

ICSI Institute for Clinical Systems Improvement

Health Care Guideline Preventive Services for Adults

3. Breast Cancer Screening (Level I)

Recommendations:

- Screening mammogram must be recommended every one-two years for women ages 50-75 years (*Strong Recommendation, Moderate Quality Evidence*).
- Screening mammograms could be recommended to women ages 40-49 and over the age of 75 (*Weak Recommendation, Moderate Quality Evidence*).

All women over age 40 should routinely be given the opportunity to receive information about breast cancer screening and informed decision-making. Therefore, breast cancer screening decisions, especially among women ages 40-49 and over age 75, must be informed by a process of shared decision-making among patients, medical groups and individual clinicians.

Efficacy

Screening mammography is the best available tool currently available for the early detection of breast cancer and has been shown to decrease breast cancer mortality.

In 2002, the U.S. Preventive Services Task Force found "fair evidence that mammography screening every 12 to 33 months significantly reduces mortality from breast cancer." They recommended screening mammography every one to two years for all women greater than 40 years of age, although they noted that there was minimal benefit for low-risk women in the 40- to 49-year age group, and insufficient evidence of benefit for women older than age 75.

In 2009, the U.S. Preventive Services Task Force, based on a review of prior evidence and on new evidence, made specific age-based recommendations for screening mammography:

- The decision to begin screening between ages 40 and 49 should be individualized and requires shared decision-making, taking "patient context into account, including the patient's values regarding specific benefits and harms."
- For women ages 50-74 years, biennial screening is recommended, as the "benefit of screening mammography is maintained by biennial screening" but "may be reduced when extending the interval beyond 24 months."
- For women over age 75, the U.S. Preventive Services Task Force concluded that the "current evidence is insufficient to assess the additional benefits and harms of screening mammography"

(Mandelblatt, 2009 [Low Quality Evidence]; Nelson, 2009 [Systematic Review]).

Benefits of treatment

Earlier detection of breast cancer offers the potential of treating the disease more effectively and with less morbidity at an earlier stage.

Harms of treatment

Screening is associated with important potential harms including equivocal or false-positive mammograms, which may lead to unnecessary biopsies and anxiety. Newer technologies, biopsy techniques, and systems of care may obviate these concerns to some degree.

Shared decision-making

All women over age 40 should routinely be given the opportunity to receive information about breast cancer screening and informed decision-making. The decision regarding age of initiation and frequency of screening should be made after helping women understand potential benefits, harms and limitations of mammography. This decision should also take into account the patient's age, risk stratification (<http://www.cancer.gov/bcrisktool>), personal values, concerns and individual circumstances (*Mandelblatt, 2009 [Low Quality Evidence]; Nelson, 2009 [Systematic Review]*).

Various patient decision aids are available and can be useful tools; for example, this Web site provides an interactive screening mammography decision aid created by the University of Sydney: <http://www.mammogram.med.usyd.edu.au/>.

Related guideline

ICSI Diagnosis of Breast Disease guideline.