

A model of podiatry care in remote Central Australia

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Describing development and evaluation of podiatry services in 14 communities North East and North West of Alice Springs since 2009.

If a crocodile takes a leg or a life it is major news in Australia and yet the number of amputations due to diabetes costing the taxpayer millions of dollars are only rarely published outside the medical field. (1)

It is estimated that 85 amputations are caused by diabetes every week in Australia and up to 85 percent of diabetic foot complications including amputations can be prevented with education and awareness of diabetes foot care (2)

In remote communities of WA Indigenous people aged 25–49 years with diabetes, were 27 times more likely to have a minor amputations and 38 times more likely a major amputations compared with non-Indigenous. While the population being investigated is skewed towards the Indigenous, further research is needed to understand why indigenous amputation rates are so high (3). In my opinion provision of good primary health podiatry care in remote areas coupled with rapid access to a multi-disciplinary team and consistent best practice wound care will help to reduce this burden.

The National Diabetes Strategy and Action Plan 2013 stated:

“ATSI Australians are 3 times more likely to have type 2 diabetes compared to non-ATSI Australians, and are also more likely to develop diabetes complications”

It plans to:

“Ensure that people with diabetes in rural and remote areas have equal access to specialist care teams when required (4)”

They recommend that:

“developed programs are designed to be culturally relevant to ATSI people.”

This is exactly what our model of care is designed to do.

Our model of care has been developed from the Indigenous Diabetic Foot program to educate and treat clients and upskill clinical staff in basic foot care in their place of work. It describes engaging clients in their own foot care, linking with high care services at Alice Springs Hospital and developing relevant services to this group of communities at a reasonable cost. Notable outcomes include reduced callous formation, increased shoe wear habits and self-referral to the podiatry clinic as soon as we arrive in the community.

The Indigenous diabetic foot program (IDFP) was developed by Jason Warnock with a grant from SARRAH and is now used as the training module for all health professionals in the Northern Territory wanting to learn to care for diabetic feet. Preference is given to those working in remote clinics and in high risk chronic disease areas such as Renal units. Courses are run once a year in both Alice Springs and Darwin. IDFP promotes self-care using common household items such as green kitchen scourers or sandpaper and regular foot checks from health staff. Feet at risk can be identified and followed up by a podiatrist or other specialist when needed. Best practice care of diabetic feet recommends a podiatrist visit for all diabetics once a year, clients with increasing foot health risk at 3-6 month intervals and high foot health risk diabetics every 3 months 5.

Diabetic feet should be checked by a podiatrist or health professional well trained in the complexities of diagnosing foot complication, but access to this service is limited in remote communities. Over the past 6 years we have been working towards maximum access to podiatry services and upskilling clinical staff to manage foot problems when we are not there. Together with other stakeholders an in-

service program has been developed with competencies certified by the trainers to ensure consistency of practice. Clinical staff access the program in their own communities learning from an IDFP DVD supplied for the purpose, followed by working for a day with the podiatrist to practice the manual skills needed to deal with thick nails and callous. Using the IDFP program as a guide, primary health foot care is taught consistently by both the podiatrists and other trained health professionals in the clinical setting. High quality visual resources from IDFP are supplied to clinics and educators. These resources help to overcome communication difficulties such as language barriers or hearing loss and are culturally appropriate.

In 2009 I was asked by the Health Development Unit, Department of Health NT to provide a podiatry service to 8 communities in Central NT North East and North West of Alice Springs. Prior to 2009 these communities had minimal and erratic podiatry provision. Funding was made available for two trips per year to communities with a maximum of 10 weeks service per year. This translated to 3 full days and two half days consultation time per week dependant on distance of communities from Alice Springs. Initially we were introduced to the communities by Department of Health staff, usually the Chronic Disease Nurse attached to the community, and I chose to take my husband Tim as an assistant.

As the service developed and more communities were added to our list, I felt that we could increase clinical hours by staying remote for the duration of the trip travelling between communities in a circular route rather than in and out of Alice Springs. This saved on fuel costs and driving times were reduced to 2-3 hours between communities and return to Alice. Independent of other staff we can drive outside usual office hours taking advantage of early mornings or late evenings to increase service delivery time. Where possible we plan trips to coincide with visits from other relevant chronic disease staff attached to the community. Introduction of single use instruments in 2013 increased the time we can stay out of Alice Springs before needing to use CSSD.

Best practice model of care for High risk diabetic foot is to be treated by a multidisciplinary team consisting of medical, surgical, nursing and allied health personnel (6). When we started there was no podiatrist at Alice Springs Hospital or Congress Medical Service. By 2011 both posts had been filled and links began to develop with remote and town services. In 2012 all Northern Territory podiatrists were invited to meet in Darwin where we discussed how we could develop the best primary health podiatry service within the limits of working in places that lacked all the modern equipment and easy access enjoyed by the rural and urban sectors. Using the example of the Congress truck Tim and I asked to use the Health on Wheels truck owned by the Health Department as a mobile clinical space when we visited the smaller communities where clinic space is a critical issue. This was well received by the Health Managers who appreciated having a service with minimal impact on their very limited resources. Our plan later this year is to use the truck to facilitate a mobile clinic visit to a group of small outstations targeting some of the older people who are unable to travel to the main clinic easily.

My husband Tim is an essential part of the team. Initially unpaid our submission to NT Medicare Local due to change in stakeholders for funding, included a suitable fee for him. He is now fully funded to travel with me which is testament to his value. He is aboriginal and has some health training in remedial massage therapies. He is able to work through the foot-care and footwear education with the men, often while they wait outside away from the women and babies in the clinic. He is able to guide the young men in stretching exercises and remain in the room with me if the client feels that is culturally more appropriate. By washing the patients' feet for them before they see me, the element of 'shame' for dirty or calloused feet is reduced or dissipated. He is also responsible for reprocessing instruments where a benchtop autoclave is available thus allowing me to remain available for clinical consults all day. I would highly recommend the use of podiatry assistants in all remote podiatry services, preferably a male/female team. In our communities traditional roles for men and woman swing from rigid to non-existent even within one community. Tim is able to demonstrate that "real men do have podiatry care" and care of feet including using moisturising cream is important.

Provision of services is broadening the positive impact of foot health on the communities increasing community awareness of basic foot care and prevention of foot injuries. We encourage everyone in the community to come for a foot health check to teach them basic foot first aid as well as reducing

nails and callous if needed. We also encourage clients to consider how to maintain their own foot health by giving them basic foot care and foot wear education.

Moving forward I want to analyse data of visits over the past 5 years and identify the percentage of diabetics in each community that had a podiatrist visit compared with the next 2 years when podiatry services are planned to be offered every 3 months to each community. In addition, I aim to identify the number of High Risk and Low Risk feet in each community and to determine the length of time between Identifying High Risk feet and the development of limb threatening complications. In 2011, Baker IDI (7) estimated the cost of lower extremity amputations in Australia to be \$A26,700 per person not including the costs of rehabilitation, supply of prosthesis and post-operative wound care. I aim to continue to work towards reducing this cost with simple foot care measures, high quality integrated diabetic services, and encouraging health literacy in both foot and diabetes care. I aim to work on auditing the service I provide and compare that with other communities having regular podiatry care. First of all I am aiming to keep the people of my communities on their feet and their feet on them.

References

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Presenter

Sara Coombes was born in Canada in 1957. She was Medical Laboratory Scientist before doing a Diploma in Chiropody at the Chelsea School of Chiropody London UK. After two years in Public health employment in southern England Sara migrated to Australia in 1981. Sara first job was in Dubbo NSW providing services to multiple centres including Bourke and Cobar introducing her to Indigenous remote health issues early in her career. Sara moved permanently to Wauchope in 1983 working in both public and private practices. She developed a keen interest in preventative foot care and diabetes and is currently studying for Graduate Certificate in Diabetes Education at Curtin University WA. From 2009 Sara has been working for various fund holders in NT providing podiatry services to remote communities north of Alice Springs while maintaining a limited private practice at home. Sara continues to study both formally and informally. In 2010 she gained her Masters of Health Sciences (Podiatry) and is an Affiliated Member of the College of Podiatric Surgeons and is an accredited Member of the Australian Podiatry Association indicating she achieves over 40 hours of continuing professional development per year. Her goal in the next two years is to evaluate her podiatry service in NT and to continue to work towards better foot health and reducing foot amputation rates in those communities.