



## No surprises from the USPSTF with new guidance on screening mammography

↘ Newly published guidelines reflect screening practices recommended by the Task Force since 2009. What is updated is their focus on more individualized recommendations for women in their 40s and use of supplemental screening tools for women with and without dense breasts.

In 2009, the US Preventive Services Task Force (USPSTF) recommended that biennial mammography screening in average-risk women begin at age 50.<sup>1</sup> New guidelines, that take into account reviews and modeling studies, clarify the earlier USPSTF recommendations, paying particular attention to individualized screening for women aged 40 to 49, use of tomosynthesis, and supplemental evaluation for women with radiologically dense breasts.

The new guidance only applies to women at average risk for breast cancer (not to those at substantially higher-than-average risk), including those with prior breast cancer or biopsy-confirmed high-risk lesions (eg, atypical hyperplasia), certain genetic conditions (such as BRCA1 or BRCA2 mutation), or histories of chest irradiation (eg, Hodgkin lymphoma).

### Major statements:

- Biennial screening is recommended for women aged 50 to 74 (B recommendation; definitions of USPSTF grades are available online at <http://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions>).
- Initiation of screening before age 50 should be individualized depending on patient preferences (C recommendation).
- For women aged  $\geq 75$ , current evidence is insufficient to assess benefits and harms of screening (I statement).
- Current evidence is insufficient to assess the benefits and harms of adding tomosynthesis to conventional screening mammography (I statement).
- For women with radiologically dense breasts, current evidence is insufficient to assess the benefits and harms of adjunctive ultrasound, magnetic resonance imaging (MRI), or tomosynthesis (I statement).<sup>2</sup>

The Task Force generated controversy with its 2009 recommendation that screening begin at age 50 in average-risk women. The current

guidance clarifies that repetitive screening of women through 10 years reduces breast cancer deaths by 4 (aged 40–49), 8 (aged 50–59), and 21 (aged 60–69) per 10,000 women, respectively.<sup>2</sup>

The term “overdiagnosis” refers to detection and treatment of invasive and noninvasive (usually ductal carcinoma in situ) lesions that would have gone undetected without screening and would not have caused health problems. The USPSTF acknowledges that, while overdiagnosis represents the principal harm from screening, estimating overdiagnosis rates is challenging (best estimates range from 1 in 5 to 1 in 8 breast cancers diagnosed in screened women).<sup>2–4</sup> False-positive results, which lead to unnecessary additional imaging and biopsies,<sup>3,4</sup> can represent an additional harm of screening mammography.

The rationale for recommending that average-risk women begin screening at age 50 is based on the relatively smaller benefits and greater harms incurred when younger women are screened;<sup>3,4</sup> however, in noting that most of the screening

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benefits for women in their 40s are realized starting at age 45, the USPSTF guidance opens the door to average-risk women to begin screening at that age (congruent with the November 2015 American Cancer Society recommendations<sup>5</sup>). Also, women with a first-degree relative with breast cancer may want to initiate screening at age 40.

Regarding screening frequency, annual screening generates minimal if any benefit while increasing the potential for harm<sup>3,4</sup>; thus, for most women at average risk for breast cancer, biennial screening provides the best benefit-harm balance.

### What about use of tomosynthesis and women with dense breasts?

Tomosynthesis, which can be performed along with conventional

digital screening mammography, seems to diminish the need for follow-up imaging while also increasing cancer detection rates.<sup>6</sup> However, whether these additional cancers represent overdiagnosis remains unknown. Furthermore, tomosynthesis can expose women to about twice the radiation as conventional digital screening.<sup>7</sup>


Twenty-four states currently mandate that patients with dense breasts identified at screening be notified. Although increased breast density is a common independent risk factor for breast cancer, the degree of radiographic density can vary substantially from one screen to the next in the same woman. Evidence for or against adjunctive imaging is very limited in women found to have dense breasts in an otherwise negative mammogram,

and suggests that ultrasonography and MRI (as well as tomosynthesis) can detect additional breast cancers while also generating more false-positive results.<sup>8</sup> Thus, the USPSTF does not recommend specific screening strategies for women with dense breasts.

### How I counsel my patients

I plan to continue recommending screening based on USPSTF guidance. However, I also will continue to support the preferences of many of my patients to:

- initiate screening before age 50
- undergo screening annually
- continue screening after age 74.

You and your patients alike may find the USPSTF's *Summary for Patients*<sup>9</sup> (<http://annals.org/article.aspx?articleid=2480981&resultClick=3>) to be helpful when navigating this territory. 

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