Mammograms at 40? Breast cancer screening guidelines spark fresh debate

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While physicians mostly applauded a government-appointed panel's recommendation that women get routine mammography screening for breast cancer starting at age 40, down from 50, not everyone approves.

Some doctors and researchers who are invested in a more individualized approach to finding troublesome tumors are skeptical, raising questions about the data and the reasoning behind the U.S. Preventive Services Task Force's about-face from its 2016 guidelines.

"The evidence isn't compelling to start everyone at 40," said Jeffrey Tice, a professor of medicine at the University of California-San Francisco.

Tice is part of the WISDOM study research team, which aims, in the words of breast cancer surgeon and team leader Laura Esserman, "to test smarter, not test more." She launched the ongoing study in 2016 with the goal of tailoring screening to a woman's risk and putting an end to the debate over when to get mammograms.

Advocates of a personalized approach stress the costs of universal screening at 40—not in dollars, but rather in false-positive results, unnecessary biopsies, overtreatment, and anxiety.

The guidelines come from the federal Department of Health and Human Services' U.S. Preventive Services Task Force, an independent panel of 16 volunteer medical experts who are charged with helping guide doctors, health insurers, and policymakers. In 2009 and again in 2016, the group put forward the current advisory, which raised the age to start routine mammography from 40 to 50 and urged women from 50 to 74 to get mammograms every two years. Women from 40 to 49 who "place a higher value on the potential benefit than the potential harms" might also seek screening, the task force said.

Now the task force has issued a draft of an update to its guidelines, recommending the screening for all women beginning at age 40.

"This new recommendation will help save lives and prevent more women

from dying due to breast cancer," said Carol Mangione, a professor of medicine and public health at UCLA, who chaired the panel.

But the evidence isn't clear-cut. Karla Kerlikowske, a professor at UCSF who has been researching mammography since the 1990s, said she didn't see a difference in the data that would warrant the change. The only way she could explain the new guidelines, she said, was a change in the panel.

"It's different task force members," she said. "They interpreted the benefits and harms differently."

Mangione, however, cited two data points as crucial drivers of the new recommendations: rising breast cancer incidence in younger women and models showing the number of lives screening might save, especially among Black women.

There is no direct evidence that screening women in their 40s will save lives, she said. The number of women who died of breast cancer declined steadily from 1992 to 2020, due in part to earlier detection and better treatment.

But the predictive models the task force built, based on various assumptions rather than actual data, found that expanding mammography to women in their 40s might avert an additional 1.3 deaths per 1,000 in that cohort, Mangione said. Most critically, she said, a new model including only Black women showed 1.8 per 1,000 could be saved.

A 2% annual increase in the number of 40- to 49-year-olds diagnosed with breast cancer in the U.S. from 2016 through 2019 alerted the task force to a concerning trend, she said.

Mangione called that a "really sizable jump." But Kerlikowske called it

"pretty small," and Tice called it "very modest"—conflicting perceptions that underscore just how much art is involved in the science of preventive health guidelines.

Task force members are appointed by HHS' Agency for Healthcare Research and Quality and serve four-year terms. The new draft guidelines are open for public comment until June 5. After incorporating feedback, the task force plans to publish its final recommendation in *JAMA*, the *Journal of the American Medical Association*.

Nearly 300,000 women will be diagnosed with breast cancer in the U.S. this year, and it will kill more than 43,000, according to National Cancer Institute projections. Expanding screening to include younger women is seen by many as an obvious way to detect cancer earlier and save lives.

But critics of the new guidelines argue there are real trade-offs.

"Why not start at birth?" Steven Woloshin, a professor at the Dartmouth Institute for Health Policy and Clinical Practice, asked rhetorically. "Why not every day?"

"If there were no downsides, that might be reasonable," he said. "The problem is false positives, which are very scary. The other problem is overdiagnosis." Some breast tumors are harmless, and the treatment can be worse than the disease, he said.

Tice agreed that overtreatment is an underappreciated problem.

"These cancers would never cause symptoms," he said, referring to certain kinds of tumors. "Some just regress, shrink, and go away, are just so slow-growing that a woman dies of something else before it causes problems."

Screening tends to find slow-growing cancers that are less likely to cause symptoms, he said. Conversely, women sometimes discover fast-growing lethal cancers soon after they've had clean mammograms.

"Our strong feeling is that one size does not fit all, and that it needs to be personalized," Tice said.

WISDOM, which stands for "Women Informed to Screen Depending On Measures of risk," assesses participants' risk at 40 by reviewing family history and sequencing nine genes. The idea is to start regular mammography immediately for high-risk women while waiting for those at lower risk.

Black women are more likely to get screening mammograms than white women. Yet they are 40% more likely to die of breast cancer and are more likely to be diagnosed with deadly cancers at younger ages.

The task force expects Black women to benefit most from earlier screening, Mangione said.

It's unclear why Black women are more likely to get the most lethal breast cancers, but research points to disparities in cancer management.

"Black women don't get follow-up from mammograms as rapidly or appropriate treatment as quickly," Tice said. "That's what really drives the discrepancies in mortality."

Debate also continues on screening for women 75 to 79 years old. The task force chose not to call for routine screening in the older age group because one observational study showed no benefit, Mangione said. But the panel issued an urgent call for research about whether women 75 and older should receive routine mammography.

Modeling suggests screening older women could avert 2.5 deaths per 1,000 women in that age group, more than those saved by expanding screening to younger women, Kerlikowske noted.

"We always say women over 75 should decide together with their clinicians whether to have mammograms based on their preferences, their values, their health history, and their family history," Mangione said.

Tice, Kerlikowske, and Woloshin argue the same holds true for women in their 40s.