# Compression Garment Selection, Fitting and Monitoring Project for Malignancy Related Lymphoedema

## Project Completion Report

## May 2016

Queensland Government

**Compression Garment Selection, Fitting and Monitoring Project for Malignancy Related Lymphoedema Completion Report**

Published by the State of Queensland (Queensland Health), November 2015



For more information contact:
Allied Health Professions' Office of Queensland, Department of Health, PO Box 2368, Fortitude Valley BC QLD 4006, email allied_health_advisory@health.qld.gov.au, phone (07) 3328 9298.

An electronic version of this document is available at https://www.health.qld.gov.au/ahwac/default.asp.



Contact Officer : Fiona Hall

Title: Allied Health Professional Leader, Allied Health Professions Office Queensland

Phone: +61 7 42263045

Version history

| Version | Date | Changed by | Nature of amendment |
|---|---|---|---|
| 0.1 | 1/11/16 | Initial draft | |
| 0.2 | 1/03/16 | Steering Committee | Feedback to initial draft |
| 0.3 | 16/05/16 | Steering Committee | Feedback to second draft |

Acknowledgements

Allied Health Professions' Office (Sponsor): Julie Hulcombe, Chief Allied Health Officer

Compression Garment, Selection, Fitting and Monitoring Steering Committee: Julie Hulcombe, Catherine Stephens, Liza-Jane McBride, Ilsa Nielsen, Susan Gordon, Kerrie-Anne Frakes, Mark Cruikshank, Vilma Girardi, Suzanne McCorkell, Kate Brennan, Megan Trevethan, Fiona Hall

Compression Garment, Selection, Fitting and Monitoring Implementation Reference Committee: Hildegard Reul-Hirche, Amanda Purcell, Nicola Cosgriff, Lauren Frame, Suzanne McCorkell, Juanine Passfield, Fiona Hall

Compression Garment Selection, Fitting and Monitoring Working Group: Lauren Frame, Robyn McMillan, Natasha Moore, Michelle Basford, Megan Trevethan, Nicola Cosgriff, Nicole Little, Kirsty Bell, Debra Horsfield, Cathryn Taylor, Asmita Sarang, Elizabeth Keith, Kirsty Bailey, Sunelle Hargreaves, Melinda Brassington, Yvette Ladner, Stephanie Fanias, Fiona Hall

HHS staff that recorded cost data: Lauren Frame, Alice Hare, Stephen Bode, Medlinda Brassington, Vilma Giradi, Trudi Epple, Nicole Little, Gayle Sutherland, Jacqueline Nix, Sue Laracy, Mark Cruikshank, Mary Whitehead, Mary Favios, Tracey Anderson, Praneel Kumar, Nicola Cosgriff, Belinda Bond, Rachel Tassotti, Natasha Moore, Susan Elliot, Andrea Leigh.

Lymphoedema Association of Queensland and all of the consumers that participated in the service model trial

# Contents

# Figures



# Tables

# Summary

## Background and purpose

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. 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 (attached Guideline, Appendix A). This supports equitable access for clients across the state with an ongoing need for compression garments to manage malignancy related lymphoedema. Access to compression garments remained limited 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 centres where there were no lymphoedema specialist 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. (Throughout this report 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.)

## Aims

The aims of the Compression Garment Selection, Fitting and Monitoring Project for Malignancy Related Lymphoedema (The Compression Garment Project) were 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.

## Objectives

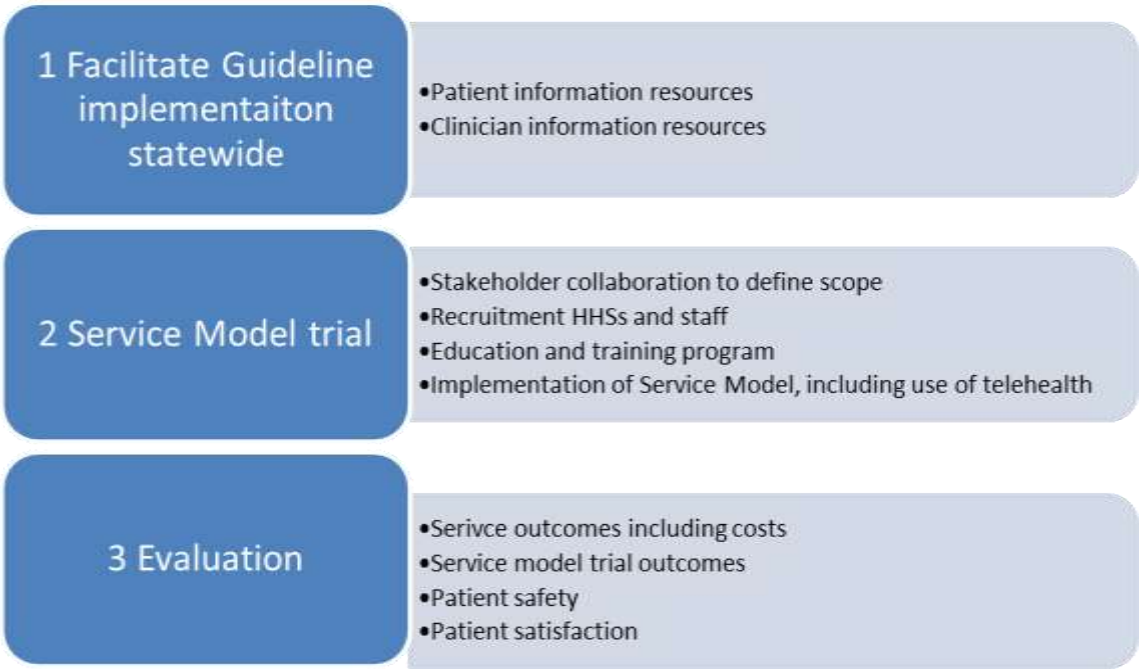
The objectives of the project were to address the barriers to implementation of the Guideline through:

- 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.

## Project activities

The project activities are outlined in Figure 1 below.

**Figure 1: Compression Garment Project Activities**




The implementation of the service model trial and information resources were launched in Cairns on 6 August 2014 by the Minister for Health.

## Deliverables

The project deliverables included:

- resources to support the implementation of the Guideline;
- a trialled service model including clinical pathways, clinical forms and patient information that is safe and effective;
- a high-quality, flexible learning education package for generalist physiotherapists and occupational therapists to deliver compression garment selection, fitting and monitoring functions within the scope defined by the trial; and
- a comprehensive project report describing evaluation outcomes.

## Evaluation

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.

## Findings

**Finding 1: The Guideline has been implemented in Queensland Health HHSs resulting in increased local access to compression garments for eligible patients.**

The Guideline implementation in Queensland public health services has:

- enhanced equity of access to compression garments for clients with malignancy-related lymphoedema and has improved access to garments in local HHS facilities;
- reduced patient need for privately and publicly-funded travel to metropolitan facilities to access garments and services; and
- enabled eligible private patients' access to public funding for the purchase and supply of garments.

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 befilled 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.

**Finding 2: 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.

**Finding 3: 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 (see Appendix F).

| Compression Garments | Number/percentage | Cost |
|---|---|---|
| Total | 2,224 | $503,396 |
| Ready to wear (RTW) | 1,486 (67%) | $169,156 |
| Custom Made (CM) | 737 (33%) | $333,742 |

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.

There has been extrapolation of data for Metro South for the months that could not be collected due to delays in implementation. There was a risk that the costing data was still underestimated, as it is self-reported data. the investigator added a 5% confidence interval to the data collected by all HHSs, and in addition to the Metro South extrapolated data, would estimate the annual cost of provision of garments for malignancy related lymphoedema to be approximately $600 000 per year.

**Finding 4: The education and training model and associated implementation resources were evaluated positively and were a key enabler for the service model change.**

**Education and training program evaluation:**

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.

**Service model evaluation:**

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[1] 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 Lymphoedema 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;

[1] Eligibility criteria are: malignancy related lymphoedema;a clinical prescription for a garment; a current medical referral; aged 16 years or over; hold a Centrelink Pensioner Card or Centrelink Health Care Card ; permanent resident of Queensland; Medicare eligible

- 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.

**Limitations**

- 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 e.g. Metro South.
- Many private providers who were entitled to provide garments to eligible patients may not have been aware of the Guideline.

## Recommendations

**Recommendation 1: The Guideline should continue to be implemented in HHSs and its scope examined for possible expansion to other clinical categories.**

The outcomes of the project support the continued implementation of the Guideline and continued embedding of supporting processes in HHSs.

The potential service impacts and costs associated with expansion to other clinical groups (e.g. non-cancer related lymphoedema, oedema,) should be examined to inform engagement between the Queensland Department of Health (QDOH) and HHSs on this issue.

Ongoing monitoring of the Guideline implementation and cost will require integration of this information into data collection systems. HHSs will be responsible for monitoring of the costs and will be asked to provide the details to AHPOQ on an annual basis.

HHS data sets, raw data and reporting templates from the project costing analysis shall be made available to HHSs to allow local implications for garment costs to be considered, for future service planning activities and capacity to expand the Guideline.

**Recommendation 2: Compression garment selection, fitting and monitoring should be embedded in service and workforce models for occupational therapists and physiotherapists who have completed the education and training program.**

The service model has continued implementation beyond the term of the trial sites in the Sunshine Coast HHS, Mackay HHS, Central Queensland HHS, Wide Bay HHS and Cairns HHS.

HHSs should be encouraged to commence or continue formal planning and activities to embed the service model in their local facilities and:

- identify generalist physiotherapists/occupational therapists to complete the education package;
- develop/improve networks with lymphoedema services and qualified lymphoedema therapists for telehealth-supported compression garment selection fitting and monitoring; and
- include the service model in orientation and induction training, through professional support and development activities, and the performance appraisal process.

Statewide services/networks should support service planning activities to embed the service model including:

- the Statewide Allied Health Cancer Care Clinical Reference Group including the "Compression Garment Service Model: Sustainable Implementation" as a standing agenda item establishing linkages with HHS cancer care champions and clinicians;
- the Statewide Physiotherapist (DOPSQ: Directors of Physiotherapy Queensland) and Occupational Therapist (QPLOT: QLD professional leaders of OT) clinical leads and educators promoting and supporting the model through their networks; and
- senior Lymphoedema Therapists expanding their network to include interested physiotherapists/occupational therapists and lymphoedema therapists promoting relevant ongoing clinical education and professional support activities to the network of physiotherapists and occupational therapists who undertake the Compression Garment Selection Fitting and Monitoring Education Package.

**Recommendation 3: The education program should be revised in line with evaluation findings and continue to be available to support the service model.**

It is proposed that:

- The Compression garment education package resides on iLearn to enhance access.
- Select resources within the education package (detailed in section 4.3 of the report) are improved.
- Opportunities for inter-jurisdictional sharing of resources (the HETI Lymphoedema early intervention package may compliment the Compression garment selection, fitting and monitoring education resource (the education resource) and interest from other jurisdictions to utilise the Queensland Health education package are explored.
- The education package is embedded into professional training pathways:
  - Inclusion in the HP3 to HP4 Rural and Remote Pathway and the Rural and Remote Generalist Pathway.
  - Discussion with the Australasian Lymphology Association (ALA) to investigate options for the education package to be an endorsed training component in the ALA training pathway.
  - Physiotherapy and occupational therapy professional associations are approached to consider recognising the education program as contributing towards professional development points.

The education package (with modifications) could be applied to other professions to provide garments e.g. nursing, podiatry and medicine or other jurisdictions e.g. private providers, non-government organisations, inter-state health agencies.

**Recommendation 4: Supporting resources, including the Guideline, Procedure and Order From, should be revised and published in line with the outcomes of the project.**

- The Guideline and Procedure should be revised to reflect the new service model.
- The Order Form should be updated and maintained to reflect changes in the standing order arrangement.

**Recommendation 5: A comprehensive communication/implementation plan should be developed to disseminate and communicate project outcomes.**

The development of such a plan should be designed to support sustainability of the service model.

# 1. Project Overview

## 1.1 Background

Lymphoedema is chronic swelling that occurs due to the accumulation of lymphatic fluid in the body's tissues. It can occur as a primary condition, due to a congenital malformation of the lymphatic system, or following damage to the lymph nodes due to malignancy, injury or infection. Incidence estimates for secondary lymphoedema following treatment for cancer in Australia suggest that 20% of breast, genitourinary, gynaecological, or melanoma survivors will experience secondary lymphoedema. This equates to more than 8000 new cases per year. Secondary lymphoedema is associated with adverse physical and psychosocial effects. The use of compression garments for patients suffering from lymphoedema is important in the long term management of this condition, minimising swelling, reducing the frequency of infection and any associated hospitalisations.

Queensland Community groups have lobbied for the equitable provision of lymphoedema compression garments in line with other jurisdictions particularly New South Wales and Victoria. The Queensland Department of Health approved the H*ealth Service Directive: Provision of Clinical Products/consumables in Outpatient settings* in March 2013.The purpose of this Directive was to ensure the costs for clinical products and consumables provided were consistently applied across HHSs. The Directive was rescinded in April 2014 with the imperative for the provision of clinical products/ consumables currently sitting in the Health Service Agreements.

The obligations of HHSs with respect to the provision of clinical products/consumables in outpatient settings are detailed in the HHS Service Agreements, including the application of guidelines to ensure standardised eligibility criteria and charges are applied. The *Guideline for the supply of compression garments: Compression Garments for Adults with Malignancy related Lymphoedema: Eligibility, Supply and Costing* (Appendix A) provides recommendations regarding eligibility criteria and payment responsibilities for the provision of compression garments to adult clients with malignancy related lymphoedema. It applies to all HHSs and is targeted at clinicians who prescribe compression garments to adults with malignancy related lymphoedema and to facilities which provide and/or are responsible for the cost of these garments. While the Guideline specifically relates to malignancy related lymphoedema, community support groups would like to see it broadened to include the provision of garments for the treatment of all types of primary and secondary lymphoedema.

The Guideline was endorsed in April 2013. Access to compression garments however remained limited due to a number of challenges. These included:

- HHSs accepting the costs associated with applying the Guideline;
- clarity around the Guidelines processes for both the public and clinicians;
- leaders supporting the implementation of the guideline; and
- an inability for implementation of the guideline in centres where there were no lymphoedema specialist services.

As a result the Allied Health Professions' Office of Queensland (AHPOQ) has supported a project to facilitate the implementation of the Guideline and assist in enabling equitable supply of compression garments for consumers with malignancy-related lymphoedema.

## 1.2 Purpose and rationale

To address Queensland Health's priority for increased access to care delivered closer to home, strategies were required to support the successful implementation of the *Guideline for the supply of compression garments: Compression Garments for Adults with Malignancy related Lymphoedema: Eligibility, Supply and Costing* (Appendix A). Prior to the development of this Guideline, patients were required to travel significant distances to access appropriately trained clinicians and a service that was able to provide a garment. This placed additional demands on patients to be away from family and work for treatment in metropolitan areas.

The need to undertake the Compression Garment Selection, Fitting and Monitoring Project has also been driven by patients, consumers, clinicians and allied health leaders in metropolitan, regional, rural and remote areas. Provision of allied health services to patients with malignancy related lymphoedema under the current model has been difficult to maintain due to low retention and maintenance of competency of lymphoedema therapists, the costs to Queensland Health (QH) including the maintenance of a sustainable training model, patient travel costs and limited or no access/provision of garments to eligible private patients.

A new service model was required to address the challenge of providing compression garments in locations without a lymphoedema therapist. A central aim of this project was to define and test a model of compression garment selection, fitting and monitoring that could be delivered by generalist occupational therapists and physiotherapists (i.e. those without Level 1 Lymphoedema training certificate). Appropriate patient selection criteria, training, supervision and clinical governance underpinned the generalist occupational therapist and physiotherapist ability to acquire scope of practice required to undertake garment selection, fitting and monitoring. The project developed trialled and evaluated a service model and supporting systems to allow expansion of compression garment selection, fitting and monitoring to locations and facilities that had not previously offered these services to community members.

## 1.3 Aims

The aims of the project were 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.
- Evaluate the service impact and sustainability of the implementation of the Guideline to inform service planning in HHSs.

## 1.4 Objectives

The objectives of the project were to address the barriers to implementation of the Guideline through:

- 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.
- Evaluating the implementation of the Guideline including reporting by HHSs on the costs associated with garments.

## 1.5 Governance

The project was overseen and monitored by the sponsor, the Chief Allied Health Officer, Department of Health, Queensland. The Compression Garment Selection, Fitting and Monitoring Implementation Steering Group was formed to provide oversight, strategic advice and support for the development, direction and implementation of the project. The Compression Garment Selection, Fitting and Monitoring Implementation Reference Group supported the implementation of the Guideline, provided guidance and support for the operational implementation of the project and input into the development of the project resources and the education and training package. The Working Group supported the implementation of the trial, and a forum for regular informal reporting of progress on the project activities.

Terms of reference (TOR) for the governance groups were as follows:

Appendix B: TOR Steering Committee

Appendix C: TOR Reference Group

Appendix D: TOR Compression Garment Trial Working Group

## 1.6 Terms and resourcing

Coordination of the project was undertaken within the normal business of AHPOQ utilising State funds. An allocation by AHPOQ was provided for the development and finalisation of the education package and the project data management.

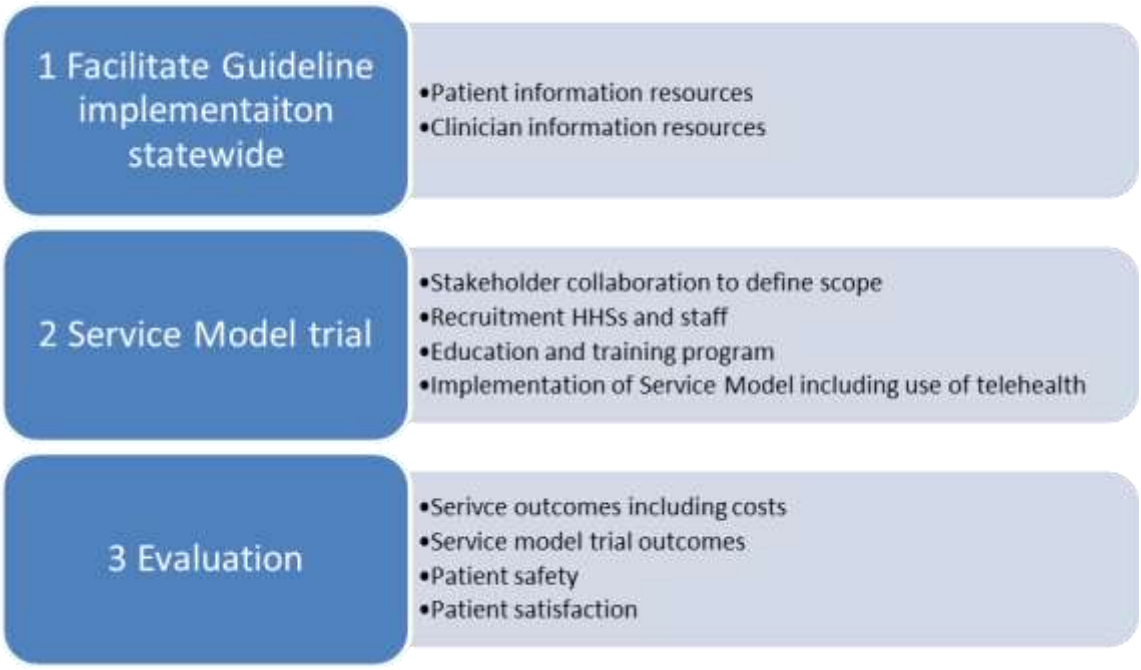
The HHS where the patient resided (their primary residential address) was required to meet the cost of prescribed compression garments for eligible patients in accordance with the Health Service Agreements. These costs would have been incurred regardless of the project through compliance with the Service Agreements. No additional funding was provided to trial sites. For many HHSs the costs were not new costs as many HHSs were funding garments prior to the project.

Generalist physiotherapists and occupational therapists from the trial and the lymphoedema therapist that supported them were able to count telehealth consultations as occasions of service under the current Activity Based Funding (ABF) model and Health Care Purchasing Framework.

# 2. Project activities

The project activities are described in Figure.

**Figure 1: Compression Garment Project Activities**




## 2.1 Facilitate Guideline implementation statewide

### 2.1.1 Resource development – patient and clinicians

A number of information resources were developed to increase patient and clinician awareness of the Guideline and address early challenges to the implementation, including clarity around clinical pathways and patient understanding of eligibility criteria.

During the Compression Garment Project, enablers to the resource development included:

- **Central coordination by AHPOQ** as a key driving centralised work unit with capacity to support this workforce initiative.
- **Consumer and clinician engagement** in focus groups who could articulate their needs and the required resources to support them.
- **Driving of organisational culture change** through strong organisational leadership by the Compression Garment Reference and Working Group members and the Cancer Care Workforce Development Officers. These groups developed capacity by promoting and implementing the resources within the HHSs.

The patient and clinical resources were stored on QHEPS and the internet to support implementation of the Guideline, they are detailed below:

| Resource | Description |
|---|---|
| Implementation plan | Describes key communication activities and strategies required to raise awareness of the guideline and to educate and engage key stakeholders across the Department of Health and the health sector to ensure their ongoing support and implementation. |
| Procedure | This procedure relates specifically to the process of patients/consumers accessing new or replacement garments from their local health service. |
| Frequently asked questions | Provides answers to common questions regarding implementation of the guideline including financial management, the redesign trial and referrals coming from private providers. |
| Prescription/Order form | Prescription/Order form to be used by Queensland Health and non-Queensland Health providers in prescription of ready – to – wear and custom made garments |
| Patient information sheet | Information sheet for patients regarding eligibility and processes to obtain a garment. |
| Guideline implementation plan checklist | A list of operational tasks that support HHS readiness to implement the Guideline. |

## 2.2 Service model trial

The service model trial involved Compression garment selection, fitting and monitoring provided by generalist occupational therapists and physiotherapists with support of lymphoedema therapists, supported by telehealth, implementation resources and governance processes. It involves a training model that pairs generalist occupational therapists and physiotherapists with a lymphoedema therapist in another facility. The online education program covering pathophysiology, assessment and management of lymphoedema, compression garment prescription, monitoring and care accompanies one-on-one telehealth delivered coaching sessions. Telehealth is used to support the supervised practice stage of the training program and can be used if required in the post-training phase if generalist clinicians require support from their lymphoedema therapist coach.

On 6 August 2014, The Hon Lawrence Springborg, MP, Minister for Health, launched the service model trial and the clinical and patient resources to support the Compression Garment Guideline. Lymphoedema Association of Queensland members, consumers, clinicians and their managers attended the launch. Mrs Nerida Smith, President, Lymphoedema Association of Queensland spoke at the launch thanking the Minister and staff for improving access to compression garments for patients with malignancy related lymphoedema.

The Hon Lawrence Springborg, MP, Minister for Health, Ms Julie Hartley-Jones, CEO Cairns and Hinterland Hospital and Health Service, Ms Julie Hulcombe, Chief Allied Health Officer, Allied Health Professions' Office of Queensland, Ms Lauren Frame, Senior Occupational Therapist, Cairns and Hinterland Hospital and Health Service, Mr Domenique Perrotin, Consumer

### 2.2.1 Stakeholder collaboration to define scope

The process to come to agreement on the key concepts and definitions described in this report and the approval process involved collaboration from the Compression Garment Selection, Fitting and Monitoring Implementation Steering Group and the Compression Garment Selection, Fitting and Monitoring Implementation Reference Group.

**Key Concepts**

Provision of compression garments is within the scope of practice for physiotherapists and occupational therapists. To safely perform the task selection, fitting and monitoring of compression garments, therapists were required to complete the Compression Garment Selection, Fitting and Monitoring Education Package prior to undertaking compression garment selection, fitting and monitoring as part of their scope of practice. Once training was completed and the therapists were assessed as competent, they assumed accountability and responsibility for their decisions and actions and performed the tasks as part of their independent scope of practice.

**Definitions**

A complete list of definitions is detailed at the beginning of this report. The definitions of lymphoedema therapist and generalist therapist are provided below:

**Lymphoedema therapist:** a therapist which meets the following criteria:

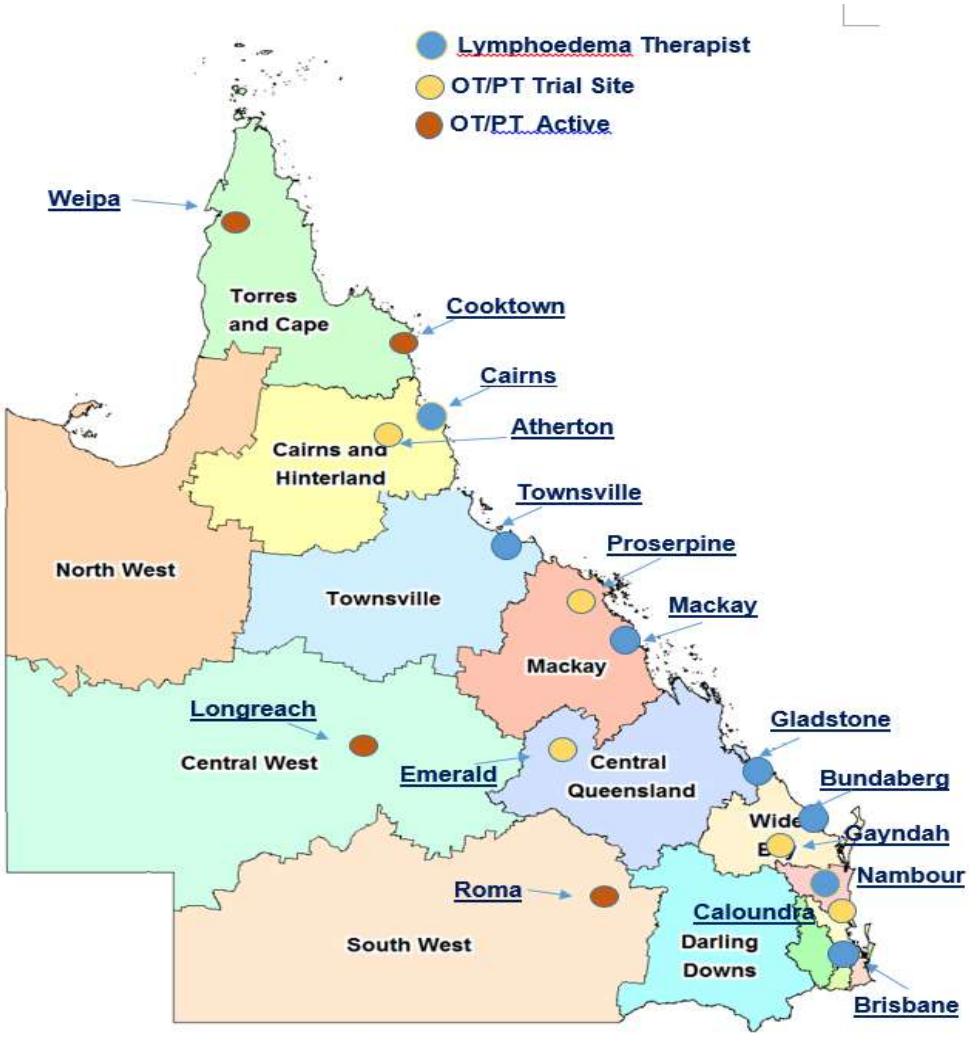
- Holder of Level 1 Lymphoedema training certificate accredited by the Australasian Lymphology Association (ALA),
- Recency of practice by demonstration of clinical experience in compression garment prescription within the previous two years.
- Continued professional development of 50 points in the previous two years as set out in the ALA Lymphoedema continuing professional development Program and/or
- Eligibility for Category 1 registration on the National Lymphoedema Practitioners Register of the Australasian Lymphology Association (Queensland Health, 2013).

**Generalist physiotherapist/occupational therapist:** for the purpose of this report is an occupational therapist or physiotherapist who delivers 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. Allied health professionals in generalist roles are required to possess a broad breadth of profession–specific skills, and may also deliver some skill shared tasks that would usually be provided by another profession in a larger service. Generalist roles may be classified at a number of levels (e.g. HP3, HP4, and HP5) as the demand for a broad scope of practice does not preclude the need for a role to manage complex presentations in a subset of the caseload. That is, a generalist clinical scope of a role does not necessarily imply a base grade position or foundation level of clinical skills. 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, Barlow, 2015; Department of Health, 2016).

## 2.2.2 Recruitment of sites

Expressions of interest to participate in the trial were requested from HHSs who had generalist therapists who wanted to participate and HHSs with a lymphoedema therapist who wished to provide telehealth support from a regional site. Ten HHSs agreed to participate. Five of the ten HHSs that volunteered met criteria they included: Cairns and Hinterland, Central Queensland, Wide Bay, Sunshine Coast, and Mackay. The other HHSs that volunteered to participate in the trial did not receive patient referrals that met the criteria for the trial and included: Cape York, Metro North, Metro South, South West and Townsville.

The map below depicts the seven lymphoedema therapist support sites (in blue), five trial sites (in yellow) that contributed data to the trial and the four active sites (in orange) that implemented the service model but did not provide data for the trial either because the patients did not consent, the patients did not meet the selection criteria or there were no referrals.




## 2.2.3 Education and training program

Prior to the Compression Garment Project, the training costs and difficulties of maintaining lymphoedema therapists in rural, remote and regional HHSs had been identified as significant barriers for local garment provision. Generalist physiotherapists and occupational therapists who trained as lymphoedema therapists reported difficulty

in maintaining their recency of practice due to the small numbers of annual referrals in rural and remote areas. To address these issues, the Compression Garment Selection Fitting and Monitoring Education and Training Program was developed as an enabler to:

- Provide sustainable, accessible, capability-based education for generalist occupational therapists and physiotherapists involved in implementation of the Guideline.
- Consolidate generalist physiotherapist and occupational therapist knowledge and skills based on compression garment selection, fitting and monitoring for patients with uncomplicated (established) malignancy-related lymphoedema.
- Increase support for the generalist physiotherapist and occupational therapist by lymphoedema therapists through a supported practice framework via telehealth.

A project officer from Metro South HHS identified and collated the content of the Compression Garment Selection Fitting and Monitoring Education Package. James Cook University developed the education package for use by the clinicians. The package was published on QHEPS.

The 2 stage education and training approach is detailed below:

**Education and training approach for physiotherapists and occupational therapists**

| Training | Focus | Elements |
|---|---|---|
| **Component 1**<br>Stage 1: Self-guided learning package (including workbook) | Independent learning activities demonstrating therapist's theoretical knowledge and understanding | Background knowledge of:<br>lymphatic system & lymphoedema assessment and management<br>Role of generalist & lymphoedema therapists in assessment & management of lymphoedema<br>Compression garment selection, fitting and monitoring. |
| **Component 2**<br>Stage 2: Supported practice | Practice based coaching sessions allowing for consolidation of knowledge and evidence of clinical skill. | Clinical task training<br>Modelling on peers or other forms of simulation.<br>Observation/assessment in supervised use of task with patients (direct or indirect supervision including telehealth) |

Stage 1: The self-guided learning package (including workbook) with independent learning activities was designed to provide theoretical knowledge and understanding of the lymphatic system and lymphoedema assessment and management. The role of physiotherapist, occupational therapists and lymphoedema therapists in assessment and management of lymphoedema and information about compression garment selection, fitting and monitoring.

Stage 2: The supported practice period included; coaching sessions with a specialist lymphoedema therapist. This aspect of the trial consolidated knowledge and observation skill acquired to assess the clinical skill. It also included modelling on peers or other forms of simulation as well as observation/assessment in supervised use of the skills with patients (direct or indirect supervision including telehealth).For stage two of the training program, generalist physiotherapists and occupational therapists

required the support of a coach who was a qualified lymphoedema therapist. The coaching process involved:

- review of any components of the self-guided learning workbook that required clarification or elaboration; and
- practice, demonstration and assessment of clinical skills required for the selection, fitting and monitoring of compression garments via telehealth or face to face.
  - Step one: if required, the physiotherapist and occupational therapist could practice clinical skills with a volunteer before they undertook patient consultation.
  - Step two: coaching support of the physiotherapist/ occupational therapist was provided by the lymphoedema therapist during a patient consultation until the physiotherapist/ occupational therapist was assessed as competent. Approximately three sessions were recommended, dependent on the variation and difficulty of the patients presenting condition and the confidence and skill development of the generalist therapist.
  - Step three: the physiotherapist/ occupational therapist performed the clinical tasks within their own scope of practice. The physiotherapist/ occupational therapist sourced coaching and support from the lymphoedema therapist if indicated by patient presentation or for periodic review as part of ongoing skill maintenance. The frequency of this support was determined by the physiotherapist/ occupational therapist in consultation with the lymphoedema therapist.

Prior to commencement of the supported practice period, the generalist physiotherapist/ occupational therapist was required to have a thorough knowledge and understanding of garment prescription, fitting and monitoring for patients with stable malignancy related lymphoedema. The outcomes of Stage 2 (supported practice) included demonstration of the knowledge and skill capabilities acquired during Stage 1 of the Compression Garment Selection, Fitting and Monitoring Education Resource. These capabilities are documented in Appendix E.

### 2.2.4 Implementation of the service model

Once the parameters of the service model were established and the supporting education and training program was developed the service model trial was implemented between August 2014 and August 2015.

Generalist physiotherapist and occupational therapist participatiing within the Compression Garment trial sites collected the following data:

- occasions of service;
- length of visits;
- eligibility criteria;
- referral points;
- waiting times; and
- support by lymphoedema therapists.

### 2.2.4.1 Telehealth support

The service model developed as a part of this project is a dual clinician model (Queensland Health, 2015), with a health care professional at both the hub (lymphoedema therapist) and recipient site (physiotherapist/occupational therapist). The service model was utilised to provide coaching from regional to rural sites, and directly from regional to regional site with the hub site clinician (lymphoedema therapist) providing coaching during the training phase. This coaching model is likely to be effective for more complex or different presentations (i.e. lower versus upper limb).

### 2.2.4.2 Telehealth readiness

Standard video equipment was used for videoconferencing for supporting the assessment and clinical evaluation of skills. MOVI applicability was trialled at two sites to determine if this technology enables the clarity of videoconferencing to assess and provide feedback relating to the clinical skill development. Lymphoedema and physiotherapist/ occupational therapists were able to operate videoconferencing equipment with reasonable skill. In addition, a good relationship with the IT support team at the relevant facility was useful for maintenance and trouble shooting.

A list of telehealth resources are provided below:

| | |
|---|---|
| **Logistics and technical assistance** | Each HHS has a dedicated telehealth co-ordinator who can act as a resource for telehealth.<br>Support is also available from Integrated Telecoms (formerly Statewide Telehealth). |
| **Patient consent** | Patient consent completed prior to a patient receiving a telehealth service. This form only needs to be completed once for each episode of care (for the same condition), and not necessarily for each consultation. Telehealth consent will be a component of overall consent process. |
| **Patient information** | Statewide patient information brochures are available:<br>• Your Telehealth Appointment.<br>• Aboriginal and Torres Strait Islander Your Telehealth Appointment. |
| **Local procedures** | Local areas may have procedures to guide the process for telehealth, for example:<br>• Cape York Hospital and Health Service Guidelines for Telehealth (Video-conference) Clinical Consultation.<br>• Telehealth sticker for documentation. |

# 3. Evaluation methodology

The project methods involved a quality improvement evaluation to inform improvements in the provision of resources and education to patients who utilise Queensland Health services and clinicians employed by Queensland Health. Consent was sought from the Prince Charles Hospital, Metro North ethics committee:

- to utilise primary data for the purpose of comprehensive analysis that would inform the ongoing development of lymphoedema services and the development of other future services;
- for utilisation of primary data without the requirement of site specific application; and
- for findings to be submitted for peer review and publication purposes in National and International health journals.

Exemption was provided by the Prince Charles, ethics committee for a full research project and support was given for the collection of data as a quality activity. Descriptive statistics were used to present qualitative survey and audit data and thematic analysis was used to analyse the qualitative data and identify priority themes and issues to be addressed. Action research methodology was applied and the outcomes of the successive action formed part of this project. Information explaining the governance, roles and requirements of the trial was provided to patients and therapists prior to requesting their consent.

## 3.1 Study measures

The study measures evaluate the following elements:

1. **Cost impact of implementation of the guideline: cost analysis of Hospital and Health Service garment provision**

   Analysis of costs associated with provision of garments to public and private sector patients with six specific data points. Data was collected between August 2014 and August 2015 via survey monkey.

2. **Development and implementation of resources**

   Evaluation of the resources included QHEPS and internet page usage of resources between August 2014 and August 2015.

3. **Compression Garment Selection, Fitting and Monitoring Education Package**

   Generalist physiotherapist/ occupational therapists evaluation of efficacy of the education package using evaluation questionnaire. The questionnaire was administered in September 2014 via survey monkey.

4. **Service Model Trial**
   - **Service provision:** Physiotherapist/ occupational therapists evaluation of service provision within the trial sites with data points relating to occasions of service, length of visits, eligibility criteria, referral points, waiting times and support by lymphoedema therapists was collected between August 2014 and August 2015
   - **Patient efficacy measures:** Patient satisfaction survey and evaluation of safety of garment provision of service provision within the trial was collected

by the generalist therapists for each patient between August 2014 and August 2015 provided to the investigator quarterly in November 2014, February 2015, May 2015, August 2015.

- **Telehealth:** Physiotherapist/ occupational therapists evaluation of telehealth support by lymphoedema therapists using a questionnaire took approximately five minutes to complete per patient and was collected between August 2014 and August 2015 via survey monkey. Lymphoedema therapist evaluation of clinical skill and efficacy of telehealth in assessment and provision of feedback using a questionnaire completed at patient review and collected between August 2014 and August 2015 via survey monkey.

# 4. Evaluation findings and discussion

The following is the reported outcomes in line with the study measures in the evaluation frameworks

## 4.1 Cost impact of implementation of the Guideline: cost analysis of HHS garment provision

The reported QH total cost for the supply of compression garments including the trial was $503396. The cost of compression garments ranged from $13 to $910 based on an average cost of $226 per garment. The cost of ready to wear was $169156 based on average cost of $113 per garment. The cost of custom made was $333742 based on an average cost of $453 garment.

All HHSs, excluding two, provided compression garments for eligible patients with malignancy related lymphoedema. For many HHSs these represented new services at local facilities (e.g. Atherton, Gladstone, Gayndah, Proserpine and Emerald) significantly reducing patients need to travel to facilities in other HHSs to access garments and services. Two smaller HHSs did not provide garments because there were no referrals or the referrals that they did receive did not meet eligibility criteria for the Guideline requirements.

Prior to the Compression Garment project, non-compliance with the Guideline was reportedly due to lack of HHS allocated funding. Notwithstanding budget tensions within the larger HHSs during the project, these issues seem to be resolved and all HHSs and facilities now seem to be meeting Guideline expectations to provide garments within the smaller centres. Prior to this budget shift, the funding for garments had been largely provided to the more centralised and more utilised allied health departments, within larger HHSs as part of the consumable items budget or to Occupational Therapy or Physiotherapy Departments. During the time of the project, larger HHSs developed a central allocation model using an internal order code and pulled this code from the various costs centres or developed one cost centre for usage across the HHS.

### 4.1.1 Garment provision analysis

A total of 2224 garments were provided. There were more ready to wear garments (67%) provided than custom made garments (33%), but custom made garments cost more to provide than ready to wear. The expenditure percentage was 67% custom and 33% ready to wear.

Script error was not high. The percentage or re-orders across all HHS's was 2.83%. One large HHS did not record script error. The higher percentage of re-orders in some HHSs related to the complexity of patients i.e. it is more common to have reorders in patients with complex lymphoedema issues. It is also acknowledged that percentage may not provide a good comparative for smaller HHS's with overall smaller numbers of prescriptions.

While there is some variation between HHSs, currently garment provision and financial allocation is more consistent between facility and HHS than it was twelve months ago.

Most facilities that provide garments have similar local procedures (consistent with the Statewide procedure) for the eligibility, number and frequency of garments provided.

### 4.1.2 Pathway to treatment

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 allows for garment 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 smaller number of referrals and garments provided by the NGO and private sectors may relate to the stage of implementation i.e. some parts of the non-public sector may not be aware of the initiative. The ability to accept scripts written by the private/NGO sector for garments provided by the public sector eases public sector pressure on service provision.

The Compression Garment Project evaluation methodology relied on accurate reporting by HHS clinicians and timely implementation of the Guideline. Metro South did not start implementing the Guideline until March 2015 and retrospectively provided data, with data for 12 months from some facilities (i.e. Wynnum Health Service and Redlands) and 6 months of data from the remainder of the HHS facilities. There has been extrapolation of data for Metro South (i.e. data provided for PAH, Mater public and Qld lymphoedema and oncology physiotherapy) for the 6 months September 2015 to February 2016 that was not able to be collected due to delays in implementation of the Guideline and it is estimated that the additional expenditure would have been $67 368.91, representing a total estimated expenditure for Metro South to be $209764. Metro North provided retrospective data for all facilities but reported that the data was an accurate reflection of the provision of garments provided. There is a risk that the costing data is underestimated as it is self-reported data but the authors added a 5% confidence interval to the total cost, which would estimate the annual cost of provision of garments for malignancy related lymphoedema to be approximately $600000 per year.

Many eligible patients may not have been aware of the significance of lymphoedema or may not have sought help within the public system (or private health system), and so would not have received garments. Many private providers who were entitled to provide garments to eligible patients may not have been aware of the Guideline as it relied on timely local HHS implementation.

See Appendix F (HHS compression Garment Costs) for more information.

**Summary**

The costing analysis has provided a centralised data collection method around prescription and supply of compression garments to accurately assess the economic consumable cost for eligible patients with malignancy related lymphoedema. The delivery of compression garments has improved primarily with local facilities meeting the requirements of the Guideline for the consumable cost of garments and by providing garments locally. It is recommended that HHS data sets, raw data and reporting templates from the project costing analysis are made available to HHSs to allow for garment costs to be considered for future HHS service planning activities and the capacity to expand the Guideline.

## 4.2 Development and implementation of resources

A Queensland Health Electronic Publishing System (QHPES) analysis was undertaken to review the uptake of the resources. The analysis also included a discussion of the use of the education program resources that were also available on QHEPS. It indicated a notable uptake of the resources. The QHEPS analysis does not imply relative importance, but describes the pattern and frequency of use. The most popular resource accessed was the clinical education resource, module four of the education package. The usage reflected the need for the trial participants and other physiotherapists and occupational therapists to refresh their knowledge in the application of compression therapy and garment provision. Following this, in descending order of usage on QHEPS, were the script/order form, the procedure, the patient information sheet and frequently asked questions. The highest frequency documents tended to be those operational in nature to which clinicians needed to refer.

Following this, very popular resources were the standardised forms that were a part of the education package and other education package components, including the Lymphoedema Compression Garment Record Template, the Lymphoedema Assessment for Stabilised Established Malignancy Related Lymphoedema and the self-guided workbook.

It was not possible to obtain the number of QHEPS hits on the resources for the full twelve months as a new program was implemented in Queensland Health in October 2014 which did not have the ability to provide informatics on document hits. It was not possible to evaluate the uptake of documents posted on the internet, which is unfortunate, as this information would have given a better idea of the demand for the resources from the general public and private clinicians including the Order form, the Guideline and Patient information sheet.

See Appendix G (QHEPS hits to resources) for more information.

**Summary**

The resources developed as part of the Compression Garment Project were well utilised. The highest frequency documents that were used included the operational documents (order form, procedure and patient information sheet), the standardised clinical forms and module four of the education package that detailed the application of compression therapy and garment provision.

## 4.3 Compression garment selection, fitting and monitoring education package

The generalist physiotherapists and occupational therapists, who participated in the trial, evaluated the education package to determine the fitness of the package to increase the knowledge and skills of the therapists to prescribe and administer compression garments. Seven of the eight therapists volunteering for the trial completed the package. One did not complete it as there were no referrals in the first six months of the trial. The education package has been received positively providing benefits primarily to occupational therapists and physiotherapists and secondarily to QH patients. Each of the components of the education package was evaluated as detailed below.

**Self-guided learning modules feedback**

The generalist occupational therapists and physiotherapists reported that the online self-guided learning package resources provided relevant and useful content. On a five point Likhert scale with “strongly disagree” as the lowest score and “strongly agree” as the highest, the majority of participants “strongly agreed” or “agreed” that the theoretical content of the independent learning modules in the self-guided learning package was appropriate. Most participants “strongly agreed” or “agreed” that the content of the self-guided learning package was interesting for their learning needs. The therapists rated each of the four modules for their relevance. Module one provided an overview of the lymphatic system and lymphoedema, Module two described the assessment of lymphoedema, Module 3 described the management of lymphoedema and Module 4 detailed the application of compression therapy and garment provision. All of the therapists rated each of the modules with the highest ratings, extremely relevant or very relevant. The weighted average was highest from Module 4 to Module 1 in descending order. The participants rated the learning opportunities that related to the application of knowledge and skills (i.e. Module 4) as the most relevant to them. This may indicate that the therapists already had existing and current knowledge regarding lymphoedema and the assessment and management of lymphoedema but needed extra resources and support to enable them to apply this knowledge in the clinical setting.

A thematic summary of general comments relating to the aspects of the self-guided learning package that worked well and facilitated learning was varied and included the pictures, references, video links, case studies, a combination of video/visual material and articles, clinical forms and PowerPoint lecture notes.

**Component one: Self-paced work book**

The self-paced workbook that supported the self-guided learning package was well received. The majority of therapists “agreed” or “strongly agreed” that that the workbook activities assisted their learning and knowledge of prescription, fitting and monitoring of compression garments. The weighted average was slightly less than the self-guided learning package, with the participants marginally preferring the self-guided learning package.

The therapists rated each of the workbook modules for their relevance. All of the therapists rated each of the modules as the highest rating, “extremely relevant” or the second highest rating, “very relevant.” The weighted average was highest from Module 4 to Module 1 in descending order. This was a similar pattern to the self-guided learning package, where the participants rated the learning opportunities that related to the application of knowledge and skills (i.e. Module 4) as the most relevant. It is considered that as with the self-guided learning package this reflected the value of resources and support that enabled application of therapist knowledge in the clinical setting.

**PowerPoints**

The majority of participants “agreed” or “strongly agreed” that the PowerPoints assisted their learning and knowledge. More than half the participants felt that it would have been useful to include audio on the PowerPoint presentations.

A thematic summary of general comments relating to the aspects of the education package that could have been improved or did not facilitate the learning related to five themes, the workload was too heavy, the PowerPoints would have been better with audio support, some of the material was repeated (i.e. between PowerPoints or self-guided learning material) and that some of the links did not work from the internet (from their home computers), only from QHEPS accessed via a QH computer. To address these issues it is recommended that construction components of the education package are addressed and include:

- Sign posts of learning are added to inform participants of additional learning material that is of interest rather than mandatory material, this way participants can be more selective about their choice of learning.
- Discussion points are added around the time to complete the package.
- A learning styles questionnaire is added to the learning package so that participants can choose the learning style material that they prefer i.e. PowerPoint or self-guided workbook (or both).
- Audio is added to the PowerPoints for each of the modules one to four.
- Resources to be placed on a learning platform such as iLearn to enable access from home computers. This method will also allow access by other jurisdictions outside of Queensland Health. This method would be worthy of further evaluation by non-Queensland Health therapists that complete the package.

**Education package: 8 month follow-up**

Eight months after completing the trial, the investigator followed up with therapists to evaluate the learning opportunities that were preferred by participants in the trial. The therapists ranked the usefulness of the resources and reported which resources they referred to the most often during the whole trial. From highest to lowest they referred to the self-paced guided learning package (particularly modules three and four), the workbook notes, the PowerPoints, the Procedure, the Patient Information and the Guideline.

Videoconference (VC) was reported to be the most useful type of coaching support, followed by telephone and then written support. VC coaching provided the opportunity for instantaneous feedback regarding the application of clinical skills.

See Appendix H (Summary of evaluation of education package) for more information.

**Summary**

Generalist physiotherapists and occupational therapists working in rural and urban facilities completed and evaluated the online education package about the pathophysiology, assessment and management of lymphoedema and compression garment prescription, monitoring and care. Telehealth coaching sessions were provided by lymphoedema therapists and included measuring a limb and application of a garment. The education package supported a working relationship between the lymphoedema therapist and generalist therapist within the boundaries outlined in the education package. Clinical accountability for patient treatment and garment prescription remained with the prescribing therapist. Feedback from the occupational therapists and physiotherapists indicated increased participant knowledge, skills and confidence and that the education program was considered acceptable as part of an independent learning process. It has been a critical factor in the development and

implementation of a sustainable service model. The content in the education package was pitched at the correct level and was more highly valued as the modules became more complex. Some therapists reported that the workload was heavy but this may have been related to the provision of information in multiple formats to support different learning styles. The baseline knowledge of therapists may also have been variable and this may explain the high workload reported by some therapists. Some of the construction components require adjustment, but these issues are easily addressed and specific recommendations have been provided.

## 4.4 Service model trial

### 4.4.1 Service provision

Implementation and evaluation of the service model trial was undertaken as a part of quality control process. Five HHSs (ten facilities) contributed data for the trial. The majority of the support came from regional and rural centres, including Cairns and Hinterland, with Cairns Hospital providing support to Atherton; Central Queensland with Gladstone providing support to Emerald, Mackay with Mackay providing support to Proserpine, Wide Bay with Bundaberg providing support to Gayndah with one site providing support from regional centre to regional centre i.e. Sunshine Coast HHS with Nambour providing support to Caloundra.

The trial included an analysis of garment costs and provision and this has been benchmarked against the HHS cost data.

**Table 1: Comparison of summary Trial site data to HHS Cost Analysis Data**

| Provision of Compression Garments | | |
|---|---|---|
| | **Trial Data** | **HHS Cost Analysis Data** |
| Total cost of garments | $6,212.43 | $503,337 |
| Range of Cost | $26 to $4900 | $13 to $910 |
| Total no of garments | 58 | 2,224 |
| Total no of patients | 69 | Not obtained |
| Average no. of garments per patient | 1.2 | Not obtained |
| Average cost of garments | $90 | $226 |
| Total Cost of RTW garments | $4,472.94 | $169,156 |
| Total number of RTW garments | 50 | 1 486 |
| Average cost of RTW garments | $89 | $113 |
| % cost of RTW garments of total costs | 75% | 33% |
| % number of RTW garments of all garments | 72% | 67% |
| Total cost of custom made garments | $1,740 | $333,742 |
| Total number of custom made garments | 8 | 737 |
| Average cost of custom made garments | $217 | $453 |
| % Cost of custom made garments of total costs | 18% | 67% |
| % number of custom made garments | 12% | 33% |

A total of 69 referrals were received from the trial sites and they were all from within Queensland Health. In order of the number of referrals seen by facility site, Sunshine Coast HHS (Caloundra) reported half of the referrals, followed by Central Queensland HHS (Emerald) with 30% of referrals, Mackay HHS (Proserpine) with 12% of referrals and the remainder from Wide Bay (Gayndah) and Cairns (Atherton). All patients were Medicare eligible and most patients were Healthcare cardholders.

There were 58 garments provided during the trial, averaging 1.12 compression garments per patient. The actual cost of garments to the HHS in these facilities could have been greater should all patients have received their entitlement under the Guideline of 2 garments every six months. These patients in the mild to moderate category with stabilised lymphoedema were likely to have been “light” users of garments.

The total cost to provide garments for eligible patients with malignancy related lymphoedema for all trial facilities was $6212. The cost of compression garments ranged from $26 to $490 with an average cost of $90 per garment. The cost of ready to wear garments was $4472 with an average cost of $89. The cost of custom made garments was $1739 with an average cost of $217.

There were more ready to wear garments, (72%), provided than custom made (12%) with 16% providing no response in this category. Despite lower prescription of custom garments they cost more to provide, accounting for 67% of the total expenditure.

The prescription error data was reviewed retrospectively and was 1% of all garments and is lower than the Statewide percentage (2.83%) and may be due to the lower complexity of the patients in the trial.

The trial and HHS cost analysis were compared. The HHS cost analysis included costs for all patients and included those with stabilised and non-stabilised lymphoedema. The trial costs only related to patients with stabilised malignancy related lymphoedema. The total average cost of all garments, ready to wear and custom garments, for the trial patients was significantly less than the HHS cost analysis data. This likely reflects the complexity of the patients seen i.e. the trial data criteria was stable mild to moderate lymphoedema. Complex cases that required complex and expensive custom garments were referred to the tertiary centres. Both trial and non-trial sites provided more ready to wear garments than custom, but the non-trial sites average cost of custom garments was less expensive, once again probably reflecting the complexity of patients seen in the trial site i.e. the trial data criteria was mild to moderate lymphoedema and did not require as many custom made garments.

**Support from lymphedema therapist**

The trial has provided a better understanding of the extent and frequency of support required from the lymphoedema therapist to the generalist occupational therapists and physiotherapists. On average generalist therapists saw patients three times with support and then practiced independently. With a net reduction in the demand on the lymphoedema service once the generalist occupational therapist and physiotherapist developed the capability. The lymphoedema therapist provided videoconference support about 40% of the consultation time and telephone support 15% of the consultation time. The remaining time was direct face-to-face consultation between the generalist therapists and the patient without the lymphoedema therapist. The time in minutes for lymphoedema therapist support varied, 30% of therapists had ten minutes

support for each of the first three sessions. 26% of the generalist therapists had thirty minutes support for each of the first three sessions and 29% of the generalist therapists had sixty minutes support for the first, second and third telehealth support sessions.

**Trial sites that did not collect data**

Three of the generalist physiotherapist/occupational therapist sites were unable to collect data for the trial. The reason varied and is described below:

Patient profile: the trial selection criterion was based on referral of mild to moderate category of lymphoedema. Some of the trial site primary referrals were in the moderate to severe category and so referral back to the cancer service was required.

Consent: tor some of the patients, participation/consent to participate in the trial was “too much” in addition to their care for a cancer condition and they declined to participate in the trial. These patients did receive treatment at their local service. This data was not captured as part of the trial, but was captured in the HHS data cost component.

Low rates: one service did not receive any referrals from the tertiary centre as there were no patients with lymphoedema in the geographical location. Further exploration is warranted as some primary care nurses have anecdotally reported low presentation of malignancy related lymphoedema in indigenous communities (represented by TCHHS in the trial who volunteered but did not have trial clients participate), and there may be cultural explanations i.e. preference not to seek health treatments by these populations.

See Appendix I (Trial data collection evaluation) for more information.

**Summary**

Queensland Health is able to improve access to services through workforce design particularly in rural and regional facilities. Trial site volunteers were not providing lymphoedema services prior to the trial. Patients would have been required to travel to the metropolitan centres. Through participation in the trial patient travel time, inconvenience and costs have subsequently decreased.

Prior to this trial the costs for garments were met at the tertiary centre not locally. The trial enabled a significant number of patients to be seen at the local centre and for local sites to develop a process and budgets to meet the payment of the garment. Sustainability measures have been put in place and it would be expected the trialled practices, networks and business model will be embedded within the local services at these trial sites.

The service model has applicability to non-malignancy related lymphoedema and other prescriptions for vascular garments. Eligible patients for this trial were those who had been diagnosed with malignancy related lymphoedema however twelve percent of the patients seen by the generalists were diagnosed with non-malignancy related lymphoedema. The generalist therapists also provided treatment to these patients and were assessed as being competent. This client group was not included in the service trial evaluation data.

The time and type of support provided by lymphoedema therapists indicates that the service model can reduce demand on their services once the generalist physiotherapist and occupational therapist met the compression garment selection fitting and

monitoring capabilities. The trial data has provided a baseline indication for time allocation by lymphoedema therapists to support occupational therapists and physiotherapists to provide compression garments for malignancy related lymphoedema.

### 4.4.2 Patient efficacy

Early in the project, stakeholders had expressed concern around the capability of generalist physiotherapists and occupational therapists to provide compression garments. A literature search was unable to find evidence of clinical tools that were able to measure or determine the safe clinical application of compression garments. Most of the literature describing evaluation tools relating to compression garments was associated with quality of life measures to assess the impact of oedema on individual social and emotional health (Keeley, 2010). To address the concerns regarding generalist therapist capability to provide garments, reference group members who were experienced lymphoedema therapists developed two patient safety scales. The first, the Compression Garment Therapist Evaluation is a clinical tool administered at the time of fit and finalised at the review session by the generalist physiotherapist and occupational therapist to support decision-making with regard to managing clinical risk. As well the Compression Garment Patient Evaluation was developed as a patient satisfaction measure. It was administered via telephone by the occupational therapist or physiotherapist one week after the initial compression garment fit.

### 4.4.3 Patient safety

**Patient Safety: Compression Garment Therapist Evaluation**

The Compression Garment Therapist Evaluation was designed to assist the reasoning process for the physiotherapists and occupational therapists, to frame supervision discussions and to provide remediation to the risk. The evaluation was reassuring that generalist occupational therapists and physiotherapists can provide a safe compression garment service as part of their scope of practice. The evaluations established that for the majority of patients there were no problems with the compression garment fit, patients did not have discomfort, skin or tissue problems and the garments were effective in providing compression. Also it indicated that patients were capable of donning and doffing the garment.

The tool was useful in identifying adverse events and management strategies at the time of fit, including determining if the garment fit and on two occasions the therapist measured for a new garment or changed to a custom garment.

The tool was also utilised to detect adverse events and remediation at the time of review including concerns or issues with the garment, skin or texture changes and problems with compression.

The tool monitored the time between fit and review.  Most patients were reviewed within three weeks of the fit. Two patients were reviewed twelve weeks after the fit, and follow-up by the investigator found that this related to patient vacation scheduling.

A proportion of the therapists did not complete the remediation section of the form. It was unclear from this data if they discussed remedial actions with their mentor/supervisor or not, or if the therapist undertook remediation actions that were

correct or not. Additional follow up by the investigator of supervision records indicated that the adverse events were discussed but not recorded on the Compression garment therapist/patient evaluations.

There is a role for the coach to address risk factors with the expectation that the education package alone does not necessarily prepare the generalist occupational therapist and physiotherapists to effectively manage risk until they are signed off as competent by the lymphoedema therapist. The Compression Garment Therapist/Patient Evaluation is a way of challenging the therapist so that they can undertake compression garment selection, fitting and monitoring as a part of their scope of practice. It is recommended that the Compression Garment Therapist/Patient evaluations are provided to the coach for noting as a mandatory component of the training period and that this requirement and these evaluation tools are added to the education package material.

See Appendix J (Compression Garment Therapist Evaluation) for more information

**Patient Satisfaction: Compression Garment Patient Evaluation**

The Compression Garment Patient Evaluation was a way of matching patient satisfaction with the garment to clinical measures undertaken by the generalist occupational and physiotherapists. The patients were asked to rate on a Likert scale a number of safety measures. The tool enabled patients to describe issues that may have arisen outside the clinical setting. It was administered one week after the garment fit by the therapist phoning the patient at home.

Along all measurement domains satisfaction with the garments was significantly higher than the number of adverse events reported. A select number of patients did have difficulties with the compression garment prescribed by the therapist, but this did not differ from the reports of the therapist in the Compression Garment Therapist Evaluation. Issues reported (approximately 10% or less) by the patients included discomfort with the garment, skin irritation, swelling, reduced circulation and a different pain, sensation or discomfort. As previously reported the therapists were able to address these difficulties via education of the patient and observation of the limb, or prescription of a replacement garment. Although a minority of patients reported some initial difficulties with their new garments, all patients reported that their new garments were as good as or better than their previous garments. This might indicate that most issues described by patients were not uncommon when patients commence wearing a new garment and that the trial resulted in appropriate garment prescription and fitting.

There were marginally higher reports (between 10 and 19%) of difficulties relating to donning and doffing the garments. However no data is available to describe or explain these difficulties or to determine if the difficulties pre-date prescription of the current garment.

Based on the percentages the inter-rater identification between the Compression Garment Patient Evaluation and Compression Garment Therapist Evaluation was high.

All patients said that the garment was the same or better than garments that they had worn previously. A large proportion of the patients could not wear the garment for the prescribed timeframe and some studies do indicate that compression garment compliance can be low. There is very little published about this though it has been

reported at the Australasian Lymphology Association (ALA) conference (2010) that compliance varies with climate.

There were no opportunities for the therapist to document remediation activities on the form. It was unclear from the data how therapists addressed issues/adverse events reported by the patient at review. It is recommended that the Compression Garment Patient Evaluation is also provided to the supervisor for noting as a mandatory component of the training period and that this requirement and an updated evaluation tool that includes sections for remedial action is added to the education package material.

The Compression Garment Therapist and Patient Evaluation tools could be applicable to lymphoedema therapists, occupational therapists, physiotherapists and patients as a tool that could be used routinely for clinical use to assess the safe application of compression garments. The Compression Garment Therapist Evaluation has not been validated and it is recommended that further work be undertaken as an honours or masters project for a physiotherapist or occupational therapist.

See Appendix K (Compression garment patient evaluation) for more information.

### 4.4.4 Patient Satisfaction

Very high levels of patient satisfaction with the new service model were reported during the trial. There was strong agreement or agreement with the following dimensions of patient care:

- The therapist was able to answer questions regarding the patient's condition.
- The therapist could provide useful information about the patient condition.
- The therapist was able to assist the patient in finding out more information about their condition.
- The appointment with the therapist was able to increase patient awareness of their condition.
- The patient felt confident in their ability to manage their condition after the appointment.
- The therapist listened to and addressed their concerns.

Additional comments provided by the patients were:

- Very happy with the attention given in a positive manner.
- Was great to talk to both people.
- Very informative!
- I am very happy with the wonderful service provided. The therapists are considerate, caring and I cannot speak highly enough about them.
- Very satisfied service is wonderful and very helpful. The therapists are just lovely. Thank you.
- Overall very satisfied.
- Very happy with my therapist and her ability to help me.
- So amazing and very professional. I hope the service continues, because I thank you for it.

See Appendix L (Patient Satisfaction) for more information.

**Summary**

The findings from the combined safety and satisfaction outcome analysis indicates that overall, generalist physiotherapists and occupational therapists demonstrated improvements in their knowledge and clinical capabilities as a result of the service model trial and were able to undertake remediation for identified clinical risk through the coaching process. Consumers reported high levels of satisfaction with the services provided. It would be anticipated that these changes have a positive impact on patient care and patient outcomes and that generalist occupational therapists and physiotherapists provide a safe compression garment service as a part of their scope of practice. Some adjustments are required for the clinical risk tools to support better documentation by clinicians.

## 4.4.5 Telehealth

### 4.4.5.1 Telehealth processes and therapist review

Telehealth sessions were effective when utilising either the standard videoconferencing unit or MOVI at the recipient and hub end, although for the service model trial the standard unit was most frequently used as it was more readily available. A small proportion of the sites used MOVI either as an adaption strategy (the standard unit didn't serve the purpose) or for convenience i.e. the therapist was undertaking the consultation as a part of a mobile clinic. The study intended to compare the clinical interventions, assessments and reviews between a number of variables including upper and lower limb and ready to wear versus custom made garments. Due to the selection criteria of the trial, there were limited numbers of patients with complex presentations, limiting the data for lower limbs and custom made garment evaluation so these are not reported.

**Generalist occupational therapist/physiotherapist acceptability of service model**

The service model is effective as a clinical support mechanism in the assessment and management of lymphoedema. Generalist physiotherapists and occupational therapists agreed that the dual clinician videoconference provided enough clarity to demonstrate the tasks associated with assessment, fitting and evaluation of ready to wear compression garments. They were also highly satisfied with telehealth as a method to receive effective coaching from the lymphoedema therapist around these tasks.

The specific interventions of the task include assessment, fitting and monitoring of garments. There were no differences reported by generalist physiotherapists and occupational therapists around the clarity to demonstrate the different tasks or to receive effective coaching from the lymphoedema therapists relating to the specifics of the clinical intervention, with assessment fitting and evaluation all receiving positive evaluations. In one instance there were poor clarity issues relating to connection problems but this represented less than 1% of all consultations during the trial.

There were high levels of satisfaction with the videoconferencing sessions and generalist occupational therapists and physiotherapists felt confident in providing compression garments selection, fitting and monitoring after the videoconference support from the lymphoedema therapist. In the majority of instances they were able to easily coordinate patient link up times and resolve technical difficulties with the videoconference equipment.

See Appendix M (Generalist Therapist Telehealth Evaluation) for more information.

**Lymphoedema therapist acceptability of the service model**

The positive evaluations by the lymphoedema therapists regarding capacity to coach provide feedback and evaluate the capability of generalist physiotherapists and occupational therapists to select, provide and monitor compression garments are compelling. In practical terms, the lymphoedema therapist was able to assess the physiotherapist/ occupational therapist clinical capabilities via telehealth to undertake the following tasks:

- Provide information and education to patients about lymphoedema, including risk reduction guidelines.
- Educate patients in aspects of self-management including advice on positioning, elevation and movement and skin care including prevention and management of cellulitis.
- Provide compression garment therapy for stable lymphoedema including the selection, fitting and monitoring of compression garments to suit individual needs.
- Direct patients to the most appropriate lymphoedema services including referral to lymphoedema therapists and tertiary services when required.

The evaluations indicated that videoconferencing was a suitable modality to allow lymphoedema therapists to accurately assess all components of the tasks performed by the generalist therapists. The tasks - assessment, fitting and evaluation of compression garments- were all similarly rated.

There were high levels of satisfaction with the videoconferencing sessions and lymphoedema therapists felt confident in supporting physiotherapists and occupational therapists via this modality. In the majority of instances they were able to easily coordinate patient link up times and resolve technical difficulties with the videoconference equipment.

See Appendix N (Lymphodoema Therapist Telehealth Evaluation) for more information.

**Telehealth adaptation**

There were high levels of inter-rater agreement between the hub (lymphoedema therapist) and recipient site (physiotherapist/occupational therapist). The views by the recipient site clinicians that they could demonstrate the tasks were matched by the hub site clinicians' views that they could assess the tasks. Both the hub and recipient sites agreed that there was enough clarity to provide and receive coaching support using the dual clinician videoconferencing model.

There were a small number of videoconference sessions where therapists reported difficulty with clarity and the ability to provide coaching. They were able to find solutions to these issues and adapt the tasks. Thematic categorisation was applied to the qualitative data and two themes were identified that were consistent with methods to adapt clinical practice identified in the Allied Health Telehealth Capacity Building: Scoping Project (Queensland Health, 2015).

The methods used to adapt compression garment assessment; fitting and evaluation for telehealth delivery are presented in summary below:

**Methods used to adapt compression garment services for telehealth**

| Indications | Solutions and adaptations to the task |
|---|---|
| **Technological issues** | |
| Reduced visual and audio quality with the standard videoconference system impacting on the effectiveness to demonstrate and assess the tasks. | Bandwidth/image chain augmentation at the HHS. |
| **Task adaption issues** | |
| Components of the tasks requiring modification | Treatment equipment modification<br>Treatment facility changes including increasing room size<br>Telehealth equipment changes. including use of MOVI where facility changes are not possible<br>Treatment equipment modification changing to bedside table rather than a plinth |

### Technology solutions

There were two sessions where issues were reported with the (VC) technology. There were poor quality images and the videoconference did not allow enough clarity to demonstrate or assess the task. The local HHS was able to address the issue, liaising with Integrated Telecoms to increase bandwidth/chain augmentation. This is a solution that could be applied to other sites with this issue.

### Task adaptation solutions

The task's component activities can be delivered safely and effectively via telehealth. Adaption of some of the components was required during the trial and these did not significantly impact on the service quality. Treatment facility changes were required when there was a large mobile Videoconference Unit and a small clinical room at the recipient end. This combination made it difficult to move the VC unit around and allow a full view of the patient to demonstrate the task by the recipient clinician and assess it by the lymphoedema therapist. Trial sites adapted the task by moving large standard VC equipment to a larger treatment room. Or, if it was not possible to find a larger room, they changed the VC equipment to a small laptop with attached MOVI that could be easily moved to improve the visual field. It was also difficult to demonstrate/assess the task when there was a large plinth in a small room. Modifications of the treatment equipment using a bedside table to support the limb, rather than a plinth resolved this issue.

It is recommended that the task adaptations applied during the trial for telehealth delivery are added to the education package.

### Benefits of the service model

At the commencement of the project it was apparent that generalist occupational therapists and physiotherapists were not familiar with, or did not have recency of knowledge and skills in the methods available to provide compression garments e.g. undertake limb measurements. By the end of the trial, the generalist therapists were able to move from telehealth supported patient care from the lymphoedema therapist, to direct face-to face care with the patient. This transition required assessment of capability by the lymphoedema therapist. Demonstration of knowledge, skills and therapeutic approach using the clinical capability checklist demonstrated that generalist

physiotherapists and occupational therapists could safely and accurately provide compression garments and that this could be assessed via telehealth by the lymphoedema therapist.

**Summary**

The service model was positively evaluated and supports changes that fit with the Ministerial Taskforce recommendations to enable the delivery of patient-centred and cost-effective services through allied health professionals optimising their scope of practice. The service model improved access to services through telehealth, enabled generalist physiotherapists and occupational therapists in rural, regional and urban areas to practice to increase the tasks included within their scope of practice and improved capacity for prioritisation of services provided by lymphoedema therapists enabling them to focus on patients with more complex care needs. Lymphoedema therapists who provided telehealth coaching reported that the model supported capability based training, clinical skill development and evaluation. Local site issues such as telehealth band width and modifications required to adapt the task for telehealth demonstration by the physiotherapists/ occupational therapists were resolved during the project. The service model (with modification to the education package) could be applied to other professions to provide garments e.g. nursing, podiatry and medicine or other jurisdictions e.g. private providers, non-government organisations, inter-state health agencies.

# 5. Project performance and closure

## 5.1 Project performance evaluation

The project was completed within agreed timeframes and resource allocation.

## 5.2 Future work

**Addition of early intervention recognition for lymphoedema**

The education program was well received and favourably evaluated. Community groups in Queensland continue to lobby for early intervention education programs to help consumers identify lymphoedema early and seek treatment. Within Queensland Health best practice guidelines suggest that this education is provided within the cancer service shortly after the time of surgery (Queensland Health, 2014). Consumers in the community have indicated that this can be a stressful time during their treatment period and that education provision at that point of care may not allow them to absorb the full impact of the information. The Health Education and Training Institute (HETI), New South Wales Health, have developed education programs to train allied health professionals to provide early education for lymphoedema within the community during non-cancer or post cancer treatment episodes (Steele, 2015). Further exploration is recommended to look at sharing the HETI Lymphoedema Early Intervention Package, with the view of adding an early intervention component to the current education package.

**Future research**

The project methodology precluded definitive efficiency and cost analysis of the trial. There is enough data in the project to undertake this body of work utilising the following variables: health care purchasing framework, travel costs, time provided by recipient end therapists, time provided by provider end therapists and time freed up at the provider end to see other clients at the tertiary centre.

**Compression garment evaluations**

The Compression Garment Therapist Evaluation and Compression Garment Patient Evaluation are clinical tools that could be used routinely for clinical use to assess the safe application of compression garments. Neither of the tools have been validated. Given the popularity of the clinical tools provided within the education package it is recommended that further work could be undertaken as a part of an Honours or Masters thesis to confirm reliability and validity of the checklist.

## 5.3 Dissemination strategy

A number of methods will be used to disseminate these findings at a State, National and International level:

- Report: The results from the study will be used to develop a Communication/Implementation Plan. This will be placed on the QHEPS and internet sites. A launch reporting the results and promoting the service model will be undertaken as a Statewide Videoconference.

- Presentation: The results will be presented at National conferences.
- Publications: A number of publications should emerge from the project.
- The results will be shared with the Australasian Lymphology Association, Lymphoedema Association of Queensland, Australian Physiotherapy Association of Australia and Occupational Therapy Australia.

## 5.4 Recommendations

**Recommendation 1: The Guideline should continue to be implemented in HHSs and its scope examined for possible expansion to other clinical categories.**

The outcomes of the project support the continued implementation of the Guideline and continued embedding of supporting processes in HHSs.

The potential service impacts and costs associated with expansion to other clinical groups (e.g. non-cancer related lymphoedema, oedema,) should be examined to inform engagement between the Queensland Department of Health (QDOH) and HHSs on this issue.

Ongoing monitoring of the Guideline implementation and cost will require integration of this information into data collection systems as the data collection methodology was time intensive for clinicians and for central coordination by AHPOQ.

HHS data sets, raw data and reporting templates from the project costing analysis shall be made available to HHSs to allow local implications for garment costs to be considered, for future service planning activities and capacity to expand the Guideline.

**Recommendation 2: Compression garment selection, fitting and monitoring should be embedded in service and workforce models for occupational therapists and physiotherapists who have completed the education and training program.**

The service model has continued implementation beyond the term of the trial sites in the Sunshine Coast HHS, Mackay HHS, Central Queensland HHS, Wide Bay HHS and Cairns HHS.

HHSs should be encouraged to commence or continue formal planning and activities to embed the service model in their local facilities and:

- identify generalist physiotherapists/occupational therapists to complete the education package,
- develop/improve networks with lymphoedema services and qualified lymphoedema therapists for telehealth-supported compression garment selection fitting and monitoring, and
- include the service model in orientation and induction training, through professional support and development activities, and the performance appraisal process.

Statewide services/networks should support service planning activities to embed the service model including:

- The Statewide Allied Health Cancer Care Clinical Reference Group including the “Compression Garment Service Model: Sustainable Implementation” as a standing agenda item establishing linkages with HHS cancer care champions and clinicians.

- The Statewide Physiotherapist (DOPSQ: Directors of Physiotherapy Queensland) and Occupational Therapist (QPLOT: QLD professional leaders of OT) clinical leads and educators promoting and supporting the model through their networks.
- Senior Lymphoedema Therapists expanding their network to include interested physiotherapists/occupational therapists and lymphoedema therapists promoting relevant ongoing clinical education and professional support activities to the network of physiotherapists and occupational therapists who undertake the Compression Garment Selection Fitting and Monitoring Education Package.

**Recommendation 3: The Education program should be revised in line with evaluation findings and continue to be available to support the service model.**

It is proposed that:

- the Compression garment education package reside on iLearn to enhance access.
- select resources within the education package (detailed in section 4.3 of the report) are improved.
- opportunities for inter-jurisdictional sharing of resources (the HETI Lymphoedema early intervention package may compliment the Compression garment selection, fitting and monitoring education resource (the education resource) and interest from other jurisdictions to utilise the Queensland Health education package are explored
- the education package is embedded into professional training pathways:
  - inclusion in the HP3 to HP4 Rural and Remote Pathway and the Rural and Remote Generalist Pathway.
  - discussion with the Australasian Lymphology Association (ALA) to investigate options for the education package to be an endorsed training component in the ALA training pathway.
  - physiotherapy and occupational therapy professional associations are approached to consider recognising the education program as contributing towards professional development points.

The education package (with modifications) could be applied to other professions to provide garments e.g. nursing, podiatry and medicine or other jurisdictions e.g. private providers, non-government organisations, inter-state health agencies

**Recommendation 4: Supporting resources, including the Guideline, Procedure and Order From, should be revised and published in line with the outcomes of the project.**

- The Guideline and Procedure should be revised to reflect the new service model.
- The Order Form should be updated and maintained to reflect changes in the standing order arrangement.

**Recommendation 5: A comprehensive communication/implementation plan should be developed to disseminate and communicate project outcomes.**

The development of such a plan should be designed to support sustainability of the service model.

# Conclusion

The Guideline has allowed client's meeting eligibility criteria[2] 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 Lymphoedema 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.

**Limitations**

- 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 e.g. Metro South.

[2] Eligibility criteria are: malignancy related lymphoedema; a clinical prescription for a garment; a current medical referral; aged 16 years or over; hold a Centrelink Pensioner Card or Centrelink Health Care Card ; permanent resident of Queensland; Medicare eligible

- Many private providers who were entitled to provide garments to eligible patients may not have been aware of the Guideline.