

## Abstract

### Background

Breast cancer places patients at high risk for breast cancer-related lymphedema (BCRL) due to obstruction in the lymphatic system. The purpose of this evidence-based project is to increase the use of outpatient specialty clinics by women and men diagnosed with breast cancer who are at high risk for BCRL and ultimately improve their quality of life by implementing an evidence-based BCRL Prevention (BCRLp)-Order Set in paper format.

The aim was to determine the impact of a specialty clinic referral process for high-risk BCRL patients in order to determine whether the number of outpatient specialty consults increases after the implementation, and to evaluate the feasibility of the BCRLp order set as perceived by the providers. The negative outcomes and chronic burden of BCRL may be preventable through early detection and timely management of early warning signs of BCRL.

### Methods

This project took place at an outpatient breast cancer clinic and utilized a quasi-experimental design. Data analysis was performed using descriptive statistics and Wilcoxon sign-rank test. Patient (ALND, SLND, gender, age, BMI, and race) and provider (age, gender, and years of experience) participant demographics were analyzed using descriptive statistics.

The number of referrals for each specialty clinic were dichotomous in nature. Counts, percentages, the median and interquartile range were used to describe the data.

### Results

All patient participants were referred to one or more specialty clinics and demonstrated an improvement in QOL after being referred to nutrition, physical and occupational therapy, and the high-risk lymphedema specialty clinics for preventative measures of BCRL. Patient participants had low questionnaire completion rates. Structural changes at the site resulted due to the COVID-19 pandemic, providers believed the implementation was feasible and sustainable with a few adjustments given staffing issues.

### Conclusion

An assessment of ongoing structural and organizational changes was necessary to anticipate needs of the project. Although findings were not statistically significant for this project, some QOL scores improved in both the psychological and psychosocial domains. This project also demonstrated the need for a longitudinal study to observe the impact of specialty clinics on BCRL patients' quality of life.