PodCast: A rural and regional service model for podiatrist-led total contact casting

Marcus Gardner, Bendigo Health
Adam McLean, Bendigo Health
Dr Byron Perrin, La Trobe Rural Health School
Background

Diabetes-related foot disease is associated with significant morbidity and health system costs (Lazzarini et al. 2018)

People in rural communities are disproportionately affected (Bergin et al. 2012)
Background

Pressure off-loading devices made irremovable are the gold standard for management of neuropathic foot ulcers (Bus et al. 2008)

These devices are underutilised, especially in rural settings (Wu et al. 2008, Quinton et al. 2015)
PodCast project objectives

1) To improve access to total contact casts and instant total contact casts for patients in Bendigo and the Loddon Mallee Region

2) To support the development of the podiatry workforce to fully utilise their scope of practice

3) To develop a cost effective, sustainable service model across high risk foot and community services
Project phases

Phase 1
• Recruitment of clinical lead
• Transition of the casting service to podiatry at regional high risk foot clinic (HRFC) site
• Development of competency training framework

Phase 2
• Training and competency development of community-based podiatrists with mentoring support
• Implementation of rural community service model in Maryborough
Primary outcomes

• Number of TCCs/iTCCs provided
  • including number provided at rural sites
• Number of patients treated
• Wound healing data (wound classification, time to healing)
• Workforce outcomes (no. of staff trained, podiatrist perceptions of providing service)
• Service costs and development of business case
## Results: Demographic, wound and casting outcomes

<table>
<thead>
<tr>
<th>Casting outcomes</th>
<th>No. of patients managed with TCC/iTCC</th>
<th>Total no. of devices</th>
<th>Total no. of devices provided at rural sites</th>
<th>No. of total contact casts</th>
<th>No. of instant total contact casts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline (12 months; 2015-16)</td>
<td>10</td>
<td>70</td>
<td>0</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>PodCast implementation (12 months; 2016-17)</td>
<td>23</td>
<td>139</td>
<td>13</td>
<td>79</td>
<td>60</td>
</tr>
</tbody>
</table>
Results: Workforce

Competency and learning framework developed
Podiatrists trained: n=4 (2 HRFC; 2 community)

Enablers and barriers (podiatrist focus group, n=3)

- Increased job satisfaction
- Increased flexibility for patient management and access for rural patients
- Difficulty in attracting patients at rural sites – unpredictable demand and issues with transport
- Number of podiatrists trained and staff turnover
Results: Service costs

Overall cost of service was similar pre and post-implementation of podiatrist led casting.

Business case for additional podiatry FTE in the HRFC approved to continue podiatrist-led casting the HRFC.

Difficult to quantify costs of providing service to rural sites due to low patient numbers.
Strengths and limitations of PodCast service model

**Strengths**
- Competency and training program helped to ensure safe and sustainable implementation of service
- Improved access and flexibility of providing service for patients at HRFC site
- Podiatrist-led service is cost effective at HRFC site

**Limitations**
- Poor uptake at rural sites reflects need for rural service models to be flexible to meet patient needs
Improving access to total contact casting in rural areas: an issue of knowledge translation?

Low uptake of casting may relate to clinician behaviour rather than knowledge (Lazzarini et al. 2015)

Possible barriers:

• Overcoming patient-related barriers to casting *(motivation)*

• Structured approach to workforce competency development needed *(capability)*

• Lack of existing high risk foot services and suitability of funding models *(opportunity)*

(Michie et al. 2011)
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For further information please contact:
Marcus Gardner
Manager of Podiatry and Allied Health Education and Research
Bendigo Health
03 54546387
mgardner@bendigohealth.org.au