Impact of Changes to Breast Cancer Screening Guidelines on Healthcare Providers and Patients

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In October 2015, the American Cancer Society (ACS) updated its evidence-based breast cancer screening guidelines for women at average risk for breast cancer. These guidelines introduced significant changes to the age to begin breast cancer screening, as well as the frequency between screenings and duration of screening. Not long afterward, in January 2016, the U.S. Preventive Services Task Force released its updated breast cancer screening guidelines, which differ from those of the ACS. The varying guidelines present challenges for healthcare providers and patients, particularly women aged 40–49 years.

At a Glance

• With the American Cancer Society’s update of its breast cancer screening guidelines for average-risk women, a major change has occurred regarding the initiation and frequency of screening.
• Many breast cancer screening guidelines, with varying recommendations, exist.
• Nurses must continue to educate themselves on new breast cancer screening guidelines and be able to help women make informed decisions based on the available evidence, as well as each patient’s risk factors and personal values.

B reast cancer is the most common cancer in women (Siegel, Miller, & Jemal, 2015). In 2016, an estimated 246,660 women will be diagnosed with breast cancer, and an estimated 40,450 women will die of the disease in the same year (American Cancer Society [ACS], 2016). In October 2015, the ACS updated its evidence-based breast cancer screening guidelines for women at average risk for breast cancer (i.e., those with no personal history of breast cancer, no genetic breast cancer mutation, and no history of radiation to the chest at an early age) (ACS, 2015a). These new guidelines are not intended for women who have a higher risk for breast cancer, such as those with a family history of the disease (ACS, 2016; Oeffinger et al., 2015; Thompson, 2015)

Guideline Development

The ACS Guideline Development Group (GDG)—consisting of clinicians, biostatisticians, epidemiologists, and an economist, as well as patient representatives from the target patient population—used a rigorous critical appraisal process when developing the new guidelines. The GDG synthesized evidence from randomized, controlled trials, along with observational and modeling studies. Using the Grades of Recommendation, Assessment, Development, and Evaluation system, the GDG graded the evidence and its strength. Additional review was conducted by outside organizations and experts, including the Duke University Evidence Synthesis Group.

The new guidelines, which are meant to provide guidance for healthcare providers and women at average risk for breast cancer, have introduced significant changes regarding the age to begin breast cancer screening, as well as the frequency between screenings and duration of screening (ACS, 2015a, 2016). According to the guidelines, women aged 40–44 years may begin annual breast cancer screening with mammograms if they desire, women aged 45–54 years should undergo annual screening mammography, and women aged 55 years or older should switch to undergoing screening mammography every two years or may continue annual screening; screening should continue as long as a woman is in good health and has a life expectancy of 10 years or greater (ACS, 2015a). Clinical breast examinations are no longer recommended as screening measures for average-risk women of any age (ACS, 2015a). However, women should report any changes in their breasts to their healthcare providers. All women should also be familiar with the potential benefits, limitations, and harms associated with breast cancer screening (ACS, 2015a, 2015b, 2016).

Comparison of Guidelines

In January 2016, the U.S. Preventive Services Task Force (USPSTF) released its updated breast cancer screening recommendations, which note that biennial
TABLE 1. Comparison of Breast Cancer Screening Guidelines

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<tbody>
<tr>
<td>Age (begin)</td>
<td>40 years</td>
<td>45 years</td>
<td>50–69 years</td>
<td>50–69 years</td>
<td>40 years</td>
<td>50 years</td>
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<tr>
<td>Age (end)</td>
<td>None</td>
<td>Continue if in good health and life expectancy is 10 years or greater.</td>
<td>70–74 years, every 2–3 years</td>
<td>Not defined</td>
<td>Not established; continue if in good health and life expectancy is 10 years or greater.</td>
<td>Aged 74 years; insufficient evidence for recommendation for those aged older than 75 years</td>
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<tr>
<td>Frequency</td>
<td>Annual</td>
<td>Annual until age 54 years, and then biennial</td>
<td>Biennial</td>
<td>Biennial</td>
<td>Annual</td>
<td>Biennial</td>
</tr>
<tr>
<td>Perform clinical breast examination.</td>
<td>All women aged 19 years or older</td>
<td>Not recommended</td>
<td>Not defined</td>
<td>Not defined</td>
<td>Annual</td>
<td>Not defined</td>
</tr>
<tr>
<td>Woman’s choice allowed</td>
<td>Not defined</td>
<td>40–49 years</td>
<td>Not defined</td>
<td>Not defined</td>
<td>Not defined</td>
<td>40–49 years</td>
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ACOG—American Congress of Obstetricians and Gynecologists; ACS—American Cancer Society; CTFPH—Canadian Task Force on Preventive Health Care; ESMO—European Society for Medical Oncology; NCCN—National Comprehensive Cancer Network; USPSTF—U.S. Preventive Services Task Force

Note. Based on information from ACOG, 2015; ACS, 2015a; CTFPH, 2011; NCCN, 2015; Senkus et al., 2015; USPSTF, 2016.

Screening should begin at age 50 years and continue until age 74 years; in addition, clinical breast examinations were not recommended at any age (Nelson et al., 2015; USPSTF, 2016). However, the American Congress of Obstetricians and Gynecologists ([ACOG], 2015) continues to recommend annual screening mammography beginning at age 40 years and clinical breast examinations for all women aged 18 years or older. Table 1 compares and contrasts different breast cancer screening recommendations from leading American, Canadian, and European groups. These recommendations are confusing and contradictory, and they are based on different interpretations of the data and the weight of the harms versus benefits. In January 2016, ACOG held a national consensus conference with the hopes of developing a consistent set of national standards for breast cancer screening guidelines.

Patient Application of Guidelines

The varying guidelines present challenges for healthcare providers and patients, particularly for women aged 40–49 years. The decision to undergo screening mammography is a personal one and is different for every woman. A woman’s risk factors, age, and personal values need to be weighed against the available evidence of benefits and harms. Because the risk for breast cancer is lower for women aged 40–49 years, the absolute benefit of screening is lower. However, the incidence of unnecessary biopsies and overdiagnosis of breast cancer is higher in this age group (Yi & Hunt, 2015). False positives may result in additional testing and procedures (e.g., recall for repeat mammogram or biopsy) and may cause unneeded stress. Screening mammography may also find low-risk cancers that would not have caused any future problems. This overdiagnosis may result in unnecessary and costly treatment for a disease that would not have progressed (Oeffinger et al., 2015). Breast tissue is denser in younger patients, which also increases the risk for false negatives (Yi & Hunt, 2015). Breast cancer may not be able to be seen on mammography in a dense breast, and these women may also need additional testing (e.g., 3-D mammogram, ultrasound).

The most important factor in counseling patients about the screening guidelines is to focus on the individual patient. Nurses and healthcare providers need to make time for shared decision making to assist patients in understanding the potential benefits and harms of screening. Taking time to have patients discuss their feelings about the risk for breast cancer versus the risk for unnecessary procedures and treatments is essential. Many women may be more comfortable with screening earlier and more frequently and be willing to take the risks associated with false positives and overdiagnosis, whereas other women may prefer less screening and avoid the potential harms.

Insurance Coverage

The Patient Protection and Affordable Care Act requires Medicare and private insurers to cover preventive services without cost sharing if the supporting evidence has an A or B grade from the USPSTF, which indicates that the services should be offered (www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions). However, the new USPSTF screening mammography guidelines for women aged 40–49 years, which allow for more individual choice, received a grade of C, meaning that the service need only be offered to select patients, depending on individual circumstances (Nelson et al., 2015). This has created concern about insurance coverage for women whose personal preferences may not align with the updated USPSTF guidelines. On December 18, 2015, President Barack Obama signed the Consolidated Appropriations Act of 2016, which allows
coverage of mammograms for women aged 40 years or older until January 2018 (H.R. 2029, 2015).

Conclusion

Although differences and controversies exist, all guidelines are in agreement that mammography is important to detect breast cancer but that some harm is associated in terms of false positives and negatives, as well as overdiagnosis. The goal is to help patients balance the risks and benefits. Nurses must continue to educate themselves about the new breast cancer screening guidelines and be able to help women make informed decisions based on the available evidence and each patient’s risk factors and personal values. In addition, nurses need to advocate for their patients with other healthcare providers, payers, and policy makers.

References


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