

ASPH Policy Brief

Creating a Culture of Wellness: Building Health Care Reform on Prevention and Public Health

EXECUTIVE SUMMARY

Policies and programs that emphasize both community-based prevention and clinical preventive services as part of primary care should be the foundation of health care reform, in the view of the Association of Schools of Public Health (ASPH).

A consensus is emerging in the Obama Administration and the U.S. Congress that significant reforms are necessary to provide affordable, high-quality health care to all Americans, and ASPH has called for legislation that will achieve health insurance coverage for all Americans, both children and adults, within two years. As efforts advance to meet those goals, the culture of the health care system needs to be transformed from one that emphasizes treatment to one that builds on public health and prevention. Targeting behavioral patterns and social and environmental circumstances in the home, the workplace, and the community, and promoting the systematic adoption of prudent clinical prevention practices, offer tremendous opportunities to reduce premature death, disability, and disease.

ASPH recommends seven key strategies to accomplish the transformation of the US health care system:

Key Strategies for Action

The ASPH blueprint for creating a culture of wellness is based on the following recommendations:

- 1. Emphasize leadership and articulate a vision for prevention.** Use of the “bully pulpit” to articulate a vision for a prevention-oriented health care system may do more to speed the transition than any other single measure. President Obama, the Department of Health and Human Services (HHS) Secretary, the U.S. Surgeon General, and other HHS leadership should use their voices and influence to clearly state that prevention is the core value of health care reform.
- 2. Increase the federal cigarette excise tax to prevent smoking-related morbidity and mortality, spending much of the resulting revenue on prevention-focused activities.** ASPH recommends an additional federal cigarette tax of \$1/pack, which would bring the total tax to \$2.01. This tax increase would drive down the rate of smoking, especially among youth, while generating approximately \$13.6 billion a year in new revenues, after factoring in declines in smoking associated with the higher costs of cigarettes. (The proposed tax is in addition to the \$0.62 increase that went into effect March 31, 2009 and is expected to generate \$7 billion annually, which has been allocated to the State Children’s Health Insurance Program [SCHIP]). Revenues from a further \$1 tax increase should support a Public Health Trust, to be used for tobacco cessation and prevention, public health research, and other public health programs. The tax revenues should also provide relief to the states and fund a range of other public initiatives.

- 3. Implement evidence-based measures to fight the obesity epidemic.** The worsening epidemic of obesity in America, which now rivals that of tobacco in its overall impact on health, accounted for more than 25 percent of the growth in the nation's health care costs between 1987 and 2001. ASPH endorses a wide array of obesity prevention measures that would improve surveillance, support nutrition programs, promote physical activity, provide guidance on advertising and marketing to children, and significantly expand funding for obesity prevention research. A government-wide, HHS-led task force on obesity should be established to define and coordinate all federal actions and establish nutrition standards for food and beverages sold in schools. In addition, ASPH believes that an excise tax on sugar-sweetened beverages warrants consideration.
- 4. Rebuild the public health workforce.** Addressing the public health workforce crisis requires short-term and long-term initiatives designed to:

 - Increase federal funding to support students pursuing graduate degrees, expand practice opportunities, and promote a more diverse workforce. Expand capacity at Schools of Public Health to educate more graduate students, more public health professionals, and more workers in health care and other intersecting fields, to increase research training, and to develop competencies and curricula in emerging areas.
 - Introduce public health into the curriculum at all levels, from primary school through undergraduate education.
 - Establish a U.S. Global Health Service to coordinate U.S. efforts to build a workforce prepared to meet international needs.
 - Institutionalize a process for enumerating the public health workforce to assess current capacity and future needs.
- 5. Build and utilize information technology architecture to measure clinical prevention services and health outcomes uniformly.** The fragmented U.S. health care system is in urgent need of world-class data management systems to measure performance, improve decision making, enhance accountability, and provide surveillance data for longitudinal analysis and research. Developing a culture of wellness depends in part on the availability of uniform assessments of health outcomes and system performance and surveillance.
- 6. Empower employers to promote wellness strategies that can be integrated with primary care.** Employers can have a strong influence on the demand for more prevention-oriented health insurance and health care delivery services. ASPH also calls for a National Workplace Prevention Program, defined by the CDC and approved by the HHS Secretary and the Surgeon General, which would provide tax credits to all public and private U.S. employers that meet program requirements.
- 7. Empower communities to put prevention and public health programs at the forefront of primary care.** Public health and primary care are both practiced at the community level, creating opportunities to integrate them in ways that would change the culture of local health systems and emphasize prevention as a core competency. Long-term investments, especially in underserved communities, are needed to train workers, including primary care providers and community health workers; expand facilities to house prevention programs; and develop information systems and governance oversight that link public health and prevention with primary care, resulting in more efficient and more cost-effective integrated models.

About ASPH: The recommendations in this paper reflect the consensus of the Association of Schools of Public Health (www.asph.org), which represents the 40 Council on Education for Public Health (CEPH) accredited schools of public health in North America. A critical national resource, the nation's Schools of Public Health educate the next generation of public health leaders; conduct cutting-edge research; and translate knowledge into public health policy and practice. They currently enroll 22,000 students, produce more than 7,300 graduates a year, and employ 9,600 faculty.

ASPH is committed to collaborating with the public health practice community, governmental agencies, academic medicine, non-profit organizations, and business groups. This policy paper is part of a series exploring the nation's public health priorities.

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Overview: An Urgent Need

High spending, low health status in the U.S. At \$2 trillion in 2005, health care spending in the United States far surpasses that of all other countries (on a GDP per capita basis). The nation also remains the global leader in biomedical research and tracks health care indicators with exceptional rigor. Nonetheless, it ranks low in many measures of health status.

- The U.S. ranked 25th in infant mortality; 22nd in maternal mortality; 23rd in life expectancy for women; and 22nd in life expectancy for men, among the 30 developed nations within the Organization for Economic Cooperation and Development.
- Among all 192 nations for which 2004 data was available, the U.S ranked 46th in life expectancy and 42nd in infant mortality (Schroeder, 2007).

Public health should be at the center of efforts to meet the nation's health challenges. Premature death is most heavily influenced by human behavior (which accounts for 40% of the risk), as evidenced by the fact that the vast majority of deaths in the United States are associated with obesity and inactivity (365 deaths/100,000) and smoking (435 deaths/100,000) (Schroeder, 2007). Genetics is also an important risk factor (30%), as is the social and working environment (20%), whereas health care itself is relatively less important, with only a 10% influence on premature death.

It is no surprise, then, that four of the six “serious and complex challenges” to health identified in a recent Institute of Medicine (IOM) report deal with prevention and public health (IOM, 2009).

According to the IOM:

- The U.S. model of health care delivery does not ensure the efficient and effective prevention and management of chronic diseases, nor does it consistently apply principles of evidence-based medicine.
- The possibility of global pandemics, emerging infections, and bioterrorism threatens to harm many Americans and to strain limited resources further.
- The public health infrastructure is weak and, in many locales, hard-pressed to meet current demands, much less those of the future.
- The United States trails many other countries in achieving desired health outcomes and longevity, despite the world's highest level of per capita health care spending.

Prevention is a cost-effective way to reduce morbidity and mortality. The value of public health measures in saving lives and reducing chronic disease and disability has been well-documented. Reductions in traffic fatalities as a result of the widespread use of seat belts, and better health outcomes from the improved control of workplace environmental exposures, are just two examples. We also know that if a basic package of cost-effective prevention measures were practiced by the entire population – including daily aspirin use, smoking cessation, influenza vaccine, and screening for colorectal cancer and problem drinking – more than 100,000 lives per year could be saved (Maciosek et al., 2006).

Investing in prevention is cost-effective, as the following evidence demonstrates:

- The Urban Institute estimates that a \$10-per-person investment in prevention in the United States would generate a return of \$16.543 billion in five years and \$18.451 billion over ten years. These calculations were derived from evidence-based studies on lack of physical activity, poor nutrition, and tobacco use (Trust for America's Health, 2008).
- The cost-effectiveness of preventive clinical services for working-age adults has been well established, using quality-adjusted, life-year metrics and based on U.S. Preventive Services Task Force recommendations (AHRQ, 2005; Maciosek et al., 2006).
- The Congressional Budget Office concluded that potential savings from health behavior and health promotion activities were only “modest” (CBO, 2008). However, that was based largely on assessing clinical preventive services, including expensive tertiary prevention, rather than on just cost-effective primary and secondary prevention. Also, the CBO did not consider the gains in health and productivity that accrue from employment-based wellness programs.
- IBM reports significantly improved employee health metrics and a \$1 billion in savings since the inception of its comprehensive and fully integrated program for its employees and their families in 2001. Free preventive services, first-dollar coverage for primary care, worker safety programs, and incentives for healthy behaviors have helped reduce employee health care costs to single digits (compared to 12-15% for other companies) and created a more health-literate workforce (Sepulveda, 2008).

The U.S. has made only a limited commitment to prevention and public health systems. At present, the United States invests less than 2% of each health care dollar on prevention while spending 75% of that dollar on treating chronic diseases, many of which are preventable. Those figures are even higher for the major federal health insurance programs; 83% of every Medicaid dollar and 96% of every Medicare dollar is spent on treating chronic diseases.

As the health care reform debate gets underway, this formula must change. ASPH has called for legislation that will achieve health insurance coverage for all Americans, both children and adults, within two years. Prevention and public health strategies should be the foundation of a newly designed system.

A Prevention-Focused Framework for Health Care Reform

ASPH recommends that a prevention-focused framework for health care reform be built around the following priority areas:

1. Ensuring every American an opportunity for a healthy life through two interrelated commitments:
 - Providing access to affordable, quality health care.
 - Eliminating health disparities linked to race, ethnicity, socioeconomic, and other factors.
2. Strengthening the public health infrastructure, with special attention to integrating health care delivery and public health, and to workforce development.
3. Increasing investment in efforts to prevent disease, injury, and disability.
4. Increasing investment in public health research, including prevention, public health systems, and population health.
5. Strengthening American leadership and investment in global health.

The remainder of this paper offers a blueprint for building that framework.

Strategic Approaches for a Prevention and Public Health Emphasis

ASPH has identified the following strategies for putting prevention and public health at the core of the health care system, and building a culture of wellness:

1. Emphasize leadership and articulate a vision for prevention.

Use of the “bully pulpit” to articulate a vision for a prevention-oriented health care system may do more to speed the transition than any other single measure. President Obama, the HHS Secretary, the Surgeon General, and other HHS leadership should use their voices and influence to clearly state that prevention is the core value of health care reform.

Corporate America has learned that wellness programs do not succeed unless they are championed by the CEO and other top managers (IOM, 2005). The federal government should recognize this as well. Long before health care reform legislation is passed, heads of the key HHS agencies, and other federal agencies with health-related missions, should emphasize their commitment to prevention, and prioritize the implementation of administrative directives to advance that goal.

The many HHS agencies with roles to play include the Agency for Healthcare Research and Quality (AHRQ), the Center for Medicaid and Medicare Services (CMS), Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), the Health Resources and Services Administration (HRSA), the National Institutes of Health (NIH), and the Substance Abuse and Mental Health Services Administration (SAMHSA). Other federal agencies with health-related activities in their missions should also emphasize the importance of prevention, including the Department of Defense, the Department of Homeland Security, the Environmental Protection Agency, and the Veterans Administration (VA).

ASPH endorses IOM recommendations for using the authority of HHS to advance public health and prevention. Five IOM recommendations highlight opportunities for HHS to take a leadership role (IOM, 2009):

- To meet 21st-century challenges to America's health, the Secretary of HHS should clearly articulate and actively promote a vision for the nation's health, ensure that HHS's mission supports that vision, and establish a small number of measurable goals focused on critical challenges.
- The Secretary should align and focus HHS on performance and encourage creative use of scientifically based approaches to meet new and enduring challenges.
- The Secretary should accelerate the establishment of a collaborative, robust system for evaluating the health care system that would incorporate existing HHS and external research, stimulate new studies as needed, synthesize findings, and provide actionable feedback for policymakers, purchasers, payers, providers, health care professionals, and the public.
- The Secretary should place a high priority on developing a strategy and tools for workforce improvement (1) in HHS, (2) in the public health and health care professions nationwide, and (3) in the biosciences.
- A new compact between Congress and the department is essential as HHS works toward achieving its vision for a healthy nation, departmental mission, and key health goals. Under this compact, the Secretary would provide regular, rigorous reports about departmental activities to Congress and the nation, and assume greater accountability for improving performance and obtaining results. In return, Congress should allow HHS greater flexibility in its internal operations and decision making.

ASPH favors expanding the role of the Surgeon General. The IOM has called for a more "prominent and powerful role" for the Surgeon General (IOM, 2009). ASPH endorses the recommendation that this individual be "a strong advocate for the health of the American people and work actively to educate Americans on important health issues."

The Surgeon General should issue an annual *Report to the Nation* that reviews the progress being made on disease and injury prevention. As a vehicle to educate all Americans and provide accountability, the report should include:

- Population-based survey assessments, at the national, state, and health plan levels, of health determinants, behaviors, and the Organization for Economic Cooperation and Development health indicators.
- Prevention report cards for all insured individuals issued by publicly funded health plans and based on federally approved and mandated clinical prevention measures. The goal is to drive the technology to develop new forms of patient prevention education and accountability by the private sector (Stagmo et al., 2004; AHRQ, 2005; Campbell et al., 2006).
- National and state-based assessments of employer participation in workplace prevention programs, based on documenting the tax credits provided for health promotion and health protection programs.
- Accreditation of all state and local health departments by a National Board of Public Health, state public health boards, and public health professional organizations, based on metrics developed by the CDC and approved by the Secretary of HHS.
- Other health behavior and health outcome national data authorized by the Secretary of HHS.

2. Increase the federal cigarette excise tax to reduce smoking-related morbidity and mortality, spending much of the resulting revenue on prevention-focused activities.

ASPH recommends increasing the federal cigarette tax by \$1/pack, bringing the total to \$2.01/pack. This increase would generate an annual revenue stream of \$13.6 billion. (This is in addition to expected revenues of approximately \$7 billion/year from the \$0.62 tax increase that went into effect March 31, 2009. Those revenues have been allocated to the State Children's Health Insurance Program [SCHIP]).

Of all tobacco control measures, price increases are widely regarded as the most effective, reducing smoking significantly and quickly. Research suggests that a new tax increase of \$1/pack will reduce smoking among adults by 6.25 percent, and lead 1.4 million adults to stop smoking altogether. That ultimately translates into approximately 700,000 fewer smoking-associated deaths. The results will be even more dramatic among young smokers, who are two or three times more responsive to cigarette price increases than adults.

The new taxes would be in line with the 12 states, plus the District of Columbia, that have taxes of \$2 or more, and closer to those in many other developed nations. In Europe, some national cigarette taxes exceed \$7/pack.

New revenue for public health, state relief, and other public purposes. The \$13.6 billion/year in new revenues generated by an additional \$1/pack increase could be used for the following purposes:

- A Public Health Trust to promote public health. Use of those resources should include substantial new funding for:
 - A media-based antismoking campaign targeted at youth and high-risk adults.
 - Smoking cessation services, including quit lines and nicotine replacement programs at the federal and state levels.
 - A media-based campaign to educate the public about what public health is, and what it accomplishes. The goal would be to promote behaviors that enhance health and reduce health care expenditures, and ultimately to broaden interest in public health in order to increase demand for funding.
 - Public health research in population health, primary prevention, and community-based and public health systems, among other areas.
 - Other essential public health purposes, including improving access to quality health care; eliminating health disparities; strengthening the public health infrastructure by integrating prevention and primary care and developing the public health workforce; investing in disease and injury prevention and health literacy; and strengthening American leadership in global public health.
- Compensation to the states for declines in their own excise tax revenues as cigarette sales decrease (leading to an anticipated loss of approximately \$1.17 billion), and for the loss of Master Settlement Agreement revenues. Providing those funds to the states should encourage them to support a federal tobacco tax increase.
- A broad range of other public purposes, which could include additional public health projects, educational support, deficit reduction, and more.

3. Implement evidence-based measures to fight the obesity epidemic.

The epidemic of obesity in America now rivals that of tobacco in its overall impact on health. But the health consequences of tobacco are contracting with tobacco control efforts while the much more recent epidemic of obesity continues to expand, with worsening health outcomes and higher health care costs predicted.

- The prevalence of obesity among adults, among preschool children ages 2-5, and among adolescents ages 12-19 has doubled since 1970, while tripling among children ages 6-11 (CDC, 2009). Over nine million U.S. children are now estimated to be obese.
- Obesity is a well-recognized risk factor for diabetes, heart disease, hypertension, stroke, certain cancers, and a host of other adverse health outcomes among adults. Children are more likely to have diabetes, hypertension, and dyslipidemia, which presage heart disease. Obesity among young people also has a significant impact on emotional health, with a link to low self-esteem, depression, discrimination, and social marginalization (IOM, 2005).
- Obesity accounted for more than 25 percent of the growth in the nation's health care costs between 1987 and 2001, with estimates of the epidemic's cost ranging from \$98-129 billion (2004 dollars) (IOM, 2005; Thorpe et al.).
- Lost productivity from obesity-related morbidity and mortality was estimated to be \$47.5 billion nationally in 1995.

ASPH endorses recommendations made by the IOM (2005) to prevent childhood obesity and supports the following prevention initiatives:

- Establish a government-wide, HHS-led task force on obesity to define and coordinate all federal actions and establish nutrition standards for food and beverages sold in schools.
- Develop CDC-funded state-based nutrition programs designed to provide grant opportunities and technical assistance to local communities.
- Cover the costs of nutrition counseling and require body mass index (BMI) to be measured as a vital sign among all publically insured patients.
- Support nutrition counseling and physical activity as a component of CDC- and HRSA-funded community health programs, especially for high-risk individuals and vulnerable populations.
- Develop and evaluate guidelines for advertising and marketing to children and youth through an IOM study and a national conference.
- Significantly expand funding for prevention intervention research, experimental behavioral research, social marketing research, and community-based research.
- Expand and standardize surveillance and evaluation of dietary patterns, obesity-related health outcomes, and related costs through new information systems and the monitoring of electronic medical records.
- Develop federal grants, and grants to states and local communities, to fund and evaluate changes in the built environment that would promote physical activity, especially in underserved communities.

In addition, ASPH believes that an excise tax on sugar-sweetened beverages warrants consideration. Consumption of soft drinks and many other beverages sweetened with sugar, high-fructose corn syrup, or similar products has increased significantly over the past three decades (Popkin and Nielsen, 2003), and now contributes about one-third of the added sugar in the American diet (Guthrie and Morton, 2000). There is clear evidence from both observational and experimental studies that increased consumption of sugar-sweetened beverages leads to weight gain (CDC, 2006).

Several states already levy soft drink taxes, often earmarking the revenues to subsidize health promotion programs and health science schools. The Congressional Budget Office has proposed a federal excise tax of three cents per 12 ounces of “sugar-sweetened” beverages as one option (Option 106) to help fund health care reform, and estimates that it would generate an estimated \$24 billion in revenues from 2009-14, and an estimated \$50 billion from 2009-18 (CBO, 2008).

The goal of an excise tax on sugar-sweetened beverages would be to drive down portion size and overall consumption, and to generate revenues that support a wide array of obesity prevention programs and offset obesity-related federal health insurance costs. Further study is necessary to determine how best to realize these benefits.

4. Rebuild the public health workforce.

The nation is facing a public health workforce crisis, with particularly critical shortages forecast for public health physicians, public health nurses, epidemiologists, health care educators, and administrators. Drawing on an array of data generated by the Association of State and Territorial Health Officials, the National Center for Health Workforce Information and Analysis, and other sources, ASPH observes that:

- The public health workforce is diminishing over time even as the U.S. population increases. In 2000, the total workforce was 448,000, or 50,000 fewer workers than in 1980.
- More than 100,000 public health workers in government – approximately one-quarter of the current workforce – will be eligible to retire by 2012.
- By 2020, the nation will need more than 250,000 more public health workers than are available today.

Short-term and long-term workforce strategies. To meet the urgent need for a significantly expanded public health workforce, traditional models of training will have to be rethought, and a combination of short-term and long-term initiatives will need to be implemented. ASPH endorses and extends a set of recommendations made by the Institute of Medicine (2002) to advance these goals and offers additional strategies:

- Increase federal funding to support public health professional education by:
 - Providing financial support to graduate students pursuing public health degrees through loan repayment and forgiveness programs, training and service obligation grants, and fellowships.
 - Strengthening “real-world” experiences for public health students by expanding both the number and the type of organizations that serve as sites for practice rotations.
 - Promoting a more diverse public health workforce by using financial incentives to attract underrepresented populations to public health, supporting students engaged with reducing racial and ethnic health disparities, and developing special training opportunities targeted at minorities.

- Build capacity in Schools of Public Health, enabling them to:
 - Enroll and train more degree-seeking graduate students.
 - Develop competencies and curriculum in emerging areas of public health practice.
 - Increase public health research training in population health, primary prevention, and community-based and public health systems. Particular emphasis should be placed on transdisciplinary research programs at the AHRQ, CDC and the NIH, which fund most research training at Schools of Public Health.
 - Expand joint degrees and other opportunities for cross-disciplinary training (combining public health graduate training with training in medicine, nursing, pharmaceutical science, veterinary medicine, dentistry, law, business, health and public administration, public policy, social work, and the behavioral sciences, among other professions).
 - Expand undergraduate public health training.
 - Promote training through short courses, certificate programs, distance learning, and other opportunities for lifelong learning. Targeted programs are needed to meet the needs of credentialed public health professionals, undertrained and non-credentialed public health workers, and other workers engaged in public health activities.
- Provide grants to state health departments to promote training. Grants can be used to encourage states to support worker training through MPH programs and public health certificates, and to promote credentialing.
- Ensure that all primary, secondary, and post-secondary schools offer curricula to ensure a basic understanding of public health and the importance of prevention in health care.
- Establish a U.S. Global Health Service to coordinate U.S. efforts to build a workforce prepared to meet international needs.
- Institutionalize a process for periodic enumeration of the public health workforce, under the guidance of the Surgeon General or federal agency, to assess current capacity and evaluate future needs.

5. Build and utilize information technology architecture to measure clinical prevention services and health outcomes uniformly.

The fragmented U.S. health care system is in urgent need of world-class data management systems to measure performance, improve decisionmaking, enhance accountability, and provide surveillance data for longitudinal analyses and research. Developing a culture of wellness depends in part on the availability of uniform assessments of health outcomes and system performance.

The information technology to provide and evaluate clinical preventive health services is already available. Many leading U.S. corporations have long used some form of scorecards to manage their health care programs (IOM, 2002). For instance, the National Business Group on Health developed Employer Measures of Productivity, Absence, and Quality (EMPAQ), which provides the methodology and a set of standard metrics for employers to measure program outcomes, participate in benchmarking, evaluate vendor performance, and identify best practices (National Business Group on Health). EMPAQ offers a common lexicon and platform for uniform content and rigorous accountability. At the patient level, “smart phones” are now available with an array of prevention programs and chronic disease management tools that can be linked to a personal electronic medical record. Systematic, national-level evaluation of individual prevention report cards, designed to provide feedback to patients and involve them in achieving prevention and treatment goals, is just beginning (Stagmo et al., 2004).

Tracking and reporting on prevention should occur at many levels. ASPH recommends the following strategies as part of developing a nationwide data management system for measuring preventive health care and outcomes:

- HHS should develop a uniform prevention report card utility so that all health care plans can provide a limited dataset using a common lexicon and platform. Standard measures of clinical preventive health care, such as those defined by the U.S. Clinical Preventive Services Task Force, are evidence-based, reimbursed by most health plans, and responsive to IOM recommendations (2009). Moreover, these measures are already included in the electronic scorecards used by many businesses and insurers, and are being evaluated nationally in Sweden. If mandated for use in publicly financed health plans, they could drive the development of Smartphone-based prevention and chronic disease management technology (Stagmo et al., 2004).
- Prevention report cards developed by the CDC and approved by the HHS Secretary and the Surgeon General, should be required of all health plans, regardless of payer, to assure uniform measurement and provide accountability and prospective surveillance. Scorecards to document health plan compliance with clinical prevention measures are well developed and available online (AHRQ, 2005; Campbell et al., 2006).
- Many other entities should implement, track, and report their compliance with clinical prevention measures, including:
 - State health departments, in conjunction with public and private insurers. States should have the option of including other clinical prevention measures, beyond a federal minimum, as their own health care policies dictate.
 - Federal health care programs, including the Veterans Administration and Federally Qualified Health Centers (FQHCs), which include community health centers, school-based clinics, and rural and migrant health clinics. Special attention should be paid to implementing and evaluating prevention measures for vulnerable rural and urban subpopulations.
 - Employers providing health insurance to their workers should integrate clinical prevention measure reporting as a part of a fully integrated employee health program.
 - Hospitals and other medical providers, in line with a trend among accrediting organizations, should adopt clinical prevention measures as quality performance indicators.
- All parties should advance transparency and accountability by sharing their clinical prevention measures with the populations they serve, via websites and annual prevention and health care quality reports.
- Initiatives to help individuals and families become more health literate and to understand evidence-based health care are essential to promote participation in clinical prevention programs. While full reimbursement for all approved prevention services is essential, high rates of participation will not occur without transparent information systems, education across the lifespan, and continuous documentation and feedback on the benefits of prevention.

6. Empower employers to promote wellness strategies that can be integrated with primary care.

Employers are a largely untapped resource for transforming the nation's health care culture into one that emphasizes prevention. ASPH believes American employers can have a strong influence on demand for more prevention-oriented health insurance and health care delivery services.

With appropriate incentives, employers can also be galvanized to develop employment-based prevention programs. To date, most fully integrated employee wellness programs are found among larger corporations (Linnan et al., 2008; Lind, 2008). Less than five percent of employers with 50-99 employees and 24% of employers with more than 750 employees offer "comprehensive" workplace health promotion programs (Linnan et al., 2008).

Yet a benchmarking study found that achieving "best practice" levels of performance in health and productivity management helped companies annually save as much as \$2,562 per employee, reflecting savings distributed among group health costs, turnover, absenteeism, and disability and workers' compensation programs (Goetzel et al., 2001). In general, investing in workplace wellness programs yields a two to threefold return, with savings divided equally between health care and productivity (Thygeson et al., 2009).

Defining a healthy workforce. The Institute of Medicine (2005) has documented the fundamental linkage between healthy employees and productive employees, describing a healthy workforce as follows:

- "Healthy—demonstrating optimal health status as defined by positive health behaviors, minimal modifiable risk factors, and minimal illness, disease, and injuries.
- "Productive—functioning to produce the maximum contribution to achievement of personal goals and the organizational mission.
- "Ready—possessing an ability to respond to changing demands given the increasing pace and unpredictable nature of work.
- "Resilient—adjusting to setbacks, increased demands, or unusual challenges by bouncing back to optimal well-being and performance without incurring severe functional decrement."

Guidelines for workplace wellness programs. Recent efforts to identify the essential elements of employer-based wellness programs and promote their use include:

- IOM recommendations for an employee health program, based on a model it designed for NASA, integrate the following elements: health advocate; health plan design; disease and case management; fitness; absence management; primary care (medical home); wellness programs; health risk assessment; health portal; occupational and environmental health; and behavioral health (IOM 2005).
- The CDC's National Institute for Occupational Safety and Health (NIOSH) has implemented the WorkLife Initiative, an intramural and extramural program designed to raise awareness and provide evidence-based data about employment-based prevention programs, and disseminate the results of research, outreach, and related information (<http://www.cdc.gov/niosh/worklife/>). NIOSH has also disseminated guidelines describing the Essential Elements of Effective Worksite Programs (<http://www.cdc.gov.niosh/worklife/essentials.html>).

- Proposed federal legislation would use tax incentives to encourage employers to adopt workplace wellness programs through tax incentives. Under the legislation -- Incentives for a Healthy Workforce, a component of the Healthy Lifestyles and Prevention (HeLP) American Act -- programs would be certified by the HHS Secretary, in conjunction with the CDC Director, if they:
 - Are consistent with evidence-based research and best practices.
 - Include multiple, evidence-based strategies, such as those outlined in the CDC's Guide to Community Preventive Services (CDC, 2009) and the AHRQ's Guide to Clinical Preventive Services (AHRQ, 2005; Campbell et al., 2006).
 - Include strategies that focus on employee populations with a disproportionate burden of health problems.
 - Include worksite policies related to occupational safety and health exposures, tobacco use, availability of nutritious food, strategies to minimize stress and promote positive mental health, design of the "built environment," and promotion of physical activity before, during, and after work.

A two-tier tax credit program would give companies up to \$200 per employee for the first 200 employees, and \$100 per employee thereafter for developing certified workplace wellness programs (paying up to 50% of program cost).

Implementing a National Workplace Prevention Program. ASPH endorses the intent of the healthy workplace provisions of the HeLP America Act, which provide an excellent template for prevention programs. More concretely, ASPH makes the following recommendations:

- Implement a National Workplace Prevention Program, including an aggressive awareness campaign, an information clearinghouse, and benchmarks for all public and private U.S employers. The program would be developed by the CDC and approved by the Secretary of HHS and the Surgeon General.
- Provide a four-tier schedule of tax credits for workplace wellness programs, based on the number of employees. Credits should not exceed 50% of the program cost for employers with fewer than 25 employees, falling to no more than 10% of program costs for the largest employers (over 1,000 employees). Requiring electronic reporting of tax credits by the Secretary of the Treasury would provide the accountability and surveillance data essential for implementation.
- Require all participants to meet basic program requirements as defined by the CDC, including smoke-free workplace policies.
- Authorize and fund a significant expansion of the CDC/NIOSH WorkLife Initiative, which is designed to promote evidence-based research and provide technical and policy assistance at the state and national level. This expanded initiative should include a targeted investigator-initiated grant program, a national network of WorkLife Centers of Excellence, and a robust demonstration research grant program to engage employers, unions, worker associations, insurers, wellness and informatics vendors, and universities.
- Authorize and fund a CDC/NIOSH state-level, employment-based health promotion and protection program.
- Authorize and fund a CDC/NIOSH program for public and private entities to develop, implement, and evaluate health communication and health literacy products designed for employers, unions, insurers, and other vendors, and targeted at employees and their families.
- Authorize and fund the development of a CDC/NIOSH website to serve as a national and global clearinghouse for all elements of this national employee wellness program, including all applications and all outcome data.

7. Empower communities to put prevention and public health programs at the forefront of primary care.

Public health and primary care are both practiced at the community level, creating opportunities to change the culture of local health systems to emphasize prevention as a core competency. Significant gaps currently exist because many community prevention services are not reimbursed as a part of primary care or adequately funded by local health departments, and are typically siloed organizationally, and by funding sources.

Expanding community-based preventive services and attracting essential personnel to underserved rural and urban communities is as essential to eliminating health disparities as an element of universal insurance coverage. Residents in these communities typically have the highest rates of poverty, the most limited primary care and prevention services, the lowest rates of insurance coverage, and the poorest health outcomes. Long-term investments are especially necessary to provide adequate prevention and public health training to local primary care providers and community health workers, to expand facilities to house prevention programs, and to develop information and administration systems that link and evaluate public health programs with primary care and make the entire community health system more efficient and cost-effective.

A new form of federal support for prevention and public health programs at the local level should be used to supplement the core program of uniformly inadequate funding of local health departments and to assure that Federally Qualified Health Centers, rural clinics, free medical clinics and local primary care providers are integrated and utilize prevention in primary care. This new federal program should share a common public-private governance board with the local public health department, hospital, and other local health programs to assure integration, efficiency, and accountability.

To meet the prevention and public health needs of communities throughout America, especially those that are underserved, ASPH recommends action to:

- Develop and fund a national network of Community Health Education and Resource Centers (CHERs), a new entity modeled on Federally Qualified Health Centers, to integrate and coordinate community-based prevention services, including core health education, mental health counseling, and outreach services. CHERs could be integrated with existing FQHCs, and with local hospitals, public health departments, primary care providers, and other community health programs through a common public-private governing board. The Health Resources and Services Administration should provide adequate funding to finance new facilities and provide core funding for CHER staff and programs, which could also be supported financially by the hospital community-benefit programs and other charitable contributions. A CHER could be located at and led by any community-based health entity and would serve as a platform from which to advocate for additional support for community-based prevention programs.
- Authorize and fund a nationwide grant program to allow FQHCs, local health departments, and publicly owned hospitals to develop and fund innovative CHER models; to organize public-private governance boards that include all community health stakeholders; to administer and evaluate CHERs; and to ensure they are integrated with other community prevention and primary health care programs.
- Authorize and fund new state-based community preventive health intervention grants, based on U.S. Community Preventive Services Task Force recommendations, to ensure state investment and engagement with federal community preventive health programs.

- Authorize and fund community prevention training grants for community health practitioners and educators, mental health nurses and counselors, and dental primary care providers. Funding should include support for an expanded clinical practice authority for dental hygienists to train to become advanced dental hygiene practitioners.
- Authorize and fund a CDC-based program of community health research demonstration grants. These should take advantage of current CDC state-based and university-based grant and center programs, including national networks of Injury Prevention Research Centers, Prevention Research Centers, and Agricultural Health and Safety Centers, which contain many of the required research elements for developing, implementing, and evaluating community-based demonstration grants.
- Authorize and fund the development of a web-based national clearinghouse to promote the development of community-based prevention programs. The clearinghouse should also provide organizational information and track research outcomes.

Authorize and fund Native American nations to assure that they receive the same benefits as other underserved communities through targeted Native American CHERs, community health demonstration grants, prevention and public health training programs, and a culturally appropriate community health clearinghouse for all community-based prevention and primary care programs.

In Conclusion

As health reform policies are debated, ASPH again emphasizes the importance of putting prevention and public health at the forefront of the debate. Even this cost-effective approach, however, will be expensive. Significant revenues, as well as important health benefits, would be generated by the \$1/pack tobacco tax ASPH recommends. Policymakers may also want to consider two other taxes – on sugar-sweetened beverages or other high-sugar foods, and on alcohol. ASPH is currently reviewing the scientific evidence for these taxes, which offer a possible opportunity to generate revenues while taking action with positive health consequences.

References

Agency for Healthcare Research and Quality (AHRQ). The guide to clinical preventive services: recommendations of the U.S. Preventive Services Task Force. Rockville, MD: Agency for Healthcare Research and Quality; 2005.

Available at: <http://odphp.osophs.dhhs.gov/pubs/guidecps/>.

Blincoe, L., Seay, A., Zaloshnja, E., Miller, T., Romano, E., Luchter, S., et al. The economic impact of motor vehicle crashes, 2000. Washington, DC: U.S. Dept. of Transportation, National Highway Traffic Safety Administration; 2002. Available at: <http://www.nhtsa.dot.gov/staticfiles/DOT/NHTSA/Communications&ConsumerInformation/Article/AssociatedFiles/EconomicImpact2000.pdf>.

Campbell KP, Lanza A, Dixon R, Chattopadhyay S, Molinari N, Finch RA, editors. A purchaser's guide to clinical preventive services: moving science into coverage. Washington, DC: National Business Group on Health; 2006. Available at: www.businessgrouphealth.org/prevention/purchasers.

Center on Addiction and Substance Abuse, Columbia University. The cost of substance abuse to America's health care system, Report 1: Medicaid hospital costs, 1994.

Centers for Disease Control and Prevention. Alcohol and public health. Available at: <http://www.cdc.gov/alcohol/>. Accessed February 25, 2009.

Centers for Disease Control and Prevention. Does drinking beverages with added sugars increase the risk of overweight? Research to Practice Series, No. 3. Division of Nutrition and Physical Activity, September, 2006.

Centers for Disease Control and Prevention (CDC). Guide to community preventive services. Available at: <http://www.thecommunityguide.org>. Accessed February 5, 2009.

Centers for Disease Control and Prevention (CDC). Obesity trends. Available at: <http://www.cdc.gov/nccdphp/dnpa/obesity/trend/index.htm>. Accessed February 28, 2009.

Chaloupka, F., Grossman, M., Saffer, H., The effects of price on alcohol consumption and alcohol-related problems (2002). Alcohol Research and Health. 26 (1), pp 22-34.

Congressional Budget Office. Budget options. Volume 1: Health care. Washington, DC: CBO; December 2008. Available at: <http://www.cbo.gov/ftpdocs/99xx/doc9925/12-18-HealthOptions.pdf>.

DeJong, W., Hingson, R. Strategies to reduce driving under the influence of alcohol. Annual Review of Public Health. 1998;19:359-78.

Department of Transportation (US), National Highway Traffic Safety Administration (NHTSA). Traffic safety facts 2006: alcohol-impaired driving. Washington (DC): NHTSA 2008. Available at: <http://www-nrd.nhtsa.dot.gov/Pubs/810801.pdf>.

Elder, R.W., Shults, R.A., Sleet, D.A. et al. Effectiveness of sobriety checkpoints for reducing alcohol-involved crashes. Traffic Inj Prev. 2002;3:266-74

Goetzel et al. Health and productivity management: establishing key performance measures, benchmarks, and best practices. J Occ Environ Med 2001;43 (1):10-17.

- Guthrie JF and Morton JF. Food sources of added sweeteners in the diets of Americans. *J Am Diet Assoc* 2000;100 (1):43-51.
- Harwood, H. Updating estimates of the economic costs of alcohol abuse in the United States: estimates, update methods and data. Report prepared by the Lewin Group for the National Institute on Alcohol Abuse and Alcoholism, 2000.
- Holder HD, Gruenewald PJ, Ponicki W, Treno AJ, Grube JW, Saltz RF, et al. Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *JAMA* 2000; 284-2341-7.
- Institute of Medicine (IOM). Who will keep the public healthy?: educating public health professionals for the 21st century. Washington, DC: National Academies Press; 2002. Available at: http://www.nap.edu/catalog.php?record_id=10542#toc.
- Institute of Medicine (IOM). Integrating employee health—a model program for NASA. Washington, DC: National Academies Press; 2005. Available at: http://www.nap.edu/catalog.php?record_id=11290.
- Institute of Medicine (IOM). Preventing childhood obesity—health in balance. Washington, DC: National Academies Press; 2005.
- Institute of Medicine (IOM). HHS in the 21st century: charting a new course for a healthier America. Washington, DC: National Academies Press; 2009. Available at: http://www.nap.edu/catalog.php?record_id=12513.
- Lind DP. Iowa employer benefits study. Des Moines, Iowa: David P. Lind & Associates, LLC; 2008.
- Linnan L et al. Results of the 2004 national worksite health promotion survey. *Am J Pub Health* 2008; 98 (1).
- Maciosek MV, Coffield AB, et al. Priorities among effective clinical preventive services: results of a systematic review and analysis. *Am J Prev Med* 2006; 31 (1): 55-6.
- National Business Group on Health. Employer measures of productivity, absence, and quality. Available at: <http://www.empaq.org>. Accessed February 5, 2009.
- National Committee on Injury Prevention and Control. Injury prevention: meeting the challenge. *Am J Prev. Med.* 1989;5 (3 Suppl):123-7.
- National Institute on Alcohol Abuse and Alcoholism (June, 2000). 10th special report to the U.S. congress on alcohol and health (NIH Publication No. 00-1583). Rockville, MD: U.S. Department of Health and Human Services, National Institutes of Health.
- Popkin BM, Nielsen SJ. The sweetening of the world's diet. *Obes Res* 2003; 11 (11):1325-32.
- SAMSHA Office of Applied Statistics. Alcohol dependence or abuse: 2002, 2003, and 2004. Available at: <http://oas.samhsa.gov/2k6/AlcDepend/AlcDepend.htm>. Accessed February 25, 2009.
- Schroeder SA. We can do better—improving the health of the American people. *N Engl J Med* 2007; 357:1221-8.
- Sepulveda M. Innovation in health care—an employer's perspective. America's Health Rankings, 2008 edition. Available at: <http://www.americashealthrankings.org/2008/ibm.html>.

Shults RA, Sleet DA, Elder RW, Ryan GW, Sehgal M. Association between state-level drinking and driving countermeasures and self-reported alcohol-impaired driving. *Inj Prev* 2002;8:106-10.

Stagmo M et al. The Swedish national programme of quality control of secondary prevention of coronary heart disease – results after one year. *Eur J Cardiovasc Prev Rehabil* 2004;11 (1):18-24.

Thorpe KE, Florence CS, Howard DH, Joski P. The impact of obesity on rising medical spending. *Health Affairs* 2004 Jul-Dec;Suppl Web Exclusives:W4-480-6.

Thygeson NM et al. Employee health at BAE Systems: an employer-health plan partnership approach. In: Pronk NP, editor. *ACSM's worksite health handbook: A guide to building healthy and productive companies*. 2nd ed. Champaign, IL: Human Kinetics. In press 2009.

Trust for America's Health. *Blueprint for a healthier America*. Washington, DC; October, 2008. Available at: www.healthyamericans.org.

U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary guidelines for Americans, 2005*. Washington, DC: U.S. Government Printing Office; 2005.

U.S. Department of the Treasury, Alcohol & Tobacco Tax & Trade Bureau, 2007.

U.S. Department of the Treasury, Alcohol and Tobacco Tax and Trade Bureau. Available at: www.thefederalregister.com/b.p/agency/Alcohol_and_Tobacco_Tax_and_Trade_Bureau/2008. Accessed March 5, 2009.

Wells-Parker, E., Bangert-Drowns, B., McMillen, R., Williams, M. Final results from a meta-analysis of remedial interventions with drink/drive offenders. *Addiction* 1995; 90: 907-26.