

VIEWPOINT

A Public Health Framework for Screening Mammography

Evidence-Based vs Politically Mandated Care

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In **November 2009**, in the midst of acrimonious congressional debates over the Affordable Care Act (ACA), the US Preventive Services Task Force (USPSTF) updated its breast cancer screening guidelines. The Task Force recommended biennial mammography screening for women of average risk aged 50 to 74 years, sparking a torrent of criticism. Although the ACA mandated insurance coverage for USPSTF-recommended preventive services, it went further for mammography screening. Instead of relying on the most recent USPSTF guidelines, Congress amended the ACA to require the Department of Health and Human Services (DHHS) to use its 2002 guidelines, which recommended screening every 1 to 2 years starting at age 40 years.

Last year, in draft form the USPSTF again provisionally recommended biannual screening for women beginning at age 50.¹ Yet, on December 18, included within a \$1.15 trillion fiscal year (FY) 2016 Consolidated Appropriations Act (HR 2029), Congress again required the use of USPSTF's 2002 guidelines. In other words, a political body required the DHHS to follow outdated scientific

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guidance. Although many women's health advocates applauded the congressional mandate, it actually undermines women's rights to make informed decisions based on the best scientific evidence. This Viewpoint highlights the societal risks of politically motivated mandates relating to public health guidelines.

The ACA's Preventive Services Mandate

To remove financial barriers, the ACA requires nongrandfathered private insurance plans to provide first-dollar coverage (no co-payments, coinsurance, or deductibles) for evidence-based preventive services. The ACA requires coverage for any preventive service receiving a USPSTF A or B grade (at least moderate certainty of a moderate or substantial net benefit). The ACA also requires insurance coverage for preventive services recommended by other scientific bodies, such as the Advisory Committee on Immunization Practices.

In 2009, the USPSTF gave a C grade to mammography screening for women of average risk aged 40 through 49 years, and the Task Force reaffirmed this assessment

in 2016 when it released its final recommendation.¹ A C grade is commonly misunderstood. It does not advise against screening, but rather it indicates moderate certainty that there is small population-level benefit. Clinicians should discuss C-rated services with patients using an individualized assessment of the patients' risk factors and preferences. Importantly, irrespective of USPSTF recommendations, most insurers have offered mammography coverage for women aged 40 through 49 years.

Political controversy, however, continues to swirl. The FY 2016 Consolidated Appropriations Act instructs DHHS to interpret any reference to "current" USPSTF breast cancer screening recommendations to mean those issued "before 2009"—in other words, its 2002 recommendations. Essentially, Congress is requiring health insurers to ignore modern scientific assessments and instead use 14-year-old guidance.

The Cumulative Weight of Evidence

Why have the Task Force's recommendations on screening mammography been so controversial? Often USPSTF guidelines are framed as government rationing of beneficial health services as a cost-saving measure. Yet the Task Force uses a rigorous scientific methodology focusing on net health benefits and does not take economic cost into account. In the case of breast cancer screening, the USPSTF relied on 4 systematic evidence reviews of randomized controlled trials² and other studies and data from 6 independent models.³ Women in their 40s who undergo screening mammography experience a high frequency and magnitude of avoidable harms (eg, false-positive results, biopsies, and excessive treatment) relative to the benefits.³

Highly respected scientific panels have drawn the same conclusions. As early as 1997, a National Cancer Institute (NCI) consensus panel arrived at similar results, later overturned by NCI's politically appointed advisory board. In 2015, the American Cancer Society recommended raising the starting age for routine mammography from 40 to 45 years, with biennial testing beginning at age 55.⁴ By declining to acknowledge scientific progress, Congress may do more harm than good to women's health.

Politics vs Science

The ACA's decision to link coverage for preventive services directly to USPSTF grading has sparked controversy. Because the ACA does not mandate coverage

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for lower-graded preventive services, USPSTF panels could be placed under political pressure, perhaps relaxing evidentiary standards, "knowing that every word...constitutes a statutory mandate."⁵ Indeed, political considerations surround debates on mammography screening. Stakeholders with conflicts of interest lobbied for mammography coverage. The Medical Imaging and Technology Alliance said a coverage mandate would "safeguard access to this important life-saving technology," while the American College of Radiology framed the Task Force's recommendations as potentially causing women in their 40s to develop illness and die of cancer.⁶

There is also a real risk that Congress could further erode the Task Force's independence. The House's version of 2016 omnibus spending bill (which was not included in the final legislation) would have denied funding for any future USPSTF mammography recommendation. Some members of Congress have gone further, proposing to alter the Task Force's composition to include "stakeholders from the medical products manufacturing community."⁶

However, in 2015 the USPSTF asserted its scientific integrity and independence from political influence: "the ACA has not influenced the methods or evidence thresholds the task force uses to assign an A, B, or any letter grade, nor does the task force consider coverage implications when making recommendations."⁷ Regarding its updated guidelines, the Task Force wrote, "the USPSTF cannot reinterpret the science and exaggerate the net benefit [of screening mammography] simply to ensure coverage."⁷

Benefits of Evidence-Based Preventive Care

Relying on scientific evidence to guide preventive care coverage is a surprisingly recent idea. Prior to the ACA, insurers had discretion to determine what screening, counseling, and vaccinations to cover as they currently do for all health services. Consequently, insurers paid for some preventive services that were shown to be ineffective, such as chest radiography for lung cancer screening in smokers and electrocardiography for coronary heart disease screening in low-risk adults. In contrast, most insurers did not pay for certain highly effective services, such as counseling for smoking cessation or alcohol misuse.

The ACA improved the consistency of preventive care across health plans by requiring coverage of evidence-based services. Widening access to effective prevention, policy makers reasoned, would improve the health of the nation. However, Congress's decision to assign disproportionate value to breast cancer compared with other conditions that middle-aged and older women experience (eg, cardiovascular disease) has a social cost. Since health care dollars are limited, devoting resources to marginally effective preventive services in a group with low disease rates results in fewer resources devoted to more effective (and cost-effective) services.

Importantly, the ACA neither discourages nor prevents insurers from paying for preventive services with a C or I grade, which denotes a marginal population benefit or insufficient evidence to assess the balance of benefits and harms. In the case of mammography, approximately 1 in every 3400 women in their 40s screened over 10 years will avoid a cancer death compared with those not screened.² Insurers could consider the evidence and determine whether the overall health benefit to their customers is worth the aggregate annual expense.

Undermining Science

When Congress required DHHS to link insurance coverage policy to outdated public health guidance, it was making a *scientific* judgment for which it is distinctly unqualified. In effect, legislators implicitly concluded that a rigorous assessment of numerous research studies during the past 14 years is not relevant to women's health today.

The ACA improved the public's health by guaranteeing that insurers provide uniform, cost-free access to preventive services based on modern evidence of effectiveness. The public's health is best served when women's personal decisions about screening are informed by evidence rather than political considerations. Congress's paternalistic response to USPSTF mammography screening recommendations vividly illuminates the social costs of politically mandated care. Rather than benefiting women, political interference with science can discourage shared decision making, increase harms from screening, and foster public doubt about the value and integrity of science.

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