EDITORIALS

Improving Screening for Cancer in the Primary Care Setting

Where Do We Need to Go and How Can We Get There?

Cancer screening ranks high among the preventive services offered by clinicians, yet important gaps remain in the delivery of appropriate screening to Americans. In a 1992 national survey, only 68% of women aged 60 to 69 reported ever having a mammogram and more than one fourth of younger women had not had a Pap smear within the past 3 years.[1] With delivery of preventive services now used as a criterion for determining quality of care, both health plans and individual physicians have an important stake in determining how to improve the delivery of cancer screening and other preventive services to their patients.

Efforts to improve delivery of preventive services have traditionally focused on changing provider behavior. As noted in the recently released report of the U.S. Preventive Services Task Force (USPSTF), the *Guide to Clinical Preventive Services, 2nd edition*,[2] doctors and nurses still face important barriers in delivering preventive care: uncertainty over the effectiveness of specific interventions; inadequate time or reimbursement for preventive care; and insufficient training or inadequate practice organization to deliver services efficiently. The first barrier, deciding what screening tests are worth doing, is less imposing for primary care clinicians in 1996, thanks in part to the ongoing work of the USPSTF, the Canadian Task Force on the Periodic Health Examination (CTFPHE)[3] and the American College of Physicians (ACP).[4] The general agreement among the conclusions of these three independent bodies should reassure doctors and nurses seeking evidence-based recommendations for cancer screening and other preventive services.

As illustrated by several articles in this issue, however, deciding *what* to do is only the first step in implementing effective screening policies in the clinical setting. Prevention requires a working partnership with patients to ensure they understand the value of early interventions and to assist them in complying with recommended tests and followup. Margolis and Menart[5] document substantial noncompliance (25%) with recommended mammography among their female outpatients, despite efforts to counsel women about the value of screening. Other surveys indicate that the reasons for noncompliance (and thus the solutions to improving compliance) vary among women: inconvenience, expense, skepticism about the value of screening, and the perception that medical care is indicated only when problems are active.[6]

Compliance is likely to loom as an even larger obstacle to the implementation of sigmoidoscopy screening for colorectal cancer. The revised USPSTF recommendations, which endorse periodic sigmoidoscopy and/or annual fecal occult blood testing (FOBT) in adults over 50, have renewed interest in colorectal cancer screening, and three bills before Congress propose adding colorectal cancer screening as a Medicare benefit. Increasing colorectal cancer screening is likely to require substantial changes in the way this screening is delivered. Among the solutions that have been successfully implemented are training nurse-endoscopists to do sigmoidoscopy and establishing dedicated screening clinics.[7] As indicated by the results of Lewis and Jenson,[8] such measures may not overcome other barriers to screening. In their study, perceived discomfort was the factor most strongly associated with whether or not patients had received sigmoidoscopy. While clinician advice was also an important factor, it appeared to have little effect among the subgroup of patients who indicated the greatest concern about pain. The difficulty of getting asymptomatic patients to accept sigmoidoscopy was also evident in an earlier trial, in which compliance was only 30%, despite reinforcing measures such as pamphlets and telephone reminders.[9] Offering patients the option of different screening interventions (e.g., FOBT or sigmoidoscopy) may be the best way to improve compliance with screening in the outpatient setting.

As clinicians struggle to make proven screening tests more available and acceptable to patients they face the opposite dilemma in prostate specific antigen (PSA), where demand for screening has outpaced conclusive evidence of its effectiveness. While we still await adequately controlled data to determine the benefit of screening on prostate cancer mortality, the "costs" of widespread screening are increasingly clear. The most immediate of these is the harm from false-positive results which lead to unnecessary biopsies and anxiety, consequences that are important to patients and which do not necessarily disappear after a negative biopsy. As Meigs et al. illustrate,[10] an "elevated" PSA (> 4 ng/ml) is present in at least 5% of asymptomatic men without cancer, 10% of those with symptoms of benign prostatic hyperplasia (BPH), and over 30% of men with documented BPH. In these latter two groups, PSA level provides relatively little information to define which men need biopsy, unless we use higher cutoffs (6–10 ng/ml) that may miss the majority of organ-confined cancers.

Furthermore, problems in the performance of PSA are secondary to the fundamental uncertainty about the risks and benefits of early detection and treatment of prostate cancer. Even if early treatment can improve the outcomes of some cancers, these benefits may be offset by the harms of aggressive treatment of cancers that would have remained clinically silent in the absence of screening. Given the high toll of prostate cancer, it is understandable that many clinicians and patients are reluctant to wait for definitive proof of effectiveness from ongoing trials of screening and treatment. All parties should recognize, however, that to screen without such evidence is to decide that it is justifiable to make a number of previously healthy men worse off in an attempt to provide possible but unproven benefits to a small minority of men (3–5%) who would otherwise develop advanced prostate cancer in their lifetime. Although this tradeoff may be acceptable to individual patients concerned about cancer, the possibility that overall harms may exceed benefits led the USPSTF, the ACP, and the CTFPHE to discourage the routine use of PSA screening.

How then should we proceed in our efforts to improve cancer screening? A reasonable first principle is to concentrate on those screening tests for which effectiveness is clearly established[2–4]: periodic Pap smears, regular mammography in women age 50 and older, and colorectal cancer screening for men and women beginning at age 50. For widely used measures of potential but unproven benefit, such as mammography in younger women and prostate cancer screening, individual practitioners and health care systems will need to develop their own policies. These policies should recognize that primary care clinicians are busy, that health care resources are generally limited, and that we still have much room for improving the use of other preventive services of proven benefit. At a minimum, unproven services should not be indiscriminately promoted to patients nor used as indicators of quality. Because all cancer screening tests have potentially serious consequences for asymptomatic persons, it is essential that patients be informed of risks and benefits and participate in screening decisions.[2]

The good news is that the importance of prevention and the need to improve the delivery of effective preventive services are now widely accepted by individual providers and their professional societies, by health plans, insurers, and health care purchasers, and by Federal and state agencies responsible for health care. We have come a long way in the past decade in our fight against preventable death and disability in this country, and we have the means to continue our progress into the 21st century.—**DAVID ATKINS, MD, MPH,** *Agency for Health Care Policy and Research, Rockville, Md.*

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