

## CLINICAL HIGHLIGHTS

# Flexitouch® System Reduces Limb Volume, Improves Quality of Life, and Demonstrates High Levels of Patient Adherence and Satisfaction

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Original Article: Home-Based Lymphedema Treatment in Patients with Cancer-Related Lymphedema or Non-Cancer-Related Lymphedema  
Journal: *Oncology Nursing Forum*  
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### INTRODUCTION

Reducing treatment burden for patients is critical to improve self-care and patient outcomes. Consistent, effective self-care is considered the most important factor in successfully managing lymphedema. This study examines patient adherence to treatment with the Flexitouch system advanced pneumatic compression device for at-home lymphedema treatment. Clinical and quality of life outcomes were measured in relation to patient adherence.

### OBJECTIVE

To compare treatment protocol adherence, satisfaction, and changes in emotional and functional status between patients with cancer-related lymphedema and non-cancer-related lymphedema using the Flexitouch system for lymphedema self-care.

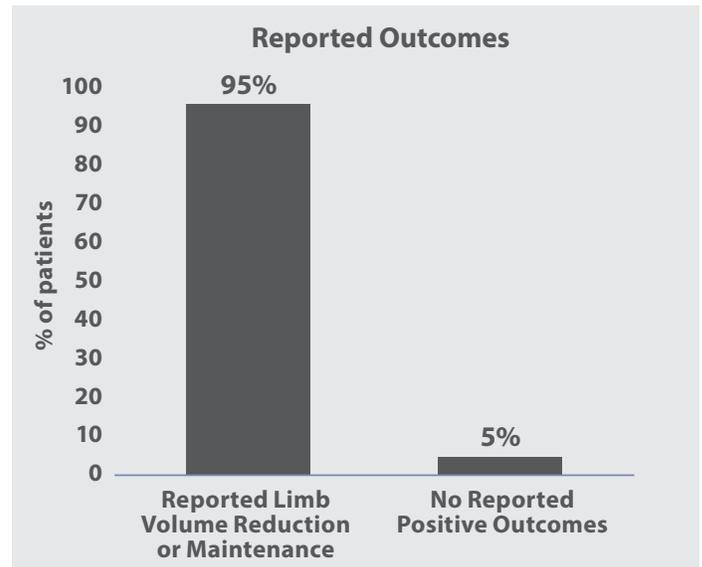
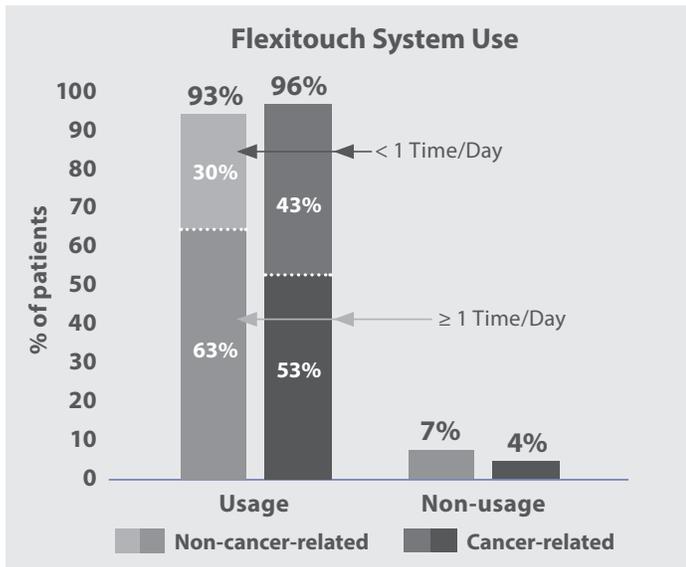
### METHODS

- Data was analyzed from 155 subjects in the U.S. with moderate to severe lymphedema:
  - 93 with cancer-related lymphedema
  - 42 with non-cancer-related lymphedema
  - 20 with primary lymphedema
- A pre-therapy short-form health survey was completed prior to Flexitouch system use:
  - Participants received in-home education about device use, safety, precautions, and prescribed therapy protocol
- A post-therapy survey was completed an average of 7 months after initiation of treatment (range 1–22 months) to assess patient usage, satisfaction, and perceived change in emotional and physical health.

### RESULTS

- Patients experienced statistically significant ( $P < 0.001$ ) improvements in physical health and emotional well-being after Flexitouch system use:
  - Physical health improvements included decreased interference from pain, improved physical functioning and fewer limitations in completing daily activities
  - Emotional well-being improvements included increased energy and ability to maintain social relationships, and decreased psychological distress (e.g., depression)
- 90% of patients reported satisfaction with the Flexitouch system:
  - 65% were extremely satisfied and 25% satisfied
- 95% of patients reported limb volume reduction or maintenance.
- 96% of cancer-related lymphedema patients and 93% of non-cancer-related lymphedema patients reported ongoing use of the Flexitouch system:
  - 63% of non-cancer patients used it one or more times per day, compared to 53% of cancer-related patients
- Patients reported a decrease in use of bandaging and self-MLD after initiation of Flexitouch treatment.

Self-Care Type	% Use Prior to Flexitouch	% Use After Flexitouch
Bandaging	54%	30%
Self-MLD	35%	22%



## DISCUSSION

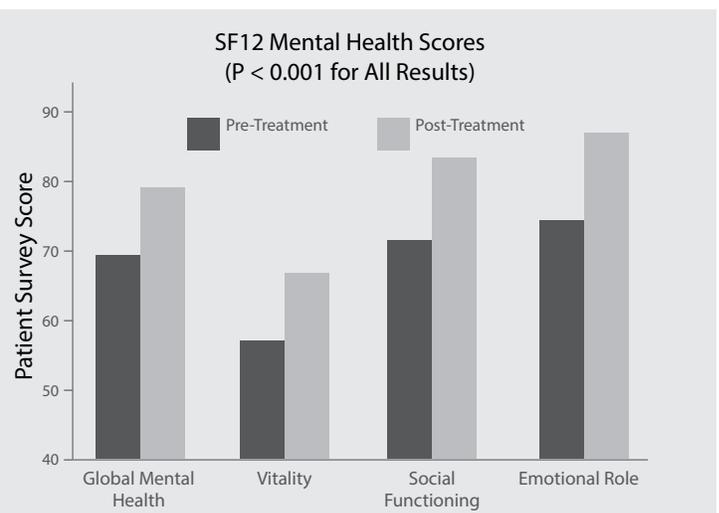
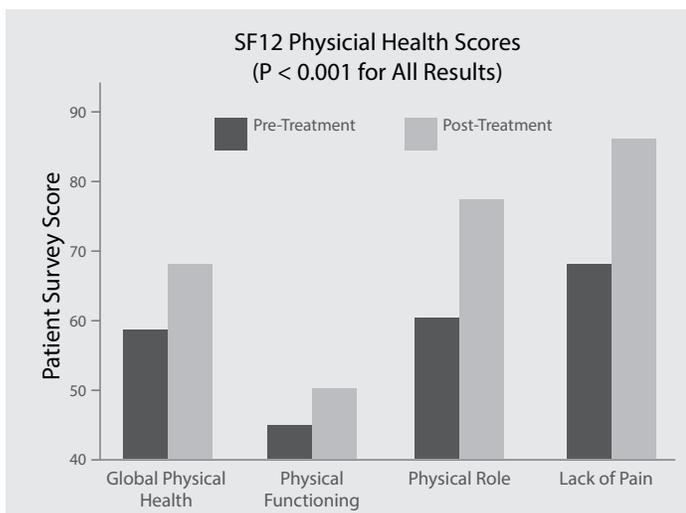
Both cancer and non-cancer-related lymphedema patient groups experienced significant improvements in all areas of physical and emotional health and perceived the therapy as beneficial. 93% of study participants were compliant with their prescribed therapy with the Flexitouch system — a significantly higher compliance rate than what has been reported with other lymphedema treatment modalities.

## CONCLUSION

The findings suggest that the Flexitouch system may be a beneficial at-home therapy option for patients with lymphedema based on positive effects on patient QoL (improvements in both physical and emotional health) and because of the high levels of patient satisfaction and adherence to therapy.

## KEY POINTS

- All patients experienced significant improvements in all areas of perceived physical and emotional health (QoL) between pre-therapy and post-therapy assessments
- 95% of patients reported a limb volume reduction or maintenance, which is the goal of at home self-management
- 90% of patients reported satisfaction with the Flexitouch system
- 93% of patients were compliant with prescribed therapy
  - This study gives healthcare providers confidence that patients will accept and use the Flexitouch system for at-home self-management



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