Preface

Screening and Prevention in the Modern Era

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Prevention and early detection of treatable medical conditions is an appealing concept. Preventive health care encompasses primary prevention of illness (eg, immunization against infectious disease or adoption of a healthy lifestyle), secondary prevention that involves early detection of latent disease (eg, colon and breast cancer screening), or tertiary prevention that aims to limit disability or improve function for an individual with an existing condition (eg, exercise rehabilitation in chronic lung disease). Positioned at the interface between public health and individual medical care, preventive health care is implemented at the population level as well as at the individual level in the health care setting. The focus of these articles is care of the individual geriatric patient.

As with so much of geriatric medical care, the promise of prevention and screening is complicated. For example, the evidence base supporting most commonly accepted recommendations for primary and secondary preventive health care rarely includes adults over the age of 75 or those with multiple chronic illnesses or frailty. Preventive health care in the busy practice setting is challenging as it frequently competes for time needed to manage acute and chronic conditions. Furthermore, implementation requires a nuanced approach that considers the individual's health and function, life expectancy, and goals of care (eg, symptom management, preservation of function, or maximum longevity), while judging benefit and harm that is frequently not quantifiable. All of this must be communicated in a way that is considerate of health literacy and beliefs, sensory limitations, and cognitive function and may involve caregivers.

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For example, consider a 75-year-old woman with intermittently symptomatic chronic obstructive lung disease, hypertension, and osteoporosis. She lives with her husband, who has early Alzheimer dementia. Although her mood is fine, she sometimes feels overwhelmed by his dependency on her. She is functionally independent within the home, but requires assistance with transportation. She and her husband experience moderate financial stress, but they do own a computer. An initial 1-hour physician office visit finds that her blood pressure is higher than recommended, and she has hearing loss and gait instability. Her cognition is good. She has limited health literacy, specifically relating to preventive health care. She received a 23-valent pneumococcal vaccine more than a decade ago, but no longer accepts influenza vaccine since she developed a respiratory infection following the injection. She has not received other recommended vaccines. She had a normal mammogram 2 years ago, but has never been screened for colon cancer. Her diet is relatively high in sodium, low in calcium and fiber. There are literally dozens of recommendations that could be characterized as preventive health care. She is at risk for complications of hypertension, respiratory infection, and injurious falls and osteoporotic fractures in addition to many more vulnerabilities and conditions associated with advanced age. Where does one start to counsel her?

Ideally, her physician will want to appreciate her intermediate and long-term goals of care. She will need to assess her willingness and capacity for change. The physician will also need to have a sense of the value of various interventions in order to prioritize and advise the patient. The patient will need enough knowledge to make informed choices and adhere to care plans, as well as necessary financial resources. Both the patient and the physician need information and payment systems to support their prevention efforts. Preventive health care in the 21st century offers some solutions to these issues, but also presents some challenges and leaves questions unanswered.

Commonly, older patients visit their physicians to discuss chronic conditions. Primary care doctors need to look for opportunities to implement preventive health care and educate patients in the midst of managing chronic conditions, which can be difficult. The Patient Protection and Affordable Care Act requires private insurance companies to cover recommended preventive services without patient cost-sharing. This led to the creation of the Annual Wellness Visit (AWV) benefit for Medicare recipients in 2011.[1] If our patient is able to return for a separate AWV, her physician could spend dedicated time discussing some of her unique preventive health care concerns, without placing financial burden on her or the physician. Depending on her preferences, this may afford her physician the time to discuss immunizations, individualized cancer screening, and fall risk. Thus far, the AWV has significantly increased rates of preventive services visits (1.4% to 27.5%) among Medicare fee-for-service beneficiaries, primarily among younger older adults with fewer chronic health conditions, but is still underutilized overall.[1,2] The AWV has modestly increased rates of some preventive care services (mammography, advance directive discussion, abdominal aortic aneurysm screening), but has been less effective in increasing rates of other services (depression screening, bone densitometry, colorectal cancer screening).[1,3,4]

While the AWV has increased rates of preventive services uptake, it is less well known whether the benefits outweigh the risks of the services used by individual patients. Predicting the relative value of a test or treatment for an individual requires combining knowledge of the patient's health status, estimated prognosis, potential benefits and harms of specific tests or treatments, and the patient's values and preferences. Our patient may prioritize interventions that maintain her functional independence and provide short- to medium-term benefit. The US Preventive Services Task Force recommends a framework for individualizing cancer screening for older adults.[5]