An Evidence-Based Practice Change to Increase Provider Adherence to Mammography Guidelines

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Abstract

**Background/Significance:** Breast cancer is the most prevalent cancer among women ages 18 to 64 years of age. Mammography screening is the most effective method for early detection of breast cancer which decreases mortality and morbidity. The American Cancer Society recommends women ages 40 to 44 have the option to begin mammography screening, women ages 45 to 54 be screened annually and women age 55 and older to have biennial screening.

**Purpose:** The purpose is to increase provider adherence to mammography screening guidelines.

**Methods:** The plan, do, study and act process (PDSA) was utilized to examine current guideline concordant care in the practice and develop changes to improve recommendations for mammography. The planning phase included observation of current clinic practices and examination of medical records. Data from this work indicated that only 12% of women received an order for mammography. Process observation of clinic flow and examination of the EMR noted that no system was in place to alert the provider to the need for the mammogram. We initiated a patient checklist that was given to the patient at reception for check-in. The patient was instructed to give the checklist to the provider who will review and then counsel the patient about breast cancer prevention. Based on this plan, the PICOT was as follows: Among providers at the clinic, does the use of a patient screening checklist increase use of breast cancer screening guidelines for women aged 40 or older at average risk for breast cancer?

**Results:** The implementation phase occurred in the spring of 2018. The results of the second chart audit revealed an increase in provider adherence to mammography guidelines. The analysis
of the audit was calculated as a percentage. A total of 79 electronic medical records were examined. The percentage of women whom a mammogram was recommended and ordered was 69.6%. This represents a statistically significance increase from the original chart audit conducted in May 2017. The screening checklist demonstrated effectiveness in increasing provider adherence to mammography guidelines.

**Conclusions/Implications:** Increasing guideline concordant screening guidelines may increase early detection of breast cancer. A paper checklist is a feasible method to improve provider adherence to breast cancer screening. Additionally, since other preventive parameters were included on the screening checklist, it could be used to evaluate and improve adherence to other screening and immunization guidelines. Further, a new EMR is being developed for implementation in the practice. This new EMR will incorporate an electronic version of the screening checklist which should have increased impact on adherence to screening guidelines and provision of preventive care by primary care providers.