The Winston Churchill Memorial Trust of Australia

Report by

Jason Warnock
2008 Churchill Fellow

The Bob and June Prickett Churchill Fellowship to investigate Indigenous health programs which focus on the prevention of diabetic foot amputations [USA & Canada].

Signed

Jason Warnock
32 Ross River Road
Mundingburra Qld 4812
22/06/09

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Introduction

The Churchill Fellowship, I undertook was titled: "To investigate Indigenous health programs which focus on the prevention of diabetic, foot amputations." Additionally, it was noted that of particular interest were programs that [1] develop self-management skills using affordable and accessible, household items, [2] encourage early identification and intervention of foot conditions, [3] provide an effective guide to diabetic foot screening for Indigenous, health workers.

The St Vincent Declaration, in 1989, called for a 50% reduction in amputations resultant from diabetic gangrene (WHO, 1989). The Declaration supported the belief that diabetic foot amputations were preventable.

In 2002, the RHSET [Rural Health Support Education and Training] program, funded by the Australian Government Department of Health and Ageing, approved an application to develop "an educational tool to assist with identification and management of the indigenous diabetic foot". This was my first opportunity to address the intention of the St Vincent Declaration.

I chose the Indigenous people of Australia as the target group for the RHSET project as they represented a population of people who had a high prevalence of diabetes, typically had difficulties accessing health services, from largely anecdotal evidence had a higher degree of foot pathology, foot ulceration and amputation. The challenge was to develop effective and culturally- accepted educational resources. My experiences of working with the local, Indigenous community of Palm Island in north Queensland provided me with the opportunity to develop a good, news story for this community and the opportunity to continuously test and reflect the development of the resources.

Since late 2003, I have continued to develop Indigenous diabetic foot resources. SARRAH [Services for Australian Rural and Remote Allied Health Inc] supported my efforts throughout this process. On 1st July 2008, SARRAH gifted the project to me and my wife Ruth.

The Bob and June Prickett Churchill Fellowship has enabled a study of similar, Indigenous health programs across the Pacific to Canada and USA. The Fellowship has enabled me to share my work, which is now called the Indigenous Diabetic Foot Program [IDFP], with Indigenous people of these countries. This Churchill report illustrates the findings of the Fellowship and makes recommendations to further the 1989 St Vincent Declaration.

The Embrace Marble Carving
Photo courtesy J & R Warnock

Bob Prickett, "Dusty Bob" as he prefers to be addressed, crafts the "Embrace" statuette for each of the Fellows who receive a Bob and June Prickett sponsored Churchill Fellowship.

For me, the statuette represents the power of supporting one another in times of joy, triumph, sadness and grief and the need we all have for human contact and touch.

"Dusty Bob" and Jason Warnock, in Cairns Nov 2008
Photo courtesy of Jason & Ruth Warnock

The marble carvings are timeless – they will continue to remind generations to come of the important of embracing one another. I feel very proud to be the 23rd Bob and June Prickett Churchill Fellow and thank Bob for making my Fellowship possible.

Executive Summary

Name: Jason Warnock
Position: Partner - Warnock Podiatry Services [NQ],
Program Manager - Indigenous Diabetic Foot Program
Occupation: Podiatrist
Address: 32 Ross River Road, Mundingburra, Townsville Qld 4812
Contact: jason@diabeticfootprograms.com.au, ph: 0747 252 988, fax: 0747 794 599

Project Description
The incidence of type 2 diabetes mellitus is growing rapidly in the western world. Indigenous people are affected in greater numbers, are managed less effectively and develop more complications than the non-Indigenous populations. (Naqshbandi, M., Harris, S. B., Esler, J. G., & Antwi-Nsiah, F., 2008)

The Bob and June Prickett Churchill Fellowship enabled me to investigate Indigenous health programs which focus on the prevention of diabetic foot amputations in USA and Canada, with the hope to improve the delivery of similar services to Aboriginal and Torres Strait Islanders.

Highlights
Meeting the people who are actively involved with delivering health promotion programs, health education programs, foot care services and podiatry programs for Indigenous people was the highlight of the study tour. Their passion and enthusiasm was to be admired, despite the difficulties that they encounter to deliver to their Indigenous people.

Major Lessons
The common factors that Indigenous communities were requesting to enable effective health programs in the areas visited were:

1. Involvement of the community in developing the programs
2. Involvement of local Indigenous health workers to deliver the programs
3. Enabling the local organisation to have control of the funding provided and enough flexibility with the funding to enable local solutions for the objectives of the program
4. Programs that would allow caring for 'the body, mind and spirit' rather than targeted disease or body part
5. Community control of the research and evaluation undertaken and their active participation in the process

As for foot care programs and amputation prevention programs, the programs being developed for the Pacific Islands in Honolulu by Papa Olo Lokahi was most impressive. The Southern Ontario Aboriginal Diabetes Initiative foot care program showed innovation to enable their Indigenous people to access services. The remote communities of northern Ontario demonstrated that they were keen to be involved with programs and clearly could adopt our Australian Indigenous Diabetic Foot Program to meet their needs. American Indian frontline workers were keen to provide diabetic foot prevention programs for their communities but did not have a clear pathway to doing so.

Implementation
Action is required as the complications of diabetes including diabetic foot amputations will follow this wave of people developing type 2 diabetes. Through my network of colleagues, my partnership with health organisations and governments and my passion for Indigenous Health, I will use every opportunity to implement the experiences of the 2008 Bob and June Prickett Churchill Fellowship.

Background information

Can diabetic foot amputations be prevented?

Research into the prevention of diabetic foot amputations is difficult is obtain. Prevention of diabetic amputations is defined in a variety of ways. Some describe such programs as “foot protection programs”, “limb salvage programs” and others “footcare programs” to name a few.

The Indigenous Diabetic Foot Program is a **primary** prevention program that aims to prevent foot injury, foot ulceration, infection and foot amputation. This is done by providing people who have diabetes with information and skills that encourages their own daily care of their feet, maintains the health of their feet and identifies foot conditions before they threaten the viability of the foot.

Mason et al, in 1999 undertook a systematic review of the research that involved the prevention of diabetic foot ulcers. The conclusion:

Foot ulcers are common in people with diabetes and are costly in term of patient morbidity and the use of health care resources. Although it is nearly a decade since the St Vincent Declaration called for a marked reduction in morbidity to be achieved through better patient management, available evidence suggests that the process of care in Britain is still very variable in quality. Foot care for people with diabetes must be organised to provide monitoring, education and referral in a manner acceptable to patients and realistic for local healthcare providers. (Mason, J. et al., 1999)

The IDFP took this advice to build a program that provided education and skills for people with diabetes, with local Indigenous health workers providing monitoring and support. The Indigenous health workers demonstrated ability to effectively undertake diabetic foot screening when supported by the IDFP workshops. Screening leads to identifying ‘at risk’ feet for referral to effective and efficient foot management. The IDFP program uses a combination of health promotion and health education strategies.

Another 10 years have passed since Mason’s review, 20 years since the St Vincent Declaration. It seems **mystical** that the Churchill Foundation funded my Fellowship, 20 years after the Declaration was made. How was USA and Canada addressing the need to reduce diabetic foot amputations?

What is the significance of diabetes and Indigenous peoples?

World Diabetes Day in 2006 focussed on “Diabetes in Indigenous People”. I was able to attend a forum in Melbourne and gained an insight into diabetes management for Indigenous people in Canada, USA, the Pacific, New Zealand and Cambodia.

At this forum, there were common issues for all countries and their Indigenous people. There seems to be a higher incidence of diabetes [type 2] in Indigenous people. Health services need to consider the multifactorial factors involved with people developing diabetes and multiple factors in providing effective services for the management of this disease.

Naqshbandi et al [2008] published a review of complication rates of type 2 diabetes in Indigenous peoples across the world. From the conclusion of the paper, it states:

The burden of diabetes among Indigenous peoples globally is cause for concern. Optimizing clinical care for these high-risk groups in the resource-constrained environments in which

many live is a major global public health challenge, as demands on health services for the prevention, management and treatment of diabetes and its complications increase. It is hoped that information on the impact of the problem and research gaps, particularly in highlighting the rates of diabetes-related complications, will serve to facilitate policy change and result in the development of local, regional and national primary and clinical interventions, ultimately reducing the burden of diabetes in the world's Indigenous populations.
(Naqshbandi, M. et al., 2008)

The report highlights the disproportional representation of diabetes in the Indigenous populations of the study. The data was sources from USA, Canada, New Zealand, Australia and the Commonwealth of Northern Mariana Islands. The report publishes data about the prevalence of nephropathy, retinopathy, neuropathy, lower extremity amputations, cardio-vascular disease and mortality due to diabetes in Indigenous people compared to the national general diabetic populations. Clearly the Indigenous people suffer more than the other members of the general population. The authors note that there is a scarcity of reported information regarding the Indigenous populations of Micronesia, Central and South America, Europe and Asia.

The Churchill Fellowship Study Tour

In preparing for the study tour, I made contact with each of the known key people at each destination. A summary document [APPENDIX 2] was sent by email to each person. This attempted to clearly identify my goals for the proposed meetings, timelines and expectations. I followed up responses to the initial emails and provided further clarification and additional information as required. On arrival in Honolulu, USA, a cell phone was purchased and this phone number was provided to key people closer to arriving at their destination. Email contact was able to be maintained throughout the tour. My wife, Ruth, also a podiatrist and partner in the Indigenous Diabetic Foot Program, accompanied me to all meetings and visits.

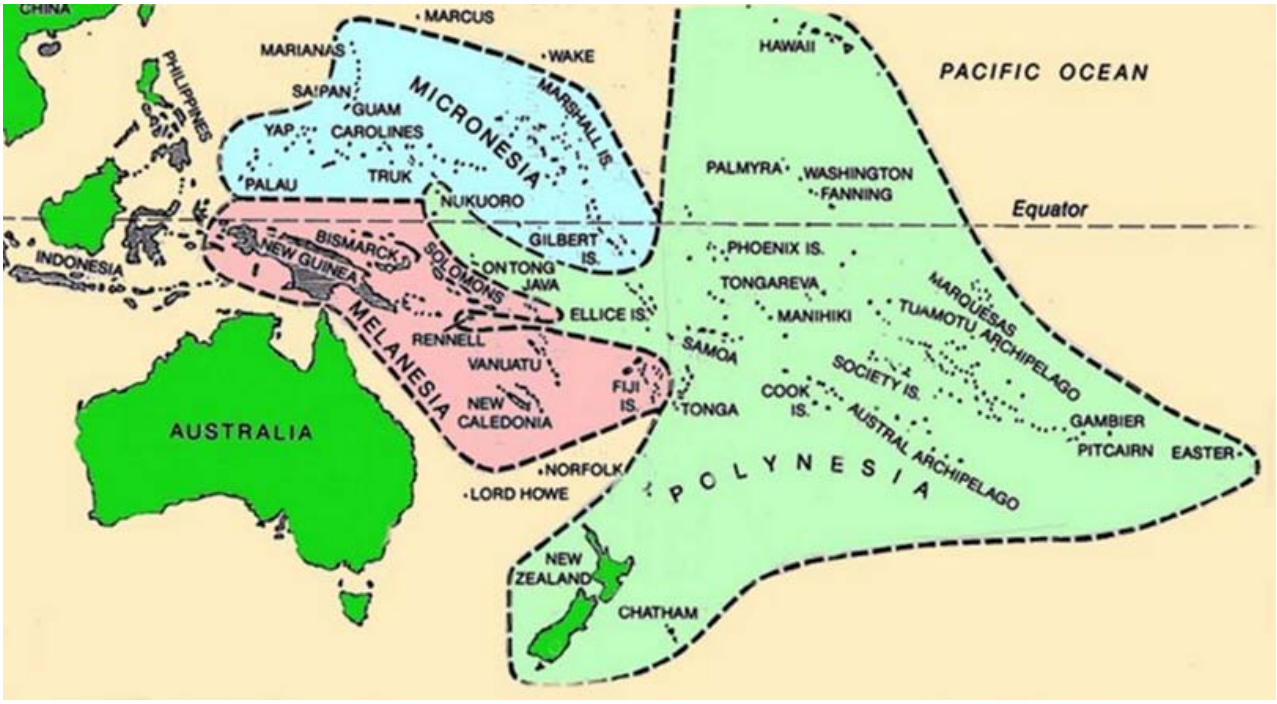
Where possible, we made use of public transport. This was a cheap and efficient means of transport. Hotels were booked approximately a week in advance and, where possible, self-contained rooms or those with a kitchenette were sought. This enabled us to have breakfasts and evening meals of our choice.

The format of the study tour will be to present information collected into themes and then follow that with recommendations section. A list of meetings and people consulted is located in APPENDIX 1. Reference to these meeting maybe inserted into the text of the theme.

Theme 1: Pacific Islander Health Programs *"Small Steps / Big Rewards"*

The visit to Honolulu in Hawaii was considered to be essential for the Fellowship for a couple of reasons. The Torres Strait Islander people have social and cultural links with people of the Pacific Islands and the prevalence of diabetes type 2 is high for both populations when compared to the general, Australian population. Additionally, the Pacific Islanders are known to reside in our north Queensland region. Pacific Islanders are close island nations within the Oceanic region. The native, Hawaiian people have had a struggle to gain recognition as an Indigenous people of the USA. It is only in recent years, that the USA has recognised their indigenous status.

Hawaii is a state of the USA. America has responsibilities in providing health services to: American Samoa, Guam, the Commonwealth of the Northern Mariana Islands [CNMI], the Federated States of Micronesia [FSM], the Republic of Marshall Islands and the Republic of Palau. The region is very large as illustrated in the map [below].



Map courteous of http://www.janeresture.com/michome/index.htm, accessed by Jason Warnock, 04/06/2009

However, there are many other nations within the Pacific that do not come under USA responsibility and hence are not entitled to receive assistance with health services. The communities in the Polynesian and Micronesian region do share regional and cultural issues, even if they do not all have the treaties / arrangements with the USA.

The meeting with **Papa Olo Lokahi**, a public health facility based in Honolulu providing diabetic foot care information and training to the Pacific community, was beneficial. It has a small budget and yet has achieved much through its diabetes programs. Nia Aitaoto is the project co-ordinator, Joann Tsark, the program director. It was a delight to meet with both women and to share their experiences in the Pacific region. Nia explained how the communities provide her with direction regarding the health issues that they feel are important in their community. Through listening and consulting with each community, Nia constructs programs to fit the local needs. Nia was a member of the public health team with the *Diabetes Today* program in 1998 which developed this local process (Braun, K. L., Kuhaulua, R. L., Ichiho, H. M., & Aitaoto, N. T., 2002). The work since then has built on the good relations and partnerships developed through the Centers for Disease Control and Prevention [CDC] funded program.

The project co-ordinator advised that diabetic foot amputations are of great concern to the people of the Pacific. People too frequently do not want to present to the health clinics with sores and cuts on their feet as the physicians are too keen to amputate the affected part. The physicians have a "three strike rule" approach to foot wounds. On the third consultation with the same wound an amputation will be performed. Like the Indigenous Diabetic Foot Program [in Australia], Nia works with local champions, provides education and training to these locals with the aim to enable a primary prevention approach to foot problems. The content of the education is provided by Diabetes America. Without formal, podiatric training, Nia has managed to develop effective, educational resources to assist the champions of each community. Care is taken to present material that includes "simplified wording, enlarged print, and graphics, photos, and case studies that reflect Pacific Island cultures, situation, and peoples" (Braun, K. L. et al., 2003).

Care is taken to ensure the people with diabetes can access household items to provide their own

foot care. This approach is very much like the education and training we provide through the Indigenous Diabetic Foot Program in Australia. Both situations have similar denominators: financially poor population, lack of access to basic equipment [eg nail clippers], lack of culturally appropriate information, fear of amputation, fear of going to seek help when early identification of a foot condition is found.

Nia states that the impact of the project has been fantastic. By providing foot care kits, people have the appropriate tools to look after their feet. Coupled with the education, people know "how to" provide the appropriate care, resulting in a reduction in foot conditions. On one island, a reduction of 400% in rates of amputations has been achieved. Her keys to success: 1) listen to the local communities, 2) provide appropriate training for the local champions to provide the leadership and support for people to learn how to look after their own feet, 3) provide ongoing support for the trainers and provide the tools required to undertake the foot care practices. The champions need to be a respected member of the community and maybe the wife of the Chief, the Pastor's wife, an elder or Dispensary Worker [American Samoa].

Each community will differ and therefore the process of providing the education needs to be modified. Traditional healers play a large role in health decisions in some areas. These healers are involved with the delivery of information if requested, to ensure 'a blending' of information to ensure better acceptance of the education. In Palau, health care is a legislated, fundamental right for all citizens. As a result the government supports health projects and here every person will have undergone a health survey and screen to determine health status and health needs. Education is required to address all age groups, as there are few older people in some communities, the younger people need to receive education to prevent and manage diabetes.

Nia believes rewards are well received by all people and she has found some innovative, inexpensive incentives for people to adhere to and maintain healthy food choices, maintain physical activity and footcare practices. The incentive to complete and document health checks, via a patient-held, record card, was to provide a canoe, paddle charm. The paddle is symbolic to this community, a symbol of power, direction and strength. Everyone wants a paddle [usually worn on a necklace] so they strive to complete their health checks, record the results on their card and gain their prize!

Physical activity programs were difficult to achieve in most communities. It was too hot or they did not have appropriate footwear or it was dangerous [for their feet] or personal safety. In Micronesia [communities of Chuuk], the community said "the only time you move quickly is when escaping from the fear of an assault," Nia reported. They also stated that there was too much rubbish to go walking. The solution that the community members found was to walk to collect the rubbish each week. It helped the environmental issues, it made the people more proud of their place, they did it collectively [supporting one another] and they got physically more active in the process. The communities live near the equator, so the activity is always hot and sweaty. As a result, a reward for their participation in physical activity was found. Nia was able to obtain funding from Hawaiian businesses to provide 'sweat' towels. The towels were printed with the wording "small steps / big rewards".

Providing healthy, food information is an essential part of diabetes education and ultimately this is reinforced as part of foot care. By eating healthy foods the management of diabetes can be improved. This reduces the risk of diabetic, foot complications as well as other complications. Nia has considered that meal sizes and portions of food groups [carbohydrates, protein, fats, vegetables and fruits] need further explanation. People cook for the extended family and the community. As a result, people are often unable to 'measure' the proportion of foods to place on their plate. The

families do not have measuring cups and measuring spoons to assist in food preparation. This has created a new project to provide these measuring containers, in small kits, just as the foot care kits.

A lesson learned from our visit to Canada, is perhaps a more creative method of guiding food sizing. This does not require plastic containers but use the hand to provide a guide to food portions:

- the palm of the hand for the size of lean meat
- the little finger to reflect the thickness of the meat
- the tip of the thumb [the end joint], for the amount of fat
- the size of the fist for the amount of grains and starches and the size for a piece of fruit
- vegetables – the amount you can hold in both hands

(http://www.diabetes.ca/Files/plan%20your%20portions.pdf accessed by Jason Warnock, 06-06-09)

Papa Olo Lokahi works closely with other partners to deliver and evaluate their interventions. One such partner is the **University of Hawaii, Department of Native Health**. We were able to meet with Joseph Kaewe'aimoku Kaholokula and gain an insight into how evaluation programs gauge outcome effectiveness. Evaluation is essential to provide the funder with some tangible evidence that the funding was wisely invested and produced results.

Kaewe has been involved with the development of tools to facilitate research involving community groups. Community groups and health facilities use these research tools to evaluate programs with which they are involved, eg physical activity programs, healthy eating programs, depression and diabetes, smoking cessation.

Kaewe noted that the community groups used the framework of the research tools effectively and appreciated the guidance that they provided. Health professionals tended to bend and flex the tools to suit their previous experiences and some 'stretched' the framework beyond its capability. This required the research team to go back to the health professionals and provide further support and training to implement the framework.

The Indigenous Diabetic Foot Program resources were shared and discussed with Kaewe and Papa Olo Lokahi. Nia and Joann were delighted with the colour and professional look of our resources and were appreciative of the detail and content provided. Their funding would not stretch to reproduce similar resources, however were keen to maintain contact to strengthen the podiatry content of their information and educational training. The CD ROM was of particular interest to Kaewe as a vehicle to support education and training.

A common factor for the Australian, Pacific Island and Hawaii locations is the difficulty to engage Indigenous people into formal education to increase the Indigenous, health professional workforce. A visit to the **Polynesian Cultural Centre**, www.polynesia.com, provided a unique example of how it has been achieved in Hawaii. The Polynesian Cultural Centre is a non-profit organisation dedicated to preserving the cultural heritage of Polynesia while providing **scholarships** for Polynesian students attending the University, adjacent to the Centre.

The Brigham Young University – Hawai'i, http://www.byuh.edu/, resides in the tropical grounds next door to the Polynesian Centre. Guides we spoke to at the Centre were from the Pacific Islands, enrolled at the University to study bachelor degree courses, reside in the residential halls on campus and work as guides at the Polynesian Centre. The guides/students advised us that they felt supported during their time at University and were encouraged to return to their communities once graduated. One of our guides said that she was initially home sick but settled into her education and enjoyed working at the Polynesian Centre. She was studying accounting and was definitely going to return home on her graduation, as she still missed her family and the "way of life".

The whole integration of the University and the Centre occurs under the umbrella of The Church of Latter-day Saints. The Centre was established more than 50 years ago and is one of Hawaii's most popular attractions. It is found in the village of Laie on the far side of the island, away from the bustle of Honolulu.

The cultures of Samoa, Aotearoa [New Zealand], Fiji, Hawaii, Tahiti, and Tonga are presented at the Polynesian Village through a number of ways: traditional buildings and artefacts, conducted tours, presentations, story-telling, participation of visitors in dance/demonstrations and a canoe pageant parade. Additionally, exhibits from Rapa Nui [Easter Islands], Mission Home Settlement [Hawaii] and Marquesas [French Polynesia] and the history of the ancient voyages to discover the Hawaiian Islands: Halau Wa'a O Iosepa.

Photo: Iosepa – twin-hulled voyaging canoe
photo: http://iosepa.blogspot.com accessed by Jason Warnock, 19/06/2009

Recommendations from the Pacific Islands:

1. To work with the team at Papa Olo Lokahi to see if funding can be gained to provide a Podiatry service from Queensland to the Pacific Region. Flights from Cairns to Guam occur each week. Connections from Guam could extend the reach across the Pacific area. To investigate opportunities with AusAid. http://www.ausaid.gov.au/country/southpacific.cfm
2. To include the staff of Papa Olo Lokahi in a global network of footcare providers for Indigenous communities to share and exchange information.
3. To reflect on the community building processes that have made the Pacific Diabetes Today program such a success.
4. To maintain contact with researcher, Kaewe'aimoku Kaholokula, at the University of Hawaii to share and exchange information regarding research involving grassroot, Indigenous community organisations.

Theme 2: Anishnabwe Health Programs of Ontario

"We have a beautiful culture and language given to us by the Creator and must get our identity back by learning our traditional teachings of Love, Respect, Courage, Honesty, Wisdom, Humility and Truth. Most of all, we need to go back to praying and teaching our children about our Creator." Lorriane Boubaire
http://www.sagkeengbalancingwellness.ca/about.html accessed by Jason Warnock 06-06-09

The 2000 report "Aboriginal Diabetes Initiative. Diabetes Among Aboriginal [First Nation, Inuit and Metis] People in Canada: THE EVIDENCE" contains the following information:

- The term Aboriginal will be used to be inclusive of all three peoples - First Nation, Inuit and Metis people
- Health information dealing with First Nations communities may also be reported as "on-reserve" or "off-reserve" figures
- From the 1991 Aboriginal Peoples Survey (APS), approximately 783,980 people were identified as North American Indian, 212,650 as Métis and 49,255 as Inuit.
- It is assumed that the actual prevalence rate of diabetes is probably 2 to 3 times greater than the report prevalence rates of diabetes due to the high proportion of Aboriginal people undiagnosed

- It is estimated, form APS that in 1991, from 80,000 to 120,000 Aboriginal people 15 years of age and over had diabetes in Canada. The prevalence rates from the First Nations and Inuit Regional Health Survey are **20% greater** than the APS
- From the 1991 APS, Inuit people have a lower rate of diabetes (1.9%) compared to the Canadian population. From the First Nations and Inuit Regional Health Survey (1999) show diabetes rates as high as 4% among Inuit people in Labrador (Labrador Inuit Health Commission, 1999), which is higher than estimates for the Canadian population
- The Métis are recognized under the 1982 Constitution as being one of the three, distinct, Aboriginal peoples of Canada. Of mixed Aboriginal and European heritage, the Métis are considered neither First Nations nor Inuit, but as a culturally, unique people
- The prevalence of diabetes among the Métis was 5.5%. This is more than twice the prevalence of diabetes in the Canadian population and is also higher than the rates reported at the time for First Nations living off-reserve
- The age-standardized prevalence of diabetes for First Nations people is 3 to 5 times that of the general population
- Aboriginal women have over 5 times the rate of diabetes compared to women in the general population and men have over 3 times the corresponding rate for men.

Diabetic Foot Amputations

- The only available Canadian data on lower limb amputations among Aboriginal peoples are from the Manitoba study of First Nations (Manitoba Health, 1999). 91% of all lower limb amputations among First Nations are among people with diabetes.
- A study of Native Americans in Oklahoma showed that the mean age of first amputations was 6.6 years post diagnosis, the 5-year survival rate after first amputation was only 40%
- In general, morbidity and mortality are elevated among those individuals with diabetes who have undergone an amputation.
- **If individuals at risk are aggressively sought out and treated, up to 50% of amputations can be prevented (Centers for Disease Control, 1991).**

(*Aboriginal Diabetes Initiative. Diabetes Among Aboriginal [First Nation, Inuit and Metis] People in Canada: The Evidence.*, 2000)

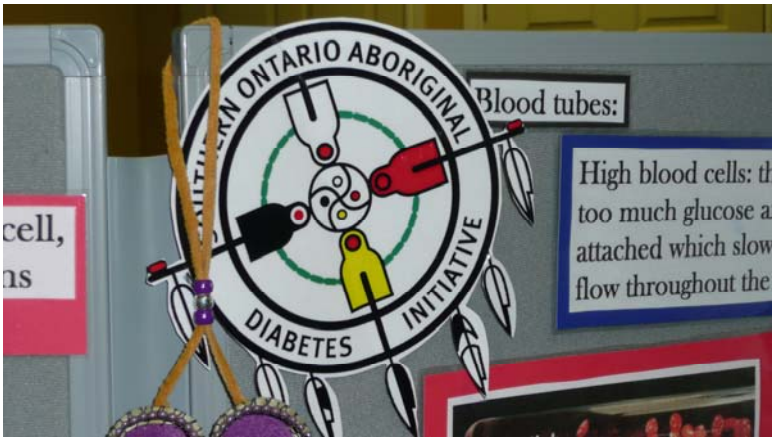
The Aboriginal Diabetes Initiative report clearly highlights the degree of type 2 diabetes in the Aboriginal people of Canada. With further reading, it only highlights the prevalence of diabetes as the data is patchy and difficult to capture. This is similar in Australia, where the system of data collection does not often capture Aboriginal status or diabetes data or foot, health related data.

During the two weeks of the Churchill Fellowship study tour in Ontario, I was fortunate to have a local Foot Care Nurse, Bette Jean Clarke, as our guide, companion and facilitator. Bette Jean lives in Orillia, outside Toronto, Southern Ontario. She works for the Home and Community Program in Sioux Lookout [Northern Ontario] and provides outreach services to small, remote communities in this region. Additionally, Bette Jean delivers a “Feet for Life” foot care workshop with her colleague Patty Everson. The Northern Ontario Aboriginal Diabetes Initiative [NOADI] engage Bette Jean and Patty’s training program is various communities in the region.

My brief to Bette Jean prior to leaving Australia was to provide a hands-on and interactive experience with First Nation people and to provide an experience of ‘where and how’ foot care services are delivered in Ontario. As a consequence, Bette Jean provided an action-packed, two week program. I’ll attempt to recount these experiences and highlight the outcomes from each meeting.

SOADI – Southern Ontario Aboriginal Diabetes Initiative

“The Southern Ontario Aboriginal Diabetes Initiative is funded by the Ontario Ministry of Health and Long-term Care, which provides financial assistance for the development, and enhancement of programs and services focusing on the education, prevention, and management of diabetes in Aboriginal communities, both on and off-reserve. The high prevalence of diabetes in Aboriginal society has placed it among the top health priorities.”
http://www.soadi.ca/aboutourprogram.htm accessed by Jason Warnock, 06-06-09



The organisation employs First Nation people to co-ordinate and facilitate its services. The services are co-ordinated by regional offices. I had the opportunity to be involved with a footcare day in Kingston, at the Katarokwi Friendship centre, over the Easter weekend. Here, I witnessed how SOADI delivers diabetes education and provides footcare services.
Photo courtesy of Jason & Ruth Warnock

The hands-on services were provided by contracted providers: a foot care nurse and two reflexologists. Other information was delivered by an elder Betty J Maracle / Katsi'tsiase [as she says "Maracle" is her social security name, "Katsi'tsiase" her Mohawke name] and SOADI staff. This in a sense is not correct, as it was a community event and the community members participated and presented information, as well.

The day commenced with a traditional drumming, smudging, a prayer of thanks to the Creator and a recount of an ancient fable of twins told in Mohawk and translated into English by Katsi'tsiase. Each part of this ceremony was part of the diabetes and footcare day. This traditional, spiritual opening was essential for preparing the body, mind and spirit for the lessons of the day. The traditional teachings of Love, Respect, Courage, Honesty, Wisdom, Humility and Truth are essential for the connection with culture, essential for overcoming and coming to terms with each person's health.

I felt this experience was the best "Mental Health consultation" in which I could participate. I can only imagine the impact of this 'session' and other sessions like it for the mental health of Indigenous people. Diabetes is known to have an impact on the mental health (Kaholokula, J. K., Haynes, S. N., Grandinetti, A., & Chang, H. K., 2003) – the incorporation of this 'session' into the program is unique to my experiences and something that could be introduced to diabetes programs in Australia. As demonstrated in Kingston, these traditional sessions are co-ordinated locally and utilize elders and other appropriate people to provide the culturally appropriate and accepted activities.

The footcare services included management and education provided by the Nurse. SOADI engage Reflexologists, as an outcome of focus group discussions, as part of their holistic approach to health. These services are provided free of charge to the clients and if additional treatment is required or referral to Chiropodists or Podiatrists is required then arrangements are made by the Co-ordinator. Whilst individuals are being cared for by the Foot Care Nurse and Reflexologists, the rest of the clients are presented with diabetes education. The day encourages open discussion and sharing of individual experiences. Lunch is provided by the Friendship Centre and this increases social interaction, support and the flow of information between the people attending.

I was asked to deliver a short presentation about the Churchill Fellowship study tour and our diabetic foot programs in Australia. Ruth and I, felt most welcomed and privileged to attend.

Later in the afternoon, the Mother Earth Water Walkers arrived. Josephine Mandamin and her followers were here for their foot care before tackling their next journey, to walk the length of the St Lawrence River from the Lake to its mouth at the Atlantic Ocean. The amazing journeys of the Water Walkers can be experienced on their website www.motherearthwaterwalkers.com. The Water Walkers demonstrated how an individual can make a difference and make a stand. With great charm and insight, Josephine [a grandmother] has walked the great lakes of north America to highlight the need to care and respect water.
Photo courtesy of Jason & Ruth Warnock

The SOADI group invited Ruth and I to visit their main office in Thorold, near Niagara Falls. I made the most of this opportunity the following week by visiting their head office and met with their Program Manager, Roslynn Baird. Roslynn and her staff enabled us to have detailed discussions about their program and for me to demonstrate our Indigenous Diabetic Foot Program. They were keen to have frontline workers involved in the delivery of diabetic, foot care information and could see benefit in them undertaking diabetic, foot screening. As a result of this meeting, I have promised to send them some resources and continue our relationship with their organisation.

NEFCA - the Nurses Entrepreneurial Foot Care Association of Canada

"The purpose of this website is to provide a framework of practical and moral support for qualified entrepreneurial foot care nurses who continue to lobby for change within the health care system" http://www.nefca.ca/news.php accessed by Jason Warnock, 06-06-09

Health systems in Australia and Canada differ. Both have universal health cover for all citizens. The role of the podiatrist in the Canadian, healthcare system required some assessment. In Australia, graduates of typically four-year, podiatric, health science programs are able to register with jurisdictional Boards to enable practice in that particular State and Territory. This will change from 1st July 2010 when Podiatry will be one of the ten, health professions to go into the National Registration and Accreditation scheme. From that time, all podiatrists will be required to register with the Podiatry Board of Australia and then be eligible to practice anywhere in Australia.

Boards do not describe or prescribe the scope of practice of podiatry, only the term "Podiatrist" is legislated. Hence, people working with feet, who may be providing foot care services and are not registered Podiatrists – can not call themselves a podiatrist.

When preparing to go to Ontario for the Churchill Fellowship, I contacted the registration authority in Ontario to check if I was required to register as I would be visiting people in Ontario and discussing their foot care and would be perceived as a podiatrist. I did not intend to 'treat feet' however thought that I would enquire just to be sure. To my surprise there are two registers in Ontario – one for graduates of an American podiatric school called the Podiatrist Register and another for Canadian graduates [where it could be suggested had a similar educational standard as graduates from New Zealand, Australia and the United Kingdom] called the Chiropody Register. To make it more confusing, Podiatrists can not be added to the Podiatry register no matter what their qualification. The Podiatry register closed in 1993 enabling those registered as Podiatrists to continue to practice under the relevant Act[s] however all other Podiatrists after this time would need to apply to the College of Chiropody for registration as a Chiropodist. For additional information: http://www.cocoo.on.ca/ . In Australia the term Chiropody was used until the early

1980's. After this date, with qualifications from tertiary institutions, the term Podiatry became the accepted title for the profession.

Canada has a population of just over 30 million people. Canada has one school of Chiropody at The Michener Institute for Applied Health Sciences in Toronto. http://www.michener.ca/ft/chiropody.php The program is taught over 3 years [seven semesters] and has an intake of 40 students per year. In comparison, Australia has a population of just over 20 million, has six podiatry programs, all programs are conducted over 4 years with the exception of one [three years].

This background information is important to understand the emergence of NEFCA and other Foot Care Nurses. There is a great shortage of Chiropodists in Canada. If only considering the epidemic of diabetes and the ageing population, the need for quality, foot care services is paramount. Chiropodists, of course, provide a much broader range of services other than diabetic foot care and aged care services.

Foot Care Nurses are health professionals trying to fill the void that would naturally be considered the domain of Chiropodists or Podiatrists who are educated from a tertiary undergraduate level to provide expert, foot care services, independently or within the multi-disciplinary, health team. It is not my place to make an opinion whether the Foot Care Nurses are forging forward in the best direction however I do commend those nurses involved for their diligence in trying to provide services for the people who require foot care services and are unable to access Chiropody or Podiatry services.

I was invited to address the NEFCA conference held in Kitchener, Ontario. I gave acknowledgement to the Churchill Foundation for providing the opportunity to visit Canada and gave an overview of my study tour. I provided a power-point presentation to illustrate the Indigenous peoples of Australia: the Aborigines and the Torres Strait Islanders. A demonstration of the Indigenous Diabetic Foot Program was also delivered to illustrate how I provide education and training to frontline workers, Indigenous workers, nurses and others to improve diabetic, foot care management. The conference gave me an opportunity to listen to the enthusiasm and progressive nature of their role within the Canadian, health system. It also enabled me to share our health system in Australia and how the multi-disciplinary team for the management of the diabetic foot has evolved. Additionally, I could advise:

- our standards and procedures eg infection control
- our legislative system and requirements
- our educational system for podiatrists
- our continuing education program
- the expectation of equipment, diagnostic tools, orthotic therapy etc

At the conference, I met a Podiatry colleague who also presented. Graham was educated in the United Kingdom, immigrated to Ontario, worked for a period of time at the School in Toronto and works in private practice in the Ottowa region. He was most helpful and insightful to the role of Chiropody / Podiatry in the Canadian, health system. Of greater benefit, he was able to describe how he was involved with Rotary International to provide a diabetic foot program to Trinidad Tobago. His experience with this project will be invaluable to pursue in future years.

Northern Ontario – the frontier territory!

To travel to the north, Bette Jean Clarke, Ruth and I flew from Toronto to Thunder Bay to Sioux Lookout. Sioux Lookout became our base for this northern experience. The township is the frontier town for travel further north into the more isolated and more extreme, weather conditions. Sioux Lookout is the principle health hub for the region as well. The residents within the Sioux Lookout Zone have been well research and the prevalence of type 2 diabetes records some of the highest rate of diabetes in Canada (Harris, S. B. et al., 1997). My Churchill study here was to see how diabetic foot conditions were managed and how prevention programs are delivered.

The 2000 Aboriginal Diabetes Initiative reports:

- In Sioux Lookout Zone, a study found Gestational Diabetes rates of 8.4% - the highest rate reported so far in a Canadian population
- 70% of women diagnosed with Gestational Diabetes went on to develop overt diabetes within 3 years. In the general population the typical conversion rate ranges between 25% and 60% over a decade or more
- Sandy Lake, Ontario reports age-adjusted prevalence rates for type 2 diabetes of 26% for its population age ten and over, and a prevalence of 54% for women age 50-59
- James Bay Diabetes Registry includes 9 communities which have reported diabetes prevalence rates from 5% to 15% (for people 15 years and older). The registry is closely linked with the diabetes program run by nurses, Community Health Representatives and doctors in the clinics. Based on HbA1c measurements taken in the clinic and entered into the registry, 23% of people with diabetes had blood sugars that were **high** and a further 44% had **dangerously high** blood sugars. This signals the need for further education, support, management and care.

(*Aboriginal Diabetes Initiative. Diabetes Among Aboriginal [First Nation, Inuit and Metis] People in Canada: The Evidence.*, 2000)

At Sioux Lookout, I meet with the Northern Ontario Diabetes Network [NODN]. The manager, Maureen Chabbert, described the difficulties coping with the large numbers of people with diabetes in their region. Maureen has been working with the NODN for 18 years as the manager. Services have been provided but there seems to be less then favourable change in self-management behaviours, health outcomes or reduction/slowing-down in the prevalence in the disease.

A recent investigation of their statistics showed that they had 78 young people [under the age of 18 years of age] registered as having type 2 diabetes. This is most alarming. NODN decided to prioritise this group of people and ensure they had the knowledge base to commence an understanding of managing their diabetes. They are now working through a program where these young people come together in groups of five to gain education about diabetes and to share their experiences.

The Network is trying a different tactic regarding the provision of education around food choices. The Dietitian has asked a group of women to maintain a list of everything that is eaten for a month. The families have been asked to keep records all their food expenses [receipts and dockets etc] and to record meals and expenses in a dairy. The first round of records had just been collected and the detail and neatness of the information has impressed the staff. The Dietitian's task will be to study each family record and see what has been purchased, how much it has cost, what meals were made from the ingredients purchased and then go back to the family with suggestions about healthier meal alternatives, where purchases could be changed to make healthier choices, where purchases could be changed to make savings and where decisions were excellent and reinforce these decisions.

I was able to describe some models of service delivery that occurred in our rural and regional areas of Australia. I shared my interest in managing youths with diabetes and explained a board game that I had created as part of an assignment for my Graduate Certificate in Diabetes Education and

Management, specifically to assist youths learning and exploring information about diabetes. Maureen was keen to work with me on developing this further and piloting the game with their group.

The Home and Community Program very kindly assisted our travel to one of Bette Jean's outreach settlements, Slate Falls. The Chief of Slate Falls, Glen Whiskeyjack, gave us permission to visit and the hospitality from the locals was warm and friendly. This is a small First Nation community accessible by 1-hour flight with a private charter [5-seater plane] or a 4-hour road trip to Sioux Lookout.

From the website: http://www.windigo.on.ca/slatefalls.htm the following information was obtained:

Slate Falls Nation is one of six new First Nations established under the Six Nishnawbe-Aski Aski Bands Agreement between the Government of Canada, Ontario and six northwestern Ontario Bands. Slate Falls Band was recognized on April 15th, 1985 as Slate Falls Band #259 under the Indian Act (revised 1985). People have been living in the area of Slate Falls for at least two centuries. Members of the Osnaburgh House Indian Band established main camps in the area for managing surrounding trap lines and hunting grounds in the 1700's. Eventually, a community developed.
Slate Falls Nation is located approximately 130 kilometers north of Sioux Lookout and 100 kilometers west of Pickle Lake in northwestern Ontario. The existing community is on the south shore of North Bamaji Lake. It is accessible year round by charter either on floats or via the Slate Falls Airport which opened in 1996. Population: 259


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Photo 1 accessed from http://www.windigo.on.ca/slatefalls.htm, Jason Warnock 06/06/09,
Photo 2 courtesy of Jason & Ruth Warnock. Slate Falls Administration area, as we saw it! 21st April 2009

Our pilot was Matthew. He made us very relaxed about the journey to Slate Falls. The trip was spectacular. From our birds-eye view we could view the frozen lakes, the partially snow covered ground and moose if they happened to be wandering through the pine forests [but they weren't]. Landing on the well prepared, dirt runway was uneventful and the circle of the township below prepared us for the land trip that followed. As we had arrived in late winter, the lake was still frozen however it was not recommended to walk over. I had noticed some of the locals doing this but took people's advice as I did not want to go missing through the lake.

The blue roofed building is the administrative centre for the community. The Band office is located here, as well as the Nursing Station [solely manned by Allan, a First Nation Registered Nurse] and our two-bedroom, visitors' quarters. Other businesses in the community included a school, kindergarten and police station. There was no corner shop or anywhere to buy essential food or other articles. The locals travel by four-wheel drive vehicles into Sioux Lookout for supplies. Interestingly, the community is surrounded by water but the tap water was not suitable for human consumption.

The agenda for Slate Falls was for Bette Jean to provide support and guidance for her front line worker, to attend to any people who had been identified with care / health issues and to provide a footcare workshop for members of the community.

Home visits were arranged for our visit. This provided a first hand experience of life at home in Slate Falls. It seemed like walking into a home at Palm Island or in Central Australia – however the snow and ice outside along with the pile of wood for heating the house was a complete contrast. Indigenous people seem to have much in common, wherever you go. They suffer from a lack of housing, overcrowding in the homes they have, high unemployment, loss of their own cultural values and beliefs, a corruption of their values through alcohol abuse, substance abuse and domestic violence. These social factors play heavily on their health and well-being and hence their management of type 2 diabetes, the complications of diabetes and their focus on providing safe and effective foot care to prevent injury and infection, to prevent ulceration and amputation.

Our home visits included two families that included all these factors mentioned above. How can one break the cycle, where does the hope for the future generations occur? What happened to that *"beautiful culture and language given to us by the Creator and must get our identity back by learning our traditional teachings of Love, Respect, Courage, Honesty, Wisdom, Humility and Truth."* As demonstrated at the SOADI workshop – the spiritual part of management of diabetes has to be found. In my opinion, spiritual connection with one's own culture provides a pathway for people to regain health. People need to overcome the mental, health issues related to all the past injustices, before physical, health improvements may be observed.

Achievements were made at our workshops. The frontline workers were a great asset to the success of the day. The community members who attended enjoyed the "Aussie Day". I showed them our CD resource and taught them about how they could look after their own feet. Bette Jean provided foot care kits for everyone who attended and we supervised them caring for their own feet. The room was full of chatter and laughter, stories and amusement.



Photos courtesy of Jason & Ruth Warnock, Slate Falls workshop with community members

We sensed that they were interested in learning more about Australian, aboriginal people, so I showed them the power-point presentation that I had prepared for the NEFCA conference. This was hugely successful and lots of questions flowed. I had also put together a slide show of sights around Australia, particularly where I have conducted Indigenous Diabetic Foot Program workshops in the past. This proved to be of great interest also.

Every workshop needs good food to stimulate good learning! Bette Jean had also purchased and transported a range of healthy foods for everyone to enjoy. This included fruit smoothies – full of

good anti-oxidants, vitamins, flavours and fructose! Other vegetable-based, snack foods were devoured as well. One lady, whom we met at one of our home visits, brought along a freshly cooked bannick. It was still warm in the tea-towel and the taste and texture of the bannick reminded me of a combination of a scone and a damper.

The workshop was a great success with about 16 community members attending.

Bette Jean and I returned the data-projector to the school the next morning. The school building was modern and like all the buildings in the community, less than 10years old. We met a young student in the school who had a disability confining him to a wheelchair. He was well known to Bette Jean as he was one of her clients and the Home and Community Program had provided physical therapy for him in the past. He had fallen out of his chair and fractured his leg [an environmental injury due to the ice] and only recently had his plaster removed. The management of his injury was unknown to Bette Jean. He was not receiving any rehabilitation. There seemed to be inadequate communication between health agencies and this young fellow was 'falling through the gap'.

Another man with multiple, health issues including a wound over the lateral side of his ankle was seen. He was being monitored by specialists in Thunder Bay as he had been admitted for surgery and remained there for a couple of months. The monitoring was achieved through teleconferencing at the Nursing Station. However, the pre-existing wound on his ankle, prior to hospitalisation, was not being adequately monitored and there seemed to be no effective system in place for the management of the wound. Another case of 'falling through the gap'.

Photos courtesy of Jason & Ruth Warnock. About to take the five-seater plane from Sioux Lookout Airport to Slate Falls, Northern Ontario.
Pictured: Jason Warnock, Ruth Warnock, Bette Jean Clarke.

Some of the scenery from the flight north to Slate Falls. You might be able to see the road starting to appear as the snow progressively melts. It is April, winter is officially over however lakes are still frozen over and still plenty of white.

Back to Sioux Lookout and back for another footcare workshop. This one was designed for health workers in the area who wanted to learn about basic, foot care information, learn some basic foot care skills and to enable them to systematically learn how to screen diabetic feet. Beryl Southall, Program Manager for the First Nations and Inuit Home and Community Care Program, was most supportive of the workshop and assisted Bette Jean with "bits and pieces" on the day. The workshop was held at the Nishnawbe-Gamik Native Friendship Centre. This workshop was over-prescribed however it was refreshing to see the interest shown. The local elders provided a welcoming ceremony which included drumming, smudging, smoking, prayers and chanting. For some of the non-Indigenous hospital staff, it was all a bit too 'native' and I thought that it was an

excellent confrontation that they needed, particularly as they are treating many First Nation people.

The workshop was held at the Nishnawbe-Gamik Native Friendship Centre, Sioux Lookout.
Photo courtesy of Jason & Ruth Warnock

The format for this workshop was similar to the one conducted in Slate Falls – Indigenous Diabetic Foot information, the power-point presentation on the Australian Indigenous peoples and a slide show of Australian places. The evaluations confirmed that the participants were able to learn their new skills from the resources developed in Australia. The First Nation people from the community that attended also appreciated the information and skills learned. Two senior school students, both of whom had diabetes, from the local boarding school attended in the afternoon and went home with new information about foot care for people with diabetes.

Anishnabwe [also spelt 'nishnawbe'] is the name preferred by the First Nation people of Ontario to describe themselves in a collective form. It is preferred over First Nation, Aboriginal or other terms that are used to describe their people.

Recommendations from the Anishnabwe Health Programs of Ontario:

1. To include people with whom I have made contact with in Ontario in a global network of footcare providers for Indigenous communities to share and exchange information. Including: Bette Jean Clarke, Patty Everson, Graham Curreyer, SOADI, Northern Ontario Diabetes Network and NEFCA
2. To work with SOADI to share experiences of interest including models of service delivery
3. To work with NODN to explore using games as a learning process when working with young adults and youth
4. To include a segment of overseas Indigenous peoples and their communities into Indigenous Diabetic Foot Program workshops
5. To investigate how to introduce traditional welcomes and other spiritual activities as part of diabetes and foot care programs

Photo courtesy of Jason & Ruth Warnock

My appreciation goes to Bette Jean Clarke for making the two-week whirlwind trip to south and north Ontario everything I asked for and more.

Theme 3: The resurgence of the Mohawk culture

Kahnawake is a Mohawk territory of 7,000 people on the south shore of the St Lawrence River, 15 km from downtown Montreal. The Mohawk Nation is part of the Iroquois Confederacy whose traditional lands cover an area that includes southern Quebec and Ontario and northern New York State. Traditional diet consisted of corn, beans and squash supplemented by foods acquired through fishing, hunting and gathering.
The current community was founded in 1680 and established at its present location in 1716. There is strong community control over politics, health and social services and education, combined with higher levels of education and acquisition of professional degrees. In the past thirty years, Kahnawake has made a strong commitment to reinforce Mohawk culture and language within community structures and the Iroquoian philosophy of participation by the people in decision-making continues to be reinforced.
http://www.ksdpp.org/elder/about_ksdpp.html accessed by Jason Warnock, 08-06-2009

From Montreal we travelled by the metro train to the end of the line and then boarded the community bus to cross the St Lawrence and arrive in Kahnawake. I had first heard of the Kahnawake Schools Diabetes Prevention Project (KSDPP) when attending the World Diabetes Day conference in Melbourne in 2006. The KSDPP began in August 1994 as a three-year, National Health Research & Development Program funded, research project. Kahnawake organizations funded KSDPP activities for the 1997-1998 year and a combination of private foundations, federal government and community funding has funded the project through its third phase. It still functions today with two Intervention Co-ordinators maintaining community and school projects. The KSDPP has been evaluated and researched widely, with the local McGill University's PRAM [Participatory Research at McGill] playing a part throughout that phase. http://pram.mcgill.ca/

The KSDPP goal is to decrease the onset of Type 2 diabetes among present and future generations. The main objectives are to increase daily, physical activity and healthy, eating habits among Kahnawake children. Other important objectives are to mobilize the community, to foster community empowerment and ownership through participation in all aspects of the project and to build capacity within Kahnawake to ensure sustainability of KSDPP goals, objectives and activities in the future.

The visit to Kahnawake was arranged to see first hand how this process of community participation drove the evaluation process. I wanted to observe if the school interventions involved foot care. Placing foot care as an everyday, hygiene task such as washing your hands after being to the bathroom or brushing your teeth twice a day would be an interesting, primary health care / health promotion activity. Would this daily routine impact in the reduction of diabetic foot amputations? How could this intervention be measured?

Our welcome at Kahnawake was warm and friendly with the day's series of meetings discussed over morning tea. We got a feel of how the KSDPP activities fitted into the community and how it has been sustained since the funding ceased. How the Kahnawake Nation governs and provides services was demonstrated and explained. Of great interest was the revival of the Mohawk language. It has been revived and now taught in schools and into the community [for many adults who have little knowledge of their language]. Parents with children in Kahnawake have the choice of sending their children to a Mohawk school or to a regular school – both available within the Territory.

The Mohawk School teaches all lessons in Mohawk language, with English and French being taught as secondary, language subjects. Towards the end of their secondary schooling the students

study a conversion course which brings them up to an English standard necessary for college and university. The regular school is taught in English with Mohawk and French being taught as secondary languages.

Kanien'kehaka Onkwawen:na Raotitiohkwa, the Kahnawake Cultural Centre is also the home of a small production house. Here children's stories are created and played on the local television service. All the language is in Mohawk and it compliments the development of their language within their Territory. The stories do contain health and social messages from time to time – but generally they provide entertainment for all the family.

This photo includes characters from the set, SARRAH [our cockatoo mascot], Jason Warnock, Judy [community representative & our guide] and Thomas Deer from the language development centre.

Photo courtesy of Jason & Ruth Warnock

The visit to the cultural centre, Kanien'kehaka Onkwawen:na Raotitiohkwa, informed us of the Mohawk history and the cultural clash with Europeans. The meeting with Thomas Deer was very informative about the traditional governance in the Mohawk people and how this system of government has transformed into their current system. He was also explained how the revival of the language has occurred, taking the oral language, developing an alphabet and forming a written language. The result has been that the school can now teach the language and the children often able to support their parents and other family members to learn their language. The enrichment of culture for the Mohawk people can only be assumed, however the long term benefits in health will be followed with great interest.

The Kahnawake experience reinforces my belief that by the Mohawk people taking charge their language, education, employment, housing, governance, law-enforcement within their Territory that they will find their way back to health and prosperity [in the Mohawk context].

Foot care is poorly accessible in the Territory. Only those who can afford private services access care. On the day we arrived, the health facility had engaged a Foot Care Nurse to manage high risk feet for the community. This was a new initiative and one which I hope to follow. The Diabetes Educator accepted our Indigenous Diabetic Foot Program resources and I hoped that they may provide some guide as how foot care resources may be utilized to increase self care, foot care practices and improve the referral pathway for 'high risk' feet in their community.

Recommendations from the resurgence of the Mohawk culture:

1. To include the Kahnawake community in a global network of footcare providers for Indigenous communities
2. To keep watch on the further strengthening of the Kahnawake Territory
3. To consider how language and cultural connections can be encouraged as part of health programs for Aboriginal and Torres Strait Islanders
4. To provide support for the Kahnawake health facility in providing foot care services

Theme 4: New Mexico & Arizona and Indian Health Services

Some facts regarding Diabetes in American Indians and Alaska Natives

3.3 million	Number of American Indians and Alaska Natives in 2007 [US Census]
561	The number of federally recognised American Indian and Alaska Native Tribes. To access Indian Health Service facilities and programs, the person needs to be able to identify themselves as belonging to one of these federally recognised tribes.
16.3%	Percent of American Indian and Alaska Native **adults** who have diagnosed diabetes [compared with 8.7% of non-Hispanic whites]
1,758	Number of American Indians and Alaska Native **youth** under the age of 19 who have diagnosed diabetes (2005)
68%	Percent increase in diabetes from 1994 to 2004 in American Indian and Alaska Native **youth ages 15 -19 years**
95%	Percent of American Indian and Alaska Native with diabetes who have **type 2 diabetes** [as opposed to type 1 diabetes]
30%	Estimated 30% of American Indians and Alaska Natives who have **pre-diabetes**
2.2 times higher	Likelihood of American Indians and Alaska Natives to have diabetes compared to non-Hispanic whites
58%	Increase in diabetes prevalence among American Indians and Alaska Natives aged 20-29 from 1990 -1998, as compared with 9.1% in the US general population
3 times higher	Death rate due to diabetes for American Indians and Alaska Natives compared with the general US population (2004)
3.5 times higher	Rates of diabetes-related kidney failure in American Indians and Alaska Natives compared with the general US population (2004)
18.5%	Percent **reduction** in new cases of kidney failure in American Indians and Alaska Natives from 1999 to 2004
3-4 times higher	The risk of developing cardiovascular disease in American Indians and Alaska Natives **with diabetes** compared with American Indians and Alaska Natives without diabetes
66%	Percent of American Indians and Alaska Natives with cardiovascular disease that had diabetes first
15 years	Number of years by which diabetes can shorten a person's life span
US$13,243	Average annual medical care cost for a person with diabetes
US$2,560	Average annual medical cost for a person without diabetes

Source: http://www.ihs.gov/MedicalPrograms/Diabetes/HomeDocs/Resources/FactSheets/AIANs08.pdf

There can be no doubt that the Indigenous people of the United States of America suffer the consequences from type 2 diabetes. The statistics demonstrate the degree of the issue. The Indian Health Services, an agency of the Department of Health and Human Services, has the responsibility of providing health services for the Indigenous people of USA.

There are many terms used to describe these Indigenous people including: Indians, American Indians, Aboriginal Americans, Amerindians, Amerinds, First Americans, Indigenous, Original Americans, Red Indians, or Red Men. Depending on which group you speak to their preference will vary.

An excellent map of Indian Nations in the United States of America is available:
http://maps.nationalgeographic.com/maps/print-collection/north-american-indian-reference.html

This map illustrates the many and diverse Indian Nations that are administered by tribes in

arrangement with the government of the USA. The Bureau of Indian Affairs [BIA] is the official government agency responsible for "the administration and management of 66 million acres of land held on trust by the United States of American Indians, Indian tribes and Alaska Natives" http://www.doi.gov/bia/

The Indian people seek self-determination and independence. The Indian Self-Determination and Education Assistance Act of 1975 facilitate this process. However the wording on the Department of the Interior wording as quoted above states "land held in **trust**" – which makes the definition of self –determination and independence questionable and provides suspicion for some Indigenous groups to whom we spoke.

Our visit to Albuquerque was proposed as the Indian Health Service headquarters is located here. Unfortunately despite email contact from December 2008 and phone calls on arrival, nudges and requests from our 'local' contact Mike Trujill, a face to face meeting did not occur. However, meetings were made with a variety of services as listed in the appendix.

The Indian Health Service (IHS), an agency within the Department of Health and Human Services, is responsible for providing federal health services to American Indians and Alaska Natives. The provision of health services to members of federally-recognized tribes grew out of the special government-to-government relationship between the federal government and Indian tribes. This relationship, established in 1787, is based on Article I, Section 8 of the Constitution, and has been given form and substance by numerous treaties, laws, Supreme Court decisions, and Executive Orders. The IHS is the principal federal health care provider and health advocate for Indian people and its goal is to raise their health status to the highest possible level. The IHS currently provides health services to approximately 1.5 million American Indians and Alaska Natives who belong to more than 557 federally recognized tribes in 35 states. **http://www.ihs.gov/PublicInfo/PublicAffairs/Welcome_Info/IHSintro.asp**

Whilst in Phoenix, I met with Dr Eugene Dannels, the Chief Podiatrist of Indian Health Services. This was a delightful meeting. After 28 years with IHS, Gene was able to explain the challenges and achievements that face the organisation. There has been a dramatic reduction of funding, with only approx 40% of services being funded with direct IHS funding. Gene says "the organisation is complex and difficult to describe." Podiatrists are insufficient to meet demands and priority is given to managing conditions rather than implementing primary, prevention services.

During our stay in Phoenix, I was able to drive to Tucson to visit Dr David Armstrong, Podiatrist. He has a well-documented number of scientific papers published dealing with management of diabetic, foot conditions. Currently he is employed at the University of Arizona Hospital, within the vascular unit and has established the Southern Arizona Limb Salvage Alliance [SALSA]. The SALSA is an amputation, prevention program. However this is more of a tertiary, prevention program, trying to save limbs once complications such as arterial vascular disease, peripheral neuropathy and foot deformity have developed.

Dr Dannels was able to explain that the podiatrists within the IHS offer a range of services to meet the needs of the community. The interventions are tailored to the needs of the individual and range from primary care, modification of footwear, orthoses and footwear, casting and surgery. An interesting specialisation in Phoenix is the surgical repair of polydactylism ie congential presence of additional toes and/or metatarsals. Dr Dannels said that polydactylism seemed to be much more frequent with the American Indian population due to the restricted, gene pool and marriages occurring within the tribe.

When examining the health education resources relating to diabetes on the IHS website for health care providers, it was interesting to find that 8 out the 16 diabetes resources were out of stock. The

foot management resource was published in 1995, that's 13 years ago! Of the resources available for consumers, these were published in 1994, 1995, 1996 and 2000. I did not find the resources in the IHS visited and could not view the resources online. However, the date of the publications seems to indicate that they are overdue to be reviewed.

On a brighter note, it was refreshing find a set of four "Eagle Books" and an excellent display at the Albuquerque Cultural Centre.

The Eagle Books are a series of four books that are brought to life by wise, animal characters, Mr. Eagle and Miss Rabbit, and a clever trickster, Coyote, who engage Rain That Dances and his young friends in the joy of physical activity, eating healthy foods, and learning from their elders about health and diabetes prevention.
http://www.cdc.gov/diabetes/pubs/eagle.htm

The Eagle books are authored by Georgia Perez of Nambe Pueblo [just north of Albuquerque], illustrated by Patrick Rolo [Bad River Band of Ojibwe] and Lisa A. Fifield [Oneida Tribe of Wisconsin, Black Bear Clan]. It was disappointing not to be able to meet with the people who could explain how the resources were being introduced to children. They provide an excellent read and were available for free.
http://www.cdc.gov/diabetes/pubs/eagle.htm

Photo courtesy of Jason & Ruth Warnock

Whilst in Albuquerque, we attended a presentation by three American Indian Health Educators at the Cultural Centre. The topic was "Traditional Tobacco". This topic was of great interest as, whilst in Canada with the exposure to smoking ceremonies and the use of tobacco leaf in prayers, I was puzzled how this related to smoking, cessation programs promoted by health professionals. The health educators provided an overview of the traditional tobacco and explained that it had nothing to do with smoking cigarettes. Confusion occurs within the Indian population particularly with the young and those that are not closely connected to their culture. Traditional tobacco is not the same as the tobacco found in cigarettes. Traditional tobacco is not inhaled and is only 'smoked' as part of traditional ceremonies. Traditional tobacco is found by elders in nature and cannot be bought in shops or as a mass produced product. Cigarette manufacturers help to confuse the issue by producing labels which suggest they are made for Indians and that it is traditional tobacco, in an effort to make additional sales.

The health educators strive hard to discourage the use of cigarette tobacco particularly with young people as it is closely associated with adverse, health outcomes. They need to explain the traditional use of tobacco yet this is not traditionally a woman's role. This means in some locations the community does not welcome them to do their work as it can conflict with their cultural rules.

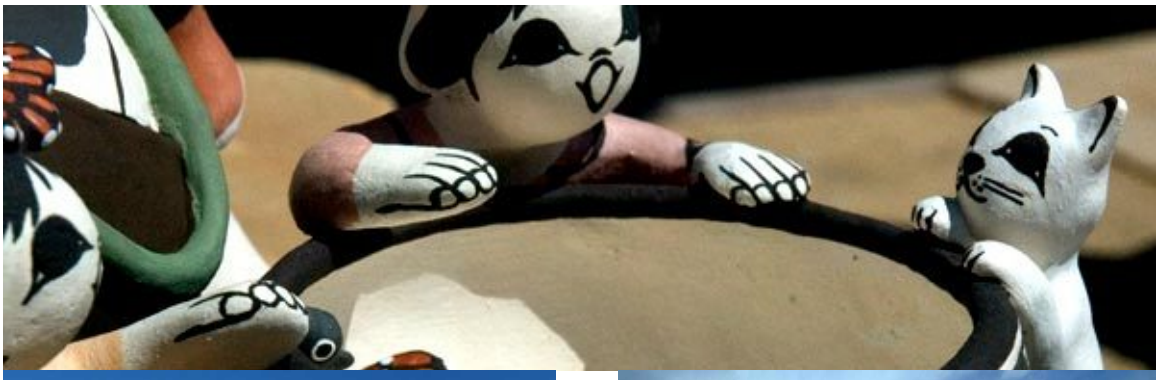
From this meeting, the educators provided other opportunities to meet with Indian health organisations. Albuquerque is a large city of almost 500,000 people however only ~ 4% [18,000 people] identify themselves as American Indians. Health services for these urbanized, American Indians is severely limited as Indian Health Services are provided on reservations ie you need to live on your reservation to obtain health services with IHS. If an American Indian moves off their reservation then they cannot access IHS services. As a result, people who move into Albuquerque need to have Indian organisations assist them to find social and health services. We were very grateful of the assistance that Shannon Flegg was able to provide us for three of the days whilst in Albuquerque. Shannon arranged introductions for us and transported us to meetings in

Albuquerque.

An invitation was received from Laguna Pueblo to present to frontline, Indigenous workers in that Indigenous community. These workers are known as CHR – Community Health Representatives. The program began in 1968 through the Office of Economic Opportunity. In 1972, the program was transferred to the Indian Health Services.

CHRs are in growing demand. It has already been seen how much they assist and connect the community and their work has become essential to the Indian Health Service facilities. The CHRs are a good advocate because they come from the community of which they serve and know the specific tribal healthcare needs; their dedication to their work has helped many of which who otherwise have trouble fulfilling their healthcare needs. The efforts the representatives put into health promotion and disease prevention has also done extremely well and has limited the people from facing the problems of ill health. They have been tremendously helpful in lowering the mortality rates through their teachings and as a result of that reducing the tribal healthcare expenses. CHRs reach out and help people on an individual basis and are an important part of the IHS facilities.
http://www.ihs.gov/NonMedicalPrograms/chr/index.cfm

The CHR workers are not the same as the Australian Indigenous Health Workers however they are vital to link the needs of community members to the health, service providers. The presentation to the Laguna Pueblo was extremely well received and they were keen to implement their new knowledge and skills. Laguna Pueblo is located approximately 45 minutes drive west of Albuquerque and near the Acoma Sky City Pueblo. On the recommendation of the CHRs, we continued onto the Acoma Sky Pueblo and appreciated the guided tour of this amazing home of 12 Acoma families, the Gaits'i Indian Art Gallery and the Haak'u Museum.



Acoma Pottery designs

Acoma Sky City

The Church at Sky City

Photos from http://sccc.acomaskycity.org/, accessed by Jason Warnock 06/06/09

In her book "The Scalpel and the Silver Bear", Navajo surgeon Lori Arviso Alvord states [pg 186]

> "Navajo people have a concept called *"Hozhone haaz'dlii"* Walking in Beauty, but it isn't the beauty that most people think of. Beauty to Navajos means living in balance and harmony with yourself and the world. It means caring for yourself – mind, body and spirit – and having the right relationship with your family, community, the animal world, the environment – earth, air, and water – our planet and universe."
> (Arviso Alvord, L. & Cohen Van Pelt, E., 1999)

Alvord reflects on her father and grandmother's lives being Navajo and living in New Mexico, and how that impacted on her own childhood.

> "Navajo children were told that their culture and lifestyles were inferior, and they were made to feel they could never be as good as white people. This pressure to assimilate, along with the physical, social, psychological, and economic destruction of their tribes following the Indian wars of the 1800s, the poverty due to poor grazing lands and forced stock reduction, and the lack of available jobs all combined to bring Navajo people to their knees. The physical genocide of the 1800s, followed by the cultural genocide of the 1900s, left behind a tribe whose roots and foundation were shattered." [pg 86]
> (Arviso Alvord, L. & Cohen Van Pelt, E., 1999)

During our driving tour to New Mexico, Colorado and Arizona, Ruth and I made the most of every opportunity to visit cultural centres, museums and arts and crafts centres to absorb the culture and way of life of these pueblo people. **The social determinants of health play a significant role in the health of individuals and communities. The historical relationships between the Indigenous people and the 'conquerors' also has a significant impact on health. By investing time looking at where and how people live, such as the pueblos, I gained an appreciation of how difficult it can be for health services to be effective and how they need to change to be more effective.**

Recommendations from New Mexico & Arizona and Indian Health Services

1. To maintain close communications with:
    a. Eugene Dannels, Chief Podiatrist, Indian Health Services
    b. CHR network in this region of USA
2. Link these people into the global network of footcare providers for Indigenous communities
3. To make contact with the "Through the Eyes of the Eagle" program

Theme 5: Research and new advances in Podiatry

The visit to Chicago was designed to include attendance of the annual Midwest Podiatry Conference. The objective here was to gauge where podiatry in the USA was heading, what were the cutting-edge issues for the profession, how were fellow professionals researching and what were they researching? This conference is huge in comparison to Australian conferences. Approximately 1,500 podiatrists were in attendance.

With some luck, I was introduced to a Podiatrist, Dr Walter Coffey. Walter in the early 1990's worked in Brisbane. It was great to meet Walter again and he went out of his way to show us around for four days after the conference, before departing for Canada.

The conference proved to be disappointing on the research front. Some interesting papers were presented but the scientific nature of the papers was less than we would expect in Australia. Visits to the trade exhibits were more productive and a broad cross-section of displays visited. The surgical registrars had a stream throughout the conference procedure which was interesting and provided insight into the residency programs in USA.

Walter Coffey ensured we visited his hospital where he is almost finished his three year, residency program. The **Sacred Heart Hospital** in west Chicago has had an on-going, residency program for many years, co-ordinated by Dr Noorland. Drs Noorland and Coffey demonstrated how the registrars developed their log books and ensured sufficient scope and breadth of surgical procedures has been achieved prior to completing the residency program.

We had the pleasure of visiting the **Garfield Park Youth Program** and where we met George Hernandez. George has been involved in this youth program for 19 years. As a boxing coach he has kept many youths occupied and focussed through boxing. This is a fantastic program and obviously successful, as George went to the Sydney Olympic games to accompany some of his boxers in the American team. He loved visiting Australia, related to the plight of the Australian Aborigines, delighted and proud of Kathy Freeman winning the 400m race. Discussing the Churchill Fellowship and explaining why we were visiting Chicago, George donated a set of leather, boxing gloves and headgear for a deserving youth on Palm Island. Palm Island is the nursery of the Indigenous Diabetic Foot Program and home of Kathy Freeman's grandmother. This was a great thrill and deserves following up in the future.

Chicago has an unenviable record regarding violence against youth.

> Teenagers in Chicago are 10 times more likely to be victims of gun violence than Illinois youngsters living outside the city, according to the Chicago Sun-Times. 650 youths were shot and killed between 2002 and 2006. During 2007, an additional 24 youths were killed and the 2008 Sun-Times article reported the number was likely to match the 2007 number in 2008. http://abcnews.go.com/US/Story?id=4704126&page=1

The Garfield Park program demonstrates an enduring presence for youth services in this area of Chicago. The level of violence against youths in Chicago reflects the need for such programs. Young people who attend this program and engage in the health and physical activities will be reducing their risk of developing diabetes. Without acknowledgement, the Garfield Park activities could be regarded as a diabetes, prevention program.

The Podiatry School in Chicago is at the Rosalind Franklin University of Medicine and Science at the **Dr William M Scholl College of Podiatric Medicine**. This is the home of CLEAR [Center for Lower Extremity Ambulatory Research] which is associated with the new SALSA in Arizona. The University is north of the city requiring us to take an hour train trip for our meetings.

The staff had gone to a lot of trouble to select and discuss a range of research topics that fitted in with the objectives of the study tour. I am most appreciative of the time Dr James Wrobel and Nancy Rivera provided for the Fellowship visit. Papers that looked at improving a systems approach to managing diabetic, foot conditions and preventing amputations were presented and discussed.
Topics of papers included:

- "Major Amputation Rates per 100,000 Diabetic Medicare Enrollees [1996-97]"
- "The High-Low Amputation Ratio: A Deeper Insight into Diabetic Foot Care?"
- "The Relationship Between Provider Coordination and Diabetes-Related Foot Outcomes"
- "Diabetic-Related Foot Care at 10 Veterans Affairs Medical Centers"

After lunch, we were taken to an outreach clinic for people without insurance and the homeless. At this clinic, three students and a tutor conducted assessments and treatments for the people attending. This was an enjoyable opportunity to speak to people who cannot afford private podiatry and to observe how third year students interact and manage these clients. It was also useful to talk with

the students to gain an understanding of how they perceived podiatry in the USA and where their futures lay.

With second year students in the gait laboratory, at the Rosalind Franklin University, Lake Bluff, outside Chicago.

Photo [left to right]: Mitchell Cook, Nancy Rivera [staff], Ruth Warnock, Braden Moore holding the mascot SARRAH, Nick Arcuri and Mark Prissel.

Photo courtesy of Jason Warnock

Later that afternoon, further contact with students was arranged in the gait laboratory. Four second-year students were constructing an experiment involving the use of post-op shoes. The post-op is frequently part of the management of diabetic foot ulcers. These students were attending the Midwest Podiatry conference later in the week and it was great to catch-up with them there. As second-year students, it was interesting to hear there stories of why they chose podiatry and what they perceived as their future in the profession.

The experience at the Rosalind Franklin University was great. The academic staffs were most welcoming and seemed genuinely interested in the objectives of my Churchill Fellowship. They were keen to listen to my experiences in Australia and to collaborate on similar future projects in the USA. The students provided a stimulating and informative profile of their career choice in podiatry.

Recommendations from Research and new advances in Podiatry

1. Maintain contact with George at Garfield Park and explore the opportunity to share a boxing experience with the youth of Palm Island
2. Maintain contact with fellow podiatrists met in Chicago
3. Forge closer ties with the staff at the Dr William M Scholl College of Podiatric Medicine, particularly Dr James Wrobel and Nancy Rivera and explore opportunities to share research in the future years.

Conclusions

This study tour involved visiting many Indigenous Health programs in Hawaii, Chicago, Ontario, Montreal, New Mexico and Arizona. The common theme with all the places visited was that the health of Indigenous peoples is not equal to the non-Indigenous people. In Australia, there is acknowledgement of a significant gap in health of Indigenous people and this is clearly demonstrated by health statistics.

Governments in Australia, Canada and USA have many programs to improve the health of their Indigenous peoples.

The Papa Olo Lokahi programs demonstrate that health improvements can be made when local people are involved in the development phase of programs. With consultation and feedback during the programs, the refinement and application to local communities results in active local participation and improvements in health outcomes.

The Kahnawake Territory visit demonstrated that with adequate resources, community participation in research and community driven programs can be achieved. In Kahnawake, the broader determinants in health – housing, environmental health, schooling, language and cultural connection, self-government – when aligned result in a strong community and improvements in health outcomes.

Projects such as the Southern Ontario Aboriginal Diabetes Initiative [SOADI] and Community Health Representatives [CHR] clearly demonstrate that with Indigenous people in-control of their programs, they can gain participation of the target group and tailor programs to meet the needs of their communities. With enough independence in the delivery of services, they can produce holistic services for the body, mind and spirit.

In Australia, phrases such as “one size does not fit all” and “local issues require local solutions” are frequently used to emphasise community engagement through the various stages of implementation of health programs. Is there the will to provide the support requested by communities to enable communities to develop and facilitate programs? The traditional teachings of Love, Respect, Courage, Honesty, Wisdom, Humility and Truth need to apply to governments, health organisations and communities when negotiating partnerships to advance health outcomes.

Diabetic foot programs are one of many health programs not effectively delivered in Indigenous communities or to the broader community. This study tour has investigated what is working well and what could be implemented into the Australian context. The question remains, do the funders have the will to implement such programs?

This Churchill report demonstrates the strengths and weaknesses of the health programs that were visited as part of the Churchill Fellowship. I intend to distribute this report as broadly as possible and will present to various forums throughout Australia. The existing Indigenous Diabetic Foot Program which is known across all jurisdictions of Australia will be my vehicle to spread my recommendations and experiences.

I welcome your comments and feedback, jason@diabeticfootprograms.com.au.

Recommendations:

Each theme from the report lists specific recommendations. A summary of these recommendations are made below.

I can endeavour to implement the following recommendations:

1. To establish a global network of footcare providers working in Indigenous communities to share and exchange information, resources, models of service delivery and other strategies. This could initially be established via my website [www.diabeticfootprograms.com.au] with communication commencing by electronic media.
2. To deliver the set of boxing gloves and helmet, provided by boxing coach George Hernandez of the Garfield Park Youth Program in Chicago, to a worthy recipient on Palm Island. To connect the youth programs on Palm Island with the Garfield Park Youth Program in the hope that an ongoing relationship will be forged.
3. To work on the use of games as a learning modality with the Northern Ontario Diabetes Network, particularly those games that are of interest to Indigenous youth.
4. To contact the "Through the Eyes of the Eagle" program and gain an insight into the development and implementation of this diabetes prevention initiative.
5. To review the Indigenous Diabetic Foot Program with the aim to engage more spirituality into the workshop format and to share the experiences from the Churchill Fellowship through stories of the Indigenous people encountered during the study tour.
6. To communicate with academics and professional peers met during the Fellowship.
7. To publish my work so that others can learn from our developments in Australia.

Recommendations that require partners to progress:

1. To work with the team at Papa Olo Lokahi to see if funding can be gained to provide podiatry services to the Pacific Region. To investigate opportunities with AusAid. http://www.ausaid.gov.au/country/southpacific.cfm and other such agencies.
2. To work with government and non-government partners in Australia to encourage Aboriginal and Torres Strait Islander language and cultural re-connection programs.
3. To work towards a more community solution to 'bridging the gap' – by addressing the social determinants of health as a significant part of health programs.
4. To work towards foot care for every body, to ensure individuals remain mobile and able to engage in healthy lifestyles.

APPENDIX ① List of Meetings attended as part of the Churchill Fellowship

1. Papa Olo Lokahi, 894 Queen Street, Honolulu HI 96813
    a. Nia Aitaoto, Coordinator, Pacific Diabetes Education Program
    b. Joann Umilani Tsark, Project Director
2. University of Hawai'i at Manoa: Dept of Native Hawaiian Health, John Burns School of Medicine, 651 Ilalo Street, Honolulu, HI 96813
    a. Joseph Kaewe'aimoku Kaholokula, Assistant Researcher
3. Rosalind Franklin University of Medicine and Science: Dr William M Scholl College of Podiatric Medicine, Center of Lower Extremity Ambulatory Research [CLEAR], 3333 Green Bay Road, North Chicago, IL 60064
    a. James Wrobel, Associate Professor
    b. Nancy Sloan Rivera, Nurse Practitioner
    c. Sarah Woodward, Co-ordinator
    d. Bijan Najafi, Assistant Professor
    e. Stephanie Wu, Director: Medical Education and Outreach [CLEAR]
    f. B, tutor with Outreach program
4. Sacred Heart Hospital, 3240 W Franklin Blvd, Chicago, IL 60624
    a. Dr Walter Coffee, Podiatrist, 3rd Year Residency program
    b. Dr Noorland, Co-ordinator, Residency program
    c. Clarence Nagelvoort, Administrator
    d. Mary Niederhauser, Associate Administrator
5. Garfield Park, Chicago Park District, 100 North Central Park Avenue, Chicago, IL 60624
    a. George Hernandez, Program Specialist
6. Bette Jean Clarke, Foot Care Nurse: Orillia, Ontario
7. Katarokwi Native Friendship Centre, 50 Hickson Ave, Kingston, ON K7K-2N6
    a. Members who provided the welcome and hosting of the foot care day
    b. Katsi'Tssiase [Betty J Maracle], Mohawk elder
8. Mother Earth Water Walk, http://www.motherearthwaterwalk.com/
    a. Josephine Mandamin
    b. Melvina Flamand, Josh & Chris
9. Southern Ontario Aboriginal Diabetes Initiative, 8 Clairmont Street, Unit 2, Thorold
    a. Roslynn Baird, Program Director
    b. Carol Croft, Coordinator – Tyendinaga Mohawk Territory
    c. Kathleen LaForme, Coordinator - Urban Horseshoe Area
    d. Shannon, Coordinator
    e. Lindsey Cosh – Footcare Coordinator
10. Sioux Lookout Diabetes Program, 37 Front Street, Sioux Lookout, ON P8T 1A3
    a. Maureen Chabbert - Manager
11. Sioux Lookout Meno Ya Win Health Centre [Zone Hospital], 7th Avenue N., P.O. Box 1500, Sioux Lookout, Ontario, P8T 1C2
    a. Lunch meeting with various staff members and Patty Everson
12. Nishnawbe-Gamik Native Friendship Centre, P.O. Box 1299, 52 King Street, Sioux Lookout
    a. Charles & Victor
    b. Members of Friendship centre committee
13. NEFCA [Nurses Entrepreneurial Foot Care Association of Canada]
    a. Delegates to the Kitchener Conference
14. Graham Curreyer, Podiatrist, Ottowa ON
15. Foot Care Canada
    a. Cindy Lazenby RN, Foot Care Provider / Educator – Association President
    b.

16. First Nations and Inuit Home and Community Care Program, Windigo First Nation Council, 160 Algona Drive, Sioux Lookout ON P8T 1B3
    a. Beryl Southall, Program Manager
    b. Bette Jean Clarke RN
17. Slate Falls First Nation, General Delivery, Slate Falls, Ontario P0V 3C0
    a. Chief: Glen Whiskeyjack
    b. BAND employees
    c. Community members
18. Community Radio, Sioux Lookout.
    a. Afternoon and night presenters
19. Kahnawake Schools Diabetes Prevention Project, Center for Research and Training: PO Box 989, Kahnawake Mohawk Territory J0L 1B0
    a. Treena, Researcher
    b. Judi Jacobs, AK-NEAHR Coordinator
    c. Elaine Delaronde & Lisa Petersen – Intervention Co-ordinators
    d. Joyce, Board member
20. Kateri Memorial Hospital Centre, PO Box 10, Kahnawake J0L 1B0
    a. Dawn Montour, RN and Diabetes Nurse Educator
21. Kahnawake Environment, PO Box 1089, Kahnawake J0L 1B0
    a. Eva Johnson, Coordinator
22. Kanien'kehaka Onkwawen:na Raotitiohkwa, PO Box 969, Kahnawa:ke Mohawk Territory
    a. Thomas Deer, Educator
23. Albuquerque Indian Centre, 105 Texas Road, Albuqurque NM 87108
    a. Gordon, Coordinator
24. Native Health Initiative, www.lovingservice.us
    a. Shannon Fleg
25. Indian Pueblo Cultural Center, 2401 12th Street, Albuquerque, NM 87102
    a. Educators, tropic "Traditional Tobacco": Shannon, Natalie, Monica
26. First Nations Community Healthsource, 5608 Zuni Road, Albuquerque, NM 87108
    a. Linda : Director
    b. Nurse Practitioner
27. SAGE [Sacred Alliance for Grassroots Equality] Council, 510 Third Street, Albuquerque, NM 87102. www.sagecouncil.org
    a. Sonny Weahkee, Executive Director
28. Indian Health Service Diabetes Grant Coordinator, Pueblo of Laguna, PO Box 194, Laguna NM 87026
    a. Ramona Dillard – Manager CHR office
    b. Natalie Thomas – Health Educator
    c. Sue Lorenzo – Diabetes program
29. Indian Health Service, 5300 Homestead Road, Albuquerque NM 87110
    a. Dr Leonard Thomas
    b. Dr Bret Smoker [Santa Fe]
30. NACHR [National Association of Community Health Representatives], www.NACHR.net
    a. Ramona Dillard, Laguna Pueblo
31. TGen [Translational Genomics Research Institute], 445 N. Fifth Street, Phoenix, AZ 85004
    a. Mike Trujill
32. Indian Health Services, Indian Medical Center, 16th Street, Phoenix AZ
    a. Dr Eugene Dannels, Chief Podiatrist Indian Health Services
33. SALSA [Southern Arizona Limb Salvage Centre], Vascular Department, University of Arizona Hospital, Tucson, AZ
    a. Dr David Armstrong, Director

APPENDIX ②

The Study Tour for Jason Warnock, Churchill Fellow 2008

Some background information about the Churchill Fellowships.

The aim of The Winston Churchill Memorial Trust is to give opportunity, by the provision of financial support, to enable Australians from all walks of life who, having exhausted opportunities within Australia, desire to further their search for excellence overseas. There are no prescribed qualifications, academic or otherwise, for the award of most Churchill Fellowships. Merit is the primary test, whether based on past achievements or demonstrated ability for future achievement in any walk of life. Benefit to the Australian community is a significant factor.
Fellows were presented with their Awards on 9th July 2008, by Her Excellency Ms Quentin Bryce the Governor of Queensland at Government House.

The Winston Churchill Memorial Trust
Rewarding Australians Striving for Excellence
For additional information: http://www.churchilltrust.com.au/index.php

Some background information regarding Jason Warnock.

Jason was born and educated in far north Queensland, Australia. The area is known for the Great Barrier Reef, tropical rainforests and remoteness from the State's capital city of Brisbane. Since graduation as a podiatrist in 1980, Jason commenced private practice in Townsville, a 'large' regional centre in north Queensland and continues in this role today. Ruth, his wife, is a partner in their podiatry practice and will join his Churchill Study Tour during 2009.
The interest in Indigenous Health has been long term. Experiences working with Aboriginal and Torres Strait Islander people, Australia's Indigenous / First Nation people, lead to the Australian Government Department of Health and Ageing providing a project grant to Jason to develop "an educational tool to assist with the identification and management of the Indigenous Diabetic Foot". This project was conducted 2003-2005 and since then has snowballed into the Indigenous Diabetic Foot Program.

For additional information: www.diabeticfootprograms.com.au [currently under construction]

The Study Tour

The Churchill Fellowship encourages the Fellow to develop their own study program to fulfil objectives of their Fellowship. The Study Tour has to be taken overseas for a period of 4 weeks to a maximum of eight weeks.

The brief description of my overseas project:

To investigate Indigenous health programs which focus on the prevention of diabetic foot amputations? Particular interest is in programs that [1] develop self-management skills using affordable and accessible household items, [2] encourage early identification and intervention of foot conditions, [3] provide an effective guide to diabetic foot screening for Indigenous health workers.

This study tour would enable me to improve the Indigenous Diabetic Foot Program and to share this program with Indigenous programs in USA and Canada.

Proposed schedule:

Base Location	Interest Area	When [includes all days in range]
Honolulu, Hawaii	Pacific Islander Health Programs	23 – 26 March
Chicago, Illinois	Midwest Podiatry Conference [2-5 April] & Rosalind Franklin University of Medicine and Science	30 March – 8 April
Toronto, Ontario	Health Programs for First Nation Peoples	14 – 24 April
Montreal, Quebec	Health Programs for First Nation Peoples	27 – 30 April
Albuquerque, New Mexico	Indian Health Programs	4 – 8 May
Phoenix, Arizona	Indian Health Programs	18 – 22 May

Areas of Interest

The prevalence of diabetes mellitus in Indigenous peoples of Australia is much greater than for the broader population. Our Indigenous population seems to suffer from a greater incidence of diabetic complications including amputations, however this is difficult to quantify. There are many theories regarding the prevalence of diabetes and for the degree of complications that result in Indigenous people.

During my study tour I am interested:

- to visit facilities and meet health professionals where services are delivered
- to see how/where/who/when services are delivered [culturally appropriate practice]
- how foot care services are delivered
- how self care footcare practices are encouraged
- how diabetic foot screening occurs
- how training is provided for health workers/ health professionals involved with diabetic foot care and diabetic foot screening
- how resources have been developed for Indigenous people, particularly for diabetes and foot care
- how foot care services and associated education is evaluated
- how programs have been developed to prevent diabetes in Indigenous communities

A lot of attention and research is provided on end-stage management of diabetic foot complications. My interest is around the involvement of the person with diabetes in the care of their feet – self care practices, early identification of foot conditions / screening, relationships with the health professionals involved with managing their feet.

I hope to be able to visit you during my study tour.

Jason Warnock
Indigenous Diabetic Foot Program
Townsville, Queensland, Australia
jason@diabeticfootprograms.com.au

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