Mammography Adherence

Creation of a process change plan to increase usage rates

Tara E. Smalls, DNP, APRN, FNP-C, Sue P. Heiney, PhD, RN, FAAN, Beverly Baliko, PhD, RN, PMHNP-BC, and Abbas S. Tavakoli, DrPH, MPH, ME

BACKGROUND: Mammography is the optimal tool to mitigate breast cancer morbidity and mortality; however, in many healthcare settings, mammography adherence rates are decreasing.

OBJECTIVES: This nurse-led quality improvement project was conducted to improve patient adherence to annual mammography screening.

METHODS: Data collection included clinical information from the electronic health record, chart reviews, tracking documentation used by the clinic’s social worker, interviews with staff, observation of the clinical setting, creation of a process flow map to identify barriers, and identification of internal and external resources. Strategies to reduce barriers included communication with staff about problems, a streamlined referral process, a scripted message about mammography, an up-front assessment of financial and social barriers to adherence, and an early referral to resources.

FINDINGS: A pre–process change chart audit showed a 22% mammography adherence rate. The post–process change rate was 51%, representing a statistically significant difference in adherence.

KEYWORDS
mammography; adherence; process improvement; breast screening

DIGITAL OBJECT IDENTIFIER
10.1188/19.CJON.281-287

BREAST CANCER IS THE MOST COMMON CANCER DIAGNOSIS IN WOMEN and the second most common cause of cancer death (American Cancer Society [ACS], 2018). Approximately 41,000 breast cancer–related deaths occur per year in the United States (ACS, 2018). Early detection has been identified as crucial to survival. When breast cancer is diagnosed in an early stage, the five-year survival rate in the United States is greater than 99% (ACS, 2019). Recognizing that the incidence of breast cancer–related deaths remains extremely high, Healthy People 2020 established the goal of decreasing breast cancer mortality by 10% (Office of Disease Prevention and Health Promotion, 2016). Optimal mammography adherence promotes early detection and is associated with increased breast cancer survival; however, in many organizations, mammography adherence rates remain below the national standard of 50% (ACS, 2018). The purpose of this article is to describe an evidence-based process change plan to improve the rate of mammography screenings in a cancer prevention clinic.

Best Practices in Screening Mammography

Health processes often require numerous actions, which may correlate with declines in patient participation in health services such as mammography (Anhang Price, Zapka, Edwards, & Taplin, 2010). The cancer-screening process requires collaborative steps that involve the patient, organization, and providers. These steps include recruitment, patient attendance at the health visit, and performance of the screening (Anhang Price et al., 2010). The coordination of care is described as interfaces, or the communication and transfer of responsibilities among the organization and patient, organization and provider, and patient and provider (Anhang Price et al., 2010).

Patient education, provider referral, and appointment setting are integral components of the process; subsequently, failures in any aspects of these steps can adversely affect follow through with mammography (Anhang Price et al., 2010; Zapka & Lemon, 2004). Women’s participation in mammography screening is determined by their ability to access and navigate the healthcare organizations that provide the services. Studies have validated evaluating and streamlining the mammography process to increase mammography adherence (Anhang Price et al., 2010; Goins et al., 2003; Zapka & Lemon, 2004).