Joint Select Committee Preventative Health Submission Preventative Care for Chronic Disease Submission from podiatrists Claire Schuringa and Vanessa Ireland

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This submission answers two of the 6 terms of reference for the parliamentary inquiry which have greatest association with the service delivery of podiatry in southern Tasmania. Both examples provided highlight the challenges facing Tasmanians who use public podiatry in southern Tasmania, and how coordinated models of care by health professionals can help those members of the community with complex, chronic and often life-threatening conditions. (1) The current impact of inequalities in the major social determinants of health on the health outcomes, including mental health outcomes, of Tasmanians and the capacity for health and community services to meet the needs of populations adversely affected by the social determinants of health;

The social determinants of health referred to in this section are the health & social services system, transport, and poverty.

Introduction

Podiatry deals with the prevention, diagnosis, treatment and rehabilitation of medical and surgical conditions of the feet and lower limbs.

In Australia, podiatry is considered as an allied health profession, and is practised by individuals licensed by the Podiatry Board of Australia. In the health Insurance Act 1973, podiatry is included as one of three - the others being dentistry and medicine - providers of 'professional attention'. They also are the only three professions that are able to operate surgically on patients. Podiatry scope of practice outweighs all other allied health professions.

A large part of the work of public Podiatrists involves preventative screening for complications of diabetes, prevention of foot ulcerations through ongoing skin integrity management and prescribing footwear and foot orthotics. A foot ulceration is a full thickness wound of any duration. Skin necrosis and gangrene are also classified in this description (Dorresteijn 2011). Effective treatment for ulceration is often over a long duration. (Dorresteijn 2011).)

Demand for Podiatry services across southern Tasmania is high. There are approximately 40 clinics per week offered to meet the demands of the community requiring public services.

As a snapshot, an audit of patient records from rural clinic areas, between 2008 and 2011, reflected disadvantages akin to many of the social determinants of health that were described by TasCOSS (The Tasmanian Council of Social Services).

The audit showed that over half of all patients attending the podiatry clinic have type 2 diabetes, and of those, nearly 40% currently have or had previously had a foot ulcer or amputation. Foot ulcerations and diabetes are high risk factors for depression and low self-efficacy, for example, a reduced ability to adhere to wound care instructions, attend appointments and monitor blood glucose levels, (Pearson, Nash and Ireland 2014).

The audit also revealed that the majority of patients had significant health complaints e.g. cardiovascular disease, renal disease, obesity, joint and muscle ailments and malignancy.

The ability of patients to self-care for even basic podiatric conditions, such as toenail care, was compromised.

There was a dramatic increase over a 4 year period in the number of patients attending for wound care or foot ulcers and a large increase in the number of people with diabetes in the highest risk category for foot complications such as ulceration and amputation. (Appendix 1). The population treated were sicker and became more dependent on podiatry and footcare health services. In the past, the public podiatry clinics across Southern Tasmania have been predominantly utilised for preventative treatments, symptomatic biomechanical assessments, paediatric assessments and a large quantity of diabetes foot screenings. With the changing profile of the Tasmanian population this now includes a significant number of patients at high risk of poor foot health outcomes who require ongoing monitoring and management of existing complications. Not surprisingly this leads to a substantial economic burden both for patients and the health system.

Health & Social Services systems: Accessibility to rural versus city services

There is high demand for public podiatry services across southern Tasmania in rural and regional areas. This demand is increasing. Private podiatrists do not work in many of these rural regions. Access to specialised podiatry services for wound care is also often not available outside of Hobart, forcing patients to travel to Hobart to receive this care.

When comparing accessibility for clients between podiatry services in large centres and rural centres, an inequity of service availability and level is seen. Hobart has a relatively good public transport system and patients living in the city can easily access the Royal Hobart Hospital or the Telstra Building outpatient public podiatry clinics and alternative locations, such as Glenorchy or Clarence Community Health Centres/Integrated Care Centre, which are approximately 7 km away. As a comparison, the distance between some regional centres was over 22km. At the time of the audit, public podiatry services were not available in many regional/rural areas.

Comparatively, in Hobart, the podiatry clinics are far more frequent with wound care/ulcer clinics operating 3 days a week. Demand is also high for services, but poverty and socio-economic disadvantage is less. In fact, according to the Australian Bureau of Statistics, the median weekly household income for Hobart and Clarence was almost double that of townships in regional and rural Tasmania.

There are also a high number of private podiatrists operating in Hobart and surrounding suburbs, which allow patients, who can afford that service, ready access.

Within its current resources, the public podiatry service has tried to prioritise areas of most need across southern Tasmania.

Transport

From the audit, patients attending from larger townships generally had no complaints about transport. However, some patients were finding it difficult to obtain taxis when required. There were many complaints about bus links being very infrequent with only 2 buses daily either way with very short times (i.e. - not long enough to attend an appointment before the patient would have to be back at the bus stop) or very long waiting times for the return journey - several hours in some cases.

Some patients were organising community transport, some attended with help from relatives, and others were independent. One patient felt he had no option but to hitch-hike due to lack of his own transport and for financial reasons.

TasCOSS (The Tasmanian Council of Social Services) also reported that "accessible public transport (defined as being those services on which a commercial fare is levied) is limited, particularly in rural and urban fringe areas. The places where we live, shop and work, and where we do many of our daily activities are often located some distance apart. Tasmania's dispersed development patterns have contributed to a dependence on motorised transport."

Moreover, "despite the high car ownership rate, there are still many Tasmanians who do not own or have access to a car, who cannot afford to run a car to the extent that they need, or who are unable to drive because of age of disability. Almost one in 10 occupy private dwellings (9%) in Tasmanian and do not have a motor vehicle. Community transport is funded and delivered by a number of different organisations and is not always well coordinated to meet the needs of clients."

Conclusion

Limited access to health and social services, irregular transport and poverty, have a significant effect on the health outcomes of a population. Anecdotally, all the clinics delivered by the public podiatry service demonstrate a similar pattern.

While high quality public podiatry services exist in southern Tasmania, challenges do exist to meet the needs of the rural population. Many patients compromised by ill health find appointments 44km away, and relying on irregular public transport, too difficult. They require these services in their local area.

Not attending clinics can lead to further ill-health and complications including foot and lower limb infection, ulceration, amputation, reduced quality of life and a decrease in life expectancy.

Low income, poor public transport and access to health and social services have adverse health effects on people living in rural and regional areas. The need for services, including podiatry, is not diminishing, but is increasing. We know that chronic medical conditions such as diabetes and obesity are approaching epidemic proportions.

Appropriate, frequent and specialised podiatry services delivered at a range of different locations, which are accessible to patients who need them most, are vital to maintain the physical and mental health of the target population. To keep these people out of hospital, regular foot checks, preventative treatments and monitoring for those patients in the highest risk categories for foot wounds or amputation is paramount. When patients have long waiting times to see an appropriate health care professional for preventative care, or cannot access one because of distance, lack of transport or poverty their foot health, their general health and their mental health may suffer. This, in turn, impacts on the availability of other services such as nursing, when there are limited podiatry services available.

By Vanessa Ireland, Senior Podiatrist

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(2) The challenges to, and benefits of, the provision of an integrated and collaborative preventive health care model which focuses on the prevention and early detection of, and intervention for, chronic disease

The High Risk Foot Clinic (HRFC) is a multidisciplinary clinic first set up in 1999; its main purpose is to manage the complications associated with diabetes mellitus. The HRFC works as a collaborative and integrated preventative health care model based on best practice research and recent published literature (NHMRC 2011).

The membership of disciplines regularly attending the clinic has increased over the past 16 years to 8 disciplines; placing this HRFC as one of the leading collaborative clinics of its kind in Australia.

The high risk foot clinic manages complications such as ulcerations (chronic wounds), Charcot neuro-arthropathy (destructive joint disorder leading to deformity and amputation), foot infections and peripheral vascular disease (loss of circulation to the limbs).

There is significant evidence that a multidisciplinary high risk foot service reduces the number of avoidable hospital admissions for ulceration and foot infections in people with diabetes (International Working Group on the Diabetic Foot).

Singh (2010) found that up to 25% of people with diabetes will develop foot ulceration in their lifetime. A study at the Royal Hobart Hospital (Sale 2004) reported a history of foot ulcers in 12.4% of insulin-treated diabetic patients in Tasmania. Brem (2006) found that in people with diabetes, foot ulcerations precede 85% of all non-traumatic amputations. Complications related to diabetes have been shown to have a higher 5 year mortality rate than breast or prostate cancer (Armstrong 2007).

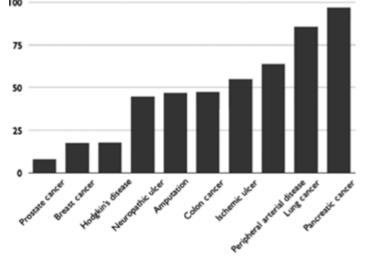


Figure 1: Five Year mortality rate of chronic conditions (Armstrong 2007)

With an increase in the incidence of diabetes across the entire Australian population, an increase in related complications is likely to be seen, therefore having a preventative health care model represented in this clinic is imperative. Bakker (2012) reports that a strategy that

includes prevention, patient and staff education, multidisciplinary treatment of foot ulcers and close monitoring can reduce amputation rates by 49-85% in people with diabetes.

The HRFC is a collaborative clinic with podiatrists, endocrinologists, vascular surgeons, infectious disease specialists, wound care nurse practitioner, diabetes educators, hyperbaric therapy and orthotists. The collaboration and integration of all these services in the one clinic has shown anecdotal benefits to patients, staff and students.

This model of an integrated and collaborative clinic for the prevention of complications of diabetes could be used across different chronic diseases, such as rheumatological or renal conditions. Such clinics have been seen to have similar success on the mainland.

Challenges faced by the HRFC:

- Ongoing membership of disciplines (staffing challenges).
- Increasing cost in interventions (wound dressings, pressure measuring devices, offloading modalities).
- Accessibility to clinic for patients (disability access required).
- Accessibility for visiting specialists.

Benefits of HRFC:

- Seen to anecdotally reduce hospital admissions. •
- Seen to anecdotally reduce Emergency department presentations.
- Reduces impact on other Specialist Outpatient Clinics.
- Team collaboration.
- Reduced costs through collaboration and pooling of resources (consumables etc.).

Benefits to staff:

- Networks across disciplines. •
- Education on roles of other disciplines leading to improved communication and more efficient referrals.
- Student education.

Benefits to clients:

- 'One stop shop' for patients - up to 8 disciplines at once, ideal for those with barriers in accessing health care.
- Reduced costs to patients.
- Best practice care as per national and international diabetes guidelines.
- Timely access for patients appropriate and effective best practice care.

By Claire Schuringa, Advanced Clinical Lead Podiatrist

References

Armstrong D., Wrobel J., Robbins J., (2007) *Guest Editorial: are diabetes –related wounds and amputations worse than cancer?* International Wound Journal, 4(4):286-287 Bakker K., Apelqvist J., and Schaper N. (2012) *Practical guidelines on the management and prevention of the diabetic foot 2011, International Working Group on the Diabetic Foot*, Diabetes/Metabolism research and reviews, 28(suppl 1):225-231 Brem H. (2006) *Evidence based protocol for diabetic foot ulcers*. Plastic reconstructive Surg. 2006 Jun;117(7 suppl)

Dorresteijn J., Kriegsman D. and Valk G. (2010) *Complex interventions for preventing diabetic foot ulceration (review)*, Cochrane Database of Systematic Reviews, Issue 1

Pearson S., Nash T. and Ireland V. (2014) *Depression symptoms in people with diabetes attending outpatient podiatry clinics for the treatment of foot ulcers,*

Prevention, Identification and Management of Foot Complications in Diabetes, (2011) National Health and Medical Research Council

Sale et al, (2004), '*Trends in diabetes management practices of patients from an Australian insulin-treated diabetes register*', Diabetes Medicine, Feb;21(2):165-70.

Singh N, Armstrong Dg, Lipsky Ba: (2005) *Preventing Foot Ulcers In Patients With Diabetes.* Jama 293:217-228, 39(3):117-119.

Zhuo X., Zhang P., Kahn H., Bardenheier B., Li R. and Gregg E, (2015) *Change in Medical Spending attributable to Diabetes: National Data from 1987 to 2011*, Diabetes Care, DOI: 10.2337/dc14-1687