The Value of Prevention: The Delivery System Perspective

Jason MM Spangler, MD, MPH

Managing Senior Fellow & Senior Program Officer



The Dollars and Sense of Prevention: A Primer for Health Policy Makers

Center for Studying Health System Change
June 8, 2009

Outline



- Partnership for Prevention
- Investing in Prevention
- ☐ Measuring Clinical Preventive Services
 - Value
 - Utilization
- ☐ Barriers to Clinical Preventive Care

About Partnership



Who We Are

- Nonprofit, non-partisan national health policy organization
- Working to improve the health of all Americans by increasing the priority on disease prevention and health promotion

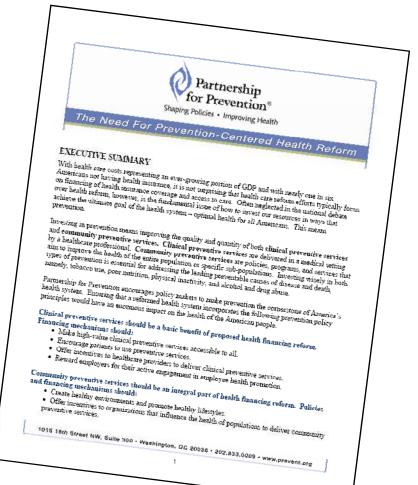
What We Do

- Develop, disseminate and advocate for science-based policies, practices, and programs
- Convene various sectors to address priority health concerns
- Leverage the workplace to improve health
- Translate evidence-based public health evidence and research into policy and practice

Partnership's Principles for Prevention-Centered Health Reform



- Clinical preventive services: provided in medical care settings—e.g. immunizations, screening tests, preventive medicines, and counseling for behavior change
- Community preventive services: provided outside the medical care setting—e.g. through schools, workplaces, community-wide initiatives—and enlisting a wide variety of public health, cultural, environmental, and social service interventions and incentives
- Increase the impact of prevention: clinical and community preventive services reinforce one another and together are necessary for real improvements in health



Investing in PREVENTION means:



- 1. Improving the quality and quantity of **clinical preventive services** delivered to individual patients.
 - Clinical preventive services are delivered in medical settings and include:
 - Immunizations to prevent disease
 - Counseling and medications to treat the root causes of disease
 - Screening to prevent disease and/or detect it in early, curable or treatable stages

Investing in PREVENTION means:



- 2. Improving quality and quantity of **community preventive** services.
 - Community preventive services are population-wide interventions that can be delivered in numerous settings and include:
 - Media campaigns
 - Environmental change
 - Legislation/policy change

Clinical Preventive Services Task Force



■ Evidence-based recommendations help decisionmakers develop disease prevention policies that are based on those programs with the **greatest proven effectiveness**

Evidence Quality	Net Benefit			
	Substantial	Moderate	Small	Zero/Negative
Good	A (strongly recommend)	B (recommend)	С	D
Fair	В	В	С	D
Poor	Insufficient			

The Guide to Clinical Preventive Services 2007 Recommendations of the U.S. Preventive Services Task Force

Strongly Recommended Preventive Services



 ☐ The Guide to Clinical Preventive Services, 2007 ☐ Provides recommendations on 58 separate interventions. ☐ Twenty-nine (29) were recommended or strongly recommended.
Aspirin for the Primary Prevention of Cardiovascular EventsBacteriuria, Screening for Asymptomatic Pregnant Women
Cervical Cancer, Screening Cervical Cancer, Screening
Chlamydial Infection, Screening Chlamydial Infection, Screening
Colorectal Cancer, Screening
Gonorrhea, Prophylactic Medication for newborns
Hepatitis B Virus Infection, Screening
High Blood Pressure, Screening
HIV, Screening
Lipid Disorders, Screening
Rh (D) Incompatibility, Screening for pregnant women
Syphilis Infection, Screening
Tobacco Use and Tobacco-Caused Disease, Counseling to Prevent

National Commission on Prevention Priorities



- □ The National Commission on Prevention Priorities (NCPP), convened by Partnership for Prevention, is a panel of experts from medicine and public health. It guides an ongoing study that:
 - Provides evidence-based information about which clinical preventive services are most beneficial and cost effective
 - Demonstrates where improving the use of preventive services and eliminating disparities will save and improve the most lives

Evidence-Based Priority Setting



- □ In 2001 and again in 2006, the National Commission on Prevention Priorities (NCPP) conducted a study that ranked effective clinical preventive services.
- ☐ Clinical preventive services were selected from the recommended interventions of the U.S. Preventive Services Task Force and the Advisory Committee on Immunization Practices.

Measuring Value



NCPP Ranks Preventive Services-Based on Two Measures:

1.	Heal	lth I	m	pa	ct
-----------	------	-------	---	----	----

- Clinically Preventable Burden (CPB) measures health impact
 CPB = (Burden of Disease) x (% Effectiveness of Service)
- CPB measured as QALYs* saved
- Accounts for years of life saved and days lived with sickness avoided

2. Cost Effectiveness (CE)

- Measures economic value: what does it cost to produce a healthy year of life?
- CE = \$s Spent \$s Saved
 QALYs Saved

^{*} A quality-adjusted life year (QALY) is a year of life adjusted for its quality. Saving one QALY through prevention is equivalent to extending a life for 1 year in perfect health.

Ranking Services



NCPP scored each service on a scale of $\mathbf{1} - \mathbf{5}$ (5 being the highest score); then, grouped services based on their combined score:

Health impact (CPB): score of **1-5**

+

Cost-effectiveness (CE): score of **1-5**

=

Total score ranging from **2 to 10**

NCPP Rankings (2007)



Highest Ranking Preventive Services for U.S. Population	H.I.	C.E.	Total
Discuss daily aspirin use—men 40+, women 50+		5	10
Childhood immunizations		5	
Smoking cessation advice and help to quit—adults		5	
Alcohol screening and brief counseling—adults	4	5	9
Colorectal cancer screening—adults 50+	4	4	8
Hypertension screening and treatment—adults 18+	5	3	
Influenza immunization—adults 50+		4	
Vision screening—adults 65+		5	
Cervical cancer screening—women	4	3	7
Cholesterol screening and treatment—men 35+, women 45+		2	
Pneumococcal immunization—adults 65+		4	
Breast cancer screening—women 40+		2	6
Chlamydia screening—sexually active women under 25		4	

Most Cost-Effective Preventive Services



Most Cost-Effective Preventive Services

Cost Saving

Advising at-risk adults to consider taking aspirin daily

Childhood immunizations

Smoking cessation advice and help to quit

Screening adults for alcohol misuse and brief counseling

Vision screening (adults 65+)

\$0 to \$15,000/QALY

Chlamydia screening (sexually active adolescents and young women)

Colorectal cancer screening (adults 50+)

Influenza immunization (adults 50+)

Pneumococcal immunization (adults 65+)

Vision screening in preschool age children

\$15,000 to \$50,000/QALY

Breast cancer screening (women 40+)

Cervical cancer screening (all women)

Cholesterol screening (men 35+ and women 45+)

Counseling women of childbearing age to take folic acid supplements

Counseling women to use calcium supplements

Injury prevention counseling for parents of young children

Hypertension screening (all adults)

*Most cost-effective preventive services among the 25 preventive services recommended by the USPSTF and ACIP that were evaluated by the National Commission on Prevention Priorities. Source: Maciosek MV, Coffield AB, Edwards NM, Goodman MJ, Flottemesch TJ, Solberg LI. Priorities among effective clinical preventive services: results of a systematic review and analysis. *Am J Prev Med* 2006; 31(1):52-61.

What Do the Rankings Tell Us?



- Some preventive services are cost neutral or save more money than they cost.
- Many preventive services are very cost-effective: For a relatively small cost, the services produce valuable health benefits.
- A health care system that optimizes the use of high-value preventive services is using its resources efficiently.





- Where does the U.S. stand on utilization of the highest ranking preventive services?
- What do we stand to gain from making improvements?

2007 Prevention Priorities



SHORT NAME	% Currently Receiving Intervention	Lives Saved Annually if Use Increased to 90%	
Discuss daily aspirin use	40%	45,000	
Tobacco Cessation Counseling	28%	42,000	
Colorectal Cancer Screening	48%	14,000	
Influenza immunization	37%	12,000	
Chlamydia Screening	40%	30,000	
Breast cancer screening	67%	3,700	
Cholesterol screening	79%	2,450	
Cervical cancer screening	83%	620	
Pneumococcal immunization	54%	800	
Hypertension screening	90.1 % & 82.8%	0	
Problem drinking screening	N/A		
Vision Screening – adults	N/A		

Why Don't More People Use Clinical Preventive Care?



Barriers Facing Consumers:

- Unaware of the preventive services they need
- Uncertain about preventive services' effectiveness
- No regular source of health care or "medical home"
- Out-of-pocket costs discourage utilization

Why Don't More People Use Clinical Preventive Care?



Health Care System Barriers:

- ☐ Lack of time
- Lack of training around counseling interventions for behavior change
- Lack of reimbursement
- Limited investment in a prevention-oriented health care system
 - Providers often lack systems proven to increase delivery of preventive care

Bottom Line



General Principles

- 1. Effective preventive services should be part of any standard benefit package.
- First dollar coverage should be provided for preventive services to eliminate financial barriers to their use.
- The same standard should be used to evaluate both preventive services and treatments when determining which benefits a package will offer.
 - ☐ If effectiveness, all A and B recommendations from *The Guide to Clinical Preventive Services*
 - If cost-effectiveness, hold treatment to same standard



Questions and Contact Info

Jason MM Spangler, MD, MPH
Managing Senior Fellow & Senior Program Officer
202-833-0009

jspangler@prevent.org

For additional resources, materials and more details on our projects and programs, go to:

www.prevent.org