- 2. Agency for Healthcare Research and Quality. Primary care workforce facts and stats No. 3: prevention & chronic care program. AHRQ Pub No 12-P001-4-EF. http://www.ahrq.gov/sites/default/files/publications/files/pcwork3.pdf. Published Jan 2012. Accessed Nov 21, 2016.
- Institute of Medicine and National Research Council. U.S. Health in International Perspective: Shorter Lives, Poorer Health. Washington, DC: The National Academies Press; 2013. doi:10.17226/13497.
- Saez E, Zucman G. Wealth inequality in the United States since 1913: Evidence from capitalized income tax data. Q J Econ. 2016;131(2):519-578.
- Egerter S, Braveman P, Pamuk E, et al. America's Health Starts with Healthy Children: How Do States Compare? Washington, DC: Robert Wood Johnson Foundation Commission to Build a Healthier America; 2008.
- Case A, Deaton A. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. Proc Natl Acad Sci U S A. 2015;112(49):15078-15083.
- Chapman EN, Kaatz A, Carnes M. Physicians and implicit bias: how doctors may unwittingly perpetuate health care disparities. J Gen Intern Med. 2013;28(11):1504-1510.
- Jolly P. AAMC analysis in brief: diversity of U.S. medical students by parental income. Association of American Medical Colleges. https://www.aamc.org/download/102338/data/aibvol8no1.pdf. Published 2008. Accessed Nov 24, 2016.

- Association of American Medical Colleges. Altering the course: black males in medicine. Association of American Medical Colleges. http://members.aamc.org/eweb/upload/Black_Males_in_Medicine_ Report_WEB.pdf. Published 2015.
- Gottlieb LM, Hessler D, Long D, et al. Effects of social needs screening and in-person service navigation on child health: a randomized clinical trial. JAMA Pediatr. 2016;170(11):e162521.
- 11. Lindau ST, Makelarski J, Abramsohn E, et al. CommunityRx: a population health improvement innovation that connects clinics to communities. *Health Aff (Millwood)*. 2016;35(11):2020-2029.
- DeVoe JE, Bazemore AW, Cottrell EK, et al. Perspectives in primary care: a conceptual framework and path for integrating social determinants of health into primary care practice. *Ann Fam Med*. 2016;14(2):104-108.
- 13. AAP Council on Community Pediatrics. Poverty and child health in the United States. *Pediatrics*. 2015;137(4):e20160339.
- 14. Czapp P, Kovach K. Poverty and health the family medicine perspective (position paper). American Academy of Family Physicians. http://www.aafp.org/about/policies/all/policy-povertyhealth.html. Accessed Nov 15, 2016.
- Braveman P, Gottlieb L. The social determinants of health: it's time to consider the causes of the causes. *Public Health Rep.* 2014;129(Suppl 2):19-31.

EDITORIALS

Prevention Priorities: Guidance for Value-Driven Health Improvement

George Isham, MD, MS; HealthPartners Institute, Minneapolis, Minnesota

Eduardo Sanchez, MD, MPH; Center for Health Metrics and Evaluation, American Heart Association, Dallas, Texas

Warren A. Jones, MD, Health Disparities Research, Dillard University, New Orleans, Louisiana

Steven Teutsch, MD, MPH; Fielding School of Public Health, University of California at Los Angeles, Los Angeles, Calif.; Public Health Institute, Oakland, Calif.; Leonard D. Schaeffer Center for Health Policy and Economics, University of Southern California, Los Angeles, Calif.

Steven Woolf, MD, MPH; Center on Society and Health, Department of Family Medicine and Population Health, School of Medicine, Virginia Commonwealth University, Richmond, Virginia

Anne Haddix, PhD; Centers for Disease Control and Prevention, Atlanta, Georgia

Ann Fam Med 2017;15:6-8. https://doi.org/10.1370/afm.2023.

he National Commission on Prevention Priorities released its first ranking of clinical preventive services in 2001. A rigorous methodology was developed that allowed for comparisons to be made across clinical preventive services on the basis of health benefit (improved length and quality of life) and value (cost-effectiveness). The methodology was applied to evidence-based interventions that had received A or B ratings from the US Preventive Services Task Force (USPSTF), as well as key recommendations from the Advisory Commission on Immunization Practices (ACIP).

In this issue of the *Annals of Family Medicine*, Maciosek et al share the 2016 ranking of clinical preventive services, which include 28 of the current USPSTF

Conflicts of interest: authors report none.

CORRESPONDING AUTHOR

George Isham, MD, MS HealthPartners Institute PO Box 1524 Minneapolis, MN 55440-1524 george.j.isham@healthpartners.com and ACIP recommendations.3 This updated ranking is being released in a vastly changed health care environment. The Patient Protection and Affordable Care Act affords persons with health insurance coverage no additional out-of-pocket costs for USPSTF A- and B-rated clinical preventive services and ACIPrecommended immunizations: patients no longer have co-payments for covered preventive services. Yet barriers remain even when the patient has access to care, including whether a clinician has time to discuss prevention during an office visit, which preventive services take priority, and whether patients consent to the service. Because time and resources are limited, clinicians still must make choices. For these reasons, the ranking remains a timely and important reminder that each preventive service affords different potential benefit to improve the health of a population.

The top tier of ranked preventive interventions preserves the most years of healthy life and assures the most cost-effective investment of resources. These services include childhood immunizations, education or brief counseling to prevent youth from tobacco use, screening and brief counseling to help adults quit using tobacco, screening for alcohol misuse and intervening briefly, aspirin use for people at higher risk of cardiovascular disease, and screening for cervical and colorectal cancers. The first 5 are actually cost saving. In other words, they are health- and cost-beneficial. Most of the 2016 top-tier interventions also scored in the top tier in 2001 and 2006. This stability in ranking should be reassuring to physicians and the general public, because it underscores the consistent value of those interventions. Sometimes things do not change much.

Office visits are already too brief, and the portion of physician visits allocated to prevention is shorter still. It can be very challenging for primary care clinicians and patient-centered medical homes to ensure that every patient receives every needed preventive service in 1 visit, so they should wisely choose which services to provide first and which to provide at subsequent office visits. Fortunately, some of the most cost-effective services primarily involve counseling, having a brief conversation with a patient to encourage behavior change. Some services can be delivered by other members of the clinical care team. Sequentially delivering the highest-value interventions that are appropriate to each patient can help ensure that a clinician's limited time is well spent and that patients are well served.

Even the small amount of time spent on prevention with each patient can reap health rewards. Maciosek et al's analysis shows that 1.3 million more healthy life years could be gained for a single year's birth cohort simply by increasing the uptake of these top-tier services from current rates to 90%.³ The same popula-

tion could enjoy 2.6 million more healthy life years if 90% uptake was achieved for the 20 services that have a combined score of 5 or higher. Clearly, increasing delivery of key preventive services, particularly those that are underused, yields large benefits.

The updated ranking offers a sequenced approach to prioritize preventive service delivery to maximize day-to-day efforts and ensure progress in catching up over time. As important as primary care clinicians are to this work, they cannot succeed alone. Patientcentered medical homes, accountable care organizations, and other evolving health care models and systems increasingly have an important role they can play. Priorities set at the health plan level can influence the direction of quality improvement initiatives and pay for performance, helping to set the direction for care. System-wide changes can produce substantial results while distributing preventive services roles and responsibilities to more members of the health team beyond primary care clinicians. Small changes in automation—from flagging high-value services for a specific patient to shortening the time it takes to input data that monitors service provision—can reduce the clinician's burden. New challenges and opportunities are emerging from collaborative care models for management of depression, diabetes care, and cardiovascular disease management.

An example of 1 such successful, sustained, systemic change occurred among Kaiser Permanente Northern California's (KPNC) patients with hypertension. KPNC developed and implemented a broadbased program to control blood pressure. Through a multicomponent approach—including a hypertension registry that presumably adds and tracks persons who screen positive for high blood pressure, creation and dissemination of performance measures, evidencebased guidance on management, visits with medical assistants to track blood pressure, and single-pill combination pharmacotherapy—KPNC nearly doubled its hypertension control rate in 8 years from 43.6% to 80.4% and exceeded national and state blood pressure control rates. 5 Augmenting clinical care system interventions, such as KPNC's, with population-based initiatives, such as reducing salt intake and creating options for greater physical activity, can have important additional benefits.

This ranking of clinical preventive services is relevant well beyond the examination room, beyond the health care practice or care system. Employers, large and small, stand to benefit from improved employee wellness and increased productivity when high-priority preventive services are delivered as recommended. Likewise, it is important for patients to understand what care is most beneficial to them and their family

members. When patients are newly enrolled and truly engaged, they can benefit from catching up and from education on prevention. In addition, providing information directly to consumers enables them to learn what might be best for them and empowers them to demand evidence-supported care from their clinicians. For instance, the top ranking for childhood vaccinations should be a part of discussions about immunizations—vaccines protect you and others from disease, save lives, and can save lots of money.

These rankings should be carefully considered by policy makers with respect to requirements of measurement and reporting for preventive services. Lists of required preventive services or requirements to measure delivery of services do not always reflect the services with the highest impact or the strongest evidence base.

Systematic approaches emphasizing services that provide the greatest value will continue to matter in the face of gaps in preventive services utilization, gaps in individual patient and population health, and rising health care costs. When the first ranking of clinical preventive services was released in 2001, the annual US health care expenditure was \$1.49 trillion, or \$5,220 per person.⁶ Aggregate costs have increased substantially since then, with the 2014 National Healthcare Expenditure at \$3.03 trillion, or \$9,523 per person.⁶ Collectively, we have the ability to ensure that services of higher value receive the priority they merit.

Clinicians prioritize services every day. This updated ranking helps them focus efficiently on the preventive services that generate the most healthy years of life and provide the greatest value. The rank-

ings can be used to shape systems changes to organize service delivery and produce broad and beneficial sustained changes in disease prevention and management.

To read or post commentaries in response to this article, see it online at http://www.annfammed.org/content/15/1/6.

Key words: disease, prevention & control; health services; economics; prioritization; health impact; cost-effectiveness; cost-savings; immunization; mass screening; behavioral counseling

Submitted October 26, 2016; submitted, revised, October 26, 2016; accepted November 27, 2016.

References

- Coffield AB, Maciosek MV, McGinnis JM, et al. Priorities among recommended clinical preventive services. Am J Prev Med. 2001;21(1):1-9.
- Maciosek MV, Coffield AB, McGinnis JM, et al. Methods for priority setting among clinical preventive services. Am J Prev Med. 2001; 21(1):10-19.
- Maciosek MV, LaFrance AB, Dehmer SP, et al. Updated priorities among effective clinical preventive services. Ann Fam Med. 2017; 15(1):14-22.
- Chen LM, Farwell WR, Jha AK. Primary care visit duration and quality: does good care take longer? Arch Intern Med. 2009;169(20): 1866-1872
- Yarnall, KS, Pollak, KI, Ostbye, T, Krause, KM, Michener, JL. Primary care: is there enough time for prevention? Am J Public Health. 2003;93(4):635-641.
- Jaffe MG, Lee GA, Young JD, Sidney S, Go AS. Improved blood pressure control associated with a large-scale hypertension program. JAMA. 2013;310(7):699-705.
- 7. Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, US Department of Commerce, Bureau of Economic Analysis and Bureau of the Census. National health expenditures, aggregate and per capita amounts. In: National Health Expenditure Accounts. Baltimore, MD: Centers for Medicare and Medicaid Services; 2015.

EDITORIAL

Preventive Interventions: An Immediate Priority

David Satcher, MD, PhD, Satcher Health Leadership Institute, Morehouse School of Medicine, Atlanta, Georgia

Ann Fam Med 2017;15:8-9. https://doi.org/10.1370/afm.2026.

n 2006 I recommended people use what was then the just-published ranking of the most valuable clinical preventive services to inform decision making with the aim of improving population health. In the intervening decade much has changed in the health care sector. The Patient Protection and Affordable Care Act (ACA) has significantly increased access to primary care to previously uninsured Americans and includes provisions to increase the delivery of clinical preventive services, although these advances may

Conflicts of interest: author reports none.

CORRESPONDING AUTHOR

David Satcher, MD, PhD
Satcher Health Leadership Institute
Community Health & Preventive Medicine
National Center for Primary Care, Room 238
Morehouse School of Medicine
730 Westview Dr
Atlanta, GA 30310
dsatcher@msm.edu