

From [Medscape Medical News](#)

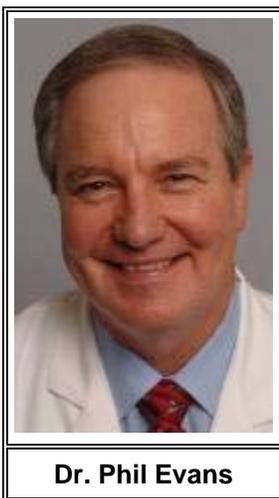


Mammography Should Begin at 40, Say New Recommendations

Nick Mulcahy

January 6, 2010 — Two professional organizations have jointly issued new recommendations on the use of imaging modalities for breast cancer screening. The recommendations, compiled by the American College of Radiology (ACR) and the Society of Breast Imaging (SBI), appear in the January issue of the *Journal of the American College of Radiology*.

The recommendations include the guidance that women with an average risk of developing breast cancer should start annual mammography screening at age 40.



Dr. Phil Evans

This is in marked contrast with guidelines [issued recently](#) by the United States Preventive Services Task Force (USPSTF), which included a recommended start age of 50 years for routine biennial screening. The USPSTF issuance led to a [firestorm of criticism](#), including from a number of coauthors of the new ACR/SBI guidelines.

One of the coauthors of the ACR/SBI recommendations, Phil Evans, MD, explained that they are the result of a 2-year consultation process.

The impetus behind the recommendations was "gaps" in existing guidelines, such as those of the American Cancer Society, on how the various imaging technologies for breast cancer screening should be used, added Dr. Evans, who is director of the Center for Breast Care at the University of Texas Southwestern Medical Center in Dallas.

These recommendations were not developed in response to the USPSTF recommendations.

"These recommendations were not developed in response to the USPSTF recommendations," Dr. Evans told *Medscape Oncology*.

Nevertheless, the authors made late revisions to the paper after it was accepted for publication to comment on the USPSTF's controversial recommendations, Dr. Evans explained.

Much of the commentary about the USPSTF recommendations, including the comments in the newly published ACR/SBI recommendations, amount to a missed opportunity, suggested one radiologist approached for comment by *Medscape Oncology*.

The authors missed a great opportunity to acknowledge and discuss the harms of screening.

"The [ACR/SBI] authors missed a great opportunity to acknowledge and discuss the harms of screening and provide true guidance to women and other physicians considering screening," said John Keen, MD, senior attending radiologist at the John H. Stroger Hospital of Cook County in Chicago, Illinois.

Dr. Keen has argued for a more [balanced view of breast cancer screening](#), which presents the benefits of screening in absolute numbers and enumerates the risks for the potential harms, which include false test results, patient anxiety, unnecessary biopsies, overdiagnosis, and overtreatment.

Recently, a prominent epidemiologist published a ["balance sheet"](#) of the harms and benefits of mammography to help

patients and physicians with mammography decision-making.

"Most women consider the greatest harm to be breast cancer," said Dr. Evans, who added that this was a "personal belief" based on clinical interaction and not on any research finding.

"Screening mammography remains the most important test a woman can undergo to reduce her chance of dying from breast cancer," he summarized.

Mammography remains the most important test a woman can undergo to reduce her chance of dying from breast cancer.

Increasingly Complex

The new joint imaging recommendations are an outgrowth of previous recommendations from the ACR but are a first issuance for the SBI, said Dr. Evans.

The message about breast cancer screening with imaging used to be fairly simple.

"The message about breast cancer screening with imaging used to be fairly simple: mammography should begin at age 40," explained Dr. Evans, who is president of the SBI.

However, with the addition of other methods for screening, such as magnetic resonance imaging (MRI) and ultrasound, and related data on their uses, the message has become more complex, added Dr. Evans.

"Most women — 80% to 85% — are not at high risk for breast cancer and therefore should undergo mammography. For the other 15% to 20% of women who are at high risk, there might be additional tests, including MRI and ultrasound, that make it possible to detect breast cancer more effectively," he summarized.

The ACR/SBI's recommended start ages for screening depend on a patient's risks. Those at high risk for breast cancer should start screening from a younger age, they suggest.

Recommendations for High-Risk Patients

The following are recommendations for high-risk patients. However, the authors acknowledge that these recommendations are based on consensus opinion; "no data exist on the optimum age to start screening mammography in women at increased risk for breast cancer," they explain.

No data exist on the optimum age to start screening mammography in women at increased risk for breast cancer.

For *BRCA1* or *BRCA2* mutation carriers or untested first-degree relatives of a *BRCA* mutation carrier, an annual mammogram and annual MRI are recommended starting by age 30, but not before age 25.

The same recommendation is made for women with a lifetime risk for breast cancer of 20% or more on the basis of family history.

Also, for women with a history of chest irradiation between the ages of 10 and 30 years, an annual mammogram and annual MRI are recommended starting 8 years after treatment, with the MRI not starting before age 25.

Finally, among women with a personal history of breast cancer (invasive or ductal carcinoma in situ), annual mammography is recommended after the date of diagnosis; annual MRI or ultrasound can "also be considered."

However, Dr. Keen told *Medscape Oncology* that this recommended use of MRI, especially among women in their 30s, is controversial.

"There are 2 problems with earlier screening of high-risk women. The first is

MRI and ultrasound have not been shown to save anyone's life.

that MRI and ultrasound have not been shown to save anyone's life," said Dr. Keen.

Indeed, the ACR/SBI authors acknowledge that only screening with film mammography has been shown to reduce mortality.

Dr. Keen continues: "The second is that radiation is an increasing problem in younger women. A study published in the *British Journal of Cancer* in 2005 estimated that there are 1.2 to 1.9 radiation-induced breast cancer deaths per 1000 high-risk women screened in their 30s for a decade."

Medscape Radiology recently reported on a Dutch study that found high-risk women (because of *BRCA* status or family history) exposed to chest-area radiation before age 20 had an increased risk for breast cancer.

Further Notes About MRI and Ultrasound

The new recommendations note that MRI should routinely be used for the contralateral breast at the time of diagnosis in all women. "This will detect another cancer in at least 3% of women," said Dr. Evans.

MRI has advantages and disadvantages compared with mammography, highlighted Dr. Evans. Some of its limitations include the need for an intravenous infusion/injection, spatial confinement/potential for claustrophobia in patients, and greater cost.

"MRI finds more breast cancer than mammography but has a higher false-positive rate than mammography," he said.

In terms of costs, the ACR/SBI authors say that adding MRI to mammography increases screening costs by more than \$50,000 per cancer detected.

Ultrasound can be considered in high-risk women for whom MRI is not suitable. Ultrasound can also be considered in women with dense breast tissue as an adjunct to mammography, note the ACR/SBI authors.

Dr. Evans is an unpaid member of the Scientific Advisory Board of Hologic, Inc, which manufactures and markets film and digital mammography-screening products. Dr. Keen has disclosed no relevant financial relationships.

J Am Coll Radiol. 2010;7:18-27.

Authors and Disclosures

Journalist

Nick Mulcahy

Nick Mulcahy is a senior journalist for Medscape Hematology-Oncology. Before joining Medscape, Nick was a freelance medical news writer for 15 years, working for companies such as the International Medical News Group, MedPage Today, HealthDay, McMahon Publishing, and Advanstar. He is also the former managing editor of breastcancer.org. He can be contacted at nmulcahy@medscape.net.

Medscape Medical News © 2010 Medscape, LLC
Send press releases and comments to news@medscape.net.
