ISSUE BRIEF

MATHEMATICA Policy Research, Inc.

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MAY 2010
NUMBER 2

REFORMING HEALTH CARE

Encouraging Appropriate Use of Preventive Health Services

by Jill Bernstein, Deborah Chollet, and G. Gregory Peterson

Federal health reform focuses on expanding the use of preventive care including screening to identify potential medical conditions, counseling, immunizations, and medications to prevent illness. Evidence strongly indicates that preventive services can substantially improve health outcomes. However, some services can do more harm than good when provided to populations at low risk of developing a particular disease. Some preventive services can reduce health care costs, but many do not, and some can increase health care costs over a lifetime. This brief summarizes the health services research evidence on the benefits and cost-effectiveness of preventive health services, and points out significant new opportunities under health reform to improve access to preventive care.

Net Health Benefits Differ

Like all health care, preventive services entail both benefits and risks to consumers. The U.S. Preventive Services Task Force (USPSTF) recommends 35 clinical preventive services, many of them only for particular populations for whom empirical evidence shows benefits of preventive care outweighing risks.[1, 2] For example, it strongly recommends screening for colorectal cancer for adults between ages 50 and 75, based on compelling evidence that appropriate screening, testing, and treatment can decrease the incidence of colon cancer and associated death rates.[3] Similarly, the Advisory Committee on Immunization Practices (ACIP), of the Centers for Disease Control and Prevention (CDC), has identified 13 vaccines (such as those for hepatitis B and measles, mumps, and rubella) for which the health benefits outweigh any associated risks for children, adults, or both.[4, 5]

The USPSTF has also identified 29 preventive services for which the risks, such as side effects or physical harm from invasive screening processes, are believed to outweigh the benefits for particular populations. For example, it recommends against routine ovarian cancer screening for asymptomatic women, because a high rate of false-positive results can lead unnecessarily to further tests or procedures with serious complications.[6, 7] The USPSTF has identified many other services for which evidence of net health benefits is insufficient to make any recommendation.[8, 9]

Cost-Effectiveness Varies

Preventive services have intuitive appeal: if a disease can be detected early or prevented altogether, the cost of treating it can be reduced or eliminated. However, relatively few services have been shown to reduce lifetime total health care costs.[10]

The National Commission on Prevention Priorities reviewed 21 services that the USPSTF recommended through December 2004 and four immunizations recommended by ACIP.[11, 12] Of these, it found five services, including tobacco-use screening and childhood immunizations, that reduced costs.[13] The other 16 services increased costs.[14] Many preventive services are

ABOUT THIS SERIES

This brief is the second in a series highlighting issues related to health care reform that policymakers may want to consider as they implement the federal health reform law. The list of forthcoming titles is on page 4. For more information, contact Deborah Chollet at dchollet@mathematica-mpr.com.

WHY MIGHT PREVENTIVE SERVICES RAISE COSTS?

Preventive services might increase health care costs for the following reasons:

- If relatively few people are likely to contract a disease, the costs of screening for that disease can outweigh the cost of caring for those who would become ill.
- Some interventions targeted at personal behavior (such as intensive diet counseling) may not change behavior enough to offset the costs of the intervention.[15]
- Better health care helps people with serious chronic illnesses (especially the elderly) to live longer and accumulate more health care expenses.[16]

cost-effective, however—providing good value, measured as improvements in health per dollar spent—even when they do not reduce lifetime total cost.[17, 18]

Efforts that combine targeted access to preventive services with more comprehensive programs to improve community health may yield significant cost savings. For example, by one estimate, investing in well designed, community-based disease prevention programs throughout the country could yield a national rate of return of at least 500 percent over five years.[19]

Use Depends on Coverage and Cost Sharing

People with health insurance are more likely than those without to obtain preventive services in a timely manner.[20] For example:

- Insured people are four times more likely to have their blood pressure checked regularly than people who are uninsured.[21]
- Insured women are 17 times more likely to receive mammograms than woman who are uninsured.[21]
- Insured people are much more likely to be screened for different types of cancer and, as a result, are more likely to have their cancer diagnosed in earlier stages.[22]

However, many people do not use preventive services at recommended rates, even when they are insured. Nationally, Americans use preventive services at about half the recommended rate.[23]

Insurance program design can affect whether consumers use preventive services. Cost sharing (including deductibles, coinsurance, or copayments) reduces the likelihood services will be used. For this reason, Medicare has minimized or eliminated cost sharing for some services including influenza immunization, blood tests for cardiovascular screening, and diabetes screening. Similarly, employer-sponsored insurance (including high-deductible plans) often cover preventive services before enrollees reach their deductibles.[24] However, neither private insurance nor Medicare benefits systematically reflect the USPSTF recommendations—in particular, some preventive services that are not evidence-based or efficiently targeted may be covered.[25]

Considerations for Policymakers

The Patient Protection and Affordable Care Act (P.L. 111-148), or ACA, focuses on expanding the use of preventive services in private insurance plans, Medicare, and Medicaid. With respect to private insurance coverage of preventive services, it requires group health plans to cover without cost sharing at least the following preventive services, effective in 2010:

- Evidence-based items or services that the USPSTF recommends (with an "A" or "B" rating), as well as breast cancer screening (including mammography) and prevention[26]
- Immunizations for particular populations, as recommended by ACIP
- Evidence-based preventive care and screenings for infants, children, adolescents, and women, as indicated in the comprehensive guidelines supported by the Health Resources and Services Administration

ACA expands Medicare coverage of preventive services as well. As of January 1, 2011, Medicare will cover an initial and periodic health risk assessment and development of a personalized prevention plan without cost sharing. These services will include updating a beneficiary's medical history, inventorying providers and suppliers regularly involved in providing a beneficiary's care (including a list of all prescribed medications), furnishing personalized health advice, and providing appropriate referrals to health education or preventive counseling services or programs aimed at reducing identified risk factors and improving self-management. In addition, the law will eliminate

cost sharing for an annual wellness visit and all other preventive services Medicare covers.

ACA also seeks to improve access to preventive services for adults and children enrolled in Medicaid.[27] As of 2013, state Medicaid programs that cover the preventive services and vaccines required of private plans will have their federal medical assistance percentage enhanced by one percentage point for those expenditures. By October 2010, Medicaid coverage for pregnant women will include comprehensive tobacco cessation services—including applicable prescription drugs without cost sharing.

ACA authorizes significant grant funding for states that implement evidence-based local or statewide programs to encourage Medicaid beneficiaries to stop smoking; control their weight, cholesterol, or blood pressure; or avoid or manage diabetes. Additional funding is available for the development of school-based health centers offering comprehensive primary care services, especially those serving large numbers of children eligible for Medicaid or the Children's Health Insurance Program (CHIP).

Emphasis on Evidence

ACA promotes the ongoing development and dissemination of science-based information about the development and use of appropriate preventive services by:

- Establishing a national Prevention, Health Promotion, and Public Health Council composed of cabinet-level agency officials to provide federal leadership with respect to prevention, wellness, and health promotion practices; the public health system; and integrative health care in the United States.
- Establishing an independent Preventive Services Task Force to review the scientific evidence related to the effectiveness, appropriateness, and cost-effectiveness of clinical preventive services; develop recommendations for the health care community; and update previous clinical preventive recommendations related to specific populations and age groups.
- Developing the role of the independent Community Preventive Services Task Force at CDC in reviewing scientific evidence about the effectiveness, appropriateness, and cost effectiveness of community preventive interventions.[28]
- Charging the secretary of the U.S. Department of Health and Human Services with developing a national public-private partnership for prevention and health promotion outreach and education. This initiative will include a national media campaign; development of a website; and communication with providers to disseminate science-based information on health promotion and disease prevention, including nutrition, exercise, smoking cessation, obesity reduction, and disease screening.
- Calling for a five-year national public education campaign focused on preventive oral health care and education and establishing grants to demonstrate the effectiveness of evidence-based disease management activities in preventing dental caries.

State and Local Leadership

ACA recognizes the ongoing roles of state and local leaders in a number of ways. First, it significantly expands the number of low-income adults eligible for coverage and provides additional Medicaid payments to states that expand coverage for preventive services. These provisions present new opportunities for states to prevent and more effectively manage chronic illness in this population. For example, states might monitor whether enrolled adults actually receive effective preventive care and identify problems that contribute to disparities in access to preventive services and vaccines, particularly in underserved communities.

Second, ACA creates new partnerships with states and communities to prevent illness and improve population health. For example, it requires the national Prevention, Health Promotion, and Public Health Council to establish processes to obtain continual public input from the states, regional and local leadership communities, and other relevant stakeholders. Third, as part of the national prevention and health promotion outreach and education campaign, each state will design a public awareness campaign to educate Medicaid enrollees about the availability and coverage of services aimed at reducing the incidence of obesity. Finally, the availability of grant funds to develop school-based clinics will challenge state and local policymakers to identify neighborhoods and communities where children are underserved and work creatively with school programs to improve the delivery of primary and preventive care to these children.

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Notes:

[1]Housed at the Agency for Healthcare Research and Quality (AHRQ), the USPSTF is the most prominent panel of experts in prevention and primary care in the United States. The agency conducts rigorous, impartial assessments of scientific evidence for the effectiveness of a broad range of clinical preventive services, including screening, counseling, and preventive medications.

[2]U.S. Preventive Services Task Force. *The Guide to Clinical Preventive Services.* Rockville, MD: AHRQ, 2009; and Agency for Healthcare Research and Quality. "Electronic Preventive Services Selector (ePSS)." Available at [http://epss.ahrq.gov/ePSS/].

[3]Among all cancers, colorectal cancer ranks third in incidence (52 cases per 100,000 people) and second in cause of cancer deaths for both men and women. Screening enables physicians to detect colon cancer at early stages and remove polyps before they become life threatening. See Agency for Healthcare Research and Quality. *Screening for Colorectal Cancer: An Updated Systematic Review.* Rockville, MD: AHRQ, 2008.

[4]ACIP is an independent panel of 15 immunization experts that provides recommendations to the U.S. Department of Health and Humans Services on routine administration of vaccines to children and adults.

[5]Centers for Disease Control and Prevention. "Recommended Immunization Schedule for Persons Aged 0 Through 16 Years—United States 2010." *Morbidity and Mortality Weekly Report*, vol. 58, no. 51-52, January 2010. Available at [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5851a6.htm]; Centers for Disease Control and Prevention. "Recommended Adult Immunization Schedule—United States 2010." *Morbidity and Mortality Weekly Report*, vol. 59, no. 01, January 2010. Available at [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5901a5.htm]; Salinsky, E. "Clinical Preventive Services: When Is the Juice Worth the Squeeze?" National Health Policy Forum Issue Brief 806, August 24, 2005, pp. 1–30.

[6]Although screening can correctly identify ovarian cancer at early stages, it often falsely identifies women as having the disease (U.S. Preventive Services Task Force 2009).

[7]U.S. Preventive Services Task Force 2009; Salinsky 2005; and U.S. Preventive Services Task Force. *Screening for Ovarian Cancer: Brief Evidence Update.* Rockville, MD: AHRQ, 2003.

[8]Services in this category include some that may provide net benefits, but because rigorous evaluation has not been conducted or completed, the net benefits have not been quantified.

[9]U.S. Preventive Services Task Force 2009; and Salinsky 2005.

[10]Cohen, J., and P. Neumann. *The Cost Savings and Cost-Effectiveness of Clinical Preventive Care.* Research Synthesis Report No. 18. Princeton, NJ: Robert Wood Johnson Foundation, 2009; Congressional Budget Office. Letter to Representative Nathan Deal. August 7, 2009. Available at [http://www.cbo.gov]; Cohen J., P. Neumann, and M. Weinstein. "Does Preventive Care Save Money? Health Economics and the Presidential Candidates." *The New England Journal of Medicine,* vol. 358, no. 7, 2008, pp. 661–663; and Maciosek, M.V., A.B. Coffield, N.M. Edwards, T.J. Flottemesch, M.J. Goodman, and L.I. Solberg. "Priorities Among Effective Clinical Preventive Services: Results of a Systematic Review and Analysis." *American Journal of Preventive Medicine,* vol. 31, no. 1, July 2006, pp. 52–61.

[11]The National Commission on Prevention Priorities, established by the Partnership for Prevention, is a 24-member panel of decision makers from health insurance plans, employer groups, academia, clinical practice, and government health agencies. Partnership for Prevention is a membership organization of businesses, nonprofit organizations, and government agencies advancing policies and practices to prevent disease.

[12]Maciosek et al. 2006.

[13]The other three services are the discussion of using aspirin to prevent cardiovascular events for men over age 40 and women over age 50, pneumococcal immunization, and vision screening for adults.

[14]Maciosek et al. 2006.

[15]Ibid.

[16]An analysis of Medicare data based on a sample of about 100,000 beneficiaries found that interventions to reduce hypertension and diabetes among the elderly—interventions that are cost-effective—did not reduce health care spending overall. Interventions to reduce obesity, however, were found to result in overall savings. See Goldman, D., D. Cutler, B. Shang, and G. Joyce. "The Value of Elderly Disease Prevention." *Forum for Health Economics and Policy,* vol. 9, no. 2, 2006, p. 1.

[17]For example, 15 of 24 preventive services recommended by the USPSTF cost less than $35,000 per quality-adjusted life year, or QALY—a measure of disease burden that takes into account both the quality and quantity of life years (Maciosek et al. 2006). Many common treatments for existing illnesses cost more than $35,000 per QALY (Cohen et. al. 2008). Cost-benefit analyses commonly use $75,000 per QALY as a cutoff point for determining whether a service is cost effective (Salinsky 2006).

[18]Goetzel, R. "Do Prevention or Treatment Services Save Money? The Wrong Debate." *Health Affairs,* vol. 28, no. 1, January/February 2009, pp. 37–41; and Woolf, S.H. "A Closer Look at the Economic Argument for Disease Prevention." *JAMA*, vol. 301, no. 5, February 2009, pp. 536–538. See also Health Systems Change. "The Dollars and Sense of Prevention: A Primer for Health Policy Makers." Washington, DC: HSC, June 8, 2009. Available at [http://www.hschange.org/CONTENT/1066/#1].

[19]Levi, J., L. Segal, and C. Juliano. *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings.* Washington, DC: Trust for America's Health, 2008.

[20]Institute of Medicine. *Coverage Matters: Insurance and Health Care.* Washington, DC: Institute of Medicine, 2001; Powell-Griner, E., J. Bolen, and S. Bland. "Health Care Coverage and Use of Preventive Services Among the Near Elderly

in the United States." *American Journal of Public Health,* vol. 89, no. 6, June 1999, pp. 882–886; and Sudano, J.J., Jr., and D.W. Baker. "Intermittent Lack of Health Insurance Coverage and Use of Preventive Services." *American Journal of Public Health,* vol. 93, no. 1, January 2003, pp. 130–137.

[21]DeVoe, J.E., G.E. Fryer, R. Phillips, and L. Green. "Receipt of Preventive Care Among Adults: Insurance Status and Usual Source of Care." *American Journal of Public Health,* vol. 93, no. 5, May 2003, pp. 786–791.

[22]Ward, E., M. Halpern, N. Schrag, V. Cokkinides, C. DeSantis, P. Bandi, R. Siegel, A. Stewart, and A. Jemal. "Association of Insurance with Cancer Care Utilization and Outcomes." *CA: A Cancer Journal for Clinicians,* vol. 58, no. 1, January/February 2008, pp. 9–31.

[23]McGlynn, E.A., S.M. Asch, J. Adams, J. Keesey, J. Hicks, A. DeCristofaro, and E.A. Kerr. "The Quality of Health Care Delivered to Adults in the United States." *The New England Journal of Medicine,* vol. 348, no. 26, June 26, 2003, pp. 2635–2645.

[24]Henry J. Kaiser Family Foundation and Health Research and Education Trust. *Employer Health Benefits 2007 Annual Survey.* Chicago: KFF and HRET, 2007.

[25]Salinsky 2005.

[26]The USPSTF grades its recommendations according to one of five classifications reflecting the strength of evidence and magnitude of net benefit (benefits minus harms). An "A" rating indicates services that the USPSTF strongly recommends—that is, for which there is good evidence that they improve important health outcomes and that benefits substantially outweigh harms. A "B" rating indicates services that the USPSTF recommends that clinicians provide to eligible patients—that is, for which there is at least fair evidence that it improves important health outcomes and that benefits outweigh harms. For other services (with a C, D, or I rating) the USPSTF makes no recommendation or recommends against clinicians routinely providing the services. See U.S. Preventive Services Task Force. Task Force Ratings. Available at [http://www.ncbi.nlm.nih.gov/bookshelf/br.fcgi?book=hscps3edrec&part=A27000].

[27]Federal law requires coverage of some preventive and screening services for children enrolled in state Medicaid programs, generally a battery of services that include well-child checkups to identify health and development problems as well as immunizations, blood pressure and cholesterol screening, nutrition counseling, lab tests, and other diagnostic tests. Although federal law does not generally require Medicaid programs to provide preventive services to adults, states can determine whether and which clinical services will be covered as optional benefits, and these determinations vary. For example, in 2009, 39 states covered cholesterol tests for men ages 35–64 with risk factors for heart disease, and 43 covered diabetes screening for adults ages 21–64 with high blood pressure. See U.S. Government Accountability Office. *Medicaid Preventive Services: Concerted Efforts Needed to Ensure Beneficiaries Receive Services.* GAO-09-578. Washington, DC: GAO, August 2009. Available at [http://www.gao.gov/new.items/d09578.pdf].

[28]The task force recommendations will be published in its *Guide to Community Preventive Services*, which is intended to assist primary care professionals, medical groups, and organizations—such as health care systems, employers, professional or community organizations, schools, public health agencies, and Indian tribes and tribal organizations—that deliver population-based services. The *Guide to Community Preventive Services* is available at [http://www.thecommunityguide.org/index.html].

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