Practice Guidelines

Breast Cancer Screening: ACP Releases Guidance Statements

Key Points for Practice

- The most significant breast cancer screening benefit for women at average risk is from biennial mammograms from 50 to 74 years of age, which can decrease breast cancer–related deaths without affecting overall longevity.
- Annual mammogram screening increases false-positive results by 45% with little to no difference in outcomes.
- Starting screening at age 40 has a small effect on breast cancer mortality at the cost of increasing false-positive results by more than 60%.
- There is no mortality benefit to screening women 75 years or older or with a life expectancy less than 10 years because screening benefits are not seen for 11 years.

From the *AFP* Editors

Breast cancer is the fourth leading cause of cancer death in the United States and is the most common cancer type in women. Factors to consider for women who are at average risk for breast cancer include when to start or stop mammography, how often to be screened, and the effectiveness of clinical breast examination. The American College of Physicians (ACP) reviewed guidelines from other organizations and developed four statements to provide advice to clinicians about breast cancer screening for women who are at average risk. Average risk is defined for this guideline as no history of cancer or high-risk genetic mutation. Patients are considered at average risk independent of other personal risk factors. Overall, the most important risk factor for breast cancer is age.

Coverage of guidelines from other organizations does not imply endorsement by *AFP* or the AAFP.

This series is coordinated by Sumi Sexton, MD, editor-in-chief.

A collection of Practice Guidelines published in *AFP* is available at https://www.aafp.org/afp/practguide.

CME **This clinical** content conforms to AAFP criteria for continuing medical education (CME). See CME Quiz on page 141.

Author disclosure: No relevant financial affiliations.

Recommendations

AGE 50 TO 74 YEARS

Women 50 to 74 years of age should be screened with mammography biennially. Screening women 50 to 69 years of age reduces breast cancer mortality but not all-cause mortality. A benefit is less clear for women 70 to 74 years of age, but the best balance of benefits to harms for breast cancer screening is from 50 to 74 years of age.

Breast cancer screening annually has little to no difference in breast cancer mortality compared with biennial screening. False-positive results are common even in biennial screening. For 1,000 women screened from 50 to 74 years of age, seven breast cancer deaths will be prevented at the cost of 953 false-positive screens, 146 unnecessary biopsies will be performed, and 19 cancers will be overdiagnosed that would not have affected the patient. Annual screening increases false-positive results by 45%.

AGE 40 TO 49 YEARS

Women 40 to 49 years of age should discuss the decision to screen for breast cancer with their clinician. For most women, the harms outweigh the benefits of screening for breast cancer with mammography. If 1,000 women are screened from 40 to 74 years of age, one additional breast cancer death will be prevented at the cost of 576 additional false-positive screens, 67 additional unnecessary biopsies, and two cancers will be overdiagnosed compared with screening from 50 to 74 years of age.

AGE 75 OR OLDER OR LIFE EXPECTANCY LESS THAN 10 YEARS

Women 75 years or older or who have a life expectancy of 10 years or less should not be screened for breast cancer. Older age, comorbid conditions that reduce life expectancy, and the patient value of the balance of benefits and harms are all reasons to discontinue breast cancer screening for this age group.

The average time to prevent one breast cancer death per 1,000 women screened who are 75

years or older is 11 years; therefore, women in this group are unlikely to benefit from screening and treatment and are more likely to experience harm.

ALL AGES

Clinical breast examination should not be used to screen for breast cancer. Evidence does not show a breast cancer mortality benefit from clinical breast examination alone or in combination with mammography. Overdiagnosis and false-positive results can lead to overtreatment, which increases patient harm. Similarly, self-breast examination does not improve breast cancer outcomes and increases false-positive rates.

Editor's Note: The ACP reviewed recommendations from the U.S. Preventive Services Task Force (USPSTF), the Canadian Task Force on Preventive Health Care, the World Health Organization, the American Cancer Society, and the evidence behind each to create their recommendations. The American Academy of Family Physicians supports the USPSTF recommendations for biennial screening in women 50 to 74 years of age and an individual decision for starting biennial screening at age 40 based on limited benefit and increased harms (https://www.aafp.org/patient-care/clinical-recommendations/all/breast-cancer.html).—Michael Arnold, MD, Medical Editing Fellow

Guideline source: American College of Physicians

Evidence rating system used? Yes

Systematic literature search described? Yes

Guideline developed by participants without relevant financial ties to industry? Yes

Recommendations based on patient-oriented outcomes? Yes

Published source: *Ann Intern Med*. April 16, 2019; 170(8):547-560

Available at: https://annals.org/aim/fullarticle/2730520/screening-breast-cancer-average-risk-women-guidance-statement-from-american

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