Preface

Update on Key Clinical Preventive Services for Adults

In this issue of *Medical Clinics of North America*, we present a series of articles on key issues in clinical preventive care for adults. The articles focus on primary prevention, with a mixture of screening, counseling, and use of preventive medications. We selected topics that are commonly encountered in clinical practice in the United States (and other developed countries), have substantial burdens of illness, and have robust evidence bases that allow assessment of the benefits and harms of potential interventions. We have focused this issue on three main topical areas: cardiovascular disease (CVD), cancer, and mental health.

In each article, the authors provide an assessment of the burden of disease for the target condition, data on the means of identifying the condition (where relevant), and a comprehensive assessment of the benefits and harms of potential interventions, including whether the evidence differs for different populations (eg, men vs women; different ages; or different risk levels). They review recommendations from major guideline-issuing organizations and provide guidance on how to most effectively implement recommendations in clinical practice.

Although each of the articles necessarily focuses on a single topic, primary care providers also need guidance on how to consider and implement an entire suite of preventive services in practice. Such a task is difficult in itself, more so when one considers that prevention is usually delivered along with acute illness care and the care of (often multiple) chronic conditions. It is no wonder that several studies have documented relatively low rates of delivery of evidence-based preventive services and the large time requirement for implementing all of the US Preventive (not Preventative) Services Task Force (USPSTF) recommended services within traditional organizational and financing structures.¹

Fortunately, new research, new tools, and new methods for organizing and financing preventive care have become available to make delivering preventive care more...
effective and efficient. This progress is well demonstrated in several of our topical areas. For example, in heart disease prevention, there is increasing acceptance that an approach to identification and management should rely on an assessment of overall (or “global”) cardiovascular risk. Pletcher and Moran discuss the rationale for a risk-based approach to CVD prevention, note the availability of evidence-based risk calculators, and describe a novel method for deciding if a risk assessment based on traditional risk factors is sufficient, or whether novel risk markers should be added. Richman and Owens, in their review of aspirin for primary prevention, discuss how CVD risk and age can be used to help balance the benefits and harms of aspirin therapy; Kazi and colleagues examine a similar approach for the use of statins for primary prevention. Finally, Viera discusses the intricacies of how to use CVD risk to help guide treatment of hypertension, including how best to determine the threshold of blood pressure that warrants a recommendation for treatment or a recommendation for shared decision-making. However, each of the articles essentially considers its topic in isolation. The task of integrating and implementing the different CVD prevention recommendations, including the assessment of risk, in practice remains a challenge.

Recently, Maciosek and colleagues published helpful guidance for such integration and demonstrated how modeling can be used effectively to help providers understand the relative potential effects of different services. They provide an assessment of the highest yield clinical preventive services, drawing from the list of USPSTF-recommended services (those receiving an “A” or “B” level recommendation). Their assessment was based on a combination of preventable burden of disease and judgment of the cost-effectiveness of potential interventions.

Not surprisingly, all four potential CVD prevention interventions for adults appeared among the top ten rankings: smoking cessation for adults (tied for first), aspirin prophylaxis (tied for fourth), and cholesterol and hypertension screening (tied for eighth), suggesting that primary care practices with large proportions of adult patients should focus efforts on the suite of CVD prevention services. Other topics covered in this issue also scored highly, including screening for alcohol misuse and screening for colorectal cancer. Notably, smoking cessation, tobacco use screening, alcohol misuse screening, and aspirin prophylaxis were all found to be cost-saving: that is, use of the service was associated with lower total costs than not implementing the service. Other highly rated services had cost-effectiveness ratios of $50,000 per quality-adjusted life-years (QALY) gained or better.

Maciosek and colleagues also examined the number of potential QALYs that could be saved for a birth cohort of 4 million US adults if the service was implemented optimally (90% performance) rather than at its current level. They found that counseling to reduce tobacco use had the highest potential gain, followed by several of the preventive services reviewed in this issue: screening and counseling for alcohol misuse (140,000 QALYs), screening for colorectal cancer (110,000 QALYs), breast cancer screening (42,000 QALYs), aspirin prophylaxis (30,000 QALYs), and cervical cancer screening (14,000 QALYs). Current levels of screening for depression in adults were unclear, but conservatively estimating current performance at 50%, they found that optimal implementation could save 45,000 QALYs per birth cohort. These findings suggest there is great room for improvement in health through better implementation of clinical preventive services.

It is important to recognize that the costs of achieving optimal implementation have not been included in the cost-effectiveness models. The authors of the articles in this issue have noted some promising strategies for increasing appropriate use (and decreasing inappropriate use) of preventive services. The Centers for Disease Control and Prevention Guide to Community Preventive Services also provides excellent
guidance for those wishing to increase the provision of high-value preventive services (www.communityguide.org). Techniques with strong evidence bases include use of audit and feedback (measuring and reporting back to providers their performance), clinical reminders directed to providers or to patients, use of small media, and reorganization of practice workflows. Financial incentives, directed to either providers or patients, have a mixed evidence base. More research is needed to better understand how different interventions may be combined most effectively and efficiently.

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REFERENCES