

In the latter half of the morning, there were presentations and discussion by a panel of resource people, all of whom are involved with the CIHR-TAAM project. The panel consisted of Paul Linton, Jill Torrie, Annie Trapper, Abraham Bearskin, and Minnie Awashish. The Panel members spoke of the lessons that had been learned over the course of the project from the “Putting Traditional Medicine First” studies and from the other community-based project activities.

Biographies of the presenters and panel members are presented in Appendix 3.

The afternoon session provided the opportunity for small group Round Table discussions to identify best practices and to develop terms of reference for offering Cree healing ways and clinical health care for patients. For the Round Tables, participants were broken up into ten small groups and asked to discuss one of three key questions developed by organizers and facilitators related to the identification of best practices and the development of terms of reference for collaboration between Cree healing ways and clinical health care. The groups were asked to report back to the full group on the key points identified in their discussions and their suggestions for terms of reference and follow-up actions. The Round Table questions are provided in Appendix 4.

All presentations, comments, discussion questions and answers, were translated into the English or Cree language, so that all proceedings were conducted in both English and Cree.

Following the reports from the Round Table, the Pierre Haddad thanked everyone for their participation and contributions to the workshop, and the session was closed by a prayer.

## WORKSHOP PRESENTATIONS

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The first half-day of the workshop consisted of a plenary session with three presentations illustrating best practices for indigenous collaboration and Inter-cultural health in other parts of the world. This was followed by a panel discussion on lessons learned throughout the course of the CIHR-TAAM project. A breakout session of small group Round Tables was held in the afternoon to discuss the best ways to offer Cree traditional healing practices most effectively alongside western medical practices.

### Summary of Presentations

#### 1. *Validation of Traditional Medicine in a North-South Indigenous Collaboration*

Presentation by Dr. Todd Pesek and Victor Cal.

**Dr. Todd Pesek** is a medical doctor, holistic physician, ethnobotanist, and health sciences professor at Cleveland State University. Key points from his presentation included the following:

Todd Pesek started with a quote: “We have not inherited the land from our forefathers – we have borrowed it from our children”. He said that internationally people face a series of interconnected crises. There is an environmental crisis which sees ongoing loss of languages, forest cover, and biodiversity. We need to come together as global people to solve these problems. At the same time, there is a health crisis which sees increasing rates of cancer, arterial disease (stroke or brain attack, and heart attack), and Type 2 diabetes. These diseases need not exist: ninety percent of diabetes cases, and seventy to eighty percent of the incidence of the other diseases could be avoided if traditional healing practices involving traditional medicines, lifestyle and diet were followed.

Traditional healers and elders the world over have an approach for promoting health which includes a balance of mind, body, and spirit in the context of healthful environmental surroundings. It can be seen that the integration of traditional healing into health care works – already more than 25% of modern medical drugs come from traditional healing knowledge, it enables and facilitates the passing of traditional knowledge to the next generation, and traditional healing systems “tread lightly” and promote environmental respect. All over the world we see the same things – a balance between mind, body, and spirit – from the Maya people to all Native American people, and as far away as India.

We need to work toward the inclusion of traditional healing in health care. The application of traditional healing in front line health care is working on a model that the Maya have put in place. It works, and is working right now – the name of the project chosen by the Maya elders is *Itzama*. The project received seed funding that brought together the Maya, Anishinabe and Inuit. In the future there needs to be pan-American collaboration for true healing based on a collaboration of traditional knowledge and science.

**Victor Cal** is a program coordinator at the Q’eqchi’ Healers Association of Belize, and Director of the Belize Indigenous Training Institute. Key points from his presentation include the following:

Victor Cal began by noting that the Mayan people and the Cree Nation see life very similarly – because of the nature of the cosmos, everyone and everything is connected, through the balance of

mind, body and spirit. He described the cosmo-vision of the Maya, which is a “vision and conception of the origin of the universe, in cosmic space and time that creates the world, nature and human beings”. People are a part of nature, not above it. We must balance and respect the four elements – water, earth, fire and air – that are the basis for all life; misusing the four elements will cause disaster. Communities have to learn to share and translate their knowledge with one another.

Among the Q’eqchi’ Maya, traditional Maya healers meet the primary health care needs of people in 43 rural villages in southern Belize. Through the Q’eqchi’ Maya Healers Association, traditional healers share knowledge with each other that has been passed down from their ancestors and learn from one another. Healers understand when to collect the plants; they ask the creator for permission and burn sacred plants in thanks. They use traditional medicine for healing, and they come together to write rules and regulations for using the medicines in a traditional way. They obtain consensus and identify which directions they want to go with their healing practices.

The Maya traditional healers have 75 acres of land they use for traditional medicines. They collect plants from the mountains and grow them on-site, to organize their traditional pharmacy. Specific plants are collected and propagated for specific sicknesses. A lot of the plants are used as teas, which keep our organs healthy. When sickness is not in the body, the healers treat the spirit.

The Maya healers share their healing practices and keep records to ensure that traditional healing continues. The healers have put their traditional practices into a book, so now both respect for tradition and copyright are very important. This way the knowledge can be used and taught in schools. They make sure that healing work is done with youth, because it is very important to teach the younger generation.

The PowerPoint presentation by Todd Pesek and Victor Cal is provided in Appendix 5.

## **2. Best Practices in Intercultural Health**

Presentation by Dr. Judith Bartlett.

Dr. Judith Bartlett is an Associate Professor and Co-Director, Centre for Aboriginal Health Research Department of Community Health Sciences, Faculty of Medicine, University of Manitoba.

Judith Bartlett began by noting that inter-cultural health takes place at different levels – among the family, with practitioners and hospitals, and in the overall health system. Her presentation outlined the results of five case studies on intercultural health that were done for the Inter-American Development Bank. The IDB was interested in how they could work better with Indigenous people on integrating western and traditional indigenous medicine. The case studies were carried out in Chile, Colombia, Ecuador, Guatemala and Suriname, and examined various models of intercultural health projects currently underway. The study used a case study method, comparing various aspects of intercultural health among the five case studies, and using best practices criteria that had been developed by the National Aboriginal Health Organization (NAHO) in 2001. The study involved 900 people, working first with communities at the grass roots level before speaking with representatives of government and higher health authorities.

Intercultural health involves health care that bridges indigenous medicine and western medicine, in ways that see both as complementary parts of the health care system. It requires engagement



between the two systems to show mutual respect and a willingness to interact, to show flexibility, and to make changes in the relations between the two systems on an ongoing basis. Dr. Bartlett outlined what the project had encountered in different countries:

- In Chile, the study team visited a Mapuche pharmacy and traditional clinic near Temuco. The traditional healing and medicine of a Machi (traditional healer) is used on an equal basis with western medical practice. The Mapuche are developing health centres of their own, using profits from them for community development.
- In the village of Kwamalasamutu in Suriname, the team compared the work of a clinic that provided western medical care with one that used traditional medicine and was operated by shamans of the village. The shamans and primary care givers work in conjunction with each other and train each other; for example, the shamans learn how to do blood slides to determine if a person has malaria. They also work with apprentices so that traditional knowledge of plants and healing methods does not disappear.
- In San Juan de Comalapa, Guatemala, the study team focused on the role of Comadronas or midwives. The study showed that the Comadronas are used as givers of birth and post-natal aftercare much more often than western-trained practitioners, because of the traditional care provided to children born with illnesses and of the difference in cost between the two systems. Despite this, the professional practitioners were not supportive of the Comadronas.
- In Ecuador, research was done in Otavalo. The Jambi Huasi Clinic has been operational for quite some time, and provides a full range of western medicine as well as indigenous health services on a fee-for-service basis. Indigenous services include a spiritual healer, herbalist, and a midwife.
- Finally, in Columbia, an association for indigenous medicine was created and funded under the “Consejo Regional Indigena del Cauca”. The organization provides health insurance and enrolls indigenous clients for health services from both indigenous and western health providers.

The study analyzed four key areas – cultural, financial and management approaches, opportunities and benefits, constraints and risks, and impacts associated with the development of intercultural health systems – in order to compare the case studies using the NAHO best practice criteria. Dr. Bartlett’s study team found that there were many opportunities in the cases they examined for knowledge exchange between traditional healers and western science-based medical practitioners, when each system is considered valid in its own way. Intercultural practices increased the trust between western and traditional medicine, with the result that clients accessed more health services overall. Intercultural health practices also help to strengthen indigenous organizations and communities, and promote increased cultural pride. At the same time, development of intercultural health practices face barriers of insufficient funding, and of lack of a clear legal framework for the practice of traditional medicine and its use in collaboration with western medicine.

The study team did not identify any one case as exemplifying an overall “best practice” model, since each country had met or partially met the majority of the best practice criteria. Rather the study indicated that each location was unique and had specific elements that could be considered as a model of intercultural health services for replication by other groups. Dr. Bartlett concluded by suggesting

the need for governments to implement contractual relationships that promote indigenous autonomy in the development of intercultural health systems.

An article in the Journal of Ethnobiology and Ethnomedicine on which Judith Bartlett's presentation was based is provided in Appendix 6.

## **Panel Discussion with Stakeholders**

Following the presentations, a panel discussion was held with five members of the CIHR-TAAM Project Team. The discussion focused on lessons learned from the CIHR-TAAM "Putting Traditional Medicine First" studies and from other community-based activities of the project. Panel members included Jill Torrie, Paul Linton, Annie Trapper, Minnie Awashish, and Abraham Bearskin.

### **Jill Torrie, Assistant Director of Public Health , Cree Health Board**

In response to a requests in the Treaty # 3 area, in 1975 the Ontario government started funding traditional healing, and since then traditional healing has been supported in Ontario. The Cree Health Board has come a very long way since its establishment, but has not yet found a way to provide access to traditional medicine alongside western health care.

The CIHR-TAAM project started up for two reasons. In the late 1990s the Cree Nation of Mistissini passed a strong resolution saying they wanted to integrate traditional medicine into health services. Soon after, Pierre Haddad and a former Cree Health Board manager proposed the project. The project went ahead because the elders in Mistissini wanted to have traditional medicine recognized and the Mistissini administrators saw that a project like this could help make the elders' vision happen. The project itself is about the study of medicinal plants. However, the project has also played an important role in opening up the discussion about traditional healing, by presenting a structure for these types of discussions, through annual meetings, community meetings, and other activities. The Health Board could have done more however, working with the project to further the discussion on how traditional medicines should be used in regional health care.

### **Paul Linton, Regional Diabetes Initiative, Cree Health Board**

Paul Linton began by stating, "Elders, doctors, youth, and death – there are good sides and bad sides" to their experience in the region. The most fundamental positive element is that there are traditional healers who are willing to work with Health Board and with the project. A negative aspect is that there are few youth here at the meeting to contribute their guidance. In the future, the youth will be our healers, and the lack of their presence here is a bad thing. The community is losing their elders; with each passing we lose the knowledge that is being passed down. These are good lessons and bad lessons we have learned. We need to get moving everywhere to preserve the knowledge from traditional healers. Knowledge needs to be passed on to the youth, because nothing is written down in books. If the healers all died today, all their knowledge would be lost.

### **Annie Trapper, Mistissini Health Clinic**

Annie Trapper suggested that the outcome of the studies that have been done is that we are going to see more traditional healing methods used in the communities. The Miyupimaatisiun -Centre will be providing health services, and there will be a place in the centre where traditional methods will be used. The project has been very important in achieving this. She also indicated that people have a hard time trying to deal with sickness, and when traditional methods are used, it helps more than western medicine. An observational study is being carried where 30 candidates are monitored to see how traditional medicine is helping them. She finished by saying that she will do her best to make sure traditional medicine is brought into the health care system. It will operate on the basis of individual choice whether to use traditional methods or western medicine for healing.

### **Minnie Awashish, Healer**

Minnie Awashish stated that she has been blessed with the ability to practice traditional medicine; most importantly, she healed herself and she found her own way of healing in the bush. Her late husband worked with people in healing, and later people came to her to ask for her help. All of this comes from the Creator; if you believe in God, the Creator, he will heal you. Minnie indicated she is very thankful for her friends, and that it is because of them she took up practicing medicine again after she lost her husband.

Minnie would like to see support for more projects like CIHR-TAAM. She proposed that there be funding for a traditional healing centre where she could provide her healing, and said that she needs help with harvesting of traditional plants because she cannot go into the bush herself now. Minnie has been approached by doctors for healing of some of their patients through traditional practices. She emphasized the importance of seeing people in the early stages; she is cautious about administering traditional medicine in the advanced stages of diabetes, for example when there has been kidney failure.

Finally, she advised that people get permission from their doctor before she works with them. She is always diligent in her treatments, to ensure that she doesn't cause any harm.

### **Abraham Bearskin, Assistant Executive Director for Nishiiyuu Miyupimaatisiun, Cree Health Board**

Abraham Bearskin spoke about the need to see things from a holistic view. He described traditional healing as being about the way we carry ourselves – with good thoughts and with positive energy that we surround ourselves with. The spirit within us is what is important, and how you approach the taking of plants from the earth is crucial. Abraham also talked about how he prepares himself before going to collect plants, which he has learned from the guidance of the elders. As a healer or medicine person, you have to have a pure mind to gain the true picture of how to treat someone with traditional healing.

Abraham also spoke about the vision statement that was prepared by the Cree Health Board in 1995 as a critical foundation for the future. The vision statement talked about the need for individuals to be balanced emotionally, spiritually, mentally, and physically in relation to the environment, and the need to hold on to traditional resources. The object of the vision is to deliver comprehensive interagency traditional health care, within the Cree system of values and beliefs. This requires adequate financial and human resources.

Abraham also credited the people that he worked with in the communities and in the CIHR-TAAM project. He suggested that it would be a good idea for the researchers from the Haddad project team to make a presentation to the Cree regional elders from all of the communities, to continue to obtain guidance and direction from the elders. He also noted that youth must also be part of the process.

Abraham thanked all the researchers in the project, and identified four points that the Cree Health Board should include in their planning:

1. All services have to be provided in accordance with cultural values;
2. The Board needs to come up with a model to offer Cree traditional healing alongside western medicine;
3. The Elders have indicated that the direction should be for the two systems to work side by side;
4. Health care needs to be developed within the broader context of Cree social policy.

## Participant Comments

Diane Reid, president of Aanischaaukamikw Cree Cultural Institute, and previously Chair of the Cree Board of Health and Social Services, noted that the anti-diabetic study was done for the purpose of alleviating diabetes in the communities. It is very good to see all the people from the communities here to discuss this study, both from a medical and from a traditional point of view. When it started, they hoped that in the future there would be a place to house the traditional knowledge of traditional plants. This centre will be finished in December. There is still a lot of work to do to gather the information we need on medicinal plants. Diane said that she wanted to share this information with you to encourage everyone to continue this work that the Health Board started.

A second comment was made by a workshop participant who was diagnosed at Christmas as being diabetic. She started taking western medication for diabetes, and at the same time went on traditional medicine, under treatment from Minnie Awashish. It had been over two weeks, and she has not had any problems. She found that her condition was very stable under the traditional medicine and she stopped using the prescription medicine. She has been testing this, and has found so far that it is working. She thanked all the people who have been working on this project, and encouraged all the other communities to look at their example.

Abraham Bearskin clarified that in the work done under the Health Board, the direction given by the Board is to consult with communities in all aspects of the work they do. They meet with Chief and Council and receive guidance from the Elders. All of the work has to be validated before it is presented to the Cree Health Board. One of the projects that is underway is to develop a framework for research in areas of Cree healing and counseling methods. This has been strongly recommended by the Elders, and will be carried out in collaboration with the communities.

## WORKSHOP ROUND TABLE DISCUSSIONS

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### Round Table Theme and Discussion Topics

The afternoon session of the workshop was a Round Table Discussion that focused on the following theme: **Identifying best practices to develop terms of reference for offering Cree healing ways alongside clinical health care for patients.** Participants were divided into ten smaller groups, each having a range of participants including healers, elders, health providers, scientists, and other participants. The members of each group were given one of three topics related to the overall issue of integrating Cree healing ways and clinical health care to discuss in their Round Table. The three main topics and discussion questions are presented on the following page.

Each of the groups had a discussion leader, and a recorder to summarize and report on their discussions. Notes were recorded onto a flip chart, and each group reported back to the larger plenary on the results of their discussions.

Group leaders for the each of the Round Tables, and the topics assigned to each for discussion were:

Group 1	Paul Linton	}	Topic A
Group 2	Jill Torrie		
Group 3	Diane Reid		
Group 4	Brian Foster		
Group 5	Annie Trapper	}	Topic B
Group 6	Pierre Haddad		
Group 7	John Arnason		
Group 8	Brendan Walshe-Roussel	}	Topic C
Group 9	Alain Cuerrier		
Group 10	Stephanie Bennett		

The results of the small group Round Table discussions are presented on the following pages. The reports from all of the groups discussing the same topic question have been summarized together to identify suggested terms of reference and proposed future action items. This is followed by an overall summary of action items for follow-up.

**Afternoon Round Tables:**

**Establishing Terms of Reference for Integration of Cree Healing Ways and Clinical Health Care**

The questions below were provided to the small Round Table groups to focus discussions on the workshop theme. Each small group was assigned one group of questions – either A, B, or C, to allow for more in-depth discussion of the issues, and sufficient time for each group to summarize and report on the results of their discussions.

**Based on lessons learned from the morning session and your own experience, what terms of reference can be put in place to successfully integrate Cree healing ways into diabetes care?**

**A. What should integration of diabetes care mean in practice?**

1. Should working together be based on:
  - a. Partnership arrangements?
  - b. Real integration of traditional healers into Cree Health Board services?
2. What should the role in the management of diabetes be for:
  - c. traditional healers;
  - d. doctors and other workers in clinics;
  - e. scientists; and
  - f. patients and their families?
3. What steps are required now and in the future to achieve good working relationships between healers, doctors and others?
4. What other issues need to be addressed?

**B. How are traditional knowledge and traditional medicine to be protected in an integrated system?**

1. What policies are required to ensure:
  - g. the value of traditional practices is recognized;
  - h. control by healers over the use of traditional medicines; and
  - i. ethical use and quality of traditional medicines?
2. What measures are required now and in the future to maintain stocks of traditional medical plants given increased use?
3. What other issues need to be addressed?

**C. How can community buy-in and control be promoted?**

1. What education and training is necessary for:
  - j. patients to have the knowledge to select health care options;
  - k. healers and staff in clinics to understand how the system operates;
  - l. transfer of traditional knowledge to apprentices?
2. What steps can be taken now and in the future to strengthen community control over how integration of diabetes care proceeds and how quickly it is implemented?
3. How should we keep track of treatment and results from this diabetes care?
4. What other issues need be addressed?

## REPORTS FROM ROUND TABLE DISCUSSIONS

### Topic A: What should integration of diabetes care mean in practice?

#### Question 1: Should working together be based on:

- a. Partnership arrangements; or
- b. Real integration of traditional healers into Cree Health Board services?

#### ***Summary of Reports: Suggested Terms of Reference for Working Together***

1. All groups agreed that traditional healers and western medicine need to work as partners. Both traditional healers and medical doctors need to understand each other's methods and the treatments that can be provided.
2. There is a need to bring back traditional medicine into our daily lives, and communities need to work together and with the Health Board to fight diabetes. There need to be agreements between medical clinics, a healers association, and the Cree Health Board, so that everyone knows their role.
3. There is a need for better awareness among members of all communities about diabetes, about the role of traditional diet in remaining healthy, and about traditional medicines. People need to understand that there are options for the treatment of diabetes, including seeking guidance from a traditional healer.
4. The Diabetes Centre should be opened, with the ability to create a clear plan for the care of patients, accessing either western medical care or traditional healing. There needs to be openness and transparency in helping patients make choices, with consistent follow-up following treatment of patients. A key problem however is the law governing physicians: they don't have the ability to make referrals to traditional healers.
5. Two of the four groups suggested that both medical doctors and traditional healers should be housed in the same building, with equal facilities and with funding for both. There should be real integration of healers and doctors, and a place in the medical clinics where people can access traditional medicine.
6. Two of the groups suggested that the traditional healers should have their own place to work where traditional healing can take place, separate from the medical clinic. The patient would have a choice of who they wish to see and which treatment to take – either western medicine or traditional medicine – but not mixing the two for the same illness.
7. There should be funding for traditional medicine, and traditional healers need to be fairly compensated for their consultations.

#### ***Proposed Follow-up Actions:***

1. Establish a traditional healers association to have more contact among healers, and to identify healers so that community members know who to go to.
2. The healers association should work with the Health Board to have traditional healers recognized by the government, in order to provide funding and fair compensation to healers.

3. Encourage oral teaching about medical plants in a natural setting, recognizing that the plants come as a gift from the Creator.
  4. Promote the exchange of medicinal plants between coastal and inland communities as an important part of the exchange of traditional knowledge.
  5. The Health Board should ensure that physicians have the ability to make referrals to traditional healers.
- 

**Question 2: What should the role in the management of diabetes be for:**

- a. Traditional healers;
- b. Doctors and other workers in clinics;
- c. Scientists; and
- d. Patients and their families?

***Summary of Reports: Suggested Terms of Reference for Roles in the Management of Diabetes***

1. **Traditional healers** would be responsible for:
  - taking a holistic approach to the treatment of diabetes using Cree methods and models; making notes from a holistic view that would be available to whoever needs them;
  - teachings on the traditional level to patients and families as healers and spiritual guides;
  - taking training from doctors about certain medical practices;
  - increasing compliance of patients by having regular follow-ups using traditional settings, such as sweat lodges, bush, gathering places, drum circle, pow-wows, and shaking tent ceremonies.
2. **Doctors and other workers in clinics** would be responsible for:
  - advising traditional healers on western medicine;
  - taking training from healers to understand more about traditional healing;
  - allowing patients to make their own decision on type of health care;
  - nurses and nutritionists would be involved in teaching community members about proper eating and health care.
3. **Scientists** would be responsible for:
  - ensuring the efficacy of medicines, validating aspects of the traditional knowledge of healers, and translating aspects of the knowledge so other can understand it;
  - supporting both doctors and healers, and providing a type of mediation between them;
  - determining if treatments have been helpful;
  - continuing community discussions with Cree partners, because this helps all people involved in the treatment of diabetes.
4. **Patients and their families** would be responsible for:
  - eating traditional food and leading a healthy lifestyle;



- taking more responsibility for their own diabetes - walking, exercising, eating better, keeping track of their own medicine, coming to get refills;
- choosing the type of treatment they wish to have – traditional healing or western medicine – and working with the healers or doctors.

### ***Proposed Follow-up Actions***

1. Obtain recognition for traditional healers through a formal certification process, under the guidance of a healers association.
- 

### **Question 3: What steps are required now and in the future to achieve good working relationships between healers, doctors and others?**

#### ***Summary of Reports: Suggested Terms of Reference for Achieving Good Working Relationships***

1. Ethical guidelines are needed to build collegial relationships between doctors, nurses, social workers, and traditional healers, so that there are rules about how to treat each other.
2. Doctors and traditional healers need to have better understanding how each treats patients. There should be a way to for healers to work with doctors and for doctors to “intern” with healers. Doctors have to be educated about the way Cree do things – healers don’t consider it proper to “boast” about their power.
3. Elders have to retain responsibility for identifying traditional healers and coordinating the traditional system of healing.

### ***Proposed Follow-up Actions***

1. Establish a healers association.
  2. Obtain recognition and funding from the government for traditional healing so that there is money for the traditional system.
  3. Hold a symposium involving both traditional and western care givers in communities, to increase understanding and co-operation between the two systems, and promote greater acceptance of traditional healing ways.
-

#### **Question 4: What other issues need to be addressed?**

##### ***Summary of Reports: Other Issues for Integration of Cree healing ways with clinical care***

1. There is a need for more Cree doctors and nurses within the clinical health care system, and more funding should be available for this.
- 

#### **Topic B: How are traditional knowledge and traditional medicine to be protected in an integrated system?**

##### **Question 1: What policies are required to ensure:**

- a. the value of traditional practices is recognized;
- b. control by healers over the use of traditional medicines; and
- c. ethical use and quality of traditional medicines?

##### ***Summary of Reports: Suggested Terms of Reference for Policies Covering the Use of Traditional Medicines***

1. The basis for protection of traditional knowledge and traditional medicine is the preservation of values, beliefs, language and practices.
2. Preservation of traditional medicine requires mutual trust that traditional medicines are not misused; this requires an accepted code of ethics.
3. Any system of traditional medicine must recognize that the value of the traditional healing belongs to the person who knows how to use it. When we talk about control by healers, we have to recognize that for traditional medicine, it is up to the healers how they will use the medicine, and up to them how they will pass it on to other generations.
4. The gift of healing is given to an individual. The healers should be the ones to determine how traditional healing should be kept within our Cree culture, and who should be recognized as a healer. The ethical use and quality of traditional medicine is part of their knowledge.
5. Healers should come up with their own policies to pass down the knowledge and how it should be administered; it should be the healers who sit down and say this is how we use it.
6. There needs to be political support from Cree leadership; the Grand Council leadership has to recognize the traditional healers.
7. Traditional medical preparations should be kept as visual teachings; this is the way it has always been taught.

##### ***Proposed Follow-up Actions***

1. Establish a Regional Elders Association of Healers.
2. Prepare a directory of healers, under the control of a healers association.

3. Create a protocol for Eeyou Istchee under the Grand Council of the Crees, recognizing the value of traditional medicine and providing guidelines for its ethical use.
  4. Encourage youth who are interested to serve as apprentices with traditional healers to ensure that the knowledge is passed down and not lost.
- 

**Question 2: What measures are required now and in the future to maintain stocks of traditional medical plants given increased use?**

***Summary of Reports: Suggested Terms of Reference for Maintaining Stocks of Traditional Medical Plants***

1. It is very important to maintain the stock of traditional medical plants.
2. Healers are responsible for maintaining the stocks of traditional plants; there needs to be control on who is considered a healer through certification.
3. There must be codes of ethics and policies on the quality and ethical use of traditional medicines, under the control of the healers association.
4. Traditional healers and elders need to teach proper care for the plants, to ensure proper collection procedures and cutting techniques are used:
  - The best time to cut the plant is in the spring, so that next spring the plant will be there, but only if you cut it the proper way;
  - Healers gather only what is needed and not too much;
  - Don't pick the whole plant so it can continue to grow;
  - There are proper cutting techniques that need to be taught;
  - Maintaining the language for names of plants and the collection process is very important.
5. There needs to be a centre where these teachings can be passed down to the youth; one for coastal plants and one for inland plants. The actual teaching must be done out on the land, through example and repetition.
6. The value of areas where medicinal plants are collected needs to be recognized, and these areas must be protected.

***Proposed Follow-up Actions***

1. Identify ways for the proper protection of lands where traditional medicinal plants are collected; there needs to be both stewardship and written policies in place to protect these lands, and these areas should be recognized in the land use plans developed by Councils.
  2. Healers need to develop plans for rotating collection areas for traditional medicinal plants, and teach younger people the proper collection process.
-

### **Question 3: What other issues need to be addressed?**

#### ***Summary of Reports: Other Issues for Protection of Traditional Knowledge and Traditional Medicine***

1. The research into traditional medical plants carried out under the CIHR-TAAM project must be continued and cannot be allowed to stop; there needs to be permanent funding to keep the relationships with the universities going.
  2. We need to raise awareness of the value of traditional medicine through a healers association, information pamphlets, videos, and education in schools; Crees are looked at as models for self-government, and Cree traditional medicine could also provide a model for other First Nations.
  3. There is need for an independent traditional medicine centre for healers to teach youth traditional medicine, open to all Cree youth willing to learn; this should be treated as a trade or profession.
- 

### **Topic C: How can community buy-in and control be promoted?**

#### **Question 1: What education and training is necessary for:**

- a. Patients to have the knowledge to select health care options;
- b. Healers and staff in clinics to understand how the system operates; and
- c. Transfer of traditional knowledge to apprentices?

#### ***Summary of Reports: Suggested Terms of Reference for Education and Training***

##### **PATIENTS**

1. The health clinics and the community health representative should do workshops and information sessions with patients so they know more about the option of traditional healing, and the importance of being tested for diabetes in the early stages.
2. It is important to educate community members through a general community awareness program on all aspects of healthy living and on options for choosing traditional healing or clinical health care treatment, including:
  - local and regional Cree TV and radio programs to inform community members about the option of traditional medicine;
  - websites, and posters in the communities;
  - information articles in “The Nation”;
  - using general assemblies as a good way to educate large groups of people and get the message out.
3. Share some of the success stories of traditional healing without revealing techniques used, focusing on the outcomes and successes; any sensitive information about treatments by traditional healers or private medical information on patients should be kept confidential.

4. Prepare a book describing the experience with the CIHR-TAAM project.

#### HEALERS AND HEALTH CARE STAFF

1. We need to build a relationship of trust between healers and health care workers, as a foundation for sharing information between both groups and educating each other: once a relationship of trust is established, there can be a sharing of success stories.
2. The results from the CIHR-TAAM project should be shared with both traditional healers and health care providers to help them in their work and in working together.
3. Traditional knowledge is not to be sold or widely publicized outside the region; elders and healers have to remain in control of the knowledge.
4. A healers association could grant certification to healers, focusing on younger people who are acquiring traditional healing knowledge and skills and giving them something to aspire to.

#### YOUTH AND APPRENTICES

1. Training and education for youth needs to start at school at all levels, from primary to university using different education techniques.
2. Schools have to play a key role in developing materials and educating children and youth about:
  - respect for the natural world;
  - practical knowledge of natural approaches to health;
  - the importance of traditional medicines;
  - traditional knowledge through extracurricular activities such as outdoor camps and workshops.
3. There should be summer training programs for youth, working with elders and traditional healers on healthy living and understanding the importance of traditional medicines.
4. A traditional healing centre has been proposed to learn more about traditional healing; there should be a site outside the community for traditional healing and education, which could be run in conjunction with other programs in the schools.

#### ***Proposed Follow-up Actions***

1. Approach the cultural institute in Ouje-Bougoumou to see if it can serve as a place for education and training in traditional medicine.
  2. Involve leadership from the start in the need to obtain funding for education of youth and apprentices by traditional healers.
  3. Funding is important for healers and students
  4. Plan to incorporate the history of Cree healing into a history book written by Cree for Cree.
-

**Question 2: What steps can be taken now and in the future to strengthen community control over how integration of diabetes care proceeds and how quickly it is implemented?**

***Summary of Reports: Suggested Terms of Reference for Strengthening Community Control***

1. Traditional healers should be part of the home care system.
2. Traditional healers should earn income from government or Cree Health Board, and be regarded on an equal footing with western medical practitioners.
3. Health care workers need to be educated to understand the local laws and practices of the communities.
4. Patients need to be made aware of collaboration between traditional and modern health treatment programs; it should not be seen as a competition.
5. We have to use the strength of the elders; youth should be trained in the ways of the elders to ensure that the control lasts in the future as well.
6. Patients need to go back to clinics to report on their successful recovery.

***Proposed Follow-up Actions***

1. Establish a traditional healers association, with a coordinator for record keeping and the development of patient charts.
  2. Obtain funding for the traditional healers association through alternative medicine resources that are available.
  3. Organize a week-long gathering of healers, elders, physicians, researchers, Cree Health Board to address the needs of a traditional healing program.
- 

**Question 3: How should we keep track of treatment and results from this diabetes care?**

***Summary of Reports: Suggested Terms of Reference for Tracking Treatment and Results of Diabetes Care***

1. Tests are current done at the clinic; community members would like to see more done with the test results to provide information to the community while respecting privacy.
2. Elders have their own ways of keeping track of the treatments and results, and they should keep doing this.
3. There should be more communication and sharing of information between the clinic and traditional healers on the results of treatments.

***Proposed Follow-up Actions***

1. Develop a digital format for storage of test and treatment results, and determine who will have access to the information.

2. Develop consent forms for patients to allow for sharing of information of restricted basis, and request form for organizations seeking information.
- 

#### **Question 4: What other issues need be addressed?**

##### ***Summary of Reports: Other Issues for Community Buy-in and Control***

1. The issue of remuneration for traditional healers must be addressed.
  2. Certification of healers and recognition of specialties should be done through a regional association of elders/healers.
  3. Healers, elders, and community members have to look at how communities are expanding and ensure that lands that are important to healers for traditional medicine plants are provided with protection.
  4. Since western medicine is free, traditional medicine should be free, based on funding for healers and for the traditional medical system.
- 

## **Presentation on Seventh Generation Prophecy**

The last item in the reports from the Round Tables was a presentation by a member of group 10 on the Seventh Generation Prophecy. The following represents the verbatim presentation that accompanied the chart depicting the Seventh Generation Prophecy.

The first era was creation. We were spirits that came from creator; we became Eeyou from the time of the ice age to first discovery of James Bay.

The next era was contact. We got disease, the introduction of alcohol, and the fur trade with Europeans.

The next era was the religious institutions, residential schools, Hudson Bay Company and trading posts – British Indian affairs department and Indian rule as well as the colonial rule. Indian agents developed reservations, we were told not to use our ceremonies and medicines, they were outlawed.

The next era is the industrial era; this is where they started moving across the country. They started building railroads, highways, airplanes and cars; they were mining, fighting WW1 and WW2, and they started forestry on the land.

The next era was the British Commonwealth rule, Canadian government was formed, the Indian Act rule was struck, and there were provincial governments formed.

We come into the modern era. We sent a man to the moon, enshrined Aboriginal rights under the new Canadian constitution and the James Bay agreement; and regulations, acts and laws defying our rights like hunting and fishing.

We are talking here about traditional medicines and return to the traditional teachings, and self-governance. We are going into the seventh generation and we are talking about bringing our practices back so they will be self governing, like they were in the beginning. This was foretold by the elders long ago that we would experience all of this that we would go back to those teachings and ways of governing ourselves.



## SUMMARY OF FOLLOW-UP ACTION ITEMS – MOVING FORWARD

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The following is a summary of the proposed follow-up action items identified in the ten Round Table reports.

### **Topic A: What should integration of diabetes care mean in practice?**

#### ***Summary of Proposed Follow-up Actions:***

1. Establish a traditional healers association to have more contact among healers, and to identify healers so that community members know who to go to.
2. Obtain recognition for traditional healers through a formal certification process, under the guidance of a healers association.
3. The healers association should work with the Cree Health Board to have traditional healers recognized by the government, in order to provide funding and fair compensation to healers and to provide funding for the traditional healing system.
4. The Health Board should ensure that physicians have the ability to make referrals to traditional healers.
5. Encourage oral teaching about medical plants in a natural setting, recognizing that the plants come as a gift from the Creator.
6. Promote the exchange of medicinal plants between coastal and inland communities as an important part of the exchange of traditional knowledge.
7. Hold a symposium involving both traditional and western care givers in communities, to increase understanding and co-operation between the two systems, and promote greater acceptance of traditional healing ways.
8. There is a need for more Cree doctors and nurses within the clinical health care system, and more funding should be available for this.

### **Topic B: How are traditional knowledge and traditional medicine to be protected in an integrated system?**

#### ***Summary of Proposed Follow-up Actions:***

1. Establish a Regional Elders Association of Healers.
2. Prepare a directory of healers, under the control of a healers association.
3. Create a protocol for Eeyou Istchee under the Grand Council of the Crees, recognizing the value of traditional medicine and providing guidelines for its ethical use.
4. There is need for an independent traditional medicine centre for healers to teach youth traditional medicine, open to all Cree youth willing to learn; this should be treated as a trade or profession.

5. Encourage youth who are interested to serve as apprentices with traditional healers to ensure that the knowledge is passed down and not lost.
6. Identify ways for the proper protection of lands where traditional medicinal plants are collected; there needs to be both stewardship and written policies in place to protect these lands, and these areas should be recognized in the land use plans developed by Councils.
7. Healers need to develop plans for rotating collection areas for traditional medicinal plants, and teach younger people the proper collection process.
8. The research into traditional medical plants carried out under the CIHR-TAAM project must be continued and cannot be allowed to stop; there needs to be permanent funding to keep the relationships with the universities going.
9. We need to raise awareness of the value of traditional medicine through a healers association, information pamphlets, videos, and education in schools; Crees are looked at as models for self-government, and Cree traditional medicine could also provide a model for other First Nations.

## **Topic C: How can community buy-in and control be promoted?**

### ***Proposed Follow-up Actions***

1. Establish a traditional healers association, with a coordinator for record keeping and the development of patient charts.
2. Obtain funding for the traditional healers association through alternative medicine resources that are available.
3. Certification of healers and recognition of specialties should be done through a regional association of elders/healers.
4. Approach the cultural institute in Ouje-Bougoumou to see if it can serve as a place for education and training in traditional medicine.
5. Involve Cree leadership from the start in the need to obtain funding for education of youth and apprentices by traditional healers.
6. Incorporate the history of Cree healing into a history book written by Cree for Cree.
7. Organize a week-long gathering of healers, elders, physicians, researchers, and Cree Health Board to address the needs of a traditional healing program.
8. Develop a digital format for storage of test and treatment results, and determine who will have access to the information.
9. Develop consent forms for patients to allow for sharing of information on a restricted basis, and request form for organizations seeking information.
10. Healers, elders, and community members have to look at how communities are expanding and ensure that lands that are important to healers for traditional medicine plants are provided with protection.

## APPENDICES

# APPENDIX 1

## ANNUAL RETREAT AGENDA, AUGUST 2010





**CIHR Team in Aboriginal Anti-Diabetic Medicines**  
Équipe IRSC sur les médecines autochtones antidiabétiques

*We would like to thank the Canadian Institutes of Health Research for financing this retreat.*



**Annual Team Retreat Agenda**  
**CIHR Team in Aboriginal Anti-diabetic Medicines**

Date: August 15<sup>th</sup> - 18<sup>th</sup>, 2010  
Location: Mistissini, Québec  
Lodging: *Mistissini Lodge*  
24 Amisk Street, Mistissini, QC, Canada, G0W 1C0  
Tel: 418 923-2333 & 1 866 923-2333  
Fax : 418 923-2335  
Conference location:  
Neoskweskau Complex (Gymnasium)  
206, Main street, Mistissini  
Tel: 418 923-3248

**Sunday August 15**

Cultural day at the Traditional Site by boat\* (\*if raining will take place at the Elder's Point)  
Water taxis will be available all day between 8am & 8pm and are free.

*Brunch\* served at the Lodge (until 2pm) for all Team members-guests that are not local Mistissini residents.*  
*\*You will need to ask for a voucher in order to get the reduced rate.*

10:30am Closing Prayer and Mass at the Traditional Site  
Visiting campgrounds of Cree families  
12:00pm Lunch on your own  
1:00pm Exhibition of Arts and Crafts  
5:00pm Supper served at the Traditional Site  
8:00pm End of activities at the Site

***Other things to do in Mistissini***

*5 km trail*  
*Swimming in the lake*  
*Boat rides*





**CIHR Team in Aboriginal Anti-Diabetic Medicines**  
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**Monday August 16, 2010**

**Scientific committee meeting at the Neoskweskau Complex (Gymnasium)**

- 7:30-8:45am Breakfast served at the Complex in the conference room  
8:50am Opening prayer (elder to be announced)  
9-10:30am Lab updates – 1 person per lab  
(30 minutes per lab: 20 min. presentation, 10 min. for questions)
- Cuerrier  
Arnason  
Haddad
- 10:30-11am **Nutrition Break**
- 11-12:30pm Johns  
Bennett  
Foster
- 12:30-1:30pm **Catered Lunch served in the Neoskweskau Complex (Gymnasium)**  
1:30-3:00pm Discussion on prioritization strategies for remaining grant period  
3:00pm **Nutrition Break**  
3:30-4:30pm Community based research (presentation by Karoline Gaudot)  
PTMF Observational study, (presentations by Jill Torrie & Paul Linton)  
4:30-5:30pm Funding & Team's Scientific Meeting, winter 2011 updates  
5:30pm Closing prayer  
6:00pm **Supper served at the Lodge and free evening (activities at Elder's point until sunset)**

2





**CIHR Team in Aboriginal Anti-Diabetic Medicines**  
Équipe IRSC sur les médecines autochtones antidiabétiques

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**Tuesday August 17<sup>th</sup>**

**Workshop day meeting at the Neoskweskau Complex (Gymnasium)**

- 7:30-8:45am Breakfast served at the Complex in the conference room  
8:55am Opening prayer (Elder *to be announced*)  
9:00am Welcome and introduction (Dr. Pierre Haddad)  
9-10:30am Title of workshop:

**Establishing best practices for the integration of Cree healing ways into diabetes care.**

**Title of presentations:**

- **Dr. Todd J. Pesek**, MD, Holistic physician, Ethnobotanist, Health Sciences Professor at Cleveland State University, Ohio, USA and **Victor Cal**, Program Coordinator, Q'eqchi Healers Association of Belize, Director, Belize Indigenous Training Institute: **"Validation of Traditional Medicine in a North-South Indigenous Collaboration"**
- **Judith G. Bartlett** M.D., CCFP, MSc. Associate Professor & Co-Director, Centre for Aboriginal Health Research Department of Community Health Sciences, Faculty of Medicine, University of Manitoba : **"Best Practices in Inter-Cultural Health"**

10:30-10:45am **Short Nutrition Break**

10:45-11:15pm Lessons learned from the CIHR-TAAM "Putting Traditional Medicine First" studies and other community based activities (**Jane Blacksmith, Paul Linton, Jill E. Torrie**).  
11:15-12:00 General discussion and exchange with guests

**Panel:** Jane Blacksmith, Paul Linton, Jill E. Torrie, other guest TBD  
**Guests:** Judith G. Bartlett, Victor Cal and Todd J. Pesek,

12:00-1:30pm **Catered Lunch served in the Neoskweskau Complex (Gymnasium)**





**CIHR Team in Aboriginal Anti-Diabetic Medicines**  
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1:30-3:00pm **Round table discussions to identify best practices and develop terms of reference for integration of Cree healing ways into health care.**

**Ten discussion groups**

For each group:

Groups: each pre-designated to include a balance of community members and scientists [one PI per group, one scribe, one translator, one spokesperson]

Designated recorder to capture key discussion points on flip chart

Each group (A, B or C ) will address discussion points provided (listed at the end of this agenda)

3:00-3:30pm **Nutrition Break**

3:30-5:00pm **Return to plenary session**

- Group leaders or designated presenters report small group findings
- Discussion
- Where do we go from here! [use flip charts to map direction]
- Determining milestones (short term and long term)

5:00- 5:15pm Closing remarks by Dr. Pierre Haddad

Closing prayer - End of 2010 CHIR-TAAM Annual Retreat Meetings –

6:00pm **Traditional Feast served in the Neoskweskau Complex, activities and Traditional Gifts exhibition\* (\*for sale)**







**CIHR Team in Aboriginal Anti-Diabetic Medicines**  
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**Wednesday August 18<sup>th</sup>**

**Elders/Healers General Meeting**

**Location: Saabutaan**

7:00-8:50am Breakfast served at the Lodge for guests that are not local residents of Mistissini

**Saabutaan**

8:55-9:00pm Opening Prayer (Elder to be announced)

9:00-11:00am Short Power-point presentations of the project and question period  
(Pierre, Alain, Thor, Stef, Brian)

11:00-1:00pm **Lunch on your own**

1:00pm Bus departs from the Lodge-  
Plant collecting with Alain Cuerrier and the Team around Murray's  
Lodge (8 km North of Mistissini)

4:00pm Bus returns to the Lodge

5:00pm **Traditional Meal @ Elders Point & activities**

**Thursday August 19<sup>th</sup>**

**Cree Health Board Research Committee Meeting (all day)**

**CIHR-TAAM**

Departure for Ottawa & Montreal

6:30-7:15am Breakfast at the Lodge (The kitchen will be opening at 6:30 for the Team)

7:30am Chartered bus leaves Mistissini

8:00pm Arrival in Ottawa

10:00pm Arrival in Montreal



## APPENDIX 2 PARTICIPANT LIST

AFFILIATION	#	NAME		COMMUNITY	TITLE
<b>GUESTS</b>	1	Judith	Bartlett	U of Manitoba	Co-Director CAHR Community Health Sciences
	2	Victor	Cal	Belize	Q'eqchi' Healers Association of Belize
	3	Alaa	Badawi	Toronto	Research Scientist, PHAC
	4	Todd	Pesek	U of Cleveland	MD and Ethnobotanist
	5	Lea	Pesek	Cleveland	
<b>MODERATORS</b>	6	Fred	Weih	Ottawa	Moderator, Stone-Circle
	7	Kory	Goulais	Ottawa	Moderator, Stone-Circle
<b>JOURNALISTS</b>	8	Véronique	Morin	Montreal	Scientific Journalist
	9	Stéphane	Ricard	Montreal	Video Tech
	10	Simon	Brien	Montreal	Audio Tech
	11	Caroline	Nepton-Hotte	Montreal	CBC North Journalist
<b>RESEARCH TEAM</b>	12	Nadine	Methot	U of Montreal	Administrative Coordinator
	13	Lawrence	Woodford	Halifax	
	14	Ellen	Bobet	Ottawa	Scientific Popularizer
	<b>Haddad</b>	15	Pierre	Haddad	U of Montreal
	16	Lina	Musallam	U of Montreal	Haddad's Lab Coordinator
	17	Hoda	Eid	U of Montreal	Haddad
	18	Caroline	Ouellet	U of Montreal	Haddad
	19	Danielle	Spoor	U of Montreal	Haddad
<b>Cuerrier</b>	20	Alain	Cuerrier	IRBV	Ethnobotanist & Co-PI
	21	Ashleigh	Downing	IRBV	Cuerrier
	22	Don		Montreal	Spouse
	23	Michel	Rapinski	IRBV	Cuerrier
	24	Youri	Tendland	IRBV	Cuerrier
<b>Johns</b>	25	Cory	Harris	U of Ottawa	Research Coordinator & CO-PI
	26	Christine	Tabib	McGill	Johns
	27	Pat	Owen	U of Ottawa	Johns

<b>Foster</b>	28	Brian	Foster	U of Ottawa	Research Scientist & CO-PI
	29	Deborah	Foster	Ottawa	Spouse
	30	Carolina	Cienniak	U of Ottawa	Foster
<b>Bennett</b>	31	Steffany	Bennett	U of Ottawa	Research Scientist & CO-PI
	32	Stephen	Fai	Ottawa	Spouse
	33	Camille	Juzwik	U of Ottawa	Bennett
<b>Arnason</b>	34	John T	Arnason	U of Ottawa	Research Scientist & CO-PI
	35	Carol	Arnason	Ottawa	Spouse
	36	Brendan	Walsche- Roussel	U of Ottawa	Arnason
	37	Jonathan	Ferrier	U of Ottawa	Arnason
	38	Muhamma d	Asim	U of Ottawa	Arnason
	39	Saleem	Ammar	U of Ottawa	Arnason
	40	Jose Antonio	Guerrero	U of Ottawa	Arnason
<b>COMMUNITIES</b>					
<b>Grand Council</b>	41	Dianne	Reid	Montreal	Representative, CRA
	42	Donnie	Nicholls	Mistissini	Director of Social Justice
	43	Robbie	Nicholls	Mistissini	Observer
<b>Whapmagoostui</b>	44	Karen	Masty Kawapit	Whapmagoo stui	CBH Research Committee
	45	Robby	Masty	Whapmagoo stui	Observer
	46	Maria	Kawapit	Whapmagoo stui	Elders' escort & CBH Board
	47	Abraham	Mamiansku m	Whapmagoo stui	Elder
	48	Juliet	Mamiansku m	Whapmagoo stui	Elder
<b>Chisasibi</b>	49	Abraham	Bearskin	Chisasibi	Director Nishiiyuu Miyupimaatsiun
	50	Rose	Iserhoff	Chisasibi	CBH Research Committee
	51	Violet	Bates	Chisasibi	CBH Research Committee
<b>Eastmain</b>	52	Norman	Cheezo	Eastmain	Health & Healing Coordinator
	53	Terry	Mooses	Eastmain	Elder's coordinator
<b>Waskaganish</b>	54	Sarah	Cowboy Whiskeychan	Waskaganish	Nurse, Head of Chishaayiyuu
	55	Charles	Esau	Waskaganish	CBH Research Committee
	56	Hazel	Esau	Waskaganish	Observer
	57	Tim	Whiskeychan	Waskaganish	Local Coordinator
<b>Nemaska</b>	58	Clara	Wapachee	Nemaska	Elder
	59	Charlotte	Matoush	Nemaska	Observer
	60	Mary	Jolly	Nemaska	Elder

<b>Waswanipi</b>	61	Sarah	Ottereyes	Waswanipi	Observer
	62	Anna	Grant	Waswanipi	Elder's representative [JT1][k2]
	63	Maria	Icebound-Mamianskum	Waswanipi	Elder
	64	Helen	Icebound	Waswanipi	Elder
<b>Wemindji</b>	65	Nancy	Danyluk	Wemindji	CBH Elder's Council
	66	Earl	Danyluk	Wemindji	CBH Elder's Council
	67	James	Dixon	Waswanipi	Observer
<b>Ouje-Bougoumou</b>	68	Joyce	Spence	Ouje-Bougoumou	Director of Community services
	69	Hattie	Wapachee	Ouje-Bougoumou	Elder
	70	Evadney	Bosum	Ouje-Bougoumou	Elder
	71	Anna	Bosum	Ouje-Bougoumou	Elder
	72	David	Bosum	Ouje-Bougoumou	Observer
	73	Matthew	Wapachee	Ouje-Bougoumou	Observer
	74	Maggie	Wapachee	Ouje-Bougoumou	Elder
<b>MISTISSINI</b>					
<b>Elders/Healers</b>	75	Minnie	Awashish	Mistissini	Healer
	76	Charlie	Etapp	Mistissini	Healer
	77	Louise	Etapp	Mistissini	Healer
	78	Johnny	Husky Swallow	Mistissini	Healer
	79	Charlotte	Husky Swallow	Mistissini	Healer
	80	Emma	Coon Come	Mistissini	Healer
	81	Emma	Coon	Mistissini	Elder
	82	Hattie	Coonishish	Mistissini	Elder
	83	Alfred	Coonishish	Mistissini	Elder
	84	Marie	Cheezo	Mistissini	Elder
	85	Joseph	Jimiken	Mistissini	Elder
	86	Allan	Edward	Mistissini	Elder
	87	Bella	Petawabano	Mistissini	Healer Apprentice
	88	Joseph	Loon	Mistissini	Healer Apprentice
	89	Laurie	Loon	Mistissini	Healer Apprentice
	90	Johnny	Mclaloom Meskiono	Mistissini	Elder
	91	Simeon	Petawabano	Mistissini	Elder

	92	Charlotte	Petawabano	Mistissini	Elder
	93	William	Petawabano	Mistissini	Elder
	94	Laurie	Petawabano	Mistissini	Elders
	95	Sam	Petawabano	Mistissini	Elders
	96	Pat	Petawabano	Mistissini	Elders
	97	Ronny	Loon	Mistissini	Elder
	98	Girty	Loon	Mistissini	Elder
	99	Joseph	Loon	Mistissini	Elder
	100	Charlie	Coon	Mistissini	Elder
	101	Sophie	Coon	Mistissini	Elder
	102	Mabel	Gunner	Mistissini	Elder
	103	Elizabeth	Coon Come	Mistissini	Elder
	104	Harriet	Matoush	Mistissini	Elder
	105	Sandy	Matoush	Mistissini	Elder
<b><i>Cree Council</i></b>	106	Kathleen	Wootton	Mistissini	Former Deputy-Chief, CNM
	107	John S.	Matoush	Mistissini	Deputy Chief CNM
	108	Jane	Blacksmith	Mistissini	Director Wellness, CNM
	109	Andy	Metabie	Mistissini	Youth Chief, CNM
	110	Mary Jane	Petawabano	Mistissini	Cree Translator
	111	Karoline	Gaudot	Mistissini	Local Research Coordinator, CNM
	112	Emily	Rabbitskin	Mistissini	Field Supervisor, CNM
<b><i>Cree Health Board</i></b>	113	Annie	Trapper	Mistissini	Director Miyupimaatisiun
	114	Paul	Linton	Mistissini	Director of Chishaiyuu
	115	Agathe	Moar	Mistissini	Coordinator of Chishaiyuu
	116	Taria	Coon	Mistissini	Coordinator of Uschinichuu
	117	Jill	Torrie	Mistissini	Assistant Director PH
	118	Tracy	Wysote	Mistissini	Research Coordinator
	119	Francis	Awashish	Mistissini	PTMF Field Coordinator
	120	Catherine	Godin	Mistissini	Diabetes Educator
	121	Harriet	Linton	Mistissini	Diabetes CHR
	122	Jocelyne	Cloutier	Mistissini	Workplace Health Officer
	123	Mae	Lafrance	Mistissini	School Nurse, Mistissini Cree Botany Project
	124	Linda	Gray	Mistissini	School CHR, Mistissini Cree Botany Project
<b><i>Cree Trapper Association</i></b>	125	Thomas	Coon	Mistissini	Director CTA

## APPENDIX 3

### BIOGRAPHIES OF INVITED GUEST PRESENTERS

**Todd Pesek M.D.** is a private practice physician in Northeastern Ohio where he specializes in preventive, integrative, holistic medicine. He is a Health Sciences Professor at Cleveland State University, Cleveland Ohio, where he teaches, researches and serves including as Director of the Center for Healing Across Cultures. Dr. Pesek received his medical doctorate from the Ohio State University College of Medicine and the Cleveland Clinic, Cleveland, Ohio. He completed his training in Medicine at Case Western Reserve University School of Medicine, St. Vincent Charity Hospital, Cleveland, Ohio. Raised in the mountains of Appalachia in rural Pennsylvania, he has embraced his calling of holistic health and wellness from an early age. His passion and purpose began with childhood rambles in those very woods, gathering comfort and learning truths from his elders and from nature, and have blossomed into extensive study and collaboration with traditional healers and preventive, integrative, holistic practitioners worldwide.

**Victor Cal** is a cultural and environmental rights proponent who has represented his Maya people and their homeland on an international stage for decades now. To that effect, he is the Director of Belize Indigenous Training Institute (BITI), a Belizean incorporated non-governmental organization founded in 1998 by local indigenous groups under the guidance and assistance of Inuit Circumpolar Conference (Inuit Canada, Greenland, Alaska and Siberia). BITI is governed by a Board of Directors with representatives from local indigenous peoples cultural councils including Q'eqchi' Council of Belize, Toledo Maya Cultural Council, National Garifuna Council, and Xunantunich Organization. BITI provides practical training to local peoples in developing income generation and employment for communities. And, they provide capacity building training in the areas of traditional knowledge and cultural heritage. The Q'eqchi' Healers Association (QHA), an organized group of traditional Q'eqchi' Maya healers, is one community association affiliated with and assisted by BITI.

**Judith G Bartlett M.D., MSc, CCFP, FCF** is a Metis physician, researcher and health administrator. She is *Associate Professor* and an *Adjunct Scientist – Manitoba Centre for Health Policy* (both in the Department of Community Health Sciences, Faculty of Medicine, U of Manitoba. She is *Director*, Health and Wellness Department, Manitoba Metis Federation, and also continues part-time clinical work. Dr. Bartlett continues her work on developing and promoting practical applications of a holistic health and wellness model. She runs an active research program in Canada and internationally. Current board/council roles include National Aboriginal Health Organization Board; Manitoba Health Research Council; Canada North West FASD Research Network Board; Canadian Index of Wellbeing Inaugural Board; and United Way of Winnipeg Aboriginal Relations Council. Past Boards: Indigenous Physicians Association of Canada (2006-08); Institute on Aboriginal Peoples Health (2001-06); National Aboriginal Health Organization (chair 2000-04); United Way of Winnipeg (member 1998-2004; chair, 2002-03); Canadian Health Network (2002-06); and Aboriginal Health and Wellness Centre of Winnipeg (co-chair 1993-2002). Dr Bartlett was the 2003 recipient for the National Aboriginal Achievement Award for Health. She is also co-owner and CEO of Jade Enterprises, an aerospace manufacturing company.

## APPENDIX 4

### QUESTIONS TO FOCUS ROUND TABLE DISCUSSIONS

#### **ROUND TABLE TOPIC QUESTIONS:**

**Based on lessons learned from the morning session and your own experience, what terms of reference can be put in place to successfully integrate Cree healing ways into diabetes care?**

#### **A. What should integration of diabetes care mean in practice?**

1. Should working together be based on:
  - a. Partnership arrangements?
  - b. Real integration of traditional healers into Cree Health Board services?
2. What should the role in the management of diabetes be for:
  - a. Traditional healers;
  - b. Doctors and other workers in clinics;
  - c. Scientists; and
  - d. Patients and their families?
3. What steps are required now and in the future to achieve good working relationships between healers, doctors and others?
4. What other issues need to be addressed?

#### **B. How are traditional knowledge and traditional medicine to be protected in an integrated system?**

1. What policies are required to ensure:
  - a. The value of traditional practices is recognized;
  - b. Control by healers over the use of traditional medicines; and
  - c. Ethical use and quality of traditional medicines?
2. What measures are required now and in the future to maintain stocks of traditional medical plants given increased use?
3. What other issues need to be addressed?

#### **C. How can community buy-in and control be promoted?**

1. What education and training is necessary for:
  - a. Patients to have the knowledge to select health care options;
  - b. Healers and staff in clinics to understand how the system operates;
  - c. Transfer of traditional knowledge to apprentices?
2. What steps can be taken now and in the future to strengthen community control over how integration of diabetes care proceeds and how quickly it is implemented?
3. How should we keep track of treatment and results from this diabetes care?
4. What other issues need be addressed?

**APPENDIX 5**  
**POWERPOINT PRESENTATION BY DR. TODD PESEK AND VICTOR CAL**







## Validation of Traditional Medicine in a North-South Indigenous Collaboration



Todd Pesek, MD  
School of Health Sciences  
Cleveland State University

Victor Cai  
Belize Indigenous Training  
Institute

Brendan Walshe-Roussel,  
Jon Ferrier, and,  
John Arnason, PhD  
University of Ottawa

“We have not inherited the land from our forefathers—we have borrowed it from our children.”

-Kashmiri proverb



## Our environmental crisis...

- Loss of language and culture—of the 15,000 languages spoken 70 years ago, only 6,000 are still spoken today.
- Loss of forest cover—between 9–12 million hectares (ha. = 2.5 acres) per year from 1990 to 2000
- Loss of Planetary biodiversity—the Living Planet Index (LPI) dropped by 37% during the 30-year interval from 1970-2000, this is indicative of exponential trends.

Sutherland W. Parallel extinction risk and global distribution of languages and species. *Nature*, 2003;342:276-279.  
Maffi L. Language, knowledge, and indigenous heritage rights. In: Maffi L, ed. *On Biological and Cultural Diversity*. Washington and London, UK: Smithsonian Institution Press; 2001: 412-432.  
Davis W. *Cleopatra's Leopard*. Vancouver, BC: Douglas and MacIntyre Publishing Group; 1999.  
Grimes B. *Ethnologue: Languages of the World*. 13th Ed. Dallas: Summer Institute of Linguistics; 1996.  
United Nations Food and Agricultural Organization. *Global Forest Resources Assessment 2000*. FAO Forestry Paper 140. Available at: <http://www.fao.org/forestry/ifa/bram/>. Accessed August 3, 2005.  
WWF. *Living Planet Report 2004*. Gland, Switzerland: World Wildlife Fund; 2004.  
Hanski I. Landscape fragmentation, biodiversity loss and the societal response. *AMBIO Reports*. 2005;6(5):388-392.

## Our health crisis...

- Cancer
- Arterial Disease
  - Stroke or Brain Attack
  - Heart Attack
- Diabetes Type 2

## Percentage of diseases that could be prevented by diet and lifestyle modifications (“traditional practices”)

- Stroke (Brain Attack) 70%
- Heart Attack 80%
- Colon Cancer 70%
- Diabetes Type 2 90%

Willet, W. C. *Science* 296:695-698 2002

## Hippocrates

“Leave thy drugs in the chemist’s pot if though  
can heal the patient with food.”

We can...

- Promote for respect and select integration of traditional healing in national healthcare

Ploch, F., Cal, M., Cal, K., Feh, R., Miley, E., Dunham, P., Aronson, J. Rapid Ethnobotanical Survey of the Maya Biosphere Range in Southern Belize. *Applied Study, Trans for Life Journal*, 2006, 1(10) 1-12.

This strategy addresses each of our  
problems in health and sustainability  
because...

- It works—greater than 25% of modern medical drugs come from traditional healing knowledge (e.g., metformin)!
- Outlet for the practice of healing and the passing of healing knowledge from elders.
- Traditional healing systems “tread lightly” and promote environmental respect.

There is commonality of traditions in  
health

- In the promotion of health traditional healers and elders the world over have an approach which includes balance of *mind*, *body*, and *spirit* in the context of *healthful environmental surroundings*.



Center for Healing Across Cultures



Pesek, T., Hinton, L., and Niaz, M (2008). *Healing Across Cultures: Learning from Traditions. EcoHealth Journal*, 3(2).

## Maya People



## Native American and Appalachian





## People in India



## A closer look... Maya



## Maya Heartland: Guatemala and Belize, Central America



## Maya Healing

- Mind
- Body
- Spirit
- Environment



## It is working now... Itzama



## Itzama



## Envisioning Itzama



## Our opportunity together...

- Seed Funds from CIET—Validating Traditional Healing via North-South Collaboration
  - Brings together Maya, Anishinabe, Inuit
- Propose pan-American collaboration for true healing based on a collaboration of traditional knowledge and science

## Meegwetch!!!

- **Earth Mother; Grandmothers; Grandfathers; Winds of the East, South, West, North; Four Peoples; Four Corns; Cosmos**

AND

- Belize Indigenous Training Institute
- Q'eqchi' Maya Healers Association
- Earth Healers
- Naturaleza Foundation
- University of Ottawa (J. Arnason and K. Knight)
- Cleveland State University (T. Peseck and P. Dunham)
- Universidad Nacional Costa Rica (L. Poveda and P. Sanchez)
- Resource and Funding Agencies
  - This programming has been financed via various contributions from the Inuit Circumpolar Conference (ICC), the Danish Aid Agency (DANIDA), ILO, UNDP, IDRC, CIET, Government of Belize, University of Ottawa, Naturaleza Foundation, Cleveland State University and others including a recently completed Indigenous Peoples Fund Grant from The World Bank.

### Definition of cosmovision:

**The vision and conception of the origin of the universe, in cosmic space and time that creates world, nature and human beings.**

## Maya Cosmovision

- Tree of Life
  - Yaxche: *Ceiba tree*
  - represents Heaven, Earth, Man, the Underworld
  - Interconnectedness of all things
- Health and Disease
  - Mental, physical and spiritual balance



**We are particles from mother earth and she is part of us. We are part of nature, not above it. We must balance and respect the 4 elements**








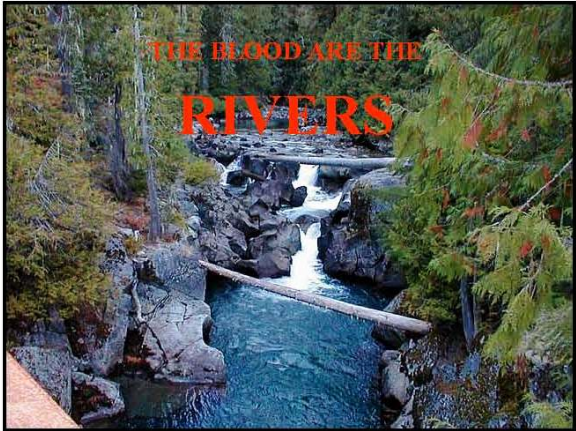
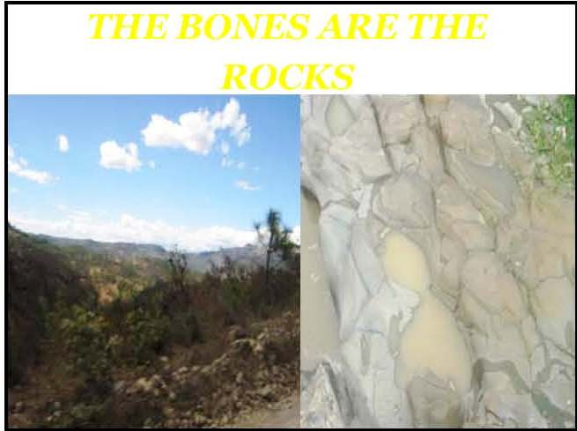
No one stays isolated from biological diversity: neither plants, animals nor human beings.

Every thing in nature finds their relationship with water, with the air, the land, the fire and its immediate surrounding.

THE HUMAN BEING IS JUST LIKE NATURE

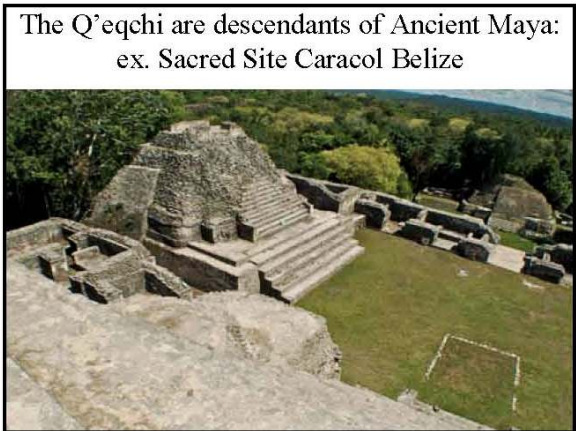
*THE FLESH IS THE LAND*





**Indigenous Q'eqchi' Maya in Belize**

- Inhabit 43 rural villages in S. Belize
- Traditional healers provide primary healthcare needs

 Three small photographs. The top left shows a rural house with a thatched roof. The top right shows three men standing in a field. The bottom right shows a group of people standing together outdoors.




Placing copal into sacred fire



Maya healers today hold similar beliefs and ancient medicinal knowledge



**Belize Indigenous Training Institute:** mission to create indigenous development and preserve culture



Original BITI offices in Punta Gorda Town



Kevin Knight, ICC helped Start BITI

In 1998 BITI formed **Kekchi Maya Healer's Association**  
Mission: to contribute to health and well being of people and to respect the harmony of nature and mankind



Founding elder of Maya Healer's Association  
**Don Albino Maquin**



**Membership Qualifications: Maya healers who possess traditional knowledge of plants and the art of traditional healing**



New Members are:

- Indigenous persons
- Have trained as traditional healers
- Are practicing healers
- Must be voted into association



## Objectives

- To form an alliance of traditional healers to learn from each other and work on common problems and activities
- Preserve and protect traditional knowledge
- Educate youth
- To heal and to do no harm
- To obtain government recognition of traditional healing
- To establish a sustainable use botanical garden for usage and educational purposes



### Itzama botanical garden:

Itzama is the place of Itzamna, God of Wisdom



Healers started garden to have medicinal plant near to patients

75 acres at Indian Creek Belize

Healers replanted medicinal plants from remote forest sites

>200 species  
All rainforest plants

Plants were collected in pristine sacred places in Maya mountains then transplanted to the Itzama garden



Rubiaceae (Coffee Family): *Palicourea*

Collaboration with University of Ottawa and Cleveland State improving the garden for school visitors: installing water pump shelter and outhouses.



OF NOTE:

Two types of plants:

1. Plants for traditional use in healer ceremonies (i.e., prescription-like use)

For example, plants used for mental health





Healing ceremony combines spirituality and plant use:



spiritual leader celebrates four cardinal directions representing earth, air water and fire

2. Plants for public use :

Ginger: not a sacred ancient traditional plant, but it is very safe and effective for nausea - can be given to public for self care



Fevergrass for Colds flu

### Phytomedicinal products



Tea



Repellent cream



Bag for spices, incense or dye

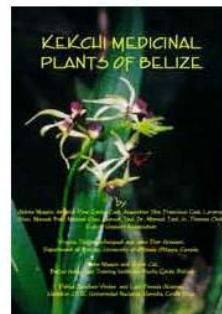


Tincture

Teaching youth about traditional culture at Tumul Kin Maya school



### Handbook publication



Handbook of kekchi medicinal plants

Provide a book to promote the transmission of the traditional knowledge and to teach the use of medicinal plants to younger kekchi

Book is copyrighted and details about the preparations are not provided to protect the intellectual property of the healers and to avoid the Self medication



Activities: research validating traditional medicines.  
Cat's claw traditional use for pain and swelling.  
Collected for lab tests: as antiinflammatory and antidiabetic



**APPENDIX 6**  
**DR. JUDITH BARTLETT,<sup>[k3]</sup>**  
***BEST PRACTICES IN INTERCULTURAL HEALTH:  
FIVE CASE STUDIES IN LATIN AMERICA***



Research

Open Access

## Best practices in intercultural health: five case studies in Latin America

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### Abstract

The practice of integrating western and traditional indigenous medicine is fast becoming an accepted and more widely used approach in health care systems throughout the world. However, debates about intercultural health approaches have raised significant concerns. This paper reports findings of five case studies on intercultural health in Chile, Colombia, Ecuador, Guatemala, and Suriname. It presents summary information on each case study, comparatively analyzes the initiatives following four main analytical themes, and examines the case studies against a series of the best practice criteria.

### Background

The practice of integrating western and traditional indigenous medicine is fast becoming an accepted and more widely used approach in health care systems throughout the world [1]. However, debates about intercultural health approaches have raised significant concerns regarding regulation, efficacy, effectiveness, intellectual property rights, lack of cross-cultural research, access and affordability, and protection of sacred indigenous plants and knowledge [2]. Further, the practice of integrating both systems is progressively taking place in correspondence with increased organization among indigenous communities and the development of their own health services [3].

Intercultural health in this paper is understood as practices in health care that bridge indigenous medicine and western medicine, where both are considered as comple-

mentary. The basic premises are that of mutual respect, equal recognition of knowledge, willingness to interact, and flexibility to change as a result of these interactions. Intercultural health takes place at different levels including that of the family, practitioner, health centre, hospital, and health system. A "best practice" in health care needs to satisfy a series of criteria. It should demonstrate a tangible and positive *impact* on the individuals and population served; be *sustainable*; be *responsive and relevant* to patient and community health needs and to cultural and environmental realities; be *client focused* including gender and social inclusion; *improve access*; *coordinate and integrate* services; be *efficient and flexible*; demonstrate *leadership*; be *innovative*; show potential for *replication*; *identify health and policy needs*; and have the *capacity for evaluation* [4].

Page 1 of 11

(page number not for citation purposes)



This paper reports on the findings of five case studies on intercultural health in Chile, Colombia, Ecuador, Guatemala, and Suriname, conducted by the First Nations Centre for Aboriginal Health Research at the University of Manitoba with the assistance of consultants in each of the countries (most of whom were indigenous). The study was funded by the Inter-American Development Bank (IDB) to provide evidence for program and policy development of socio-culturally appropriate solutions to increase availability and quality of services in health among indigenous peoples in the Americas. At the proposal stage a study framework was developed by the research team to assess initiatives of intercultural health against the above mentioned best practice criteria and to comparatively analyze the cases across four common analytical themes: Cultural, financial and management approaches to intercultural health service development; Opportunities and benefits provided by the intercultural health initiatives; Constraints and risks associated with the articulation of indigenous and western health systems; Assessment of impacts of intercultural health system development. The themes were developed to articulate broader health system domains when analytically comparing the intercultural initiatives. They add a level on inquiry to the understanding of how well best practice criteria were met in the different case studies. The best practice criteria utilized were derived from a study conducted by the National Aboriginal Health Organization of Canada that had developed a framework of best practices for aboriginal health and health care [4].

### Methods

This study used a replicative case study design, which is widely utilized in anthropological research, and is also employed where the focus is on a holistic understanding of how and why certain events or decisions have occurred over time [5]. "Replicative" refers to the replication of similar methodology in separate cases that enables a series of comparative analyses. Case study design has been defined as "an empirical inquiry that: a) investigates a contemporary phenomenon within its real-life context, b) the boundaries between the phenomenon and context are not clearly evident, and c) multiple sources of evidence are used." [5] Case study methodology must meet the scientific standards of validity and reliability. Validity was satisfied in our study by using multiple sources of evidence, maintaining an accurate and transparent record of the data collection process, and providing for the participation of case study stakeholders in the analytical process. Having multiple investigators examine the specifics of each case and to compare observations also strengthened validity. Rigorous documentation of the data collection process across case studies and investigators increased reliability.

The cases were chosen in consultation with the IDB and the Pan-American Health Organization (PAHO), exemplifying ongoing intercultural health initiatives with differential organizational structures and background. Data collection took place between August 2004 and January 2005, with an average of eight days of fieldwork in each country by the Canadian researchers, accompanied by the local consultants. Additionally, these consultants conducted prior in-country work to produce background documents in advance of the fieldwork, and organized the extensive, and often complex and sensitive, fieldwork logistics. The study proposal was approved by the Research Ethics Board of The University of Manitoba.

Across the five case studies, the research team interviewed a total of 69 individuals on a one-to one basis and conducted 56 group interviews and meetings (Table 1). Among these participants were indigenous community members, health systems users, western and traditional health care providers, health administrators, indigenous organizations and community leaders, NGO staff, multi-level and sector government officials, and IDB and PAHO country officials. The researchers also participated in community events that in total included approximately 450 people. These events included a community ceremony for a *Machi* (traditional healer) in a rural area near Temuco (Chile), a village celebration and feast in the Cauca region (Colombia), and a village assembly near Otavalo (Ecuador). At all sites, after initial orientation with consultants, data gathering began at the local level and then moved to regional and finally national levels. Within the local level, data was first gathered from indigenous service providers and community members, next from indigenous political organizations, and finally from government and organizations or western health systems. This allowed for better contextualization of interviews related to government policy such that they could be analyzed through a 'community lens'.

Data collection was achieved through open-ended and semi-structured key informant interviews as well as structured interviews. In general, key informants in each case study were identified in consultation with country consultants. Interview guides were pre-designed seeking to operationalize the research questions. Nonetheless, the style of interview allowed for flexibility in the topics covered. Extensive notes by at least two researchers were taken during the interviews and later transcribed into computer files. Where necessary, interviews were conducted in the relevant indigenous language with the assistance of interpreters. Oral consent to participate in the study was obtained from local communities, organizations, agencies, and individuals. Observations were recorded, and numerous written documents and some quantitative data were gathered and reviewed. The docu-

**Table 1: Summary Information of each Case Study**

	Suriname	Guatemala	Chile	Ecuador	Colombia
<b>Case Study</b>	Medical Mission & Amazon Conservation Team clinics in Trio villages.	Comadronas (Midwives) Association in Comalapa, Kaslen Foundation, health center	Makewe Pelale Hospital, Boroa Health Centre, Mapuche Pharmacy	Jambi Huasi Clinic/ Midwife Association/ Yachac Association	Consejo Regional Indígena del Cauca/ Asociación Indígena del Cauca/Instituciones Prestadores de Servicios de Salud
<b>Place</b>	Kwamalasamutu & Pelele Tëpu	Comalapa & surrounding areas	Temuco & surrounding areas	Otavalo & surrounding areas	Popayan & other areas in Cauca region
<b>Description of Initiatives</b>	-Western medical clinic & Traditional Shaman's clinic operate independently in remote indigenous villages. -Joint collaborations: workshops, mutual referrals, etc.	-Comadronas association supported by a local health promotion NGO (Kaslen) provide approximately 85% of childbirth services to Mayan women in remote areas -Comadronas receive training from government health centre	-Makewe Hospital and Boroa Health Centre run by Mapuche indigenous organizations offer both western medical services and traditional services with funding for western services provided by national government. Indigenous services are supported by both patients and administrative savings. -Mapuche operated Pharmacy in Temuco sells traditional medicines	-Jambi Huasi Clinic provides western and indigenous health services simultaneously in private fee-for service clinic. Fees for both western and indigenous healers are modest and identical. Patients select appropriate service and cross-referrals occur regularly. -Collaborates with Indigenous Midwife Association -Collaborates with Yachac's (traditional healers) Association	-Health Insurance Company (owned and operated by the indigenous regional council) enrolls indigenous clients and purchases indigenous and western services on their behalf from Health services providers mostly owned and operated by indigenous organizations.
<b>Individual Interviews</b>	10	10	7	12	10
<b>Group Interviews /Meetings</b>	12	7	11	14	12
<b>Total participants</b>	73	57	39	96	93
<b>Community Events</b>	None	None	1 (250 people)	1 (50 people)	1 (150 people)
<b>Locations Observed</b>	8	9	7	5	12
<b>Documents/data files</b>	12	12	42	25	23

ments consisted mainly of printed information produced by the organizations themselves or of previous studies conducted by other researchers. The quantitative data was mostly utilization data gathered by the cases for operational purposes. The observations were recorded as rigorously as possible, given the specific context of each observational activity. Some activities were video recorded or photographed. In all instances documentation of observations did not include personal identifiers to protect the anonymity and confidentiality of case study participants. Analyses were completed following the pre-designed case study framework.

### Case Study Descriptions

#### Suriname

The first case study was in the southern area of Suriname, mainly in the village of Kwamalasamutu, which is an interior Amazon locale that is a two-hour flight from the cap-

ital city of Paramaribo. One clinic provides western medical care, run by a local NGO Medical Mission and funded primarily by the government. The other clinic provides traditional indigenous medicine, is operated by elder tribal shamans of the village, and is mainly financed by the Amazon Conservation Team (ACT), a US-based NGO. This clinic is built adjacent to the health outpost and provides sufficient space for several healers to practice traditional medicine. Patient visits to the traditional medicine clinics remain entirely elective. A second traditional clinic visited in another village, Pelele Tëpu, has the same characteristics.

Shamans, Medical Mission health workers and physicians, and ACT members lead workshops to raise awareness among primary care practitioners about traditional health practices, important medicinal plants, and indigenous concepts of health and illness. The workshops also



train traditional healers on basic primary care issues and preventive health practices. As a result, both the primary care workers and the shamans have altered their practice. Depending on the diagnosis and type of treatment required, referrals are routinely made between the two clinics. With the goal of preventing the disappearance of traditional knowledge, there is a Shamans and Apprentices program that encourages young apprentices to learn from the elder shamans and to preserve the knowledge of medicines from the Amazon rainforest. Apprentices are also trained to complete record forms that document conditions and treatments utilized for each patient at the traditional medical clinics. Voucher specimens of medicinal plants utilized in the clinics are obtained for taxonomic determination.

#### Guatemala

The Guatemalan case study was based in San Juan de Comalapa, a Municipality with 35,441 people that is divided between a town centre and 27 surrounding villages and hamlets. It is located 24 kms from the urban centre of Chimaltenango and 85 kms from Guatemala City. Comalapa's population consists almost entirely of Kaqchikel Mayas (95.2%).

This case study focused on the role of "*comadronas*" in the health care system. *Comadronas* provide midwifery care to approximately 85% of pregnant mothers in the Mayan community. These women have played an important cultural and empirical role in the healthcare system of Mayan communities for centuries. *Comadronas* are responsible for assisting with pregnancy and childbirth, and for providing spiritual guidance to mothers and families. Additionally, they administer spiritual and empirical treatments to infants with cultural illnesses (e.g., *susto*, *mal de ojo*).

The "best practice model" in this instance is to link *comadronas* with the professional health system through the development of a training programme that is intended to increase the quality of care provided by the women, and to provide them with the knowledge and skills necessary to know when to refer their clients to the professional healthcare system. The ultimate aim of this model is to extend coverage of the western medical system into the poorest and most remote Mayan villages.

Sixteen *comadronas* of Comalapa have recently formed a Midwives Association together with nearly 65 *comadronas* from surrounding villages, with the support of the Kaslen Foundation, a local Mayan NGO. Comalapa also has a health centre and seven health posts across the region. The nearest hospital is in Chimaltenango, which is located 25 kms away from Comalapa.

Training programs for *comadronas* have varied considerably over the past few years. Both the public health system and the Kaslen Foundation have initiated programs for these attendants at various times in the past few decades. The health centre also introduced training initiatives for *comadronas* in 2002. The women participate in a one-week program in pre-natal care and recognition of complications, at the end of which they receive a certificate that allows them to register births. Since registration of births is important for families, this permit acts as a license to provide midwifery services. *Comadronas* who do not complete the training are technically unlicensed to provide care, although this does not seem to limit the practice of unlicensed *comadronas*.

#### Chile

In Chile, the study was conducted at several health facilities in the city of Temuco and nearby areas. Temuco is located 670 km south of Santiago and has a population of some 300,000. The rural Makewe Hospital is situated in the territory of Makewe-Pelale, a historical Mapuche territory 25 km south of Temuco in the municipalities of Padres Las Casas and Freire. The Boroa-Filulawen Health Care Centre is also located in historical Mapuche territory. It is an area with 55 communities within the municipality of Nueva Imperial, 45 kms from Temuco. The Mapuche Pharmacy and urban traditional clinic are located in the city of Temuco.

The intercultural program focuses primarily on building a system where the power of traditional medicine embodied in the *Machi* (traditional healer) is offered as an equal and complementary alternative to western medicine. This vision is strongly embedded in a context of self-determination, as the recovery of traditional medicine is directly linked to social, political, and economic development in the Mapuche communities. The first initiative undertaken in 1998 was the development of the Makewe Hospital intercultural program, owned and operated by an association of Mapuche leaders. This Association is accountable to a Council of Mapuche Community Presidents from communities in the surrounding Makewe region. The Makewe Hospital provides a range of western health services under the direction of a western-trained Mapuche medical director. These include full-time physician services that are supported by nurses and nurse auxiliaries, midwives, visiting specialists, a dental clinic, and a social work department. An intercultural health worker is on staff and patients are seen by a Mapuche staff member and a western physician to ensure that if the patient has health needs that can only be met by traditional medicine, they are referred appropriately. The hospital holds a medical ward with 35 beds, a polyclinic, and a waiting room with a reception. The Mapuche Association is a not-for-profit corporation, and as such sells western health services to

the government. Although linked to the work of the hospital, Mapuche medicine is not provided in the hospital, and *Machis* or other healers are not paid by the Association.

The second intercultural initiative was the development of a health centre in the community of Boroa, which was spearheaded by 25 Mapuche communities that did not have easy access to physicians and traditional services at the Makewe Hospital. The Boroa-Filulawen Health Care Centre has a *Machi* who attends the clinic one day per week but then treats patients at her home. Patients pay directly for her services similar to the system described above for the Makewe Hospital, although the health centre subsidizes the *Machi* with a small direct payment. Patients who have been diagnosed by either a western physician or a *Machi* have the choice of selecting herbal medicine instead of western medications, or as a complement to the latter.

A third component of the intercultural initiative are a traditional clinic and a pharmacy in Temuco directed by the Makewe Hospital Association.

#### Ecuador

In Ecuador, the research was conducted predominantly in Otavalo, located in the province of Imbabura. The city of Otavalo is 110 km from the capital, Quito, and 25 km from the provincial capital Ibarra. The city has a population of almost 30,000. The official language is Spanish but many people also speak Runa Shimi or Kichua. The Otavalans are one of the most recognizable indigenous peoples in the Americas due to unique historical and socio-cultural dynamics that have permitted them to maintain their customs and traditions over time.

This case study describes the indigenous health program in the Otavalo region of Ecuador. The central component is the Jambi Huasi Clinic in the town of Otavalo. The clinic has been in operation since 1990 and provides a full range of western and indigenous health services to a population of 40,000 people on a fee-for-service basis. The Jambi Huasi Clinic operates under the authority of FIC (Federación de Indígenas y Campesinos de Imbabura), an indigenous organization supported by 160 communities in the region.

Jambi Huasi occupies an older house in a central area of the town of Otavalo. The clinic offers western, indigenous, and alternative health services. Western services include physicians (two sharing a full-time position), a dentist that is available four days per week, and a laboratory that provides medical tests like Pap smears and HIV/AIDS tests. Indigenous services include a *Yachac* (Spiritual Healer available one day per week), a *Fregadora* (Herbal-

ist/Massager on a full-time basis) and a Midwife (full-time). One alternative practitioner specializing in Chinese massage and acupressure is available full-time as well. The clinic also has a health promotion facility that integrates knowledge from western and indigenous systems.

The second component is the Indigenous Midwives Association. This Association was formed in 2002 to monitor the certification of traditional midwives (*Parteras*) in the region. There are 64 midwives registered with the Association, although there are many more in the Otavalo region. The third component of the case study is the Yachac Association of Iluman, a small community near Otavalo. *Yachacs* are the spiritual healers in the Kichua community and there are a large number of them concentrated in this region due to the sacred nature of the area. In 2005 there were 47 members of the Association, including members from surrounding localities. Although the Yachac Association operates independently of all other health services and organizations, Jambi Huasi advocates with government and the western health care system on their behalf.

#### Colombia

This case study was based in the department of Cauca in southwestern Colombia, which has a total population of 1,276,423, of which 190,069 are indigenous. Contrary to the general tendency in Colombia, the majority of the population in Cauca lives in the rural area (65%). It is a department with little economic growth, and agriculture is the major economic activity, followed by agricultural manufactures, and commerce. There are 81 indigenous "resguardos" (reserves) in Cauca, 108 indigenous Cabildos (local indigenous governments), and 10 Cabildo associations.

In 1993 the health reform in Colombia culminated with Law 100 that created the social security system. The essence of the system reform was the provision of coverage to persons under contributory and subsidized regimens that are based on a partnership scheme of income redistribution, which ensures universal benefits through the protection of the insured and family members. The subsidized regimen covers the most vulnerable population. Entities called "health promotion enterprises" were created and are responsible for the financial resources, health promotion, and organization and delivery of medical services. They are in essence health insurance schemes.

In 1997 the Consejo Regional Indígena del Cauca (CRIC) created a health insurance company, the Asociación Indígena del Cauca (AIC). Funded under the subsidized regimen it currently has 166,000 members. Nonetheless, differential indigenous population estimates suggest that



up to 40% of the indigenous people in the CRIC region are not yet members of AIC. AIC staff is 70% indigenous and at the management level 100% of the staff is indigenous. At the operational level (delivery of care and programs) staffing is 60% indigenous and 40% non-indigenous. The model includes both indigenous governance and institutions, and the main articulating organization is the CRIC.

The AIC is a special character public entity constituted by 102 indigenous authorities, whose objective is to administer the health subsidies. It is directed by an administrative *junta* chosen by the General Assembly of Cabildos of the AIC and is presided over by a legal representative also chosen by the Assembly. Community involvement is ensured through designations at a local level and at a regional level through the participation in debates and decisions at community assemblies, "vereda" meetings, zonal assemblies, regional directive boards, directive boards of the AIC, and the Congress of CRIC. The community is not simply a user of the system, but through CRIC, AIC and the IPSS (Institutional Health Service Providers) it takes part in the decision-making process directing the health system.

The model is financed through public monies in the form of contracts between the municipalities and AIC. The model is also supported through its own resources that originate from the General System of Participation, which the indigenous reserves have a right to, and from international cooperation funds of CRIC's health program.

## Results

### Comparative analysis

This section comparatively analyzes the five cases following the four main analytical themes of the study: 1) cultural, financial and management approaches to intercultural health service development; 2) opportunities and benefits provided by the intercultural health initiatives; 3) constraints and risks associated with the articulation of indigenous and western health systems; 4) and assessment of impacts of intercultural health system development.

### Cultural, Financial and Management Approaches to Intercultural Health Service Development

The notion of interculturality has different expressions across the case studies. Suriname is relatively clear-cut with two clinics, a western and a traditional, interacting in indigenous villages. The informal collaboration between these entities enhanced the work of each and has garnered significant community support. The case studies in Chile, Ecuador and Colombia are western health care organizations offering intercultural health care services, although each attempts this in somewhat different ways. The initia-

tive in Guatemala attempts to articulate a western health care public institution with indigenous organizations in the area of midwifery.

The governance and management models of the five cases parallel the above description. While the Suriname and Guatemala experiences have one entity in charge of western medicine and another for traditional medicine, the other three initiatives have indigenous entities managing both aspects. However, in all cases there are attempts at articulation of cultural approaches within the broader health system at different levels. Unfortunately it would appear that this goal is seldom realized and there is considerable evidence that racism is institutionalized in hospitals and other sectors of the health care system.

In terms of resources, the main funding for the traditional indigenous medicine aspect of the initiatives mostly came from non-governmental donors, fee-for service, or re-allocation of surplus administrative funds. Rarely does government provide any direct funding for indigenous traditional health services. Given the limited and insecure basis for this funding, the indigenous governance and management of the health delivery entities strengthened the integration of indigenous health services into the health care system.

### Opportunities and Benefits Provided by the Intercultural Health Initiatives

The case studies suggested a number of interesting opportunities provided by intercultural health initiatives. Opportunity for exchanging knowledge between both types of practitioners was particularly visible in Suriname and Ecuador, and to a somewhat lesser extent in Chile and Colombia. Despite efforts in Guatemala, the model emphasized western practitioners "training" the *comadronas* instead of a two-way exchange, and this approach constrained opportunities for knowledge exchange.

Another significant opportunity was an increase in trust among community members towards the health care system. Community trust of both the western and traditional clinics in Kwamalasamutu, Suriname, originated from a positive experience with each clinic separately, but also seemed to be reinforced by the collaboration between the two. On the other hand, in the Guatemala experience, the lack of trust between the *comadronas* and the western health centre has hindered the development of trust in intercultural work.

In Chile, the political mobilization of Mapuche communities has strengthened their position and enabled them to improve access to both western and traditional medicine. As well in Cauca, Colombia, indigenous run health insurance and health services companies provided power-



ful opportunities for indigenous governance and management of health care. In Otavalo, Ecuador, the Jambi Huasi experience has proved valuable in educating western health care staff to indigenous health and facilitating communication and trust with indigenous communities.

The benefits can be summarized as an apparent increase in cultural pride among the indigenous communities, although the situation in Guatemala is more ambivalent. Overall, the revaluing of traditional knowledge and practices and the increased sense of ownership and control over the health system appear to provide a wide range of potential benefits to indigenous communities.

More specifically, the articulation of indigenous and western systems seemed to facilitate more timely and appropriate referrals when medical care of higher complexity is required. In Otavalo, Ecuador, the collaboration of the municipal government with Jambi Huasi and the midwives association has enhanced initiatives of maternal, child and adolescent health. In Cauca, Colombia, the success of the indigenous health insurance company has increased the respect towards indigenous governance and management of health systems. In Temuco, the Makewe initiative has created a new dialogue around the value and role of traditional medicine and the responsibility of indigenous leadership in health issues.

#### **Constraints and Risks Associated with the Articulation of Indigenous and Western Health Systems**

One set of constraints on intercultural health initiatives was related to the resistance from certain churches to traditional medicine or aspects of it. In Suriname, this was evidenced in the sidelining of the ceremonial spiritual practices of Shamans, not the use of traditional medicines per se. In the other cases, the resistance by mostly evangelical Christian churches was at times more overt. However, these constraints based on religious beliefs do not seem to have seriously limited any of the intercultural health initiatives studied.

Constraints related to health professionals differed across cases. In Suriname doctors and nurses working in remote areas were quite open to collaboration with traditional medicine. In Guatemala western health professionals indicated a degree of acceptance, but also felt that traditional practitioners should work as adjuncts to the western system. In Chile there was evidence that recent medical graduates are interested in practicing in indigenous settings precisely because of the experience of interculturality. In Ecuador integration between western and traditional practitioners works well in a specialized intercultural clinic, but there was little support for indigenous medicine among western health professionals in general.

In all cases, the relationship with personnel at the hospital level was not particularly positive, thus limiting the cultural appropriateness of services. The lack of clarity in relation to the legal framework for the practice of traditional medicine, and its interaction with western medicine, also creates many constraints. The legal situation in Chile is not currently of concern, but ambiguity in the legal codes places the experiences at risk if the government's position changes. Even in Colombia, where important legislation provides reasonable legal backing for intercultural initiatives, the lack of proper regulations supporting an integrated system constrain further developments. Ecuador constitutionally protects traditional healers, but lacks clear regulations as to how the public health system can interact with them. In Guatemala, the legislative situation of *comadronas* is unclear, although the public health system seeks to both regulate them through a registration system and entice them to receive training. In Suriname, the lack of a regulatory framework does not seem to have constrained the intercultural initiatives.

The lack of secure funding engenders many constraints across the five cases. Particularly in Guatemala, a very limited state health budget has prevented any broad articulation between the *comadronas* and the health system. The experience in Colombia indicates that even where financial resources are scarce, indigenous health resource governance and management enhances the viability of intercultural health. In Suriname, without support from a foreign NGO, the traditional clinics would not likely be operating. The Makewe Hospital in Chile has government funding support for western health services, and administrative efficiencies provide a small amount of funding for the intercultural experience. The Jambi Huasi Clinic in Ecuador is very efficient with financial resources provided by international NGO's, but these have not been continuous and the clinic is forced to rely on fee-for service income (albeit at a modest level) to survive.

The potential risk of iatrogenic consequences regardless of the system of medicine followed was identified by key informants in most case studies. A common theme was the acknowledgement of increased risk when a proper articulation across the two systems is lacking. The cases of Ecuador, Chile, Suriname and Colombia suggested intercultural models with certain level of monitoring within and across the two health systems seeking to minimize potential iatrogenic risks.

Finally, the lack of adequate data collection systems in all cases, Suriname being somewhat of an exception, seriously constrains these intercultural health initiatives in terms of planning, operations, monitoring, evaluation and research.



### Assessment of Impacts of Intercultural Health System Development

The most likely impact in four of the five cases of the intercultural health initiatives was an apparent increase in access to both traditional and western medicine. Guatemala was an exception because the intercultural model did not seem to be functioning properly. The cases suggested that when indigenous entities are involved in organizing health care there was an impact in reducing barriers to access and increasing user satisfaction.

The cost of traditional medicines and practitioners vis à vis western medicine is minor. The case studies revealed that the systems do not function in opposition to each other. On the contrary, the real choice is between investing in inclusive intercultural health care models instead of systems based only on western health care.

A positive impact of most intercultural health initiatives was in relation to indigenous community development, including revalorization of indigenous knowledge, cultural continuity and pride as a people. The initiatives not only seemed to positively impact health care, but also the development of community participation and organization, which had an impact on broader health determinants such as nutrition and employment.

The case studies suggested the plausibility of these initiatives in improving access, satisfaction, increasing treatment options in health care, impacting broader health determinants, and consequently having a positive effect on health status. Nonetheless, a different study design and adequate data collection systems would be required to provide evidence of the effectiveness of these intercultural health systems. There was a lack of adequate information systems in the five cases for both the western health care practices and the traditional indigenous practices. The development of appropriate information systems would surely be of assistance to the intercultural health initiatives.

### Case study initiatives compared against the best practice criteria

Table 2 summarizes our findings in comparing case studies against the best practice criteria based on three levels of achievement, criterion *met*, *partially met*, and *not met*. Granted, there is an element of relativity in this categorization. The assessment of *met* refers to evidence suggesting a sufficient level of achievement of that particular criterion as defined in the framework. When the level of achievement was limited the criterion was categorized as *partially met*. When there was evidence of not having achieved basic levels, it was assessed as *not met*. This assessment was conducted independently by each of the three main researchers using the evidence collected. In the

**Table 2: Five Case Study Initiatives Compared Against the Best Practice Criteria**

Project/Criteria	Shaman's Clinic & MM Clinic (Suriname)	Comadronas Midwifery (Guatemala)	Makewe Hospital/Boroa (Chile)	Jambi Hausi/Midwife and Yachac Associations (Ecuador)	CRIC/AIC/IPS (Colombia)
Impact	pm	nm	pm	pm	pm
Sustainability	pm	nm	pm	pm	m
Responsiveness and Relevant	m	pm	m	pm	m
Client Focus	m	pm	m	m	m
Access	m	pm	m	m (urban)	m
Coordination & Integration	m	nm	m	pm	m
Efficiency & Flexibility	pm	pm	pm	pm	pm
Leadership	pm	pm	m	m	m
Innovation	m	pm	m	m	m
Potential for Replication	pm	pm	pm	pm	pm
Health/Policy Identification or Resolution	pm	pm	m	pm	m
Capacity for Evaluation	pm	nm	pm	nm	pm
Criterion					
m = met	5	0	7	4	8
pm = partially met	7	8	5	7	4
nm = not met	0	4	0	1	0

few cases of discrepant ratings, the evidence was again reviewed and a consensus was reached. The Colombian and the Chilean experiences were the cases that met most of the criteria, followed by the initiatives in Suriname and Ecuador. The Guatemala case failed to meet most of the criteria.

*Impact* refers to the notion that the initiative can demonstrate some tangible and positive health improvement on the individuals and population served or improvement for health care providers that can be measured quantitatively or qualitatively. In the absence of reliable quantitative data across the five cases in both the western and traditional medicine experiences it was impossible to determine impact at either the individual or population level. However, we were able to use qualitative information to reach a tentative assessment of positive impact in Suriname, Chile, Ecuador and Colombia. This was not clear in the case of Guatemala. The positive impact of the intercultural health initiatives was apparent at several levels including having strengthened indigenous organizations, cultural identity and continuity. The plausibility of improved health can be deduced inasmuch that increased referrals to higher complexity care, more culturally appropriate primary care, preventive services and health promotion activities, and improved social/cultural determinants have a positive effect on health.

The Colombian and the Chilean experiences demonstrated a plan for viability and continuity of the initiatives through existing contractual arrangements with the state. The *sustainability* of the Suriname experience is positive organizationally and economically but externally dependent on funding. The Jambi Huasi Clinic in Ecuador has demonstrated that it is economically self-sustainable through fee-for-service funding but this has severely limited the reach of its programs. In Guatemala, both government and indigenous organizations have plans for sustainability but as yet, none have been realized.

A high level of *responsiveness* to patient and community health needs, as well as to cultural and environmental realities was shown in all five case studies. Despite very different origins, all five initiatives appeared to have emerged in response to needs of the indigenous communities for access to both health services and strengthening of cultural identity. The intercultural health initiatives in at least four of the five cases were the result of ongoing struggles by indigenous organizations that were able to take advantage of constitutional and legislative changes (these also partially a result of indigenous struggles) to develop systems that seek to respect and integrate western and traditional health models.

In line with responsiveness, all five initiatives demonstrated *client focus* in their sensitivity and provision of appropriate opportunities for individuals and communities, as well as special attention to elders, women and youth. The Colombian and the Suriname experiences appeared to be the most successful, followed by the Chilean and Ecuadorian initiatives. The Guatemalan experience was limited in this regard due to difficulties with the public health system.

*Access* refers to improvement in the ability of individuals to obtain required services at the right time and place. Despite the geographic isolation, the Suriname experience shows a remarkable level of access. The Chilean and the Colombian initiatives suggest increased access. The Ecuadorian and Guatemalan cases are somewhat more ambiguous in this regard. The mere existence of these initiatives stimulated attention to reducing barriers to access and increasing health resources for indigenous people but additional quantitative data is needed to determine the access issue more accurately.

The ability to provide uninterrupted, coordinated service across programs, practitioners, organizations and levels of service over time appears to have been enhanced by most of the cases studied. This *coordination and integration* is exemplary in the Colombian experience. The Suriname initiative shows a model of two separate organizations working very well in coordination. The Chilean case suggests a degree of progress in this regard. It is in the Ecuadorian and Guatemalan experiences where the level of integration in particular is quite limited.

Limited data has hindered the possibility of assessing *efficiency and flexibility* of the experiences, in the sense of achieving desired results with the most cost-effective use of resources as well as the degree to which the initiatives are flexible to new requirements. The fact that these experiences are essentially community-based indicates that they are more flexible than top-down health systems. Although in most cases there were suggestions of cost-effectiveness, more comprehensive and detailed data is needed.

In all five cases, *leadership* represented as the ability to initiate, spur, encourage, inspire and catalyze change was evident. This leadership took different forms, and was particularly strong in the Chilean and Colombian experiences, but was also present in the other cases.

The development of new and creative solutions that meet or surpass known standards is understood as being *innovative*. All five cases demonstrated, to varying degrees, that they meet this criterion.



To some extent, all cases can serve as a model for *replication* by others. In fact the Makewe experience in Chile spurred the Boroa initiative, as the success in Suriname's Kwamalasamutu case facilitated its replication in Pëlele Tëpu and elsewhere. However, each initiative is clearly context dependent, so only certain principles and organizational aspects are ultimately replicable.

All cases emerged as attempts to *resolve health and policy issues identified* by the indigenous communities. The organizations that emerged were having a significant influence on health policy at local and state levels. This was particularly evident in the cases of Chile and Colombia.

*Capacity for evaluation* refers to the capacity to measure outcomes to inform decision-making and assess the effectiveness of strategies and programs as well as client satisfaction within the best practice. However, there is a dearth of the data and information systems required for proper evaluations. The Suriname experience is the exception, because both clinics collect data on patient visits and make an effort to computerize these records. The Colombian case has potential since all services are managed by an indigenous insurance organization that must be accountable to government funders, but resources are not available to systematically record all health care transactions. Similarly, the Chilean initiative has more potential for evaluation given that data is collected on patient services at the local level. However, even these nascent information systems rarely document intercultural health contacts. In all cases, the state appears to have a negligible capacity or interest to create information systems that may evaluate not only intercultural health initiatives, but the publicly funded system itself.

### Discussion and conclusion

Traditional medicinal knowledge and healing practices of indigenous peoples throughout the world continue to play an important role in health care, both in parallel and in some cases in conjunction with western medicine. In Latin America, this situation exists in a context of larger socio-economic and political processes, including state controlled health systems, economic instability, constitutional and health reforms, and the marginalization of indigenous medicine and cultural identity [6,7]. Previously, research into traditional and contemporary health care practices among indigenous populations examined topics such as utilization patterns [8], relationships between community members and formal health services [9], and the impact of cultural conflict or change on health status [10]. However, in light of recent indigenous rights movements and the rapid expansion of pharmaceutical developments to exploit plants and local expertise, perspectives on this complex set of issues have become

highly politicized. Many researchers are presently examining the state of traditional medicine's regulation throughout South America (i.e. integration, coexistence and tolerance) [11] and the need for community participation in health initiatives that are linked with indigenous rights and empowerment [12,13].

Another approach taken to study this development is that of intercultural health initiatives, which are designed to incorporate traditional and western medical practices within health care systems that are preferably led and managed through indigenous organizations. Using case study data, this paper reported on different models of intercultural health projects currently underway in Chile, Colombia, Ecuador, Guatemala, and Suriname.

Four main themes were comparatively analyzed: cultural, funding and management approaches to intercultural health service development; opportunities and benefits provided by intercultural initiatives; constraints and risks associated with the articulation of indigenous and western health systems; and an assessment of the impacts of intercultural health system development. As well, the cases were examined against best practice criteria seeking to assess the degree of successful development of the intercultural health initiatives. While space does not permit a thorough analysis of each topic, the breadth of our investigation speaks to the range of topics involved in intercultural health projects. The risks and benefits for indigenous populations and organizations are of particular significance, as they highlight the political tensions between state-run health systems and the largely marginalized practices of traditional healing. They are also related to the significant increase in community mobilization, inter-generational transmission of traditional knowledge, and the reclaiming of cultural integrity as a result of their participation. The plausibility of positive impact on health of these initiatives was also identified.

The study had a number of limitations. First, the study design sought to assess the cases against certain criteria but was not an effectiveness assessment of adequacy, plausibility or probability [14]. Second, information systems limitations of most case studies hindered the possibility of using reliable financial, epidemiological, and health utilization data for study purposes. Third, although significant fieldwork was done by local consultants prior to that of the principal investigators, the time spent by the latter collecting data in each intercultural case study was somewhat less than ideal.

The study identified a series of recommendations for policy makers at local, national and international levels. These include, the development of a culturally appropriate regulatory environment, de implementation of con-

tractual models for promoting indigenous autonomy in health system development, supporting the shift from exclusively western health systems toward intercultural health programs and practices, supporting indigenous organizations and communities in the development of health programs, providing technical and financial support to develop information systems for monitoring, evaluation and research purposes, and fostering the exchange of ideas and models across Latin American countries and between North and South America. Among recommendations specific to research, the agenda should be to prioritize effectiveness studies.

### Competing interests

The author(s) declare that they have no competing interests.

### Authors' contributions

Javier Mignone, Judith Bartlett and John O'Neil equally conceived the study, conducted field work and wrote the main report of the study. They also equally contributed to the manuscript. Treena Orchard contributed to the study by assisting with the analysis of data, by writing sections of the initial study report and contributing to writing the manuscript.

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### References

1. PAHO: *Medicinas y Terapias Tradicionales, Complementarias y Alternativas. Informe No. 21*. Washington, D.C 2002.
2. O'Neil J, Bartlett J, Mignone J: *Best Practices in Intercultural Health* Inter-American Development Bank. Washington, D.C, 2006.
3. Montenegro RA, Stephens C: *Indigenous health in Latin America and the Caribbean*. *The Lancet* 2006, **367**:1859-1869.
4. Mable A, Marriott J: *A Path to a Better Future: A Preliminary Framework for a Best Practices Program for Aboriginal Health and Health Care* National Aboriginal Health Organization, Ottawa; 2001.
5. Yin RK: *Case Study Research: Design and Methods* Sage Publications: Newbury Park; 1991.
6. Puertas B, Schlessler M: **Assessing Community Health among Indigenous Populations in Ecuador with a Participatory Approach: Implications for Health Reform**. *Journal of Community Health* 2001, **26**(2):133-147.
7. Rodríguez-Monguio R, Infant Campos A: **Universal Health Care for Colombians 10 year after Law 100: Challenges and Opportunities**. *Health Policy* 2004, **68**:129-142.
8. Kroeger A: **South American Indians between Traditional and Modern Health Services in Rural Ecuador**. *Bulletin of the Pan-American Health Organization* 1982, **16**(3):242-254.
9. Pedersen D, Coloma C: **Traditional Medicine in Ecuador: The Structure of the Non-Formal Health Systems**. *Social Science and Medicine* 1983, **17**(17):1249-1255.

10. Finerman R: **Experience and Expectation: Conflict and Change in Traditional Family Health Care Among the Quichua of Saraguro**. *Social Science and Medicine* 1983, **17**(17):1291-1298.
11. Nigenda G, Mora-Flores G, Aldama-Lopez S, Orozco-Nunez E: **The practice of Traditional Medicine in Latin America and the Caribbean: The Dilemma Between Regulation and Tolerance**. *Salud Pública de México* 2001, **43**(1):1-10.
12. Jagtenberg T, Evans S: **Global Herbal Medicine: A Critique**. *The Journal of Alternative and Complementary Medicine* 2003, **9**(2):321-329.
13. Morgan L: **Community participation in health: perpetual allure, persistent challenge**. *Health Policy and Planning* 2001, **16**(3):221-230.
14. Habicht JP, Victora CG, Vaughan JP: **Evaluation designs for adequacy, plausibility and probability of public health programme performance and impact**. *International Journal of Epidemiology* 1999, **28**:10-18.

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