

Introduction

- Over 316,950 new cases of invasive breast cancer will be diagnosed in women, with 59,080 new noninvasive cases of ductal carcinoma in situ (DCIS).^{1,2}
- Breast Cancer related lymphedema (BCRL) is a blockage in the one-way lymphatic transport system from physical trauma to the affected area caused by surgery or radiation.³
- Manual Lymphatic Drainage (MLD) is a gentle technique to set up the lymphatic system for decongestion and it is an integral part of Complete Decongestive Therapy (CDT).⁴
- BCRL is one of the most serious post-operative complications of breast cancer treatment, which may occur weeks to years post- surgery. BCRL has a dramatic negative impact on a patient's quality of life, causing physical, social, and psychological problems.⁵
- Limitations in study design and lack of patient education have made it difficult to capture the effectiveness of CDT.

Purpose/Aims

Evidence indicates that manual lymph drainage (MLD) alone cannot adequately address the needs of individuals with breast cancer-related lymphedema (BCRL).

The aims of this capstone experience and project were:

1. To identify the needs of individuals with BCRL and explore, from an occupational lens, strategies to support breast cancer survivors, including the feasibility of a supplemental telehealth program.
2. To complete advanced clinical training and certification in Complete Decongestive Therapy (CDT) and physical agent modalities (PAM) to enhance clinical expertise and ensure the highest quality, evidence-based interventions and education.

Project Description

This capstone project was deeply personal as my mother's resilience inspired it with her breast cancer journey. Lympha Villa is aligned with promoting lymphatic health and well-being by supporting individuals who have undergone post-cancer treatment and/or post-operative procedures related to cancer, especially breast cancer.

This project aligns with Hawai'i Pacific University's OTD program core values with demonstration of leadership (**Aloha**), responsibility to the occupational therapy profession and enhancing practice for the best interest of the community (**Kuleana, Pono**), supporting clients with BCRL and enhancing their quality of life (**Kokua**), and interprofessional collaboration (**Laulima**).

References/Acknowledgements



Special thanks to Martina Ricabar, MS, for their continued support & encouragement with this capstone, Alex Villanueva, OT, CLT, at Lympha Villa for their mentorship and expertise throughout this project, and HPU Faculty Mentor, Dr. Jana Cason for continued guidance.

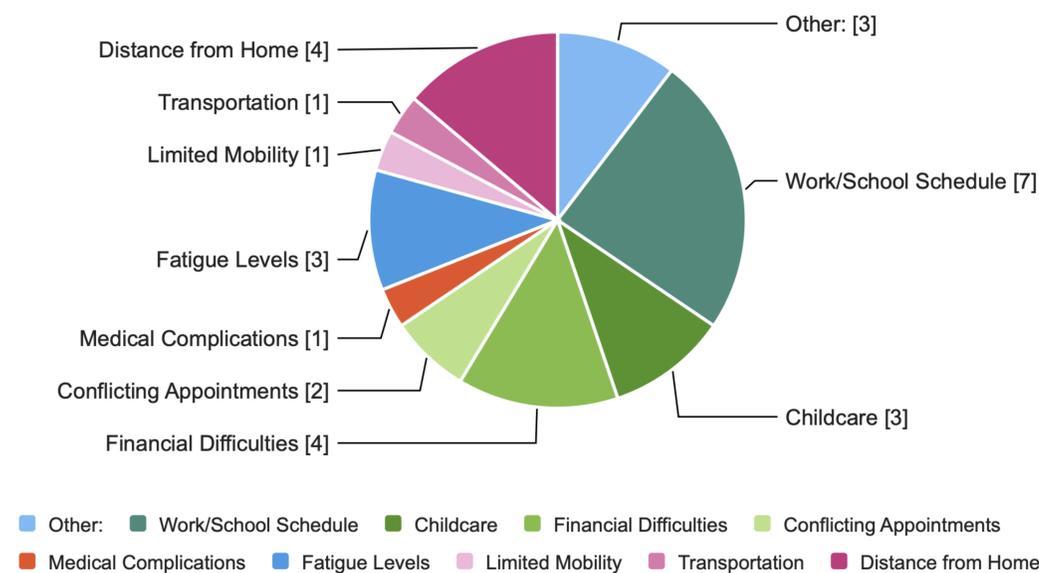
Methods

- A comprehensive literature review and needs assessment guided the project.
- **Distribution and analysis of an electronic survey to evaluate feasibility and interest in a supplemental telehealth program:** Eligibility criteria consisted of individuals with a history of breast cancer who had completed cancer treatment or were in remission. The survey launched on Google Forms. Due to technical issues, the survey transitioned to Qualtrics (data from both platforms were analyzed). Participants were recruited through a local cancer support group, an outpatient lymphedema clinic, and social media platforms (Instagram and Facebook) using direct links and QR codes.
- **Data analysis** included descriptive statistics with the frequency of survey responses.

Results/Outcomes

- **Survey Participant Profile (n=26):** Most participants (20%) had invasive, hormone receptor–positive (HR+) breast cancer, with radiation therapy & surgical interventions (dissection/reconstruction), leading to lymphedema management through MLD/CDT
- Participant Recommendations:
1. Individualized supplemental programs should be introduced Pre-Op or within the first 2 weeks Post-Op.
 2. Car seat belt modifications should be considered due to hypersensitivity at the procedure site.
 3. Health/Medication management support indicated post-survey, however, not initially addressed in questionnaire.
 4. Interest in supplemental telehealth programming related to lymphedema care.
 5. Importance of overcoming challenges with ADLs and life roles, and energy conservation.

Figure 1
Barriers to Accessing Lymphedema Clinic (n=15)



Prioritized training interest of survey participants based on survey results (n=26)

1. **Lymphedema Care** (signs & symptoms, compression garments & schedule, compression bandaging, MLD, skin integrity & infection prevention, surgical complications, axillary web syndrome (Cording), lifestyle adjustments, lymphedema care)
2. **Energy Conservation** (optimizing desk/office for work/study, modifying daily schedule around fatigue levels, task simplification techniques for self-care, increasing activity tolerance with exercise, communicating to others when less energetic)
3. **Roles & Responsibilities** (work & job performance, financial management, school/studying, socializing with friends, caring for others, child-rearing, taking care of pet(s), home management, cooking and food/meal prep, laundry)
4. **ADLs** (donning compression garments, fitting into clothes or shoes, donning socks or shoes, bathing or showering, toileting, hygiene & personal care, eating/drinking, sexual activity & intimacy, religion or spirituality, sleep)

Capstone Deliverables:

- **Advocacy:** A collaborative presentation with Lympha Villa occurred at the Occupational Therapy Association of California (OTAC) Annual Conference in November 2025.
- **MLD certification:** Obtained at Norton School of Lymphatic Therapy in Henderson, NV, reflecting 135 hours of advanced training & satisfactory assessment of knowledge and refined hands-on skills.
- **PAM certification:** Obtained at Saginaw Valley State University via 12 online learning modules, 2-day hands-on workshop & comprehensive exam.

Discussion

The rate of invasive breast cancer is increasing annually, and OTs have an important role in *Pre-Operative Evaluation in the Lymphedema Surveillance Protocol* for early intervention and education. Through a holistic approach focused on enhancing occupational performance, role competence, and quality of life, OT practitioners support the BCRL population in all stages of recovery. Future programs should explore the use of supplemental telehealth programming for the BCRL population based on their expressed areas of interest.