Time to Douse the Firestorm Around Breast Cancer Screening

The 2009 U.S. Preventive Services Task Force (USPSTF) recommendations on breast cancer screening ignited a firestorm (1). Seven years later, the draft updated recommendations, which were available for public comment from 20 April to 18 May 2015, rekindled the fire (2). Sparks included full-page advertisements, likely costing up to a half-million dollars and appearing in such venues as The New York Times, USA Today, and The Washington Post, that asked, “Which of our mothers, wives, daughters, and sisters would it be OK to lose?” The named sponsors of the ad—Bright Pink, the Black Women’s Health Imperative, the National Medical Association, the National Hispanic Medical Association, Men Against Breast Cancer, and the Prevent Cancer Foundation—urged readers to sign a petition to “stop the guidelines” (bit.ly/StopTheGuidelines). Flames, fueled by controversy about the grade C screening recommendation for women aged 40 to 49 years, spread to the halls of Congress.

A convoluted law passed in the wake of the 2009 recommendations required private insurers to cover procedures for which the USPSTF issued grade A or B recommendations, except in the case of the 2009 recommendations for mammography. The exception, which was meant to ensure coverage for screening mammography for women aged 40 to 49 years (a grade C recommendation in 2009), was set to expire when the USPSTF issued new recommendations. The planned expiration was averted, however, when Congress passed an omnibus bill in December 2015 that included a rider that effectively extended the exception for screening mammography indefinitely (3).

In this issue, Annals publishes the updated recommendations of the USPSTF (4). The USPSTF did a difficult job well, considering updated evidence reviews, a fuller panoply of potential harms, and tradeoffs of different screening strategies (5-9). The science led the USPSTF to conclude that the following recommendation (originally issued in 2009) still stands: Each average-risk woman between the ages of 40 and 49 years should make her own decision about whether to have a mammogram, based on her personal balancing of the benefits and harms of screening (a grade C recommendation). Although for many years the dogma was that women should have mammograms “once a year for a lifetime” starting at age 40 years, current evidence shows that the balance of risks and benefits of screening, particularly among women in their 40s, warrants more nuanced decision making. Potential harms of overdiagnosis and overtreatment of lesions with little progressive potential and harms of false-positive screening results with unnecessary biopsies and multiple repeated examinations must be considered (10, 11). The potential benefits of preventing breast cancer deaths are real, but the likelihood of those benefits is small and no definitive evidence shows that screening reduces total mortality. The USPSTF grades its recommendations to reflect the evidence about the benefits and harms of the health care intervention. When the net benefits of a health care intervention for a specific patient group are clear, the USPSTF strongly recommends it for patients in that group (grade A or B recommendation). When the balance of risks and benefits is less clear or the net benefit is small, the USPSTF issues a grade C recommendation, as it did for average-risk women in their 40s.

As women who have had personal experiences with breast cancer and false-positive screening results and who devote much professional energy to evaluating medical evidence, we are concerned about efforts that conflate scientific evidence with policy decisions related to payment for health care. These efforts also create unwarranted suspicion of the USPSTF’s work and divert attention and resources from gathering evidence to fill important gaps in knowledge about effective breast cancer prevention and screening. Most important, we may lose the attention and trust of the public with regard to the content of evidence-based recommendations unless scientists pay more attention to addressing existing gaps.

The evidence gaps are wide and concern issues surrounding breast cancer screening about which we and many women worry. For example, we need to identify better screening methods for all women, particularly those with dense breasts. We need to act on concerns about the prevalence of a more deadly form of breast cancer in African American women and promote research that evaluates the effect of screening in ethnic minority women. And we need to identify optimal strategies for the management of possible precursor lesions, such as ductal carcinoma in situ, while also better defining and quantifying the harms associated with overdiagnosis—an issue with direct application to screening mammography.

The firestorm that reignited in spring 2015 was not without reason. The public has had legitimate worry about whether copayment for mammograms would be required if a new recommendation were to supersede the special privilege accorded to the 2009 mammography recommendation. But the target should not be the USPSTF, which cannot make payment decisions. Congress and health plans have the option of mandating private insurance coverage or noncoverage for a grade C recommendation. We are faced once again with a question about acceptable boundaries when politics meets science. Instead of freezing the guidelines in time, we should eliminate coverage decisions that do not accommodate all 3 pillars of evidence-based health care: scientific evidence, clinical knowledge, and patient values.

Otis Brawley, chief medical officer of the American Cancer Society, has noted that Americans have been
taught to fear cancer and have blind faith in screening with too little appreciation of its limitations and harms (12). He notes that “unlike some of its most vocal critics, the Task Force understands the complicated science of screening.” Strong recommendations for screening average-risk women in their 40s, for annual rather than biennial screening in any age group, or for continuing screening in elderly women would misrepresent the net benefit of mammography in these groups. Guidelines that mislead women about the net health benefits they can expect from mammography would disrespect our mothers, wives, daughters, and sisters. When the USPSTF posted its draft recommendations for comment, it noted, “Women deserve to be aware of what the science says so they can make the best choice for themselves, together with their doctor.” We could not agree more. Let’s douse the flames and clear the smoke so that we can clearly see what the evidence shows and where we need to focus efforts to fill gaps in our knowledge so that women, along with their health care providers, can make the best decisions to reduce their risk for breast cancer-related morbidity and mortality.

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