Partnership for Prevention™

Shaping Policies • Improving Health

Public Policymaker's Guide

Priorities for America's Health: Capitalizing on Life-Saving, Cost-Effective Preventive Services

Preventive Care is front and center as policymakers, clinicians, health care purchasers, and insurers explore ways to improve the health of our nation and rein in rising health care costs. But which preventive services do experts recommend? Do some have a greater effect on health than others? Which offer the most benefit for the dollar invested? Policy makers whose decisions affect the health care system must balance competing demands on limited public financial resources — *they need answers to these important questions.*

In a landmark study, Partnership for Prevention ranked the health impact and cost effectiveness of 25 preventive health services recommended by two nationally recognized sources: the U.S. Preventive Services Task Force and the Advisory Committee on Immunization Practices. The resulting rankings — published in a leading medical journal and presented in this guide — offer key information policymakers can use in setting priorities for promoting preventive care.

Highest Ranking Preventive Services

Discuss daily aspirin use — men 40+, wm 50+
Childhood immunizations
Smoking cessation advice and help to quit — adults

Colorectal cancer screening — adults 50+
Hypertension screening and treatment — adults
Influenza immunization — adults 50+
Pneumococcal immunizations — adults 65+
Problem drinking screening and counseling — adults
Vision screening — adults 65+

Cervical cancer screening — wm
Cholesterol screening and treatment — men 35+,wm 45+

Breast cancer screening — wm 40+
Chlamydia screening — wm under 25
Discuss calcium supplementation — wm
Vision screening — children

Services in the same group were tied in the ranking.

Services in bold have the lowest utilization rates nationally (≤ 50%).

See page 9 for the complete rankings.

How Can Public Policymakers Support Preventive Care?

Government can support preventive care in several ways:

– As an employer who purchases healthcare for employees

– As a purchaser/provider of healthcare services to enrollees in public programs

– As a leader in guiding the health system toward optimal health for the entire community

Who Benefits From Policymaker's Preventive Services Decisions?

- Recipients of publicly sponsored healthcare, such as Medicaid and SCHIP
- Public employees who receive health insurance benefits through their government employer
- The uninsured and underinsured who receive health care services through publicly funded community clinics or public health clinics
- Private-sector employees who receive health insurance benefits that are guided by government regulation, information, and assistance
- Private-sector employers who gain from government's purchasing power in the marketplace — in exerting cost pressures and in stimulating development of new insurance products, and through government-sponsored information and assistance

Did You Know...

...That the study's authors:

- Evaluated only those clinical preventive services **proven to be effective**
- Conducted a **thorough review** of the scientific literature
- Used a consistent approach to evaluating each service, so as to ensure **comparability** among them

Maximize Investment of Public Dollars: Buy What Works

The rankings in this guide provide health impact and cost effectiveness information for 25 key clinical preventive services. Evidence shows that each of these services contributes to improved health, qualifying all of them for inclusion in publicly sponsored health insurance benefit packages. However, some of the services make a stronger contribution to improving health than others, and some make for a more cost-effective investment. Policymakers will want to enhance the investment of public dollars by promoting use of the highest-value services through multiple policy and purchasing approaches.

Set Market Ground Rules for Coverage and Cost

Use Regulation and Rule-Making to Reduce Barriers to Accessing Preventive Services

Public sector regulations and rules can promote access in both the public and private sectors to high-value preventive services. For example:

- Insurance market regulation can increase access to preventive services. For example, requiring that insurers eliminate or reduce enrollee cost-sharing for preventive services — especially in consumer-directed health plans — can increase use of these services.
- Coverage mandates for private-sector insurers could increase use of specific services.
- Rules for public program health care coverage, such as covering problem drinking screening and counseling in a Medicaid program, use government's role as a purchaser to model and push similar coverage in the private-sector marketplace — particularly among health insurers that have both publicly sponsored and private enrollees.

continued

Did You Know...

...That physicians discussing daily aspirin use with men over 40, women over 50, and others at risk for cardiovascular disease would save 80,000 lives annually and result in a net medical cost savings of $70 per person advised?

– Public health rules that affect the health behaviors of individuals, such as smoking bans in public places, not only enhance the health of the population, they can indirectly encourage use of certain preventive services, such as smoking cessation counseling.

Use Taxation to Encourage Availability of Preventive Services

Taxation approaches can encourage employer coverage of preventive services and individual enrollment in health insurance, and can create funding streams for public preventive service programs.

– Subsidies, in the form of premium assistance or tax credits or rebates, could encourage employers to cover preventive services in their employee health insurance benefit plan. Subsidies also can encourage health insurance enrollment among employees and individuals.

– Targeted taxes can be used to fund access to public preventive services programs. For example, taxes on tobacco sales can be used to fund access to publicly sponsored tobacco cessation services, including 24-hour tobacco quit lines.

Use Budget Allocation to Model Prevention Priorities

Public budgets indicate policymakers' priorities for the health of the population. The rankings in this guide can help policymakers target program funding to optimize access to key preventive services.

– Allocating funds to public health programs that focus on high-value preventive services, such as programs for colorectal cancer screening, adult vision screening, and purchasing and provision of childhood immunizations, will improve access to these services and model priorities in the health system.

Did You Know...

...That 19,000 deaths could be prevented annually if all people age 50 and older were periodically screened for colorectal cancer? Yet 65% of people are not up-to-date on screening.

Lead, Inform, and Assist in the Marketplace

Promote Preventive Care

Government as an employer can model practices that encourage employees to use preventive services. The Community Guide (see sidebar) observes that using a combination of practices is more effective than using any single approach, alone.

- Educate employees about the services covered under their health plan, empowering them to seek age and gender-appropriate preventive care.
- Use a Health Risk Assessment to increase awareness among employees about how to stay healthy and use it as a link to preventive services and healthy lifestyle behavior-change programs available through your health insurance plans. The state of Arkansas is using this approach.

Reduce Barriers to Access

In addition to its regulatory power, government can use its roles as an employer and as a health care insurer/provider to model practices that reduce physical barriers to accessing care.

- Resolve time and distance barriers, including service location, facility hours of operation, and availability of child care. For example, influenza vaccination can be provided at special drop-in clinics with evening hours, at public health clinics, and at workplace locations.
- Offer coupons for influenza vaccination or over-the-counter purchases of nicotine replacement medications.
- Institute standing orders to allow non-physician health care providers to administer services, such as childhood and adult immunizations. Standing orders can be used in a variety of settings, such as inpatient and out patient health clinics, pharmacies, and workplaces
- Offer 24-hour, toll-free telephone information and support lines for tobacco cessation counseling to improve quit rates.

Did You Know...

...That Chlamydia is the most common bacterial sexually transmitted disease in the U.S. — with 3 million new cases annually — and that screening and treatment is extremely cost effective? Yet 60% of this service's target population – young women - have not received this service.

The Guide to Community Preventive Services offers expert reviews of the effectiveness of policy, programs, and services designed to promote health and improve disease and injury. See www.thecommunityguide.org.

Monitor Quality of Care

States and the federal government are experimenting with how to measure and reward improvement in the quality of care delivered to public sector employees and Medicaid and Medicare beneficiaries. For example, states are testing financial and non-financial incentives to managed care organizations and Medicaid providers ("pay for performance"). Partnership for Prevention's evaluation of preventive services reveals the relative impact and cost effectiveness of achieving high utilization rates for many of the preventive services included in HEDIS (Health Plan Employer Data and Information Set) and other performance measurement sets.

Collect, Evaluate, and Disseminate Information

Policymakers can influence the health system by collecting and evaluating information about health care services and providers, and disseminating information to purchasers, health plans, providers, and consumers.

- Surveys of healthcare utilization trends should monitor receipt of high-value preventive services.
- Educational materials can be offered to explain the importance of high-value preventive services
- Policy makers can use the "bully pulpit" to define the problem (e.g. low use of high-value preventive services) and convince individuals or organizations to act in ways that will solve it.

How Could Congress Improve Medicare's Prevention Policies?

Congress can take important steps to protect and improve Medicare beneficiaries' health:

- Authorize the Centers for Medicare & Medicaid Services to cover new preventive services in the same way that it already covers diagnostic and treatment services.
- Waive the deductible from the *Welcome to Medicare Visit* which, if encouraged, will get beneficiaries up-to-date on their preventive services and empower them to establish or maintain healthy habits.
- Waive the deductible from colorectal cancer screening – namely, sigmoidoscopy and colonoscopy—to encourage use of this high-impact, high-value service.

Understanding the Tables

Clinical preventive services in this ranking are immunizations, screening tests, counseling, and preventive medications offered by healthcare providers in clinical settings. The scope included 21 services recommended by the U.S. Preventive Services Task Force for asymptomatic people and for people at high-risk of coronary heart disease. It also included 4 recommendations of the Advisory Committee on Immunization Practices: 3 for adults and 1 for a defined series of childhood immunizations.

The health benefits of preventive services were defined as **clinically preventable burden (CPB)** or the disease injury and premature death that would be prevented if the service were delivered to all people in the target population. CPB was measured in quality adjusted life years or **QALYs,** a measure of the effects of mortality and morbidity.

The economic value of services was measured as **cost effectiveness (CE),** which compares the net cost of a service to its health benefits. Net cost was defined as the cost of the service minus the cost avoided because of the service. CE provided a standard measure for comparing services' return on investment.

A scoring system was used to group services with similar value in order to make distinctions among services without overstating the precision of the CPB and CE estimates.

Services that produce the most health benefits received the highest CPB score of 5. Services that are the most cost effective received the highest CE score of 5. Scores for CPB and CE were then added to give each service a possible score between 10 and 2.

10 = highest impact, highest value among these evidence-based services

2 = lowest impact, least cost effective among these evidence-based preventive services.

Did You Know...

...That people with lower income and people in certain racial and ethnic groups use fewer preventive services and have worse health outcomes? Learn more details about disparities in health and use of specific services at **prevent.org/ncpp.**

How to Interpret the Scores

Score	CPB Range: QALYs saved	CE Range: $/QALY saved
5	360,000	Cost-Saving
4	185,000 - 360,000	$0 - $14,000
3	40,000 - 185,000	$14,000 - $35,000
2	15,000 - 40,000	$35,000 - $165,000
1	15,000	$165,000 - $450,000

CPB, clinically preventable burden; CE, cost effectiveness QALY, quality adjusted life year
CE estimates are discounted to present value; CPB estimates are not

ABOUT THE STUDY

Partnership for Prevention is a national membership organization dedicated to building evidence for sound disease prevention and health promotion policies and practices.

To guide the study, Partnership convened the **National Commission on Prevention Priorities,** chaired by former U.S. Surgeon General Dr. David Satcher and consisting of experts from health insurance plans, an employer group, academia, and governmental health agencies.

Partnership collaborated with researchers at **HealthPartners Research Foundation** in Minneapolis for all analytical work (hprf.org).

The federal **Centers for Disease Control and Prevention** (CDC) and **Agency for Healthcare Research and Quality** (AHRQ) sponsored the study.

For More Information

- These findings were published in the July 2006 issue of the *American Journal of Preventive Medicine.*
- Access the published articles, learn more about the study methods, and find data on disparities in health outcomes and use of preventive services by visiting **prevent.org/ncpp.**

Partnership is very grateful to Jeffrey R. Harris, MD, MPH, MBA of the University of Washington Health Promotion Research Center and Patricia Lichiello, MA, health policy consultant for their assistance in writing and editing this publication.

Eating a healthy diet and being physically active lead to improved health and lower healthcare costs. So where are these issues in the rankings?

The U.S. Preventive Services Task Force (USPSTF) did not recommend medical counseling to address physical activity and diet among the general population of adults or children because the research evidence compiled to date is not sufficient to issue strong evidence-based recommendations.

The USPSTF did recommend intensive counseling and referral to specialists (as opposed to brief counseling from a primary care provider) for selected groups: adult patients who are obese (see obesity screening) and adult patients with high cholesterol and other diet-related diseases such as diabetes (see diet counseling). Obesity screening and diet counseling were not among the services in this study offering the greatest health benefits due to low patient compliance with recommended behavior changes, among other issues.

Services	Description	CPB	CE	Total	*What Policymakers Should Know*
Aspirin Chemoprophylaxis	Discuss daily aspirin use with men 50+, postmenopausal women and others at increased risk for heart disease for the prevention of cardiovascular events	5	5	10	Although aspirin is cheap and accessible, very few adults are likely using aspirin consistently and need guidance from a healthcare provider to start and maintain an aspirin regimen. This service is cost saving.
Childhood Immunization Series	Immunize children: Diphteria, tetanus, pertussis, measles, mumps, rubella, inactivated polio virus, Haemophilus influenzae type b, Hepatitis B, varicella, pneumococcal conjugate, influenza	5	5	10	The childhood immunization series is highly effective and cost saving. High immunization rates among U.S. kids may reduce parental absenteeism.
Tobacco Use Screening and Brief Intervention	Screen adults for tobacco use, provide brief counseling and offer pharmacotherapy	5	5	10	20% of adults smoke[1] and 1/3 of smokers will die prematurely as a result.[6] Smoking results in more than $100 billion annually in medical costs.[3] This service is cost saving. An effective health plan should cover smoking cessation counseling and therapies — including over-the-counter cessation aids — and offer telephone quit lines.
Colorectal Cancer Screening	Screen adults 50+ years routinely with FOBT, sigmoidoscopy or colonoscopy	4	4	8	19,000 deaths could be prevented annually if all people 50+ were periodically screened for colorectal cancer.[4] Currently only about 1/3 of adults 50+ are up-to-date on screening.[5]
Hypertension Screening	Measure blood pressure routinely in all adults and treat with anti-hypertensive medication to prevent the incidence of cardiovascular disease	5	3	8	30% of Americans age 20+ have hypertension; nearly 50% develop hypertension before age 65.[6] Hypertension and its complications result in over $100 billion annually in medical costs.[7] Yet only 1 in 3 hypertension cases is controlled.[8] The maximum benefit of screening is gained only through long-term use of therapies. Generics for major drugs are available.
Influenza Immunization	Immunize adults aged 50+ against influenza annually	4	4	8	The flu is more than a bad cold — it may also result in hospitalization or death. The single best way to protect against getting the flu is to get a flu shot each fall. Among working-age adults, both injected and nasal flu vaccinations reduce absenteeism and presenteeism.[9,10]
Pneumococcal Immunization	Immunize adults aged 65+ against pneumococcal disease with one dose for most in this population	3	5	8	This cost-saving vaccine prevents a bacterial form of pneumonia that causes hospitalization and death. Emerging drug-resistant strains underscore the importance of prevention through vaccination.
Problem Drinking Screening and Brief Counseling	Screen adults routinely to identify those whose alcohol use places them at increased risk and provide brief counseling with follow-up	4	4	8	15% of adults report alcohol use that is consistent with binge drinking. Binge drinking is more common at younger ages but is still reported in 12% of those age 45-54.[1] Many people are unaware that their alcohol use is excessive and will change their behavior when their doctor points it out.

Services in boldface are those with scores of 6+ for which data indicate that delivery to the U.S. population eligible for the services is likely ≤ 50%.

Services	Description	CPB	CE	Total	*What Policymaker's Should Know*
Vision screening—Adults	Screen adults aged 65+ routinely for diminished visual acuity with the Snellen visual acuity chart	3	5	8	About 25% of older people wear inappropriate visual correction.[11] Appropriate vision correction can reduce hip fractures from falls[12] and improve quality of life.
Cervical Cancer Screening	Screen women who have been sexually active and have a cervix within 3 years of onset of sexual activity or age 21 routinely with cervical cytology (Pap smears)	4	3	7	Pap smear screening is highly effective and has been credited with a 30-year decline in cervical cancer mortality.
Cholesterol Screening	Screen routinely for lipid disorders among men aged 35+ and women aged 45+ and treat with lipid-lowering drugs to prevent the incidence of cardiovascular disease	5	2	7	21% of adults age 35+ have high cholesterol. Of these, most will develop high cholesterol before age 55.[6] One out of 4 adults who do not control their high cholesterol will have a cholesterol-attributable heart attack. One out of 3 will die of cholesterol-attributable coronary heart disease.[13] Long-term use of therapies is necessary to achieve maximum benefits of screening
Breast Cancer Screening	Screen women aged 50+ routinely with mammography alone or with clinical breast examination and discuss screening with women aged 40-49 to choose an age to initiate screening	4	2	6	Mammography currently prevents 12,000 deaths from breast cancer annually.[14] About 1 in 4 women over age 40 are not getting screened at recommended intervals.[15]
Chlamydia Screening	Screen sexually active women under age 25 routinely	2	4	6	Chlamydia is the most common bacterial sexually transmitted disease in the U.S., with 3 million new cases annually.[16] Left untreated, Chlamydia will cause infertility in some women.
Calcium Chemoprophylaxis	Counsel adolescent and adult women to use calcium supplements to prevent fractures	3	3	6	Lifelong use of calcium prevents hip fractures. Few women use calcium supplements consistently and need regular physician guidance to encourage lifelong use.
Vision Screening—Children	Screen children less than age 5 routinely to detect amblyopia, strabismus, and defects in visual acuity	2	4	6	About 3% of preschoolers have visual impairments,[17] a portion of which would remain undetected at school age without screening. Screening and treatment are inexpensive and improve quality of life.

Services in boldface are those with scores of 6+ for which data indicate that delivery to the U.S. population eligible for the services is likely ≤ 50%.

Services	Description	CPB	CE	Total
Folic Acid Chemoprophylaxis	Counsel women of childbearing age routinely on the use of folic acid supplements to prevent birth defects	2	3	5
Obesity Screening	Screen all adult patients routinely for obesity and offer obese patients high-intensity counseling about diet, exercise or both together with behavioral interventions for at least one year	3	2	5
Depression Screening	Screen adults for depression in clinical practices that have systems in place to assure accurate diagnosis, treatment and follow-up	3	1	4
Hearing Screening	Screen for hearing impairment in adults aged 65+ and make referrals to specialists	2	2	4
Injury Prevention Counseling	Assess the safety practices of parents of children less than age 5 and provide counseling on child safety seats, window/stair guards, pool fence, poison control, hot water temperature and bicycle helmets	1	3	4
Osteoporosis Screening	Screen women aged 65+ and women aged 60+ at increased risk routinely for osteoporosis and discuss the benefits and harms of treatment options	2	2	4
Cholesterol Screening — High Risk	Screen men aged 20 to 35 and women aged 20 to 45 routinely for lipid disorders if they have other risk factors for coronary heart disease and treat with lipid-lowering drugs to prevent the incidence of cardio-vascular disease	1	1	2
Diabetes Screening	Screen for diabetes in adults with high cholesterol or hypertension and treat with a goal of lowering levels below conventional target values	1	1	2
Diet Counseling	Offer intensive behavioral dietary counseling to adult patients with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease	1	1	2
Tetanus-diphtheria Booster	Immunize adults every 10 years	1	1	2

Things to Know About 4 of These Services

Obesity screening: Patients must spend a significant time on this intervention. If the monetary value of patients' time were ignored, this high-intensity intervention may be very cost-effective.

Injury prevention counseling is aimed at a relatively small target population, which affects its overall health impact assessment. This is a cost-effective service, however, and would be a top priority in a list aimed solely at children.

Cholesterol screening in younger adults with risk factors for coronary heart disease also aimed at a relatively small target population. Cholesterol screening for the general, asymptomatic population received a higher score in this ranking.

Diabetes screening: Consistent with the evidence review of the US Preventive Services Task Force (USPSTF), the scores for this service reflect the marginal benefits of achieving lower blood pressure targets in people with diabetes (diastolic blood pressure < 80 mm Hg) rather than the conventional standard for all patients (≤90 mm Hg). All people should be screened for hypertension and high cholesterol and treated appropriately. The USPSTF did not find that screening/early detection of diabetes in the general population provided greater benefits than did clinical detection of diabetes. The exception is diabetes screening/early detection targeted to people with high blood pressure or high cholesterol, which can help healthcare providers more tightly control patients' cardiovascular risks.

Go to prevent.org/ncpp for more information about all the services in the ranking...

Reference List

1. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. 2004. [Web Page]; http://www.cdc.gov/brfss/. [Accessed 24 Mar 2006].

2. Projected smoking-related deaths among youth – United States. MMWR Morb Mortal Wkly Rep 1996 Nov 8;45(44):971-4.

3. Solberg, L. I.; Maciosek, M.V.; Edwards, N. M. Tobacco Cessation Screening and Brief Counseling. Technical Report Prepared for the National Commission on Prevention Priorities.2006.

4. Maciosek, M.V.; Solberg, L. I.; Edwards, N. M., et al. Colorectal cancer screening. Technical report prepared for the National Commission on Prevention Priorities.2006.

5. Maciosek, M.V.; Coffield, A. B.; Solberg, L. I., et al. Colorectal Cancer Screening: Health Impact and Cost Effectivness. Amer J Prev Med.

6. National Center for Health Statistics. Health, United States, 2005 With Chartbook on Trends in the Health of Americans. Hyattsville, Maryland: 2005.

7. Hodgson TA, Cai L. Medical care expenditures for hypertension, its complications, and its comorbidities. Med Care 2001 Jun;39(6):599-615.

8. Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo JL Jr, Jones DW, Materson BJ, Oparil S, Wright JT Jr, et al. Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. Hypertension 2003 Dec;42(6):1206-52.

9. Bridges CB, Thompson WW, Meltzer MI, Reeve GR, Talamonti WJ, Cox NJ, Lilac HA, Hall H, Klimov A, Fukuda K. Effectiveness and cost-benefit of influenza vaccination of healthy working adults: A randomized controlled trial. JAMA 2000 Oct 4;284(13):1655-63.

10. Nichol KL, Mallon KP, Mendelman PM. Cost benefit of influenza vaccination in healthy, working adults: an economic analysis based on the results of a clinical trial of trivalent live attenuated influenza virus vaccine. Vaccine 2003 May 16;21(17-18):2207-17.

11. Maciosek, M.V.; Edwards, N. M.; Goodman, M. J., et al. Vision screening for elderly adults. Technical report prepared for the National Commission on Prevention Priorities.2006.

12. Day L, Fildes B, Gordon I, Fitzharris M, Flamer H, Lord S. Randomised factorial trial of falls prevention among older people living in their own homes. BMJ 2002 Jul 20;325(7356):128.

13. Maciosek, M.V.; Edwards, N. M.; Nelson, W.W., et al. Screening for high cholesterol. Technical report prepared for the National Commission on Prevention Priorities. 2007.

14. Maciosek, M.V.; Solberg, L. I.; Edwards, N. M. Breast cancer screening. Technical report prepared for the National Commission on Prevention Priorities.2006.

15. Centers for Disease Control and Prevention. National Health Interview Survey 2003 Public Use Data Set. [Web Page]; http://www.cdc.gov/nchs/nhis.htm.

16. Alexander LI, Cates JR, Herndon N, Ratcliffe JF. Sexually transmitted diseases in America: How many cases and a what cost? December 1998.

17. Hillis A, Flynn JT, Hawkins BS. The evolving concept of amblyopia: a challenge to epidemiologists. Am J Epidemiol 1983 Aug;118(2):192-205.

Partnership for Prevention™

Shaping Policies • Improving Health