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EDITORIAL

Convergence and Divergence Around Breast Cancer Screening

In 2015, contentious discussions about breast cancer screening and prevention continued, with physicians, advocates, lawmakers, and scientists all lending their voices to the debate. Many of these stakeholders focused on the need for women to be able to make more informed health care choices about when to start screening without having to worry about the cost of an insurance copayment.

The role of the U.S. Preventive Services Task Force (USPSTF) in these discussions has remained unchanged: to empower women with the best scientific data about the benefits and harms associated with breast cancer screening, so they can make an informed decision with their doctor.

In this issue, we released an updated final recommendation statement on screening mammography for breast cancer (1)—a guideline developed by experts in the medical specialties that order nearly all screening mammograms in the United States. Our final recommendation is grounded in scientific evidence and informed by significant input from breast disease specialists and comments from the public. In our recommendation, we confirm that regular screening is effective in reducing breast cancer mortality for women aged 40 to 74 years and that women aged 50 to 74 years are most likely to benefit from regular screening. Women in their 40s may also benefit from screening; however, their overall likelihood of benefit from screening is lower. If a woman in her 40s places a higher value on the potential benefit than the potential harms, the scientific evidence indicates that she may want to begin screening, after discussing all of the information with her doctor. Ultimately, these recommendations support a range of choices for women on when to start screening—from beginning regular mammograms at age 40 or at some point during their 40s or waiting until age 50, when the likelihood of benefit is greater.

Much attention has been focused on the differences among the guidelines and recommendations issued by various cancer prevention advocates and professional societies. Although we acknowledge that disagreements exist, it would be a disservice to women and their clinicians if these disagreements obscured a strong emerging convergence among groups who have recently issued evidence-based guidelines. The USPSTF, the American Cancer Society, and many others have affirmed that mammography is an important tool to reduce breast cancer mortality, and that the benefits of mammography increase with age. Most guidelines suggest that there is value in mammography screening for women in their 40s. Support of a personal, informed choice for women in their early 40s is also widely shared, not just by the USPSTF and the American Cancer Society, but also by the American College of Physicians, the American Academy of Family Physicians, and the Canadian Task Force on Preventive Health Care. This convergence among distinct organizations, all of which adhere to the rigorous conflict-of-interest standards advanced by the National Academy of Medicine, should give the public confidence in the science that supports mammography screening (2, 3). Evidence-based guidelines most often diverge when strong, publicly available research is sparse or inconsistent, or when the benefits of a particular preventive service are smaller. Each guideline developer handles these "gray" areas differently. In the case of the USPSTF and breast cancer screening, we found a small net benefit for women aged 40 to 49 years and thus issued a "C" recommendation for women in this age range.

The USPSTF and others have also affirmed that women should be able to make an informed decision to begin screening before age 50. The USPSTF believes that women who understand the harms but value any chance of reducing their risk for dying of breast cancer, even if small, should be able to make an informed decision to begin screening in their 40s. The more women know about the benefits and harms of screening, the more likely they are to make informed choices about their health care. The USPSTF and others fully support the shift toward shared decision making that is emerging within the mammography debate, and we are glad to see that it is part of a larger movement toward empowering patients with information not only about the benefits but also the harms of preventive services.

Finally, the USPSTF acknowledges the important role that insurance coverage plays in access to and use of preventive services. The Patient Protection and Affordable Care Act provides a link to full coverage only for those clinical preventive services determined by the USPSTF to have moderate or substantial net benefit (grade "A" or "B" recommendations); other preventive services (including "C" recommendations, which have small net benefit) are neither included nor excluded from coverage mandates. For this and other reasons, our "C" recommendation in particular is often misinterpreted as a recommendation against mammography screening or coverage. In the linkage to coverage established by the Patient Protection and Affordable Care Act, the USPSTF's role is limited to evaluating the science to determine the net benefit of a clinical preventive service. Our review of the scientific evidence may be only one of the inputs to determining insurance coverage; often it is the floor to determining minimal coverage, not the ceiling. Coverage decisions are the domain of payers, regulators, and legislators (4). Whatever we may believe about the importance of coverage in shared decision making about mammography, we cannot exaggerate our interpretation of the science to

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* For a list of the members of the USPSTF, see the **Appendix** (available at www.annals.org).

ensure coverage for a service. This would lead to confusion regarding the state of science versus the politics of coverage.

We are hopeful that our recommendations on breast cancer screening will be perceived as an important part of a growing consensus among experts in evidence-based medicine. All women deserve to understand the many parallels among the various expert recommendations and guidelines—and the differences—so they are empowered to make the best choice for themselves, together with their doctor. We hope our work can help advance progress in that direction for the benefit of all women.

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Note: The U.S. Preventive Services Task (USPSTF) is an independent expert panel that reviews the scientific evidence for preventive services and makes recommendations based on this evidence for patients and health care providers.

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Appendix: Members of the USPSTF

Members of the USPSTF at the time the editorial was finalized† are Albert L. Siu, MD, MSPH, *Chair* (Mount Sinai School of Medicine, New York, and James J. Peters Veterans Affairs Medical Center, Bronx, New York); Kirsten Bibbins-Domingo, PhD, MD, MAS, *Co-Vice Chair* (University of California, San Francisco, San Francisco, California); David C. Grossman, MD, MPH, *Co-Vice Chair* (Group Health Research Institute, Seattle, Washington); Linda Ciofu Baumann, PhD, RN, APRN (University of Wisconsin, Madison, Wisconsin); Karina W. Davidson, PhD, MASc (Columbia University, New York, New York); Mark Ebell, MD, MS (University of Georgia, Athens, Georgia); Francisco A.R. García, MD, MPH (Pima County Department of Health, Tucson, Arizona); Matthew Gillman, MD, SM (Harvard Medical School and Harvard Pilgrim Health Care Institute, Boston, Massachusetts); Jessica Herzstein, MD, MPH (Independent Consultant, Washington, DC); Alex R. Kemper, MD, MPH, MS (Duke University, Durham, North Carolina); Alex H. Krist, MD, MPH (Fairfax Family Practice, Fairfax, and Virginia Commonwealth University, Richmond, Virginia); Ann E. Kurth, PhD, RN, MSN, MPH (New York University, New York, New York); Douglas K. Owens, MD, MS (Veterans Affairs Palo Alto Health Care System, Palo Alto, and Stanford University, Stanford, California); William R. Phillips, MD, MPH (University of Washington, Seattle, Washington); Maureen G. Phipps, MD, MPH (Brown University, Providence, Rhode Island); and Michael P. Pignone, MD, MPH (University of North Carolina, Chapel Hill, North Carolina). Michael LeFevre, MD, MSPH (University of Missouri, Columbia, Missouri), Immediate Past Chair, also contributed to the editorial.

† For a list of current USPSTF members, go to www.uspreventiveservicestaskforce.org/Page/Name/our-members.