



Early Detection of Lymphedema in Breast Cancer Patients With Lymph Node Biopsy

Quality Improvement Project

Michelle Kondracki MPT, CLT-LANA, Claire Edwards MD, FAS, Brittany Christopher PA-C, Margaret Navarro RN, MSN-BC, Shari Sitron LCSW, OSW-C, MPH

Breast cancer-related lymphedema affects approximately 21% of women who are diagnosed with breast cancer. Evidence shows that a prospective surveillance model for detecting early onset breast cancer-related lymphedema allows for early diagnosis ultimately decreasing the severity of disease, treatment time, and cost of treatment while improving overall quality of life. Monitoring for subclinical lymphedema is not standard practice in clinical settings.

Problem: Breast cancer patients undergoing node dissection were not consistently referred or scheduled for a pre-operative evaluation with a certified lymphedema therapist. During this evaluation, base line measurements are taken as well as providing the patient with education on early signs and symptoms of subclinical lymphedema.

Goal: 80% of all breast cancer patients having lymph node dissection will complete a pre-operative lymphedema assessment with a certified lymphedema therapist. Implement a consistent system in place for breast cancer patients to be referred for pre-operative education and monitoring.

Plan: Improve the existing process of lymphedema therapy referrals. Automatic referrals are now placed by the breast surgeon at the time of the patients pre-surgical consultation. Potential barriers for patients being seen are tracked. Barriers include no insurance, transportation and scheduling issues.

Conclusion: Once the referral system was implemented, the percentage of patients evaluated jumped from 28% to 73% over the course of the year.

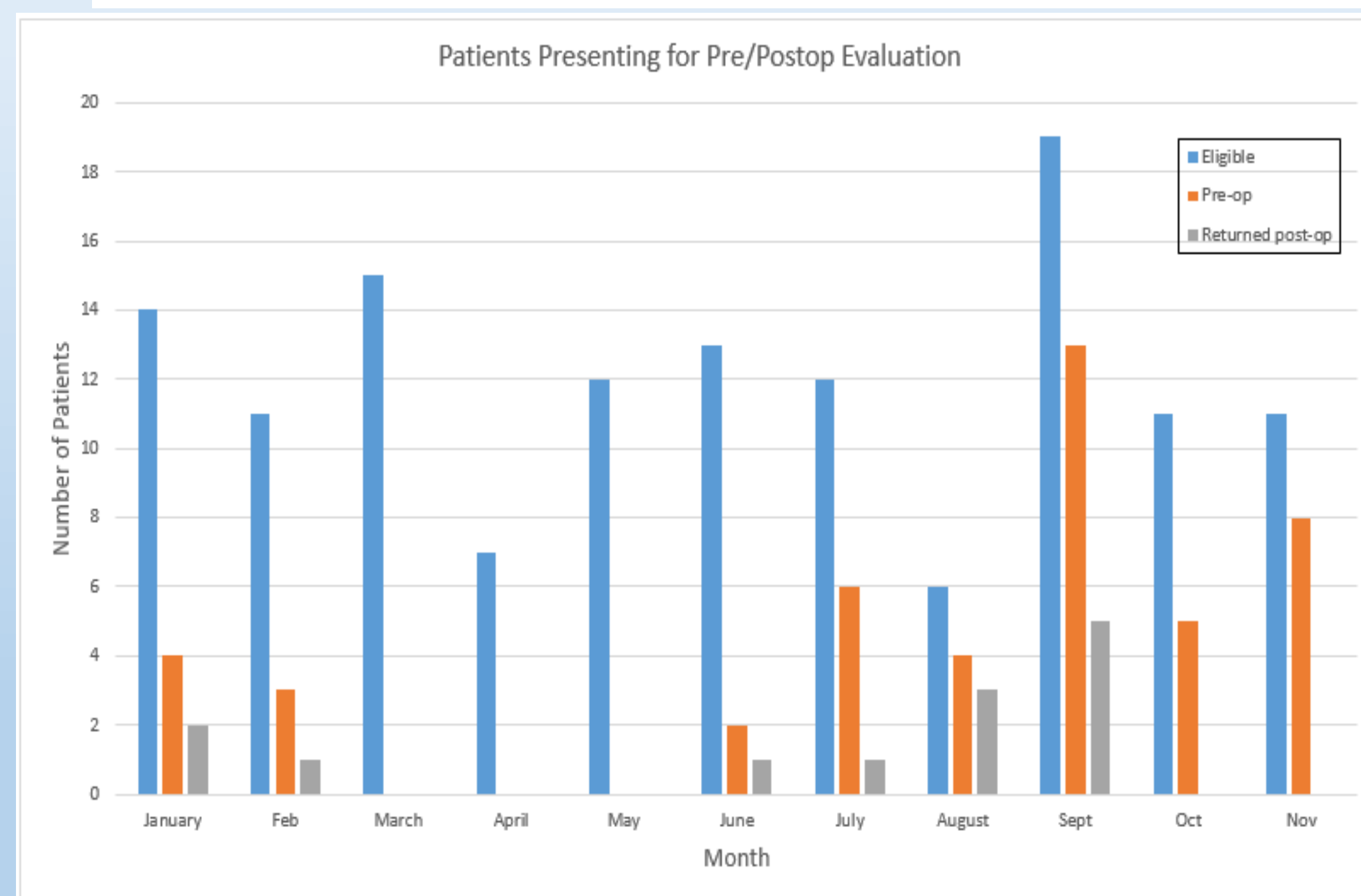


Figure 1: Number of patients eligible for a pre-op lymphedema eval, the number actually seen pre-op by a lymphedema therapist and the number of patients that returned to physical therapy after surgery for treatment for the year 2020.

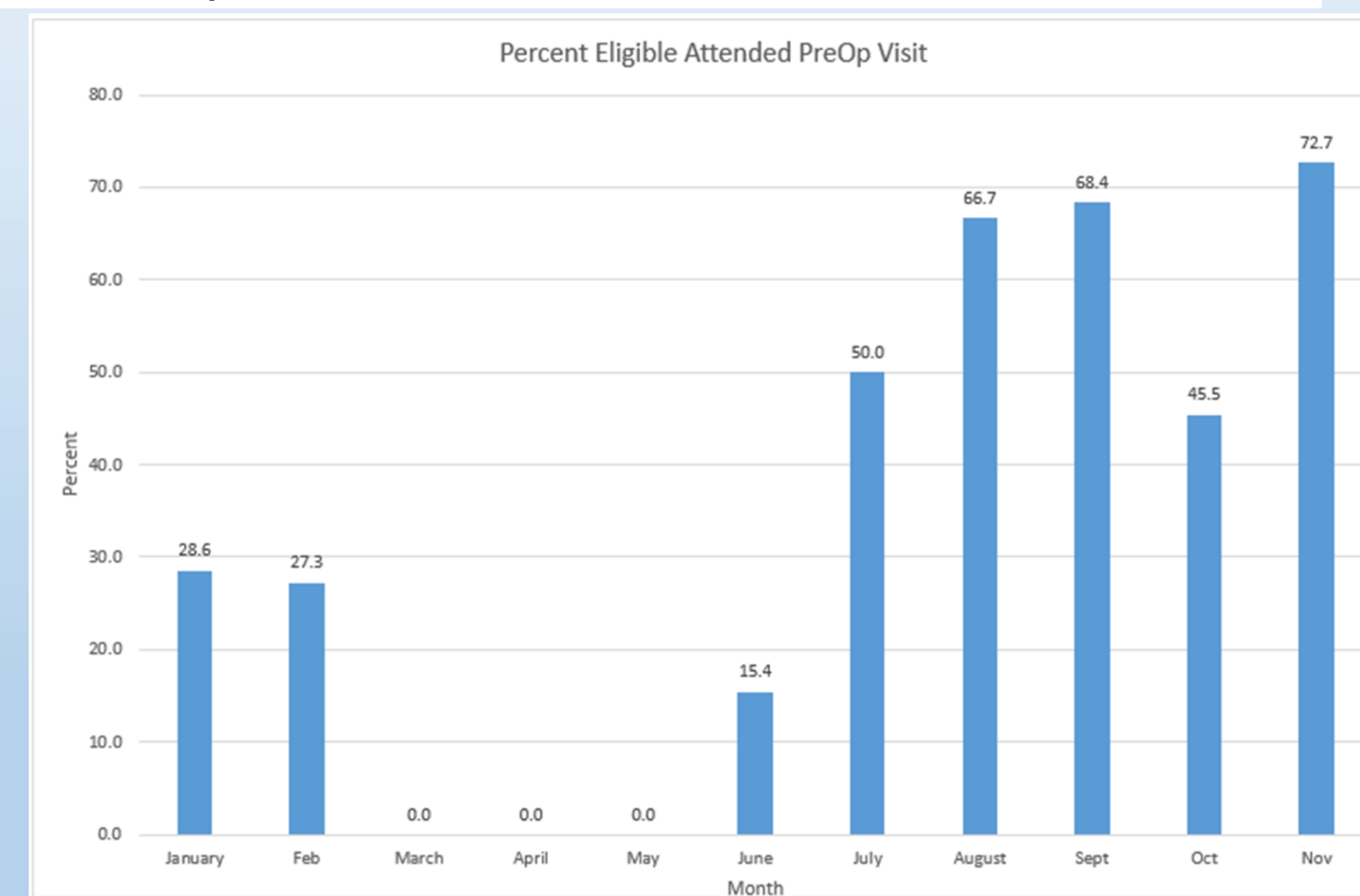


Figure 2: The percentage of patients who received a node biopsy at VHC that were seen by a certified lymphedema therapist prior to surgery for the year 2020. March, April and May of 2020 the lymphedema clinic was closed due to Covid.

Lessons Learned: By implementing a consistent referral system, the majority of breast cancer patients undergoing lymph node biopsy are able to be seen by lymphedema therapy for education and early monitoring for breast cancer-related lymphedema. This prospective surveillance model has become a standard of care at VHC health. It is expected across departments any patient under going lymph node excision for breast cancer will have a pre-operative assessment with lymphedema therapy. By increasing the number of breast cancer patients seen pre-operatively for education, the number of patients who returned for post-operative assessments also increased. Based on the success of executing a prospective surveillance model for breast cancer patients, a similar model could be established for other cancer diagnoses.

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