

ACS Releases Guideline on Breast Cancer Screening

Key Points for Practice

- Routine screening with mammography should be initiated at 45 years of age in women at average risk.
- For women 55 years and older, biennial screening is the preferred approach, with the option to screen each year.
- Annual screening mammography should be offered to patients between 40 and 44 years of age.
- Clinical breast examination is not recommended as an approach to screening for breast cancer.

From the AFP Editors

► See related Editorial on page 652, and USPSTF at <http://www.aafp.org/afp/2016/0415/od1.html>.

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

This series is coordinated by Sumi Sexton, MD, Associate Deputy Editor.

A collection of Practice Guidelines published in AFP is available at <http://www.aafp.org/afp/practguide>.

Breast cancer remains a leading cause of cancer-related mortality among women in the United States, even as early detection and treatment advances have helped contribute to a decline in deaths from breast cancer in recent decades. Mammography is an important screening tool, and the publication of long-term follow-up studies has led to a better understanding of the impact its use has on patient health.

The American Cancer Society (ACS) organized an interdisciplinary guideline development group to review the available evidence on breast cancer mortality, quality of life, life expectancy, false-positive findings, overdiagnosis, and overtreatment, and to update their 2003 guideline on breast cancer screening in average-risk women. The 2015 recommendations emphasize the need to inform patients of the balance of potential harms and benefits of screening and engage in shared decision making.

Recommendations

SCREENING MAMMOGRAPHY

In women who are at average risk of breast cancer, routine screening with mammography should be initiated at 45 years of age. Screening should continue on an annual basis until 54 years of age. For women 55 years and older, biennial screening is the preferred approach, with the option to screen each year. Annual screening mammography

should be offered to patients between 40 and 44 years of age, although the five-year absolute risk of breast cancer is lower in this age group than for women older than 45 years.

The previous guideline directed clinicians to screen women annually starting at 40 years of age, and continue screening throughout the patient's lifetime unless the patient was in poor health or would not be able to withstand treatment for breast cancer.

High-quality evidence demonstrates that there is significant benefit to using mammography long term to screen for breast cancer compared with other screening methods or a no-screening approach. Life-expectancy gains from screening mammography are meaningful in the context of individual patients in whom the intervention prevented a premature death. However, the effect of these gains on measures of life expectancy across the entire population is not discernable.

Screening mammography commonly results in false-positive test results, which can lead to repeat imaging, and potentially biopsy. Understanding that factors such as the use of digital vs. screen-film mammography or the absence of sufficient comparison images may increase rates of false-positive findings is key for implementing practices to reduce harm associated with this outcome.

Screening mammography may detect cancers that do not need to be treated because they otherwise would not become symptomatic breast cancer. Harm from unnecessary treatment is a significant concern and may represent the greatest risk associated with mammography. However, reliable numbers are not available regarding the degree to which overdiagnosis can be expected to occur among women who undergo breast cancer screening.

Modeling studies suggest that screening with mammography may lead to a slight

increase in quality-adjusted life expectancy. This association has not been further studied in a real-world setting, and the available evidence for this outcome is not high quality enough to inform the selection of screening practices.

DISCONTINUATION OF SCREENING

The decision to discontinue screening mammography should be based on the patient's overall health and life expectancy. Healthy women who are expected to live at least 10 years are likely to benefit from continued screening. It is important that clinicians consider an individual's values and preferences when determining whether to recommend that screening be stopped because of a serious illness or increasing age.

Breast cancer incidence begins to decline once women reach 75 to 79 years of age. However, about 25% of 85-year-old women can be expected to live at least 10 years. Because mammography's sensitivity and specificity increase as a patient ages, it remains an effective tool for detecting breast cancer in older women. Studies in this population are limited, but findings suggest that screening healthy women older than 75 years with mammography can reduce deaths from breast cancer.

Clinicians can consult mortality indices to predict the likelihood that a patient will live at least 10 years, indicating whether screening should continue. When informing women about the potential harms and benefits of screening mammography later in life, decision aids can be useful for ensuring that the direction of care is in line with individual patient preferences.

CLINICAL EXAMINATION

Evidence has not shown clinical breast examination to be effective in detecting breast cancer in women of average risk among any age group. It is not recommended as an approach to screening for breast cancer. Mammography alone detects a higher number of breast cancers than clinical breast examination, and clinical breast examination performed

in addition to mammography may lead to a higher number of false-positive test results.

Clinical breast examination is a time burden for clinicians. Although the 2003 guideline encouraged clinicians to perform a breast examination, focus should be shifted away from this practice and toward careful assessment of family history and patient counseling on screening mammography and breast changes that may require medical follow-up. Self-examination may not be more effective than incidental discovery, and evidence has not been sufficient to recommend that it be performed routinely.

These updated recommendations represent a complete revision in the approach to screening. Rather than letting patients choose whether to receive more information about the possible implications of breast cancer screening, it is now strongly suggested that clinicians familiarize women with general aspects of early detection, including associated harms, benefits, and limitations.

EDITOR'S NOTE: The American Academy of Family Physician's breast cancer screening recommendations align with the U.S. Preventive Services Task Force (USPSTF) recommendations, which endorse biennial mammography for women 50 to 74 years of age and cite insufficient evidence to support screening in older women. The decision to screen patients younger than 50 years should be individualized (<http://www.aafp.org/patient-care/clinical-recommendations/all/breast-cancer.html>). The USPSTF and the ACS agree that the harms of screening mammography are likely greater than the benefits for patients younger than 45 years. They also emphasize engaging patients in a discussion of the benefits, harms, and limitations of mammography to enable them to make an informed decision about screening.—SUMI SEXTON, MD, Associate Deputy Editor, *American Family Physician*.

Guideline source: American Cancer Society

Evidence rating system used? Yes

Literature search described? Yes

Guideline developed by participants without relevant financial ties to industry? No

Published source: *JAMA*. October 20, 2015;314(15):1599-1614

Available at: <http://jama.jamanetwork.com/article.aspx?articleid=2463262>

MARSELLE BREDEMEYER, *AFP* Associate Editor ■