

# Factors Influencing Surveillance Mammography Adherence Among Breast Cancer Survivors

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**PROBLEM IDENTIFICATION:** Many breast cancer survivors fail to engage in surveillance mammography to detect new and recurrent cancers. This review identifies factors promoting or inhibiting breast cancer survivors' participation in recommended surveillance mammography.

**LITERATURE SEARCH:** This integrative review included all English-language studies published from 2000 to 2017, identified in CINAHL®, PsycINFO®, Embase®, and MEDLINE® via PubMed®.

**DATA EVALUATION:** 23 studies met the inclusion criteria and were analyzed and synthesized.

**SYNTHESIS:** 19 factors influencing mammography adherence were identified and organized into a conceptual model with two major categories: individual factors and healthcare system. Sixteen individual factors represented sociodemographic, clinical, psychological, or health behavior characteristics. All three healthcare system factors related to healthcare accessibility and availability.

**IMPLICATIONS FOR RESEARCH:** The new model of predictors of mammography adherence can provide guidance for identifying individuals at greatest risk for nonadherence, as well as development of new interventions to address barriers to regular mammography screening, to promote early detection of new and recurrent cancers and improved survival rates.

**KEYWORDS** breast cancer; cancer screening; cancer survivors; mammography; surveillance

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Continued surveillance is essential for early detection of new and recurrent cancers, yet many breast cancer survivors fail to engage in appropriate follow-up. A study of 27,212 survivors found that 19% had no breast imaging at five years after treatment, based on administrative claims data (Ruddy et al., 2018). The proportion of women participating in imaging decreased over time, even among women with insurance. The authors concluded that a better understanding of the factors associated with imaging was needed to improve adherence. Other studies have reported similar findings regarding non-adherence worsening over time (Doubeni et al., 2006; Field et al., 2008; Wirtz et al., 2014).

The purpose of this integrative review was to identify a comprehensive set of factors that promote or inhibit participation in recommended surveillance mammography after completing treatment for breast cancer. The authors found only two previous literature reviews focusing specifically on surveillance mammography in breast cancer survivors. Grunfeld et al. (2002) performed a comprehensive review similar to the current one, covering publications from January 1980 to August 1999. The current search covers the subsequent time period from 2000 to 2017. Another review covered the period from 1980 to 2005 but was limited only to psychosocial factors influencing adherence (Magai, Consedine, Neugut, & Hershman, 2007). Other reviews on mammography exist, but they focus on healthy women (Jerome-D'Emilia, 2015; Schueler, Chu, & Smith-Bindman, 2008). Healthy women are likely to differ in significant ways from those who have experienced diagnosis and treatment for breast cancer, as shown by Duffy, Clark, and Allsworth (2006) in a matched cohort study comparing cancer survivors with women never diagnosed with cancer.

Breast cancer is the most commonly diagnosed cancer in women, accounting for 30% of all female