

Retrospective Review of Women Surgically Treated for Breast Cancer Demonstrate Shortfalls in Lymphedema Screening Practices

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Background

Lymphedema is a common complication of mastectomy and lumpectomy


 20-30% incidence

 Typically within 12 months of surgery

Lifestyle implications from uncontrolled lymphedema

- Lymphedema (LE) (gradual onset → debilitating severity)
- Range of Motion (ROM) deficits such as shoulder abduction and external rotation
- Increase in perceived pain and disability
- Negative affect

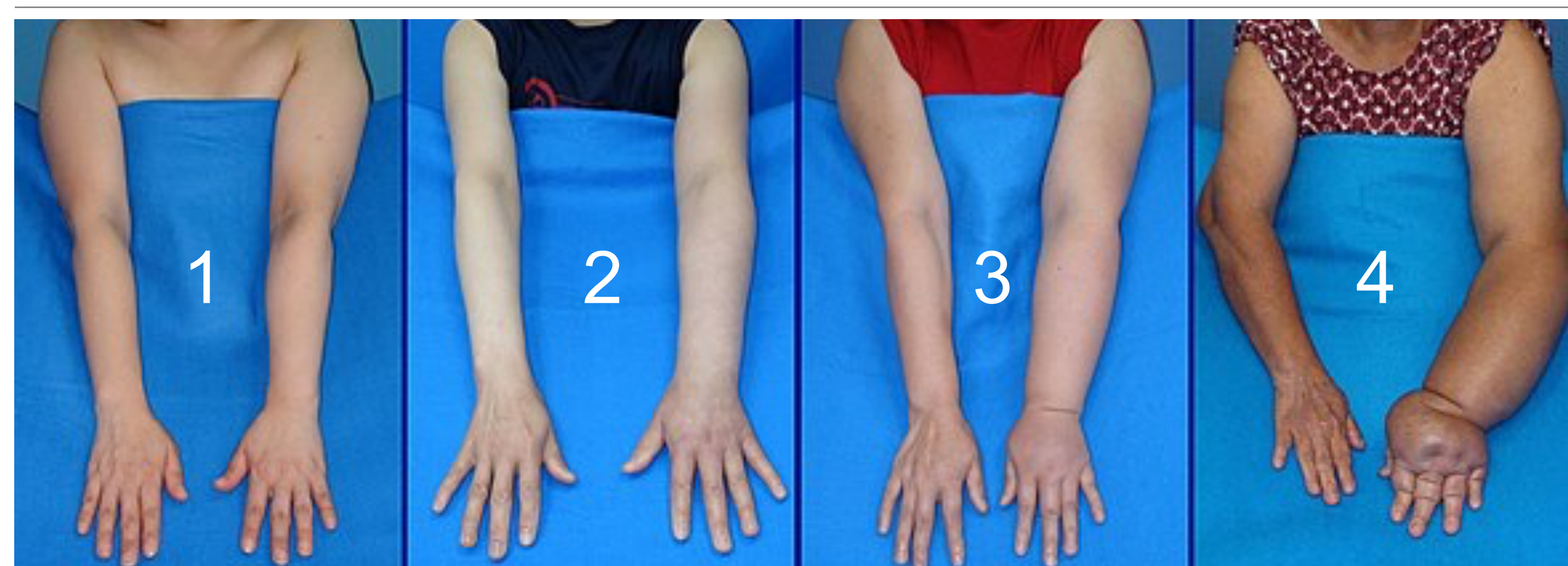
 ↑**290%**
Out-pt hospital costs

 ↑**167%**
Out of pocket costs

 ↑**131%**
Office co-pays

 ↑**122%**
Overall costs ≈ **\$2,340** per year

Lymphedema Stages



Stages 2-4 are irreversible

Purpose

Explore the screening practices for lymphedema and ROM deficits among women surgically treated for breast cancer to highlight gaps in published incidence data vs community data.

Methods

- Retrospective chart review of females surgically treated for breast cancer by an academic medical center from 2013-18
- Focused on the physician's encounter documentation, specifically post-operative arm morbidity complications
- 626 independent clinical encounters were reviewed, encompassing 106 unique patients

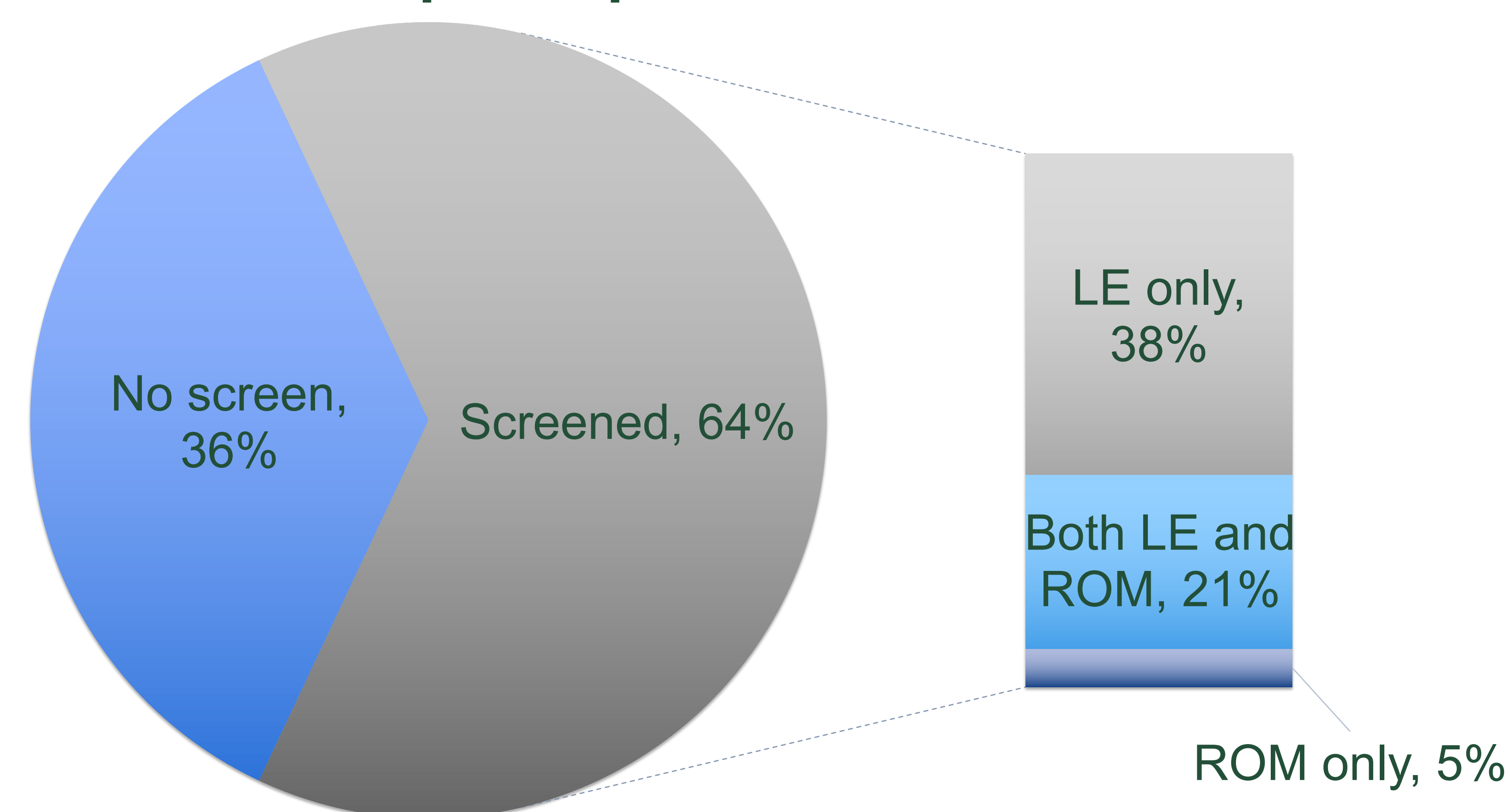
Results

Non-limb volume based screening practices underdiagnosed post-surgical lymphedema by 10-24%

■ LE underdiagnosis (10-24%) ■ LE Dx (10.4%)







Summary of screening via visual inspection and patient interviews of 626 post-operative clinical encounters



Best practice screening techniques utilized in <2% of encounters. Rather, visual inspection of the upper extremities with occasional directed patient questioning was utilized

Discussion

Potential Barriers

-  Limb volume measurements, while reliable, are time consuming
-  Lack of arm morbidity severity and screening awareness of surgeons
-  Assumption the patient will verbalize new problems
-  Assumption other providers will manage this such as PCP or oncologist

The tools to effectively detect arm morbidity are being significantly underutilized. The Knowledge to Action framework stresses the importance of identifying barriers and gaps in knowledge to facilitate behavior change. Research supports proactively prescribed facility-based physical therapy or regular prospective surveillance to mitigate the incidence and severity of secondary lymphedema and ROM deficits. Implementing evidence-based standardized screening would lead to better and earlier detection of arm morbidities, alleviation of its disease course through prophylactic rehabilitation, and reduced economic burden underdiagnosed patients face. Future research should focus on adapting and tailoring this insight to local context and circumstances.