Workforce redesign to improve access to compression garments services in rural facilities

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Abstract

Background: Delivery of malignancy related lymphoedema services including provision of compression garments in rural and remote Queensland has been difficult due to staff and skill shortages. Consumers have undertaken lengthy, expensive travel to metropolitan centres to access services. The service barriers and access issues have prompted Queensland Health stakeholders to examine the scope of compression garment selection, fitting and supply that can be safely and effectively delivered by generalist occupational therapist and physiotherapists in smaller regional, rural and remote locations to improve local access to this service for community members.

Methods: A new service model involved an evaluated trial of compression garment selection, fitting and monitoring provided by generalist occupational therapists and physiotherapists (i.e. physiotherapist or occupational therapist who had not completed a formal lymphoedema training program (e.g. Level 1 or 2 course), but had undertaken, an on-line education program with support of lymphoedema therapists, supported by telehealth, implementation resources and governance processes. The service model included a training model that paired generalist occupational therapists and physiotherapists in rural areas with a lymphoedema therapist. The online education program covering pathophysiology, assessment and management of lymphoedema, compression garment prescription, monitoring and care accompanied one-on-one telehealth delivered coaching sessions. Telehealth was used to support the supervised practice stage of the training program and was used if required in the post-training phase if generalist clinicians required support from their lymphoedema therapist coach.

Results: Seven rural and remote health facilities have implemented the telehealth supported compression garment selection, fitting and monitoring service model. There were 69 referrals and 58 garments provided during a 12 month trial period. Evaluation demonstrated that the delivery of compression garment selection, fitting and monitoring by generalist occupational therapists and physiotherapists supported by defined training, supervision and governance processes is safe, effective and positively evaluated by consumers and health professionals.

Discussion: The service model has provided sustainable workforce and service solutions and improved access to care for consumers in rural and remote Queensland. Phase two of the service model implementation is underway and will promote and expand the model for the provision of compression garments for the treatment of lymphoedema.

Introduction

Queensland Health has a commitment to delivering services as close to the client’s home community as possible (Queensland Health, 2013). Compression garment selection, fitting and supply has historically been undertaken primarily by occupational therapists and physiotherapists with specialised lymphoedema management training in cancer care services in larger centres.
The Guideline for the Supply of Compression Garments: Compression Garments for Adults with Malignancy Related Lymphoedema: Eligibility, Supply and Costing (“the Guideline”) was implemented in 2013 (Queensland Health 2013). The Guideline, actioned through the Health Service Agreements, defines the responsibility of Hospital and Health Services (HHSs) to provide a compression garment at no cost to clients meeting specific criteria. This supports equitable access for clients across the state with an ongoing need for compression garments to manage malignancy related lymphoedema (Queensland Health 2013).

Access to compression garments remained limited in many rural and remote facilities in Queensland due to a number of challenges including HHSs accepting the costs, clarity around the process for the public and the clinicians, leaders making changes to implement the Guideline and inability for implementation of the Guideline in rural and remote centres where there were no lymphoedema specialist services. Consumers in rural and remote areas have undertaken lengthy, expensive travel to metropolitan centres to access services. The implementation of the Guideline prompted Queensland Health stakeholders to examine the level of compression garment selection, fitting and monitoring skill and knowledge required to implement the Guideline that can be safely absorbed within the role of the generalist physiotherapist and occupational therapist.

The term generalist occupational therapists and physiotherapists is used to describe occupational therapists or physiotherapists who have not completed a formal lymphoedema training program (e.g. Level 1 or 2 course), but have received additional education as well as training and support from lymphoedema therapists. Generalist physiotherapists/occupational therapists deliver a wide range of services, generally to a client population with a large variety of presenting conditions, and across the age range and continuum of care. Generalist roles are most common in rural and remote areas, and smaller urban teams particularly in community settings. Generalist professionals’ work in partnership with clinical experts in specialised units, the multi-professional team, their community, clients and family to support the delivery of services in community settings and as close to the client’s home as possible (Nielsen, 2013; Nancarrow, Roots, Grace, Young, G & Barlow 2015).

The new Compression Garment Selection, Fitting and Monitoring Service Model Trial for Malignancy Related Lymphoedema (Service model trial) aimed to enhance equity of access to compression garments for clients with malignancy-related lymphoedema by facilitating the implementation of the Guideline in Queensland public health services; expand the number of services capable of implementing the Guideline, particularly in rural and remote areas; and evaluate the service impact and sustainability of the implementation of the Guideline to inform service planning in HHSs.

Methods

The service model trial involved

- developing resources to support the implementation of the Guideline;
- undertaking a trial of compression garment selection, fitting and monitoring provided by generalist occupational therapists and physiotherapists with the support of lymphoedema therapists via telehealth and the provision of implementation resources (referred to in this report as the “service model trial”);
- developing and evaluating an education program for generalist physiotherapists and occupational therapists participating in the service model trial; and
• evaluating the implementation of the Guideline including reporting by HHSs on the costs associated with garments.

The project activities are outlined in Figure 1 below.

**Figure 1  Compression Garment Project Activities**

<table>
<thead>
<tr>
<th>1 Facilitate Guideline implementation statewide</th>
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<tbody>
<tr>
<td>• Patient information resources</td>
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<td>• Clinician information resources</td>
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<tr>
<th>2 Service Model trial</th>
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<tr>
<td>• Stakeholder collaboration to define scope</td>
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<tr>
<td>• Recruitment HHSs and staff</td>
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<tr>
<td>• Education and training program</td>
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<tr>
<td>• Implementation of Service Model, including use of telehealth</td>
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<th>3 Evaluation</th>
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<td>• Service outcomes including costs</td>
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<td>• Service model trial outcomes</td>
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<td>• Patient safety</td>
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<td>• Patient satisfaction</td>
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The implementation of the service model trial and information resources were launched in Cairns on 6 August 2014 by the Minister for Health.

The evaluation methods employed were:

• HHS self-reported data on the provision of compression garments by all HHSs (including those not participating in the service model trial). Survey data was collected between September 2014 and August 2015 regarding public and private sector patients who were provided compression garments for malignancy related lymphoedema and included:

  • patient demographic information, compression garment costs;
  • number and type (ready to wear vs. custom made) of compression garments; and
  • quality indicators including adverse outcomes, garment re-orders, referral points, script provider details.

• Stakeholder perceptions and feedback of:

• the education package including survey data from generalist physiotherapist and occupational therapists completing the education program;

• the safety of compression garment provision by generalist occupational therapist and physiotherapists;
the service model trial including survey data of patient participation relating to occasions of service, length of visits, eligibility criteria, referral points, waiting times, and survey data (of generalist therapist and lymphoedema therapists) relating to telehealth provision and support was collected between August 2014 and August 2015; and

- patient satisfaction with service provided in the service model trial sites.

Results

The Guideline has been implemented in Queensland Health HHSs resulting in increased local access to compression garments for eligible patients. The number of services capable of implementing the Guideline in urban, rural and remote areas has expanded, with thirty-five facilities across thirteen HHSs providing patients with local access to compression garments. The evaluation of the pathway to garment provision indicates most services receive referrals from QH (85%), with the non-government sector referring 11% and private providers referring 3%. The Guideline allowed for the provision of scripts to be filled for eligible private and non-government provider patients. These numbers represented a very small number with 1% of the total scripts provided by private providers and 3% provided by the non-government sector. The provision of scripts by the private/NGO sector with the provision of garments by the public sector eases public sector pressure on service provision without placing strain on the public budget.

Delivery of compression garment selection, fitting and monitoring by generalist occupational therapists and physiotherapists (supported by training, supervision and governance processes) as defined in the service model is safe, effective and positively evaluated by clients and health professionals. During the compression garment selection, fitting and monitoring trial there were no adverse events or poor clinical outcomes reported in relation to generalist clinicians’ provision of compression garments in the service model trial. The rate of garment re-orders were approximately equivalent to services provided by clinicians possessing a Level 1 Lymphoedema Training Certificate, there was no significant difference in the relative frequency of ordering ready to wear compared to custom made garments and there was positive feedback from patients and health professionals.

The annual cost of provision of garments, and the type of garments provided by QH services to eligible patients with malignancy related lymphoedema have been collated for the period September 2014 to August 2015. Data was collected by all HHSs on prescription and supply of compression garments in order to assess the system-level cost of compression garments for eligible patients with malignancy related lymphoedema and to predict future needs and service delivery requirements.

<table>
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<tr>
<th>Compression Garments</th>
<th>Number/percentage</th>
<th>Cost</th>
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<tr>
<td>Total</td>
<td>2,224</td>
<td>$503,396</td>
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<tr>
<td>Ready to wear (RTW)</td>
<td>1,486 (67%)</td>
<td>$169,156</td>
</tr>
<tr>
<td>Custom Made (CM)</td>
<td>737 (33%)</td>
<td>$333,742</td>
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Although there were more RTW garments provided than custom made, custom made garments accounted for 67% of the total expenditure. These costs are consistent with the HHS Service Agreement requirements to provide compression garments to adults with malignancy related lymphoedema.

The education and training model and associated implementation resources were evaluated positively and were a key enabler for the service model change. A total of seven physiotherapists and
occupational therapists working in rural and urban facilities completed and evaluated the online education package and support from a lymphoedema therapist provided by telehealth. The content in the education package was evaluated as appropriate for the learner group and was more highly valued as the modules became more complex. The four modules took between 1.5 and 3 hours to complete (total completion time of education package 6 and 12 hours depending on prior knowledge of the learner). The education package supported a working relationship between lymphoedema therapist and generalist therapists within the boundaries outlined in the education package. Feedback from the occupational therapists and physiotherapists indicates increased participant knowledge, skills and confidence and that the education program was considered acceptable as an education model as part of an independent learning process.

Seven HHSs enrolled in the telehealth supported compression garment selection, fitting and monitoring service model trial. Four sites met the criteria for the evaluation of the telehealth trial. In those sites there were 69 referrals and 58 garments provided. The evaluation demonstrated the adequacy of telehealth as training and coaching medium to support generalist occupational therapists/physiotherapists to safely and effectively select fit and supply compression garments to a select group of patients with stable malignancy related lymphoedema. The telehealth trial improved connections between rural and metropolitan services and personal connections that enhanced the understanding of service context, supported patient flow and implementation of the Guideline, as the generalist physiotherapist/occupational therapist and lymphoedema therapist were more confident in the provision of garments for stabilised malignancy related lymphoedema by the generalist physiotherapists/occupational therapists. Lymphoedema therapists provided support for garment provision but overall there was a net reduction in demand on their service when occupational therapists and physiotherapists developed the capabilities (and required less frequent support) to provide compression garment services locally.

Conclusion

The Guideline has allowed client’s meeting eligibility criteria to be supplied a garment, irrespective of whether the garment had been prescribed by a generalist Queensland Health occupational therapist or physiotherapist or a Lymphoedema trained clinician (i.e. holder of Level 1 Lymphoedema Training Certificate accredited by the Australasian Lymphology Association) working within either Queensland Health or other sectors (private, non-government).

The service model supported the purpose and objectives of the Guidelines through:

- providing clear and consistent processes for clinicians and patients;
- increasing service capacity through expanding the number of clinicians and facilities able to provide compression garments; and
- improving service quality and continuity of care for patients.

The service model addressed barriers including

- operational issues: access to clinical and patient resources;
- access issues: reduced travel times for patients and staff particularly through the use of telehealth services, local training for therapists;
• training and cultural barriers: development of a therapy network that increased organisational capacity using the online education package to enable occupational therapists and physiotherapists to acquire the scope of practice required to undertake compression garment selection, fitting and monitoring; and

• evaluation of cost: assessed the economic cost of provision of compression garments.

The service model trial demonstrated that there is a scope of compression garment selection, fitting and monitoring that does not require completion of the Level 1 Lymphoedema Training Certificate and is consistent with garment selection, fitting and monitoring by generalist physiotherapists and occupational therapists. The model provides scope for generalist physiotherapists and occupational therapists in urban, rural and remote areas to offer patients with stable lymphoedema compression garment, selection, fitting and monitoring services. The model also assumes there is an education program accessible, training and practice supervision available from a lymphoedema therapist and clinical governance processes in place to ensure safety and effectiveness.

The limitations noted to the service trial included trial all HHSs in the trial were self-nominated (10 of 15 HHSs); Data was self-reported by HHS clinicians; there were delays in the implementation of the Guideline in some HHSs which meant retrospective data collection had to occur and that data collection for the period was not complete.

References


Presenter

Upon graduating as a psychologist Fiona Hall worked as a counsellor and psychologist in educational, community and hospital settings in rural, remote and metropolitan locations in Australia. Following this she worked as a clinical psychologist and researcher providing mental health services for more than a decade and completing post-graduate studies in clinical hypnotherapy, acute care in the community and a Doctorate in Psychology. The last ten years in the workforce have been committed to progressing the National allied health workforce and mental health reform agendas through the management of Statewide projects and programs. Fiona lives with her family in Cairns, North Queensland and works for the Allied Health Professions Office of Queensland, where she manages statewide strategic workforce planning and policy development activities and provides leadership to allied health professionals in the Torres and Cape Hospital and Health Service of Queensland Health.