



Multidisciplinary teams:
Uniting for Better Care

Pathways to Progress: Healthcare Access in Rural Victoria

Abstract title: Collaborative Inpatient and Community Care: A Novel Approach to Diabetes-Related Foot Disease for Regional and Rural Victoria.

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Background

Diabetes-related foot disease (DFD) is a major health concern in Australia and in many parts around the world. It refers to sequelae, such as ulcers and amputation, from diabetes-related peripheral neuropathy, peripheral vascular disease, and foot deformity. (1) Major inequalities in DFD outcomes are associated with geographical areas exposed to higher levels of social deprivation. (2) According to the Australian Institute of Health and Welfare (AIWH), people with diabetes living in regional and rural Australia are over 4 times more likely to undergo lower extremity amputation compared to their metropolitan counterparts. (3) Gippsland, a regional area in eastern Victoria, ranks first in the state for having the highest prevalence of diabetes. (4) There is currently no data on the prevalence and outcomes of DFD in Gippsland, and until recently, a multidisciplinary High Risk Foot Service (HRFS) within the region has not been available.

Methods

A new collaborative HRFS was established between members from Latrobe Regional Hospital (LRH) and Latrobe Community Health Service (LCHS) in November 2022. The Gippsland HRFS consists of members from Podiatry, Endocrinology, Vascular Surgery, Infectious Diseases, Wound Care Clinicians, Diabetes Nurse Educators, Dieticians and Nursing. Using data from LRH, generated since the establishment of the HRFS, a prospective clinical audit was conducted from 1st July 2022 to 30th of June 2023. Collected data relating to DFD presentations included patient demographics, clinical and biomedical characteristics, treatment modalities offered and ulcer outcomes, according to the National Association of Diabetes Centres HRFS Database. The aim of this study is to evaluate the impact of a collaborative inpatient and community-based podiatry HRFS model of care between two independent healthcare providers within a large regional primary health network in rural Victoria.

Results

In the first year of service, the Gippsland HRFS treated 134 patients with DFD who presented with 231 ulcerations. Patients had multiple morbidities, with approximately 70% having hypertension and 60% with dyslipidaemia, amongst other medical conditions. The healing rate for diabetes-related foot ulcers after 12 weeks was 34%, which is above the national average of approximately 30% (4). Furthermore, patients were found to have their ulcer for on average 39 days prior to presenting to the Gippsland HRFS, which is 11 days longer compared to the national average of 28 days (4).

Conclusions

The benefits of service collaboration between healthcare providers in regional and rural settings should be more widely recognised. Our work has identified that whilst patients at the Gippsland HRFS have longer periods to presentation compared to similar services across Australia, once under the care of a collaborative HRFS, the diabetes-related foot ulcer healing rates after 12 weeks are equivalent. This suggests that our novel collaborative approach to care is effective in treating patients with DFD, irrespective of their pre-referral delays to initial presentation. Yet, outreach into the Gippsland community to ensure shorter referral times is required, which may reduce healing times further. These findings can help model how future diabetes foot health services in regional and rural settings might be planned, organised and resourced to improve DFD outcomes.

References

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