

## From the Editor's Notebook

# Revealing Oz Behind the Curtain: USPSTF Screening Mammography Guidelines and the Hot Air Balloon

**P**ay no attention to that man behind the curtain! The Great Oz has spoken!" Although the Wizard of Oz appeared to Dorothy first as a giant head, then as a beautiful fairy, a ball of fire, and later a terrifying monster, we came to know that the wizard was just an ordinary man using tricks and deception to make himself appear "great and powerful." It is no coincidence that the wizard left Oz in a hot air balloon. Now that the U.S. Preventive Services Task Force (USPSTF) screening mammography guidelines have placed women's lives at stake, we need to take a long hard look behind the curtain.

Breast cancer is the most common cancer in women, with 192,370 new cases and 40,170 deaths expected in the United States in 2009 [1]. USPSTF agreed that screening mammography decreases breast cancer mortality for women in their 40s, but they believe that the absolute benefit is less than that among older women in whom the disease is more common, and that younger women are more likely to have false-positive findings resulting in anxiety and stress. The USPSTF itself concluded from the data that there is a statistically significant 15% reduction in breast cancer mortality between 39 and 49 years of age due to screening mammography [2]. In fact, the risks associated with screening mammography from radiation exposure (which the USPSTF panel overestimated by a factor of two), false-positive results, pain, and anxiety are no reason to sacrifice the lives saved by screening mammography.

The USPSTF denied support for mammography screening in women of average risk between the ages of 40 and 49 years (grade C recommendation), advised screening only every 2 years for women between ages 50 and 74 years (grade B recommendation), and advised that breast self-examination (grade D recommendation) and clinical breast examination be discontinued (I statement) [2]. This flies in the face of reason. Statistical analysis shows that breast cancer mortality in the United States from 1952 through 2002 in women over the age of 40 years has declined by about 30% despite an increasing incidence of breast cancer [3]. This progress was

largely due to the increased use of screening mammography beginning in the 1980s.

The USPSTF was convened in 1984 by the U.S. Public Health Service. Under the auspices of the Agency for Healthcare Research and Quality since 1998, the USPSTF is an independent panel of experts in primary care and prevention. The 16-member panel had *not one expert* on breast cancer screening, diagnosis, or treatment.

There is no justification for denying reimbursement for screening mammography to women in their 40s. Screening mammography is one of the most studied tests in medicine. Both randomized controlled trials and service screening data in the peer-reviewed scientific literature clearly demonstrate that screening mammography saves lives in women 40–74 years of age [4–16]. Nonetheless, the USPSTF findings could result in withdrawal of previous coverage by Medicare. The health care reform legislation before the Senate provides for translating the USPSTF recommendations into policy based on the Medicare Improvements for Patients and Providers Act of 2008. Private insurance companies and Medicaid would undoubtedly also follow. Fortunately, due to the efforts of Senator Barbara Mikulski (D–Maryland), the Senate approved an amendment to the pending health care reform legislation (H.R. 3590) by a vote of 61 to 39 on December 3, 2009, requiring insurance companies to offer women's preventive care services at little or no cost to patients, to include screening mammography. Although this step potentially mitigates the current damage, it does not remedy the root cause of the problem.

The USPSTF panel lost a prime opportunity to advance public health in the U.S. by their failure to recommend annual mammography screening for women age 40 years and older. In addition, they failed to recognize that the U.S. is one of the few developed countries *not* to have a true population-based screening program and failed to make any recommendations to achieve one. They squandered an opportunity to advance public health in the U.S. in a meaningful way.

"Pay no attention to that man behind the curtain! The Great Oz has spoken!" But we must and should pay close attention. It's time

to drop the curtain and look at the way the levers and buttons are pushed. The USPSTF process is fundamentally flawed. The panel consisted of members without any expertise in the field they assessed, met in closed sessions, sought no input from scientific or clinical experts in the field, allowed no opportunity for comment, and kept their report and supportive analyses embargoed until their recommendations were released. How can we sit by and allow recommendations by USPSTF panels to be submitted to Congress without appropriate rigorous review and input by experts specific to the area of medicine under consideration? I urge each and every one of you to contact your congressmen, congresswomen, and senators to voice your opposition to this juggernaut. Otherwise we will have more of the same: a well-intentioned but clandestine and unsound decision-making process that will result in flawed recommendations exacting a heavy toll of increased suffering and lives lost.

And this is just the beginning. The balloon has just begun to rise, and as the wizard last said, "I can't come back! I don't know how it works!"

Marcia C. Javitt

*AJR Section Editor, Women's Imaging*  
femscan@aol.com

R. Edward Hendrick

*Department of Radiology*  
*School of Medicine*  
*University of Colorado*  
*Denver, CO*  
edward.hendrick@gmail.com

DOI:10.2214/AJR.09.4065

### References

1. American Cancer Society. Cancer facts and figures 2009. [www.cancer.org/docroot/STT/content/STT\\_1x\\_Cancer\\_Facts\\_Figures\\_2009.asp](http://www.cancer.org/docroot/STT/content/STT_1x_Cancer_Facts_Figures_2009.asp). Accessed December 7, 2009
2. Screening for breast cancer: U. S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2009; 151:716–726
3. National Cancer Institute. Cancer trends progress report—2007 update. [progressreport.cancer.gov/doc\\_detail.asp?pid=1&did=2007&chid=76&coi=729&mid=](http://progressreport.cancer.gov/doc_detail.asp?pid=1&did=2007&chid=76&coi=729&mid=). Accessed December 7, 2009
4. Tabár L, Fagerberg CJ, Gad A, et al. Reduction in

## From the Editor's Notebook

- mortality from breast cancer after mass screening with mammography. Randomized trial from the Breast Cancer Screening Working Group of the Swedish National Board of Health and Welfare. *Lancet* 1985; 1:829–832
5. Andersson I, Aspegren K, Janzon L, et al. Mammographic screening and mortality from breast cancer: the Malmö mammographic screening trial. *BMJ* 1988; 297:943–948
  6. Andersson I, Janzon L. Reduced breast cancer mortality in women under 50: update from the Malmö mammographic screening program. *J Natl Cancer Inst Monogr* 1997; 22:63–67
  7. Hendrick RE, Smith RA, Rutledge JH 3rd, et al. Benefit of screening mammography in women aged 40–49: a new meta-analysis of randomized controlled trials. *J Natl Cancer Inst Monogr* 1997; 22:87–92
  8. Bjurstram N, Bjorneld L, Duffy SW, et al. The Gothenburg breast screening trial: first results on mortality, incidence, and mode of detection for women ages 39–49 years at randomization. *Cancer* 1997; 80:2091–2099
  9. UK Trial of Early Detection of Breast Cancer group. 16-year mortality from breast cancer in the UK Trial of early detection of breast cancer. *Lancet* 1999; 353:1909–1914
  10. Nyström L, Rutqvist LE, Wall S, et al. Breast cancer screening with mammography: overview of Swedish randomized trials. *Lancet* 1993; 341:973–978
  11. Bjurstram N, Bjorneld L, Duffy S, et al. The Gothenberg breast cancer screening trial: preliminary results on breast cancer mortality for women ages 39–49. *J Natl Cancer Inst Monogr* 1997; 22:53–55
  12. Alexander FE, Anderson TJ, Brown HK, et al. 14 years of follow-up from the Edinburgh randomized trial of breast-cancer screening. *Lancet* 1999; 353:1903–1908
  13. Nystrom L, Andersson I, Bjurstram N, et al. Long-term effects of mammography screening: updated overview of the Swedish randomized trials. *Lancet* 2002; 359:909–919
  14. Duffy SW, Tabâr L, Chen H, et al. The impact of organized mammography service screening on breast carcinoma mortality in seven Swedish counties. *Cancer* 2002; 95:458–469
  15. Bjurstram N, Björneld L, Warwick J, et al. The Gothenberg breast screening trial. *Cancer* 2003; 97:2387–2396
  16. Otto SJ, Fracheboud I, Looman CW, et al. Initiation of population-based mammography screening in Dutch municipalities and effect on breast cancer mortality: a systematic review. *Lancet* 2003; 361:1411–1417