Screening Mammography: The Goal Is Changing

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Over the past 25 years, a number of trends have converged to place patients more at the center of health care.[1] Medical journals increasingly publish articles about patient-centered care as a valued outcome in its own right.[2] The Institute of Medicine sees patient-centered care as an important approach to improving the quality of health care.[3] Although there are various definitions of this concept, it at least means providing patients with information about the benefits and harms of competing options and engaging patients in decision making for appropriate health care decisions.[4] The U.S. Preventive Services Task Force (USPSTF) has embraced this approach to decision making about preventive services.[5]

A well-known example of the need for patient involvement in decision making for preventive care is the issue of screening women in their 40s for breast cancer. Although the USPSTF appeared to downgrade screening from a B recommendation in 2002 to a C in 2009, a close reading of the two recommendations shows that the USPSTF did not change its recommendation for physicians to inform patients about the potential benefits and harms, and to engage them in participating in the decision of whether to be screened.[6,7] This approach seems more reasonable than ever today; over the years we have learned more about the limited benefits of screening mammography, and also more about the potential harms, including anxiety over false-positive results and overdiagnosis and overtreatment of disease that would not have caused health problems.

More and more, the goal for breast cancer screening is not to maximize the number of women who have mammography, but to help women make informed decisions about screening, even if that means that some women decide not to be screened. We suggest that this goal should not be limited to women in their 40s, but instead should include all eligible women 40 to 75 years of age. We further suggest that this goal is achievable within the constraints of today's busy primary care environment, but only if the practice organizes itself for effective communication about screening.

The goal of improving patient decision making should be expanded to all women eligible for breast cancer screening (i.e., those 40 to 75 years of age who are in reasonable health), because the benefits and harms of screening are not very different among these age groups. For example, starting biennial screening at 40 years of age compared with 50 years will extend the life of fewer than one woman for every 1,000 women screened. Starting biennial screening at 50 years of age compared with 60 years will extend the lives of one or two women for every 1,000 screened. Biennial screening between 60 and 69 years of age only would extend the lives of three or four women for every 1,000 screened.[8-10] For all of these age groups, 350 to 500 women would have at least one false-positive result over the 10 years.[11,12] Although the exact number of women who would be overdiagnosed and overtreated is not known, our best estimates are that this would affect about six women per 1,000 in their 40s, eight in their 50s, and 10 in their 60s.[13-15] Although the benefits of screening mammography increase with age, so do the harms; the balance between benefits and harms may be close in all of these age groups. All eligible women—not only those in their 40s—should understand these numbers before agreeing to be screened.

Organizing a practice to effectively communicate about screening requires the use of validated decision tools or handouts,[16] training nursing personnel in the use of

these tools to help patients understand the issues,[17,18] and good documentation systems for these discussions.[19] Because patient-centered care is one of the cornerstones of the patient-centered medical home, systems of efficient and effective communication within a restructured primary care practice are being developed and tested.[20-22] However, a more limited restructuring could use carefully designed handouts based on the benefits and harms of mammography, discussed with appropriate patients by trained nursing personnel, and documented in the medical record on forms designed for this purpose.

In an era of patient-centered medical care, screening mammography is only one of an increasing number of clinical issues that will require rethinking the clinical mission and restructuring clinical practice to help patients make informed choices. Performance measures should assess not how many patients have had mammograms, but how many understand the benefits and harms of screening. This should be a change that we in the primary care trenches welcome.

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