

Breast Cancer Screening

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Policy Problem

The federally appointed United States Preventative Services Task Force (USPSTF) released new guidelines for breast cancer screening in November 2009. The new recommendations are a huge change from previous findings determined by the USPSTF. These changes have ignited a firestorm among doctors across the country and left women and their families confused and worried over the changes. The American Cancer Society (ASC), the American Congress of Obstetricians and Gynecologists (ACOG), and the American College of Radiology's (ACR) Breast Imaging Commission have responded by publishing contradicting guidelines and challenging the USPSTF's motivation for changing their previous recommendations.

The USPSTF is an outside group of independent health experts convened by the Department of Health and Human Services to make recommendations based on the best available evidence (Agency for Healthcare Research and Quality [AHRQ], January 2010). The determination of this group has set the standards for past and current breast screening guidelines, which our insurance companies also look at to determine eligible benefits. These most recent published guidelines could potentially cause women to lose the benefits of screening mammography before age 50, then decrease the benefit to biennial screening from age 50 to 74 with no benefit after age 74. This change could potentially cause a decline in early breast cancer detection with a resulting increase in breast cancer deaths. In an effort to protect women's health benefits, a bipartisan amendment to support women's preventative services was affirmed and passed in the Senate.

The USPSTF recommendations are based on its assessment of identified benefits minus identified harms. It makes a recommendation if it deems the available evidence to be of high enough quality that it can have a high or moderate certainty as to the magnitude of the net benefit. Recommended interventions are given a letter grade based on the net benefit determination. An A grade means the intervention has a substantial net benefit. Interventions that are given a grade B have a moderate to substantial net benefit. For A and B graded recommendations, the suggestion is to offer or provide the service. Interventions with a grade C have a small net benefit and interventions graded a D have no net benefit, or the harms have exceeded the benefit, discouraging the use of the service. If the intervention is given a C grade, the suggestion is to offer the service after individual consideration has determined the intervention would be beneficial to the individual. If evidence does not meet USPSTF standards, an “I statement” is issued. For I statements, the suggestion is to read the clinical considerations publicized by the USPSTF. If the service is to be offered, the patient should understand and weigh the benefits and harms (Agency for Healthcare Research and Quality [AHRQ], May 2008).

In 2002, the USPSTF found that women 40 to 69 years of age who had screening mammograms every 1 to 2 years died of breast cancer less frequently than women who did not have screening mammography. They also found that benefits increased as women became older. They officially recommended screening mammography, with and without clinician breast exam (CBE) every 1-2 years for women aged 40 and older, a grade B recommendation. They concluded that the evidence was insufficient to recommend for or against routine CBE alone to screen for breast cancer, a grade I statement. They concluded that evidence was insufficient to recommend for or against teaching or performing breast self exam (BSE), a grade I statement.

They claimed that out of 1,792 women age 40 to 49 years of age, having mammography can prevent one breast cancer death. The benefit of 838 women age 50 to 69 years of age, having mammography can prevent one breast cancer death (Humphrey, Helfand, Chan, & Woolf, 2002).

The newest guidelines were released by the USPSTF in November of 2009. These guidelines recommend against routine screening mammography in women age 40 to 49 years old. They do, however, state that an individual decision to start regular screening mammography before age 50 needs to be based on the individual's risk for breast cancer and with the patients values regarding specific benefits and harms; a grade C recommendation. They are recommending biennial mammography screening for women aged 50 to 74 years; a grade B recommendation. The USPSTF concludes that current evidence is insufficient to assess additional benefits and harms of screening mammography in women 75 years or older; a grade I statement. The teaching or promotion of BSE is not recommended; a D recommendation. And they conclude that current evidence is insufficient to assess additional benefits and harms of CBE beyond screening mammography in women 40 years or older; a grade I statement. They conclude that there is insufficient evidence to know whether newer types of mammography such as digital mammography or magnetic resonance imaging are any better than regular film mammography results; a grade I statement. The USPSTF sites the potential harms of mammography, including: anxiety, distress, unnecessary procedures with resulting pain and expenses created by false-positive results, and receiving a cancer diagnosis including treatment that would not have surfaced on its own within a woman's natural life time ("USPSTF guidelines", 2009).

Background

Social Factors

Breast cancer is the second most common cancer, and the second leading cause of cancer deaths in American women. The incidence of breast cancer and the death rates from breast cancer increase with age. White women have a higher incidence of breast cancer after age 40 and African-American women have a higher incidence of breast cancer before age 40. African-American women are more likely to die from breast cancer overall (American Cancer Society [ACS], 2003). Incidence and death rates from breast cancer are lower among women of other racial and ethnic groups. Breast cancer deaths decreased by 3.7% per year among women under age 50 between the years 1991 and 2000. The decline has been attributed to both improvements in cancer treatments and early detection. Factors associated with an increased risk of breast cancer include: age, family history, age at first birth, early menarche, late menopause, postmenopausal obesity, use of postmenopausal hormones, alcohol consumption, and physical inactivity. Some factors are modifiable while other factors are not. Age is the single most important risk factor for developing breast cancer (American Cancer Society [ACS], 2003).

The American Congress of Obstetricians and Gynecologists (2009) published an interpretation of the 2009 USPSTF's screening recommendations. They claim that fewer deaths would be expected in mammography screened women age 40 to 49 as compared to predicted death rates. They demonstrated this by documenting that the U.S. Census data had 22,327,592 women 40 to 49 years old in the United States as of July, 2008. The Surveillance Epidemiology and End Results Program (SEER) data predicted breast cancer deaths over ten years which they estimated at 204 deaths per 100,000 women age 40 to 49. The ten-year death rate leads to a predicted 45,492 breast cancer deaths for women age 40 to 49. With a relative risk of 0.85 for breast cancer mortality among women age 40 to 49 screened by mammography, over ten years,

an estimated 38,668 deaths would occur in these screened women. That is 6,800 fewer deaths than with the usual ten-year death rate with screening.

Economic Factors

The economic impact of early screening and detection is being argued by both sides. Some critics of the new guidelines have stated that screening would begin too late. Money may be saved, but lives would be lost if the guidelines are economically driven and not patient-care driven. The recommendations the USPSTF suggests are frequently used by policymakers, managed care organizations, public and private payers, quality improvement organizations, research institutions, and patients.

On the other hand, if screening too early is causing harm in the sense that patients are experiencing anxiety and too many false-positive results, which, in turn, creates more spending on unnecessary tests and treatments, this is not fiscally responsible healthcare dollars being spent. Healthcare reform is at hand and it is calling for evidence-based practice to reduce the costs of healthcare overall as well as providing healthcare to populations who can not afford it. Prevention measures are an important component to reducing the healthcare dollars being spent on advanced disease. Diseases such as advanced stages of breast cancer create economic distress for our country and the individuals experiencing the tragedy.

Ethical Factors

Ethical factors considered are that of preserving human life using the best technology and resources we have available in the United States as well as the right to healthcare for all Americans. Mammography is the best available method to detect breast cancer in its earliest, most treatable forms. Studies have shown that early detection can save lives if performed every 1

to 2 years for women over the age of 40, according the 2002 USPSTF report (Humphrey, Helfand, Chan, & Woolf, 2002).

Funding is available in all 50 states by the National Breast Cancer and Cervical Cancer Early Detection Program (NBCCEDP) that was developed by the Centers for Disease Control (CDC) as part of the Breast and Cervical Cancer Mortality Prevention Act of 1990. The program helps low-income, uninsured, and underinsured women gain access to breast cancer screening and diagnostic services (Centers for Disease Control [CDC], 2009).

According to the American Cancer Society (2003), socioeconomic factors play a role in the populations who have a higher rate of breast cancer mortality. Funding to the NBCCEDP needs to be continued in order to provide screenings to underserved populations. To Christians and humanitarians, human life is highly valued. Continued breast cancer screening for those over age 40 would show the human value of the 0.85 relative risk. The fewer deaths expected with screening compared to the predicted deaths without screening shows the significant benefit of screening on mortality in the 40 - 49 year-old age group.

Political and Legal Factors

Recent healthcare legislation had included the USPSTF grading system as a determination for insurance companies to be required to cover all medical services that received a grade of A or B. The USPSTFs most recent recommendation has given a C grade to mammography screening in women 40 to 49 years of age (“USPSTF guidelines”, 2009). Insurance companies could be lead to stop covering annual breast screenings beginning at age 40. The Senate feared this may occur, so they approved an amendment to the healthcare reform bill requiring health insurers to cover mammogram for women ages 40 to 49 (Staff, 2009).

Many political factors are economically driven. Since there is a great deal of research to show how early breast cancer detection reduces extended cancer treatments and ultimately reduces breast cancer deaths, Congress is likely to continue with amendments such as the most recent amendment that supports continued early detection screening. The USPSTF based the new recommendations on two pieces of research that had been completed since the 2002 guidelines were released. The decision by the USPSTF was based on the data that women in their 40s and 50s benefited equally from routine screening mammography, but the women in their 40s experienced greater harms than the women in their 50s (“USPSTF guidelines”, 2009). These recommendations have had political and legal implications, and with the Senate’s recent decision to disregard the task force’s recommendations, it brought the USPSTF’s power and credibility into question.

Issue Statement

How could all major authorities on breast cancer screening be included in setting unified standards regarding mammography screening recommendations while maintaining the best possible outcomes for patients in all age groups?

Stakeholders

Breast cancer is big business with many stakeholders. There are many authorities on breast cancer and breast cancer prevention. Many of the stakeholders fund and publish research, develop guidelines for clinicians, provide education for patients, and set recommendations. Patients, institutions, organizations, healthcare providers, and associations all have a stake in the topic of breast cancer and breast cancer prevention. Insurance companies pay for prevention services, hospitals promote their services to capture the dollars the insurance companies are

willing to pay for the service, and the patient trusts the authorities, who determine the recommendations for breast cancer prevention and treatment options.

Breast cancer awareness has exploded over the last decade with a tremendous amount of money being funded specifically for breast cancer and early detection research. Organizations such as the Susan G. Komen Foundation have become highly respected influences in the fight against breast cancer because they report they are focused on the cure. These foundations are often high stakeholders in the funding for breast cancer research, education, screening and treatment. Fundraising for breast cancer plays a large part in the funding of research (Komen, 2010).

Women's health promotion has been on the forefront of healthcare over the last decade. Women's health centers that specialize in breast care have become the choice of where women want to go for their screenings. Diagnostic imaging services have invested in improved technology to detect breast cancers even earlier. Breast cancer boutiques have also made their way to main street cities promoting specialty clothing, undergarments, and prosthetics created with the breast cancer patient in mind.

Policy Goals and Objectives

The goal of breast cancer screening is an attempt to detect any breast cancer in its earliest stages and prevent breast cancer deaths. Policy objectives include the following:

1. Acknowledge that evidence based interventions for breast cancer screening have come into question where recommendations must be re-evaluated to determine best practice guidelines.
2. Develop policies, legislation, and regulations that provide steady funding to further breast cancer research.

3. Establish a subcommittee to the USPSTF that will review breast cancer research. The subcommittee shall include representation from each breast cancer authority. The new subcommittee would be included in decision making for any guideline changes related to breast cancer prevention.

Policy Options and Alternatives

Policy alternatives for resolving the issue of breast cancer screening standards include:

1. *Do Nothing Option:* Continue with divided standards among authorities on breast cancer screening.
2. *Join Forces Option:* Enact legislation that encourages all authorities on breast cancer screening to join forces and develop unified standards on the net benefits of mammography screening.

Criteria for Evaluation

1. Ability to provide the best breast cancer screening guidelines.

Analysis of Option 1

Criterion 1: Ability to provide the best breast cancer screening guidelines.

Pro

To do nothing and remain divided gives people more choices. Doing nothing creates an atmosphere for all stakeholders to individually critique research more thoroughly and not just follow one breast cancer authority's recommendations. Remaining divided challenges researchers to improve the quality of future research in an attempt to close the gap in divided recommendations. While research utilization determines if research is worthy and valid, research critique for the best evidence is still subjective.

Con

Remaining divided and doing nothing to close the gap in standards creates confusion for all stakeholders. It is impossible for any breast cancer authority to claim they have an evidence based guideline that can be utilized with confidence. Patients will take a stand, either choosing to be on the side of caution with continue screening at age 40 or they may completely lose faith in the research, avoid screening all together, and increasing their risk of breast cancer. Doing nothing leaves the patient and healthcare provider without a map in deciding the best route of prevention to take.

Analysis of Option 2

Criterion 1: Ability to provide the best breast cancer screening guidelines.

Pro

Breast cancer screening and prevention methods, that are unequivocally argued to be the best recommendations by all breast cancer authorities, would result in guidelines that could be used with confidence. Healthcare providers and consumers would be able to trust that best practices have gone through rigorous scrutiny and the guidelines are formed from experience as well as solid research.

Con

A unified group of breast cancer authorities could skew data and monopolize the breast cancer industry. Politics are often economically driven and the potential for a single group of committee members to be swayed to make a decision based exclusively on finances is there. Rules and regulations would need to be in place to ensure ethical conduct by all committee members.

Comparison of Alternatives and Results of Analysis

Analysis and comparison of the two policy alternatives matrix as outlined on the scorecard (Table 1) reveal that Alternative 2, Enacting legislation that encourages all authorities on breast cancer screening to join forces and develop unified standards on the net benefits of mammography screening, scores higher than Alternative 1, Continue with divided standards among authorities on breast cancer screening. The divided standards alternative scores positively on the criteria regarding the ability to provide best practice guidelines, but not strongly. Alternative 2, joining forces between all breast cancer authorities strongly meets the criteria in the ability to provide best practice guidelines.

Table 1

	Alternatives	
	Do Nothing Option	Join Forces Option
Criteria		
Ability to provide best practice guidelines.	+	++
Score	+1	+2

Summary and Recommended Policy

Enacted legislation that encourages and requires all authorities on breast cancer screening to join forces to develop unified standards on the net benefits of mammography screening is the policy option that is recommended based on the analysis of the criteria. Policy change does not come easy. It is hard to adapt to new recommendations and guidelines, especially when those new ideas force us to change the way we think on a topic as important as breast cancer prevention. Formal organizations and government funded research has guided the breast cancer prevention guidelines, without challenge, until recently. We have been educated and programmed to believe early detection is the key to prevent breast cancer death.

Power struggles and bipartisanship are the cause of many road blocks to progress. Sometimes, better proactive decisions never come to fruition because those in power cannot move past their own bias. Working together could harness an enormous amount of wealth and knowledge on breast cancer prevention. Unified decisions are what will give Americans the power to fight breast cancer and the best chance to find a cure.

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