

A Pragmatic Approach to Melanoma Screening in Collaboration With Primary Care Providers

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In 2009, the US Preventive Services Task Force issued an I statement for routine skin cancer screening, noting a lack of evidence to support the balance of benefits and harms from screening,¹ a recommendation that is likely to be upheld this year. As dermatologists and melanoma specialists, we have abundant anecdotal evidence of the value of screening; however, population-based screening performed exclusively by dermatologists is not practical. There are approximately 170,000,000 adults 35 years and older and only 9600 practicing dermatologists in the United States, requiring each dermatologist to screen nearly 18,000 individuals per year to meet the needs of the population.

Only 8% to 15% of people in the United States report having received a recent skin examination by a physician.^{2,3} Partnering with our primary care provider (PCP) colleagues has the potential to reach more patients and to improve skin cancer screening rates more rapidly. The workforce in primary care is substantially larger than dermatology by approximately 30-fold, and PCPs are more likely than dermatologists to practice in rural areas, thus reaching patients with limited access to dermatologists. Skin cancer screening can be included in the routine PCP visit, reducing the need for an additional physician visit for the patient. Patients visit their PCP more frequently as they age, which parallels

the risk for developing and dying from melanoma and also provides an opportunity to introduce skin cancer education and screening to a population at higher risk who may not otherwise seek it on their own.⁴ Providing PCPs with the training and tools to perform melanoma screening shifts the responsibility of initiating screening from the patient alone to a shared responsibility of patient and provider. Dermatologists, in turn, need to be available to examine those patients found to have a suspicious lesion, treat newly diagnosed skin cancer, and follow those patients at highest risk of developing skin cancer, including those who are immunosuppressed, have multiple atypical moles, or have a personal or family history of melanoma.

Evidence from the SCREEN (Skin Cancer Research to provide Evidence for Effectiveness of Screening in Northern Germany) project supports PCP-based screening. In the 5 years following a 1-year pilot screening program, there was nearly a 50% reduction in melanoma mortality.⁵ Unfortunately, these encouraging results were not confirmed once the pilot project was translated into a national skin cancer screening program.⁶ However, there are lessons to be learned from the German project and we propose that PCP-led screening is feasible and practical in the United States and we currently have a pilot program in our institution, the University of Pittsburgh Medical Center (Pittsburgh, Pennsylvania).

In the SCREEN project and in routine practice across the United States, screening is primarily driven by patients. Generally, higher-risk patients such as men and the elderly are the least likely group to seek skin cancer screening. In our program, PCPs are offered training in skin cancer screening using a validated web-based program and alerted through the electronic health record to offer skin cancer

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The authors report no conflict of interest.

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screening annually to patients 35 years and older who present for routine primary care visits.⁷ This approach reduces self-referral bias by promoting physician initiation rather than patient initiation of screening, which can occur while the patient is already in the PCP's office.

Melanoma thickness can be measured among screened patients, unscreened patients, and historic controls and compared to determine if this approach is effective. Health care utilization data can help to inform us if this approach leads to more skin biopsies and procedures or to an increased rate of dermatology referrals. As health care payment and delivery models evolve, there is greater emphasis on outcomes and team-based care. We believe that this approach will allow us to form effective teams of PCPs, dermatologists, and other experts in melanoma, public health, and informatics to reduce melanoma mortality in a cost-effective manner.

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