

# Accelerating the Adoption of Preventive Health Services

*Building New Partnerships and Community Commitment*

PROCEEDINGS FROM A CONFERENCE



NIHCM  
FOUNDATION



SAFER • HEALTHIER • PEOPLE™

# Table of Contents

---

Executive Summary	i
-------------------	---

---

Introduction	1
--------------	---

---

Accelerating the Adoption of Preventive Health Services	3
Employer Strategies	4
Health Plan Strategies	9
Federal Government Strategies	14
State Government Strategies	17
Provider and Consumer Strategies	18

---

Conclusion	24
------------	----

---

Endnotes	24
----------	----

---

Appendices	25
A: The CDC Guide to Community Preventive Services	25
B: List of Conference Faculty	26
C: Medicare and Preventive Care Services	28
D: Resources and Links	30

## **Credits**

The National Institute for Health Care Management (NIHCM) Research and Educational Foundation convened the conference on which this publication is based. The Centers for Disease Control and Prevention (CDC) sponsored the conference. It was held September 26-27, 2002 in Washington D.C.

The NIHCM Foundation is a non-profit, non-partisan organization whose mission is to promote improvement in health care access, quality, efficiency, and management. The Foundation is in Washington, D.C.

The CDC is the lead federal agency charged with promoting and protecting the health of the American people. It is based in Atlanta, Georgia.

The following organizations also provided support for the conference: the American Association of Health Plans, the Blue Cross Blue Shield Association, the Alliance of Community Health Plans, the National Business Coalition on Health, and the Washington Business Group on Health

Larry Stepnick, president of The Severyn Group, a health care research and consulting firm, wrote this proceedings report. Steven Findlay, MPH, of the NIHCM Foundation edited it.

# Executive Summary

Preventive health services and promotion of healthy lifestyles continue to be seriously underutilized health strategies in the United States. This report summarizes the proceedings of a conference convened to explore: (a) the confluence of forces responsible for the underuse of many preventive health services, (b) the current science and evidence on the value of preventive care, and (c) ways the adoption and use of preventive health services might be accelerated. The conference brought together speakers and participants from health plans, employers, medical groups, government, academia, benefits consulting firms, and the public health community.

Speakers and participants broadly concurred that the evidence base for many preventive health services is growing stronger, and that employer, health plan, and government coverage of preventive care services has expanded significantly over the last decade. Several speakers presented data showing a “return on investment” (ROI) for selected preventive services (such as smoking cessation and disease screenings) in the range of \$2 to \$4 of value (e.g., in reduced illness, absenteeism, enhanced worker productivity) for every \$1 invested.

Despite this, speakers said that lingering doubts concerning the clinical benefit and cost-effectiveness of many preventive care services (at a time of heightened concern about health costs) remains an obstacle to even broader private and public insurance coverage and provider and consumer use of preventive care. Clinicians in particular are highly variable in their embrace of preventive care and lifestyle modification counseling, even when services are a covered benefit for their patients. Fewer than half (44%) of primary care physicians, for example, consistently review their patients’ health behaviors.

At the same time, continuing lack of awareness among consumers about the health benefits of preventive care further impairs wider use. Workforce turnover also remains a potent obstacle to employers’ willingness to invest in preventive benefits and work site health promotion and behavioral counseling programs. Finally, speakers agreed that the emerging ROI case for some key clinical preventive and behavioral modification services has not been made or communicated strongly enough to employers, insurers, providers, and consumers.

Speakers supported the work of two government initiatives – the United States Preventive Services Task Force (USPSTF, housed at the Agency for Healthcare Research and Quality) and the Centers for Disease Control and Prevention’s (CDC) efforts in creating the *Guide to Community Preventive Services*. Both initiatives make preventive services recommendations based on systematic and in-depth reviews of the scientific evidence. (For more information on the CDC guide, please see Appendix A.)

Speakers urged health benefit managers and consultants, health plan administrators, and clinicians to learn more about these initiatives and the evidence supporting the clinical and financial return from preventive care services. Payers, including Medicare, should consider expanding coverage of preventive care services and aligning it with USPSTF and CDC recommendations. Today, employer and Medicare coverage of preventive services is consistent only about half the time with these recommendations.

Speakers recommended that employers, health plans, government, and provider organizations partner to accelerate the adoption of evidence-based preventive health services among both clinicians and consumers. New tools based on information technology and the internet should be employed more aggressively in this context.

Other general points of agreement that emerged:

- Government could more effectively use the tools at its disposal to encourage evaluation, coverage, adoption, and consumer use of evidence-based preventive services. These tools include public awareness campaigns, research, funding for demonstration projects, and tax incentives.
  - Employers could more effectively use the workplace as a setting for preventive health screenings and identifying populations in need of behavioral and lifestyle counseling.
  - Stakeholders need to collaborate at the community level. Well-targeted, coordinated, mutually reinforcing prevention messages and campaigns almost always achieve a larger impact and greater success than do “stand-alone” initiatives.
- 
- Health plans could do more to communicate the clinical value of covered, evidence-based preventive care services to doctors in their networks and to their enrollees. They should consider helping doctors build and implement reminder systems and other information technology-based tools that will enhance the delivery of preventive care services.
  - Non-physician professionals are often ideal providers of preventive health and behavioral counseling services, particularly when lengthy patient counseling and follow-up is involved. Insurers and government should consider covering services delivered by these individuals when evidence supports it.
-

## Introduction

This conference brought a diverse group of health care stakeholders together to better understand how to accelerate the adoption of preventive services and lifestyle modification programs in the U.S. **Susan Dentzer**, health correspondent for *The NewsHour with Jim Lehrer*, moderated the event.

**Nancy Chockley, MBA**, president of NIHCM Foundation, set three goals for the conference:

- To improve understanding of decision-making around coverage of preventive care services.
- To foster a dialogue among key stakeholders about the issues at hand.
- To understand how to make the prevention message more compelling to each stakeholder in an era of rising health care costs.

**Richard Dixon, MD**, director of the Division of Prevention Research and Analytic Methods at CDC, noted that despite years of mounting research and experience, a large gap remains between what we know works in prevention and what is practiced. Even though studies demonstrate the benefits of standing orders to screen – and when necessary immunize – hospitalized elderly patients for pneumococcal disease, for example, relatively few hospitals have such orders in place. Likewise, many employers and health plans still pay for only one smoking cessation intervention per year, despite strong evidence showing that multiple interventions yield substantial benefits at relatively low cost. Gaps like these need to be closed.

In a keynote address, **Richard Carmona, MD, MPH, FACS**, Surgeon General of the United States, said fully 70% of annual health care spending in the U.S. pays for the care of people with diseases, illnesses, and chronic conditions that could have been prevented. In particular,

increasing proportions of the U.S. population now live sedentary lifestyles that contribute to or exacerbate a variety of ailments. Obesity related to physical inactivity and excessive caloric intake is today the fastest growing cause of preventable death, responsible for more than \$150 billion annually in direct and indirect health care costs. And it's not just adults that cause concern; childhood obesity is also a major emerging social and public health problem. An estimated 300,000 Americans die each year prematurely as a result of being overweight or obese.

**Cary Sennett, MD, PhD**, vice president for science and quality improvement at the American College of Cardiology and editor-in-chief of *Preventive Medicine in Managed Care*, shone a spotlight on the role prevention has played to date in cardiovascular disease (CVD) and diabetes – and the challenges that are still unmet.

Some 60 million Americans have heart and/or vascular disease, including three-quarters of those over the age of 75, half of those age 55 to 64, and one-third of those age 45 to 54. The cost: \$200 billion annually, 15% of the nation's health expenditures. But too little is spent on preventing CVD despite mounting evidence that the effort would produce benefits that far outweigh the costs, Dr. Sennett told conferees.

A significant drop in premature deaths from heart disease over the past 20 years, especially among men, underscores the potential to reduce the burden of this leading killer. A portion of these gains are due to increased use of procedures to diagnose and treat the disease (e.g., catheterizations, bypass surgery, and angioplasty). But a portion is also attributable to a reduction in adult smoking, lifestyle modifications, improved identification of people with heart disease, and improved preventive care treatment of people with high blood pressure and high cholesterol levels.

Despite these gains, however:

- Only half of the 50 million Americans with high blood pressure have the condition adequately under control with lifestyle modifications and medication. Fully 25% are not even taking a high blood pressure drug. Untreated high blood pressure over time doubles or even triples the risk of having a heart attack or stroke.
- Approximately 42 million Americans are at high risk for CVD due to elevated cholesterol levels (defined as a level above 240 mg/dl). Studies suggest that the majority of these individuals are not being adequately treated, and thus are at higher risk of angina and heart attack. In addition, in 1999 roughly 30% of adult Americans had not had their cholesterol tested in the past five years.<sup>1</sup>
- Almost half of all adults are overweight, with 44 million classified as obese. Obesity is now widely recognized as an independent risk factor for premature heart disease and premature death from heart disease.
- Three in four Americans do not reach target levels of physical activity.
- Over 20% of the population smokes, including one in four men.

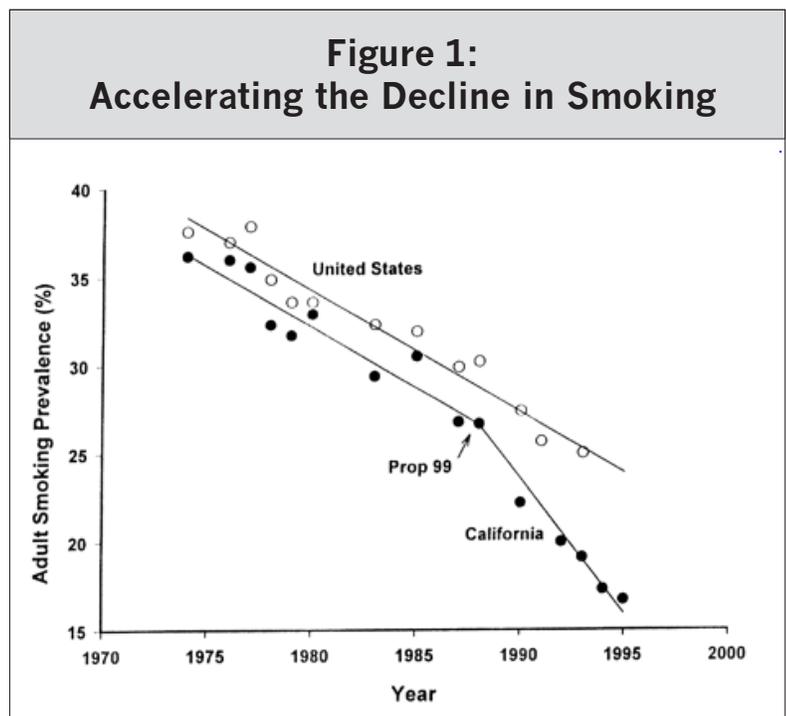
Dr. Sennett emphasized that even modest reductions in risk factors through a greater emphasis on prevention and lifestyle modification can have a huge impact on the incidence and costs of CVD-related episodes, including heart attacks and strokes. For example, even a one-percent reduction in the prevalence of smoking among adults age 35 to 64 would lead, over seven years, to 64,000 fewer hospitalizations for heart attack, 34,000 fewer hospitalizations for stroke, and a \$3.2 billion reduction in health costs.<sup>2</sup>

Dr. Sennett said such an aspiration is entirely realistic. California, for example, has already achieved a significant decline

in smoking prevalence. (See Figure 1.) And Group Health Cooperative, a health plan in the Seattle area, reduced the prevalence of smoking in its enrolled population to 15%, five percentage points below the average in the Seattle area. Similar strides could be made to prevent and treat diabetes, and to lessen the burden of its complications. An estimated 17 million Americans have diabetes, six million of whom do not know it. But better short- and long-term glycemic control can reduce costs and improve functional status for patients who have or are at-risk of developing diabetes. A study at Group Health Cooperative in Seattle found that improvements in glycemic control over a period of six years led to average reductions in health care costs of \$685 to \$950 per diabetic patient per year.<sup>3</sup>

But even short-term control of blood sugar levels can provide significant benefits. Dr. Sennett cited a study on the impact of glycemic control over a four-month period documenting improved quality of life and functional status and a roughly 50% reduction in workplace absenteeism.<sup>4</sup>

**Figure 1:  
Accelerating the Decline in Smoking**

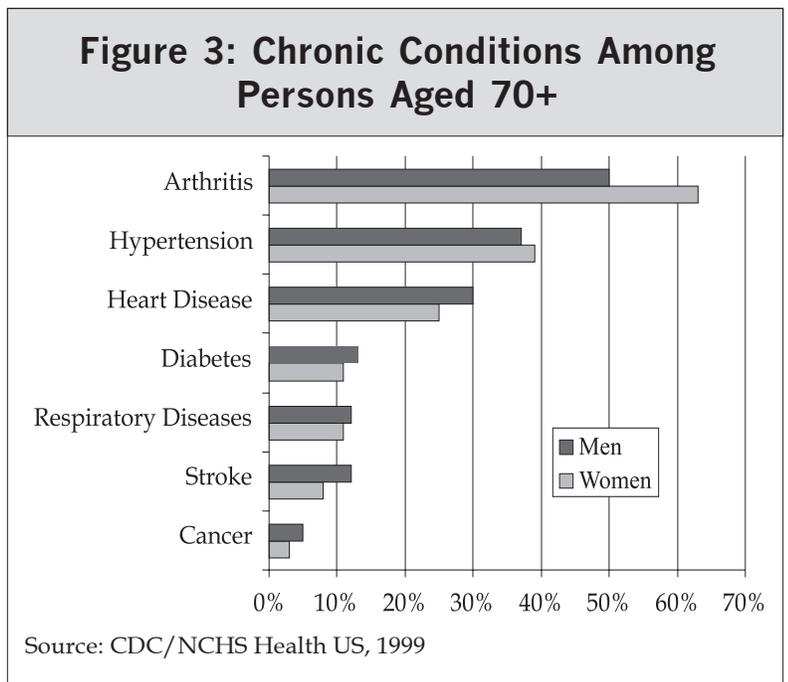


**Suzanne Mercure**, a consultant to the National Business Coalition on Health (NBCH) and the Washington Business Group on Health (WBGH), echoed Dr. Sennett’s plea with remarks on preventing the onset of chronic disease. Employers are newly focused on this strategy, driven by recent research showing that a growing portion of employer health care costs are generated by individuals with chronic (largely preventable) diseases. (See Figure 2.) Such individuals represent about one in four workers but account for 42% of total employer health costs.

**Catherine Gordon, RN, MBA**, former director of health promotion and disease prevention at the Centers for Medicare & Medicaid Services (CMS) and now senior public health analyst in the Office of the Director at CDC, said preventable chronic disease is also now a major focus of Medicare policy. A majority of Medicare beneficiaries over age 75 have one or more chronic illnesses. (See Figure 3.) Ms. Gordon said CMS and CDC are keenly aware that preventive health measures and lifestyle modifications could enhance the health of the elderly population and help constrain government spending on health care.

Figure 2: Impact of Chronic Disease		
Condition	Mean per capita health costs per person	Percent of workers with condition missing workdays
Diabetes	\$5,646	10%
Cardiac Disease	\$10,823	37.5%
Hypertension	\$4,073	8.1%
Asthma	\$2,779	19.8%

Source: *Health Affairs*, Nov/Dec 2001



Source: CDC/NCHS Health US, 1999

## Accelerating the Adoption of Preventive Health Services

Employers, health plans, and government have significantly expanded their promotion and coverage of preventive health services in the past decade. This has increased clinician use of such services and consumer access to them. But both provider and consumer adoption are still sub-optimal for a complex mix of reasons. This has prompted private payers, government, and providers to search for new ways to accelerate the appropriate use of such services and create a healthier workforce and population.

Speakers generally concurred that prevention’s potential to enhance the health of the population and constrain health care spending will not be realized until prevention’s “return on investment” (ROI) is more clearly articulated and communicated. In addition, speakers agreed that major health stakeholders could accelerate the diffusion of evidence-based preventive services through better collaboration and coordination of their efforts.

### Employer Strategies

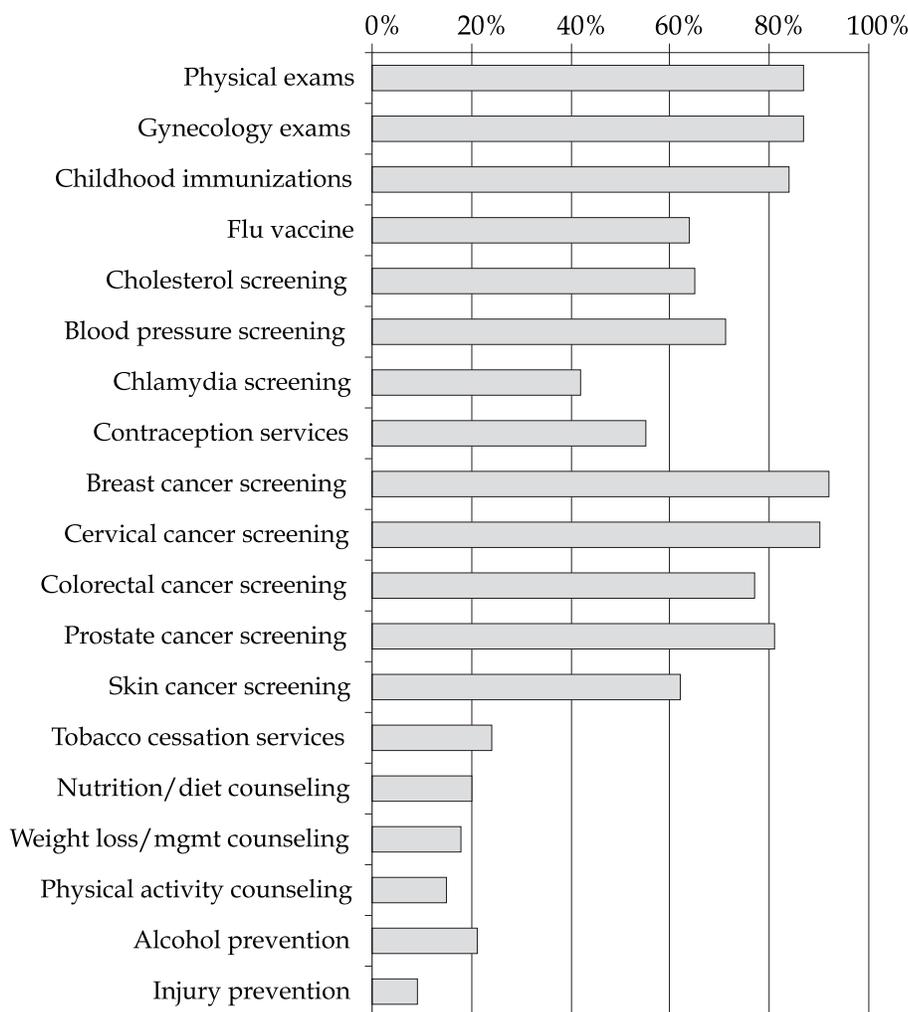
Maris Bondi, MPH, senior health analyst with the Partnership for Prevention, presented results from a survey of employers conducted in 2001. The study, funded by the Robert Wood Johnson Foundation, found high rates of coverage for most common preventive care services. Over 80% of surveyed employers, for example, provided coverage for physical/wellness exams, gynecological exams, and childhood immunizations. Several other preventive health tests, procedures, and interventions were covered at much lower rates, including chlamydia screening, smoking

cessation programs, nutrition/diet counseling, and weight loss programs. (See Figure 4.)

Work site preventive care and wellness programs were far less universal. Only 5% of employers had a formal stress management program. A similar small percentage of employers offered work site weight counseling and smoking cessation programs.

The survey found that employer coverage does not always follow the recommendations of the United States Preventive Services Task Force (USPSTF), a government-sponsored panel of experts affiliated with the Agency for Healthcare Research and Quality (AHRQ). (See

**Figure 4: Employer-Based Preventive Care Services - 2001\***



\*Percent of employers covering service through the health plans they sponsor. Source: Partnership for Prevention/William M. Mercer National Survey of Employers, 2001. Results presented here are preliminary. Final report to be issued in 2003.

box on page 8.) For example, task force recommendations include screening for colorectal cancer but not for prostate cancer, yet more employers cover the latter. The task force also recommends routine chlamydia screening for women under age 25, yet only 40% of employers cover this service at all. Ms. Bondi and other conferees suggested that employer coverage of preventive services be refined based on USPSTF recommendations.

**Peter R. Kongstvedt, MD**, vice president at Cap Gemini Ernst & Young, cautioned, however, that the current escalation in health care costs makes it difficult for employers and government to contemplate expanding benefits – even in cases where evidence is growing that the benefit may save money in the long run. Health care costs are soaring again at a time when many employers’ ability to increase prices, productivity, and earnings are constrained.

**Jon Gabel, MA**, vice president for health system studies at the American Hospital Association’s Health Research and Educational Trust, concurred that rising health benefit costs are dampening employers’ willingness to enhance benefits. But many employers – and the health benefit managers that help them design health coverage – are favorably inclined to preventive care – believing that such benefits, particularly in managed care plans, are popular and foster good will among employees. On the other hand, benefit consultants sometimes can be “the problem” when they advise clients against covering specific preventive services on the basis that they – the employers – will reap little or none of the benefit themselves. Indeed, employee longevity on the job and workforce turnover remain potent obstacles to top management’s willingness to invest in preventive care benefits.

**Linda Bergthold, PhD**, senior consultant and national thought leader at Watson Wyatt Worldwide, agreed. Many benefit consultants are unaware of the literature on prevention. For this reason, Watson Wyatt is in the process of evaluating the “science base” for many preventive health services, and specifically the

work of the USPSTF. The aim is to pull together a preventive benefits package based on the task force’s recommendations. Such a tool should help inform everyone and lead to increases in coverage and adoption of such services. The case is likely to be especially strong if the benefits can be linked to specific chronic conditions, since employers increasingly recognize that identifying and managing high-risk individuals makes best use of their health care dollars.

Speakers said the “return on investment” (ROI) issue looms large for employers. It’s how they evaluate their capital investments, and they tend to think the same way about the health care services they purchase. (See box entitled *Projecting ROI* on page 16.)

Ms. Bondi said that focus groups with large and small employers show that employers accept the premise that preventive health services should and often do reduce absenteeism, enhance productivity, *and* save money. But they are nevertheless quite skeptical that a clear ROI has been demonstrated for many if not most preventive care services.

Ms. Mercure said her experience working with large employers confirms this. Business executives want to see “units of something produced” – real costs, a real ROI calculation, and short- and long-term productivity gains. If employers are going to increase coverage of preventive services, they must see evidence that they will realize short-term savings – either through reduced health care costs or reductions in lost work time – that outweigh any incremental costs. **Tami Collin**, senior consultant at William M. Mercer, Inc., agreed that ROI evaluations are important. But the data need not be perfect or precise. **Elizabeth Dudek**, senior health consultant and vice president of The Segal Company, a benefits consultant firm, said that what employers really care about is “presenteeism” – getting workers who are on the job to perform at 100%. She and Ms. Collin agreed that there is an urgent need to put systems in place to track the impact of initiating coverage of preventive services on presenteeism, absenteeism, and overall health costs.

## Case Studies: Employer Strategies

*Virtually all large companies cover preventive care services and many also conduct work site health promotion activities. But companies vary widely in their approach, as illustrated in the three case studies that follow.*

### Dow Chemical

**Steve Morgenstern**, health plan manager at Dow Chemical, said the company spent \$290 million on health care in 2002. After many years of not covering preventive care, Dow – “reluctantly” at first – began to cover selected services in the 1980s. Among these were pap smears and mammograms.

By the 1990s, the company’s leadership began to see wisdom in promoting prevention more rigorously. As a result, Dow initiated coverage for well-baby care and immunizations, and began offering a wellness benefit, disease management, demand side management, and fitness centers at facilities with a large number of workers.

In the last few years, Dow implemented coverage for smoking cessation and weight reduction programs, began offering diabetes education, and developed a host of web-based tools to assist consumers in pursuing a healthy lifestyle. The Dow “mind set” has shifted from seeing preventive care as a personal (not a company) responsibility to viewing prevention and wellness programs as a strategy for improving productivity and reducing health care costs.

That said, Dow may not be covering the “right” preventive services. While the company tries to use data from the CDC, vendors, peer companies, and others in making coverage decisions, much of what they decide is based on anecdotal input from the company’s medical director, global benefits director, integrated health management program, and employees. For example, the company’s \$200 wellness allowance began as coverage for flexible sigmoidoscopy; it was changed when many

employees—especially women—suggested that they had other, more pressing preventive health needs. The company’s decision to cover weight reduction and smoking cessation programs at work sites without a fitness facility was an attempt to make benefits more comparable for employees across facilities, regardless of size.

Mr. Morgenstern and other company health administrators would like to see more data to continue to make the “business case” for prevention to company officials and to base their coverage decisions in the future on hard evidence.

### Raytheon

Raytheon is one of the few companies to get involved in the actual delivery of health care. The company operates 23 worksite clinics in the U.S. and seven others around the world. These clinics and the company as a whole are increasingly emphasizing preventive services, **Charles D. Hackett, MD**, Raytheon’s chief medical officer, told conference attendees. Most recently, the company’s preventive health interventions have focused on flu vaccination and outreach to individuals with depression. Dr. Hackett sees depression as the major health issue facing Raytheon.

The company also has a wellness and disease management program, and an e-health program to provide consumers with information to better manage their own health. Raytheon is currently conducting an audit of its health plans to find out what they cover in the area of preventive health. The ultimate goal is to get the plans to cover *all* the services now recommended by USPSTF.

Dr. Hackett is also pushing for the use of evidence-based medicine to justify coverage of preventive services that go beyond USPSTF recommendations. As a worldwide company with clinic operations overseas, Raytheon is also concerned about promoting prevention outside the U.S., a task that requires an understanding of the cultural differences that exist with respect to prevention.

Raytheon believes it gets a “return on investment” with its preventive health activities. To that end, the company uses six-sigma training and techniques with its health care vendors with the expectation that there will be a “dollars-and-cents” return on investments in prevention and wellness.

### **Chevron-Texaco Corporation**

**D’Ann Whitehead, PsyD**, former manager of health and productivity at Chevron-Texaco Corporation, said the company’s evolution with respect to preventive health care is characterized by three trends.

First, the company now outsources its preventive health programs to vendors and health plans in lieu of its past approach, which was to organize and implement some of these initiatives in-house. For example, the company no longer offers on-site smoking cessation programs. Instead, the company has worked with its health plans and other vendors to develop and administer a model benefit covering a full range of smoking cessation options, including behavioral and pharmaceutical interventions.

Second, the company has sought to shift from a “paternalistic” approach to preventive care to “employee empowerment.” Chevron-Texaco is convinced that employees respond much better when educated thoroughly about the benefits of behavior change to stay healthier

than they do when coerced to engage in such activities. Better tools are now available to help employees understand the benefits of preventive care and to give them incentives to participate.

And third, the company has moved from “high touch” to “high tech.” The company sees huge potential for information technology (IT) in the area of prevention. IT systems can help identify and deliver information to individuals who might benefit from a particular service.

Because the company has a strong culture of safety, early prevention efforts focused on personal safety. Then in the early 1970s, the company began to expand its preventive health benefits, first with the development of an in-house employee assistance program (EAP). In the 1980s and 1990s, coverage for preventive exams, health risk appraisals, and smoking cessation programs were added. On-site fitness centers were also launched.

As testament to its commitment and the success of its programs, Chevron-Texaco in 1998 won the C Everett Koop award for its prevention programs.

In recent years, the company’s focus has shifted to helping employees be wise consumers and managers of their personal health, with the goal of reducing absenteeism. To that end, the company has created on-line tools (e.g., health risk appraisals and other educational tools) to assist employees and their families in accessing preventive services and managing their health. Looking ahead, the company plans to further integrate their on-line prevention tools into programs where they can be delivered on a “just-in-time” basis, such as through Integrated Disability Management and on-site injury prevention programs.

## Key Recommendations of the U.S. Preventive Services Task Force\*

- *Breast cancer*: Screening with mammography of all women age 40 and older, with or without clinical breast examination, every 1-2 years.
- *Cervical cancer*: Routine screening with Pap tests of women under age 65 who have been sexually active.
- *Colorectal cancer*: Routine screening of men and women 50 years of age and older.
- *Childhood infectious diseases*: Immunization schedule recommended by Centers for Disease Control & Prevention for all children against diphtheria, tetanus, pertussis, measles, mumps, rubella, hemophilus influenza type b, hepatitis B, and chicken pox.
- *Flu*: Annual vaccination for adults age 50 and over, and children, adolescents, and health care workers of any age who are at high risk.
- *Pneumococcal disease*: One-time vaccination for all persons age 65 and over and those younger than 65 who are at risk.
- *Cancer, multiple forms*: Routine counseling of all smokers to quit.
- *Diabetes*: Routine screening for type 2 diabetes in adults with hypertension or hyperlipidemia. (Routine screening is not recommended in general population.)
- *Depression*: Routine screening of all adults in clinical settings that have systems in place to assure accurate diagnosis and effective treatment and follow-up.
- *Anemia*: Screening of all pregnant women and high-risk infants.
- *Blood lead levels*: Screening at age 1 of all children believed to be at high risk of lead exposure.
- *High blood pressure*: Routine and periodic screening of all adults age 18 and over.
- *Elevated cholesterol and lipid disorders*: Routine screening with blood tests of men age 35 years and older and women age 45 years and older; screening of men age 20 to 35 and women age 20 to 45 only if they have other risk factors for coronary heart disease. Measurement should be of total cholesterol and high-density lipoprotein cholesterol.
- *Heart disease*: Intensive behavioral dietary counseling for adult patients with hyperlipidemia and other known risk factors for cardiovascular disease, including overweight and obesity. Counseling can be delivered by primary care clinicians or by referral to other specialists, such as nutritionists or dietitians. Clinicians should also discuss use of aspirin with adults who are at increased risk for heart disease.
- *Osteoporosis*: Screening of all women age 65 and older and women age 60 to 64 who are at increased risk of osteoporotic fractures.
- *Hepatitis B*: Screening of all pregnant women on their first prenatal visit. (Routine screening in general population is not recommended.)
- *Chlamydia*: Screening of all sexually active women who are age 25 years and younger, and other women considered to be at increased risk.
- *Syphilis*: Screening of all pregnant women and other women considered to be at increased risk (notably those with multiple sexual partners).
- *Gonorrhea*: Screening of all women considered to be at increased risk (notably those with multiple sexual partners).
- *HIV*: Screening of all sexually active people considered to be at risk.

\*As of April 2003; this is not a comprehensive list of the Task Force's recommendations. See [www.ahrq.gov](http://www.ahrq.gov), the web site of the Agency for Healthcare Research and Quality (AHRQ), for a complete list and details about the recommendations.

Sources: AHRQ web site ([www.ahrq.gov](http://www.ahrq.gov)); *Guide to Clinical Preventive Services, Second Edition* (U.S. Department of Health and Human Services, 1996); *Clinician's Handbook of Preventive Services, Second Edition* (U.S. Department of Health and Human Services, 1998).

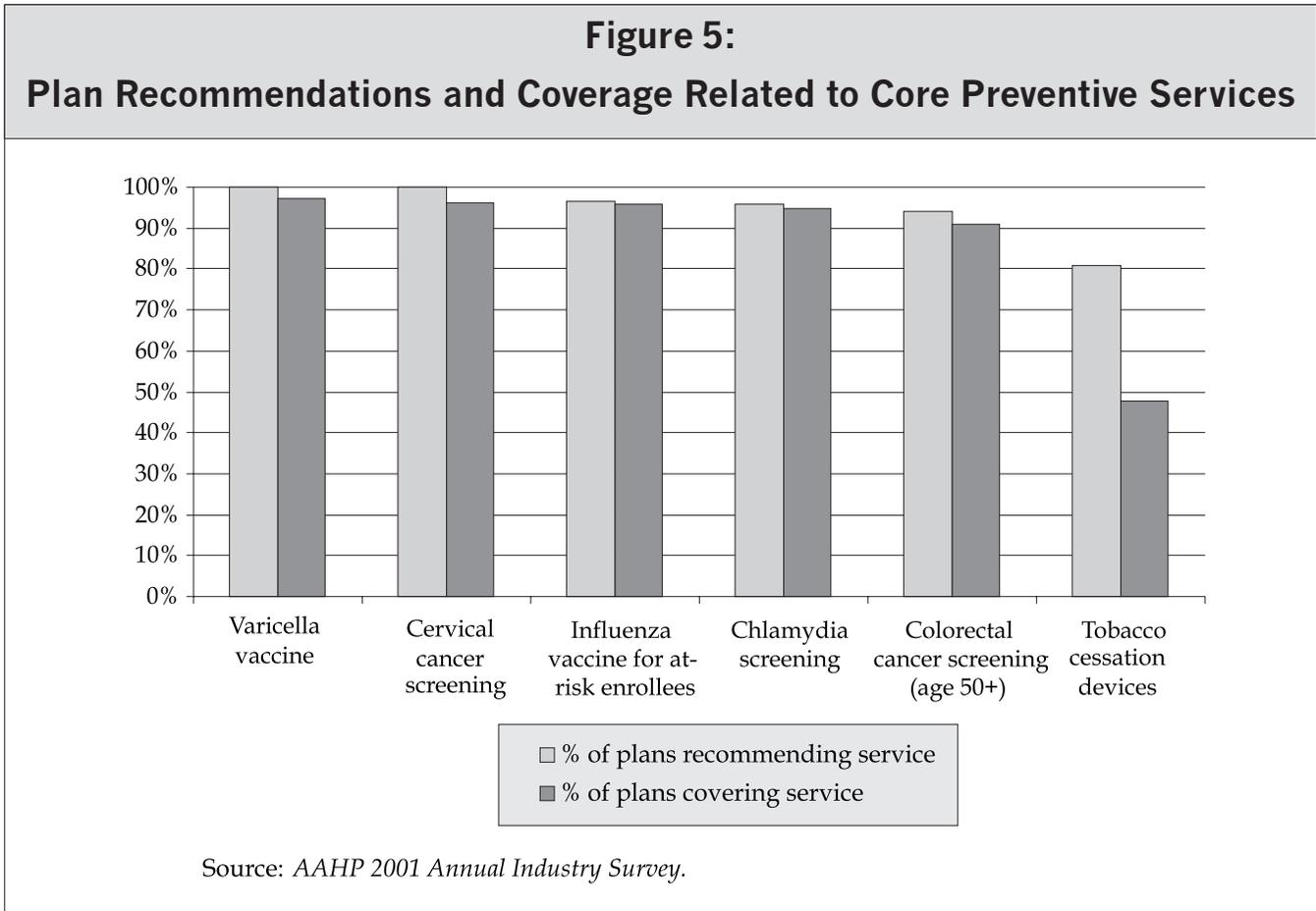
### Health Plan Strategies

Managed care plans pioneered the broader application of preventive health care in the 1970s. Indeed, keeping enrollees healthy and maintaining their health over time were organizing principles of health maintenance organizations (HMOs). As the managed care industry expanded and evolved in the 1990s, preventive care remained a core mission. Today, health plans are trying to determine the best approach to integrating preventive services into the larger structure of health care benefits and disease management programs. Health plans are working more closely with employers to maximize the impact of preventive care services.

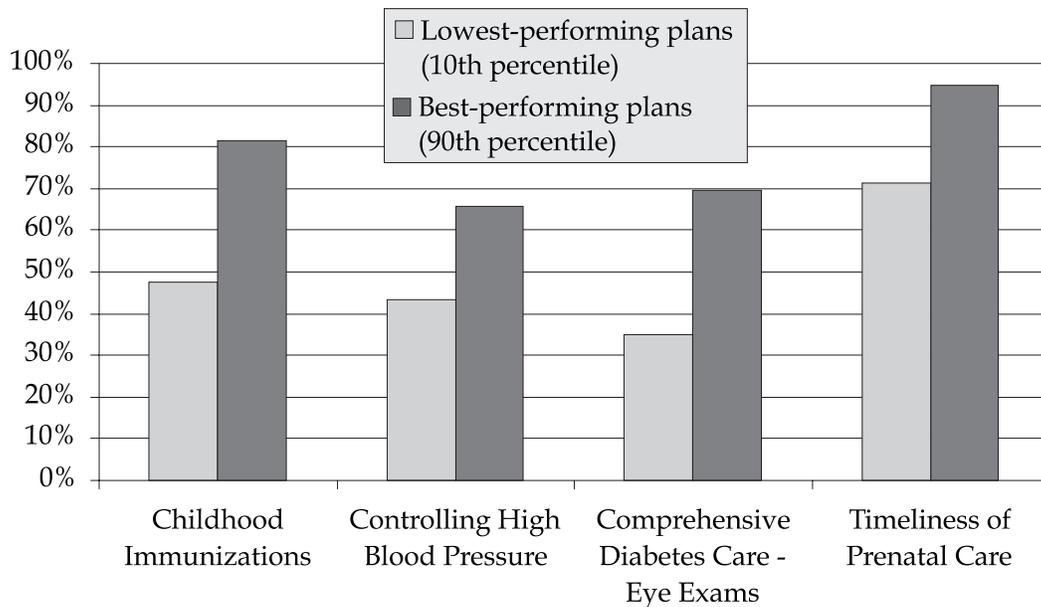
**Robert E. Scalettar, MD, MPH**, vice president of medical policy and corporate director at Anthem Blue Cross Blue Shield of Connecticut, presented data from a 2001 survey of health

plans conducted by the American Association of Health Plans. The survey found that the vast majority (over 90% in most cases) of health plans both recommend and cover a core set of preventive care services, including vaccinations, screenings for cervical and colorectal cancer, and chlamydia screening. (See Figure 5.) Just short of 90% offer a free or low cost or low-cost smoking cessation program and 81% recommend the use of smoking cessation aids to their enrollees who smoke. At the same time, the survey found that only 48% covered the cost of smoking cessation devices and medications.

HEDIS (Health Plan Employer Data and Information Set) data also indicate that many health plans, particularly HMOs, have enhanced the use of preventive care over the last five years. But the HEDIS data also reveal wide variations in such care from one health plan to the next. (See Figure 6 on next page.)



**Figure 6: Selected HEDIS Measures for 2001**



\*Percent of enrollees for whom plan meets HEDIS standard for the service in question. Figures represent average performance for plans in that percentile.

**Nicolas Pronk, PhD**, vice president of the Center for Health Promotion at Health Partners, Inc., agreed that data indicate health plans are providing more coverage of preventive services compared to a decade ago. But he said that data pertain primarily to coverage of screening tests and can be misleading when it comes to assessing broader and sustained public participation in health promotion and lifestyle modification activities. One 1996 study, for example, found that only 2% of health plan enrollees aged 18 to 64 in California participated in any kind of community- or health plan-based health promotion program. That percentage is likely higher in 2002-2003, Dr. Pronk acknowledged. But such low numbers indicate the considerable challenge plans and providers face in getting people to participate. Even when services are free, participation rates are often very low.

And while most physicians and nurses say they value their role in motivating patients to improve their health, Dr. Pronk and other speakers said the evidence reveals that providers often fail to play this role during the busy everyday practice of medicine. One study, for example, found that fewer than half (44%) of primary care physicians always review their patient's health behavior and provide counseling when needed.

Dr. Pronk presented a cost and risk profile of the U.S. population (see Figure 7 on facing page) which indicates the wide disparity in annual expenditures between healthy and unhealthy people. Identifying those at high risk and with chronic conditions is key to prevention and disease management programs.

Dr. Kongstvedt noted that recent changes at health plans should lay a firmer foundation for the speedier adoption of prevention services.

**Figure 7: U.S. Population Health Risk and Cost Profile**

	Healthy/Low Risk	Poor Health/ High Risk	Active Disease
% of Population	63%	30.1%	6.9%
Annual Cost of Care	\$0 to \$1,792	\$4,042	\$11,618
Annual Number of Clinical Visits	0 to 8	14	24

Source: Nicolas Pronk/Health Partners, Inc.

Namely, plans are now embracing a more collaborative approach with both employers and providers. And they are increasingly using medical and disease management models that emphasize prevention. These efforts have evolved from loose and passive programs that provide information on a single disease to more proactive and integrated strategies (e.g., phone calls, home care visits, nurse interventions) that focus on the sickest and most costly individuals. To assist with these efforts, plans are increasingly outsourcing their disease management function to vendors. Disease management vendor revenues grew from less than \$100 million in 1997 to roughly \$500 million in 2001, he said.

Ms. Mercure cautioned that the growth in interest in so called “consumer-driven” health benefit plans poses issues for preventive care services. Though a fledgling movement now, shifting costs and risk to consumers by making them personally responsible for the first \$1,000

to \$3,000 of their care before insurance kicks in (using in part dollars their employer gives them) could serve to either undermine or strengthen preventive health services. If, for example, consumers have to pay more out-of-pocket for preventive services, they will almost certainly use them less.

But if employers structure consumer-driven plans such that preventive care benefits are covered free (or with very low co-payments), enrollees may actually use the services *more* than they would in other kinds of plans. So far, employers experimenting with consumer-driven plans are exempting some, but not all, preventive care screening tests from co-payments. There is a greater risk that routine behavioral counseling will decline if it is not exempted. That’s because consumer-driven plans aim to induce enrollees to go to the doctor less, and fewer trips to the doctor means less opportunity to reinforce preventive care counseling, Ms. Mercure told conferees.

## Innovative Health Plan Initiatives to Promote Prevention

*Health plans are using incentive programs, software, and other innovative tools to foster wider use of preventive care. Information technology often plays a critical role in improving the delivery of preventive services to plan members, providing vital information to both providers and patients in a timely manner. The three case studies below are illustrative of these types of innovative programs.*

### Univera Healthcare

Univera is a Buffalo, NY-based health plan that serves 150,000 enrollees. The company recently launched a program that uses new computer-based tools to assess and promote the use of preventive care services. **Kathleen Curtin, MBA, NP, MA**, Univera's vice president of quality management administration, told

conference attendees the program has put preventive care services "front and center" for physicians and made patient data easy for them to use.

The program gives both doctors and enrollees computer-based information and data. Physicians, for example, get a quarterly report that includes their rates of use for a variety of

preventive services. Their performance is then compared to a panel of physicians in the same geographical area.

The health plan also gives doctors a periodic update on the preventive health services they gave to each Univera enrollee, based on claims analysis. Called a patient management reminder, the form is a quick list of preventive services and recommended dates for administering them. (See chart.) In addition, Univera sends patients and physicians an annual "health maintenance report" that contains a list of plan-recommended clinical preventive services, and matches that list against the actual services rendered to Univera enrollees.

Univera also generates periodic disease management reports for patients with certain chronic diseases. For example, a report for a diabetic would contain a record of tests to assess blood sugar and cholesterol levels, and eye and kidney damage.

UNIVERA HEALTHCARE		PATIENT MANAGEMENT REMINDER			Page 1 of 2	
Pt				Appointment	Mon 04/29/02 09:00a	
DoB	[F60]			Appt. Provider		
PCP				Adv.Dir. in Chart	No	
Procedures performed during the appointment should be marked on the Billing Form ONLY and not this Form.						
<b>PREVENTIVE</b>						
Description	Frequency	Due Done	Code	Freq Change&Reason	History	
Smoking Status	{Current,Former,Never}	<b>**NOW**</b>	HCP638		_/_/_	
Pap Smear <b>HYSTER</b>	N/I	09/11/95 09/18/97 10/07/99	88164 V76.2		_/_/_	
Mammogram	q12m>49	10/10/01	76092		_/_/_	
PneumoVax	1/ite	11/14/96	90732		_/_/_	
CCa FOBT	q12m>49	04/02/01	82270		_/_/_	
CCa Scope	q60m>49	07/07/01	45330		_/_/_	
<b>ASTHMA</b>						
Description	Frequency	Due Done	Code	Freq Change&Reason	History	
Controller Med	q3m Intal Inh Aer 800mcg	08/24/00 <b>**NOW**</b>			_/_/_	
Home PeakFlow Meter	q12m	12/31/01 <b>**NOW**</b>	A4614		_/_/_	
<b>DIABETES</b>						
Description	Frequency	Due Done	Code	Freq Change&Reason	History	
Glycohemoglobin	q3m 9.5 9.2 9.1	08/27/01 11/26/01 01/15/02 <b>**NOW**</b>	83036		_/_/_	
Microalbumin	q12m 1.3 4.3 1.4 < 0.7	11/17/97 10/26/98 05/03/00 08/27/01	82043		_/_/_	
Retinal Exam	q12m	02/22/02	92012		_/_/_	
<b>CORONARY ARTERY DISEASE</b>						
Description	Frequency	Due Done	Code	Freq Change&Reason	History	
CHOL TRIG HDL LDL	q12m 190 204 273 042 107 185 191 042 105	12/13/00 01/08/01 01/11/01 01/15/02	83721		_/_/_	
<b>CCa FOBT</b> = Colon Cancer Screen, Fecal Occult Blood Test <b>CCa Scope</b> = Colon Cancer Screen, Flexible Sigmoidoscopy or Colonoscopy Return Updates via Fax to Univera Quality Management @ 857-6355						

Both doctor and patient get the report, which indicates when the next round of tests are due. Univera also uses other systems and programs to promote adoption of preventive services, including regular mailings to physicians and consumers, promotion of guidelines, and meetings among panels of physicians.

Ms. Curtin told meeting attendees that the approach is working, with rates of most preventive care services on the rise. For example, tests for LDL cholesterol levels have risen from around 40% of enrollees in 1996 to about 75% of enrollees by the end of 2001. Univera plans to improve the approach by incorporating financial incentives for physicians based on their performance.

### **Anthem Blue Cross Blue Shield**

Anthem is one of the largest health plan companies in the nation. It operates Blue Cross Blue Shield plans in nine states that collectively enroll almost 12 million Americans. The company has become a leader in quality improvement and preventive care. Dr. Scalettar told conferees that Anthem has been experimenting with a number of preventive health benefits. He conveyed the results of one pilot project. In January 1998, Anthem's Blue Cross Blue Shield plan in Maine launched a smoking cessation benefit and program for enrollees in its HMO products. The program included coverage for counseling, tools for primary care physicians, coordination with pharmacies, and a community outreach component.

In February of 1999, 2000, and 2001, enrollees were sent follow-up information packets that included reminders about the smoking cessation program. Primary care providers and dentists were also given reminders and asked for feedback on the program.

At launch, 18% of Anthem's adult HMO enrollees smoked, less than the 21% in Maine's adult population in general. The program's goal was to reduce the percentage of enrollees who

smoked to 15%. By May 1999, the rate of smoking among Anthem enrollees had declined to 16.8% and by March 2000 to 13.1%—beating the target. By comparison, Maine's adult smoking rate climbed to 23.8% of the adult population during this period. Dr. Scalettar believes the program has been an unqualified success. It has yielded a three-to-one ROI, generating \$0.36 per member per month (PMPM) in savings compared to just \$0.12 PMPM in costs. Dr. Scalettar hopes to export the program and its dramatic success to other Anthem plans and beyond.

### **WellPoint Health Networks**

**Dawn Wood, MD, MPH**, vice president and medical director of state-sponsored programs at WellPoint Health Networks, spoke about her organization's efforts to boost childhood immunization rates.

The initiative was launched in 1995, at first with just simple reminder letters and cards sent to enrollees and physicians. In 1996, the health plan added an outreach component, with staff directly contacting enrollees or their parents. In 1998, a call center was formally set up, with faxes and reminders pouring out to patients and providers. Then in 2001, WellPoint upped the ante – adding a “rewards” program that gave enrollees gifts (from Wal-Mart) for keeping children up to date on immunizations and well-child visits.

Some 9,000 enrollees claimed the gifts after just the first five months of the program. Last year, WellPoint enhanced the program further by linking providers to a community immunization registry.

The program has successfully boosted immunization rates. Between 1998 and 2002, rates for common childhood immunizations increased from around 23% to 61%. The program garnered several awards, including recognition from the American Association of Health Plans and the Blue Cross Blue Shield Association.

## **Federal Government Strategies**

The federal government finances and covers preventive health services through a variety of programs. The largest of these is Medicare, covering 39 million senior citizens and disabled persons. The Office of Personnel Management’s (OPM) Federal Employee Health Benefits (FEHB) program covers 9 million active federal employees, retirees, and dependents.

Ms. Gordon noted that the Medicare program’s original statute precluded coverage of preventive care. To this day, federal legislation is needed to incorporate preventive care services into Medicare’s benefit package. As a result, Medicare’s covered preventive benefits have grown only slowly over time. (See box below.)

Ms. Gordon said that Medicare coverage of preventive care services is not optimal and not in sync with the USPSTF recommendations. For example, the task force does not recommend bone densitometry to screen for osteoporosis in people age 65 and over. But Congress added densitometry coverage for Medicare in 1998. Likewise, the task force does not recommend prostate-specific antigen (PSA) testing, a benefit added to Medicare coverage in 2000. Indeed, of the 12 preventive care

services now covered under the Medicare program, only five have been recommended for the elderly population.

A General Accounting Office report released in May 2002 points to other problems as well. The report, *Medicare – Use of Preventive Services is Growing But Varies Widely*, concluded that “although the use of preventive services is growing, it varies from service to service and by state, ethnic group, income, and level of education.” Breast cancer screening rates, for example, varied among states from 66% to 86% in 1999. And 57% of whites were immunized against pneumonia, compared to just 37% of African Americans and Hispanics.

Ms. Gordon said CMS is working to accelerate the uptake of preventive health services by sponsoring research on standing orders, clinical protocols, provider and patient reminders, and financial incentives. All of these tools are underutilized today and are key avenues to enhance preventive care. The current leadership at CMS and HHS is also committed to the principles of healthy aging for Medicare beneficiaries, and to being more proactive in seeking Congressional approval of appropriate, evidence-based preventive care services.

### **Medicare Preventive Care Benefits and Year Benefit Was Added**

- Pneumococcal immunizations – 1981
- Hepatitis B immunizations – 1984
- Pap smear – 1990
- Mammography – 1991
- Influenza immunizations – 1993
- Pelvic exam – 1998
- Bone densitometry – 1998
- Colon cancer screening – 1998
- Diabetes self-management education – 1998
- Prostate cancer screening — 2000
- Glaucoma screening – 2002
- Nutritional therapy for diabetics and people with end stage renal disease – 2002

For more detail on Medicare coverage of preventive services, see Appendix C.

Source: Centers for Medicare & Medicaid Services

To that end, CMS recently created the Evidence-Based Center for Healthy Aging. The Center is housed at the RAND Corporation and is charged with translating what works to promote senior health into Medicare coverage, programs, and policies. Much of the Center's work relates to preventive care services. The Center's first report focused on smoking cessation. One in eight Medicare beneficiaries smokes, creating a burden of smoking-related illness for the program estimated at \$800 billion over the next 20 years. The Center's review of the evidence found that drugs can double quit rates, and that both provider counseling and telephone counseling are effective. While the evidence suggests that seniors experience a sharper functional decline from smoking than do younger individuals, the findings cited research showing that significant benefits accrue to smokers who quit at any age.

CMS is currently trying to determine the best way to cover smoking cessation services as a Medicare benefit. To that end, CMS is sponsoring a Stop Smoking Demonstration Project among 43,500 beneficiaries in seven states. The results will help determine Medicare's coverage policies.

The Center is also conducting a demonstration project with CDC that is designed to reduce vaccine-preventable diseases in nursing homes through the use of standing orders that call for screening and immunization without a physician examination. Current regulations prohibit this, but the demonstration facilitates the adoption of standing orders by waiving these regulations in eight states and the District of Columbia. A second Medicare demonstration project is evaluating the relative effectiveness of different types of health risk appraisal and follow-up programs. This project, which got underway in Fall 2002, will evaluate the appraisal questionnaire and routine feedback to both beneficiaries and physicians. The project also seeks to determine if CMS can facilitate self-care as well as effective links among seniors, community resources, and physicians.

Debate over Medicare reform in recent years has included discussion of preventive care. Speakers and discussants at the conference were strongly supportive of adding more preventive benefits to the Medicare program.

**Abby L. Block, MSW, MA, MBA**, assistant director for insurance programs at OPM, said her agency essentially operates as a large employer purchaser. It does not have to go to Congress to set health benefits for active and retired federal employees and their dependents. OPM paid over \$27 billion in premiums in 2002 to more than 180 commercial health plans around the country that are offered as options to government workers. While there is no standard benefits package among FEHB plans, plans are required to cover certain preventive services. These include mammograms, PSA tests, colorectal cancer screening, and childhood immunizations. Most FEHB plans also cover additional preventive services. These most commonly include blood cholesterol screenings, routine physicals, sickle-cell screening, and vision screening tests. With respect to preventive care for children, most FEHB plans adopt the recommendations of the American Academy of Pediatrics, which advocates coverage for a wide variety of child care services, including well-child care and certain immunizations and vision screenings.

Ms. Block said OPM is continually reviewing guidelines on preventive care benefits and evaluating industry norms. In general, FEHB program coverage of preventive services tracks the clinical recommendations of government and national organizations such as the National Cancer Advisory Board of the National Cancer Institute or the American Cancer Society. OPM encourages FEHB plans to review and adopt these recommendations. In 2002, for example, OPM sent out a "call letter" that encouraged FEHB plans to cover non-diagnostic colonoscopies, fasting lipoprotein profile tests, and certain tests for colorectal cancer.

## Projecting ROI

Producing useful ROI measures is still a work in progress and challenging methodologically. But **Ron Z. Goetzel, PhD**, vice president of consulting and applied research at The Medstat Group, emphasized that studies already show a positive ROI from prevention. One aggregate analysis of 32 studies, for example, found 28 showing a positive ROI for prevention, averaging \$3.48 in benefits for every dollar invested. Health care costs and absenteeism were the primary outcomes.<sup>5</sup> Another study found a median benefit of \$3.14 per dollar invested for health management programs, \$4.50 per dollar invested for demand management programs, and \$8.88 per dollar invested for disease management initiatives.<sup>6</sup>

Anecdotal results back these findings up. A health screening and promotion program sponsored by Citibank, for example, generated a net \$7 million in savings over a two-year period. The program cost \$1.9 million to implement and operate, generating savings of \$8.9 million, or \$4.70 in benefits for every \$1.00 in costs. Half of the company's 40,000 employees participated in the program, which included an initial screening of employees, computerized triage of subjects into high- and low-risk intervention programs, extensive follow-up

with the high-risk subjects, and general health education.<sup>7</sup>

A long-term health and wellness program conducted at Johnson & Johnson between 1990 and 1999 yielded similar results, with overall savings of approximately \$8.5 million per year. Savings came from reduced medical care use (\$3.3 million) and lower administrative costs (\$5.2 million).<sup>8</sup>

Dr. Pronk said the cost savings produced by prevention can also be measured as cost per life-year saved. Studies now show that several preventive services fall into the category of saving lives at a "low" cost. For example, smoking cessation programs, including minimal (three-to-six minute) physician counseling, intensive (15-minute) physician counseling, nicotine replacement therapy via patch or gum, and nurse-based education, cost less than \$15,000 per life-year gained. Many exercise programs cost less than \$20,000 per year of life gained. By any measure, the one-year productivity gains achieved through such interventions for employees in the middle of their careers would well exceed implementation costs, Dr. Pronk said.<sup>9</sup>

But the incompleteness of data on the cost of disease make ROI and cost-of-life-year

The federal government is also working to foster preventive care through the work of the Agency for Health Care Research and Policy. **Kenneth Fink, MD, MPH**, a visiting scholar at AHRQ, said the agency oversees the activities of the USPSTF, supports a dozen Evidence-Based Practice Centers around the country, and administers the National Guidelines Clearinghouse, which includes numerous prevention-oriented services. In addition, AHRQ administers the *Put Prevention into Practice* (PPIP) program. PPIP seeks to improve the delivery of appropriate preventive services

based on the evidence-based recommendations of the USPSTF. It consists of a package of easy-to-understand materials that assist physicians in overcoming the barriers to effective delivery of appropriate clinical services. These tools (which include waiting room posters, preventive care timelines, adult and child health risk profiles, preventive care flow sheets, and patient reminder postcards) help clinicians determine their patients' preventive care needs and administer needed services. In addition, a set of guidebooks helps patients understand and keep track of their preventive care needs.

saved calculations iffy, noted Dr. Sennett. Patients in studies get lost to follow-up and indirect costs (e.g., lost productivity, travel time to and from health care settings) are often difficult to estimate. Productivity is particularly difficult to calculate, due in part to a lack of standard metrics. These factors would tend to result in an underestimation of the potential of prevention to reduce costs.

At the same time, other factors tend to inflate the projected savings from prevention. For example, preventive services may extend the life of some individuals by preventing or delaying the onset of a particular disease. But these individuals may well fall victim to other diseases, especially later in life, noted Dr. Sennett. These ailments never would have occurred—and the accompanying, often costly treatment never would have been necessary—if it had not been for the life-extending preventive services. Of course, our society values preventive services because they contribute to more productive, satisfying lives for those who receive them. The point here is simply to recognize that these investments, though they generate social and economic benefits, may also someday lead to increased health care costs.

In addition, Dr. Sennett said that any cost savings from preventive services should be “discounted” to account for the “time value” of money. Savings that occur in the future are intrinsically less valuable than immediate savings due to the erosive impact of inflation on purchasing power. But setting an appropriate discount rate is complex. Finally, any calculation of the potential cost savings from prevention must be estimated rather than observed (since one cannot observe costs that do not occur). Estimates tend to be less compelling than actual observations when organizations such as the government and large employers are trying to price out the costs and benefits of their activities.

In terms of policy, the potential disconnect between who pays for preventive services and programs and who benefits from them is a major issue. The private sector—including both commercial insurers and employers—may be institutionally resistant to investing broadly in prevention if they believe that the benefits from such expenditures will accrue to another employer or insurer. This issue is especially important in the U.S., since almost everyone becomes a Medicare beneficiary at the age of 65, and the financial benefits of preventive services may not materialize until the post-retirement years.

## ***State Government Strategies***

States (in partnership with the federal government) finance health care coverage for the poor through two programs - Medicaid and the State Children’s Health Insurance Program (SCHIP). In addition, states can and do require commercial insurers to cover some health services, including a range of preventive care services.

## **Medicaid and SCHIP**

**Rhonda Rhodes, MS**, acting director of the Division of Benefits, Coverage, and Payment within Family and Children’s Health Programs at CMS, told conferees that the federal government requires state Medicaid programs to cover a comprehensive set of preventive services and “early assessments” of the health needs of Medicaid-eligible children. The program is called EPSDT (Early and Periodic

Screening, Diagnosis, and Treatment). Its framework is somewhat unusual. Essentially, any medically necessary treatment that results from the provision of EPSDT-mandated prevention and screening services must also be covered, even if that treatment is not covered generally in the Medicaid program.

Many states also cover preventive health services as a separate benefit under Medicaid. For example, many states have opted to cover family planning services, breast and cervical cancer prevention and treatment, and disease management.

SCHIP covers a broad array of preventive services, but that coverage is designed and arrived at differently than under Medicare or Medicaid. Seeking to avoid the complexity of adding coverage in a piecemeal fashion or “benchmarking” coverage to the private sector, states are required to cover well-baby and well-child care and to adopt one of the following benefits packages:

- Existing state-based comprehensive coverage, a provision that was “grandfathered” in for Pennsylvania, New York, and Florida.
- Secretary-approved coverage, which are exemptions approved by the federal government subject to certain ground rules.

While the current economic climate in states makes expansion of preventive services coverage difficult, some states have been progressive in this area. For example, North Carolina recently trained pediatricians to conduct oral health assessments and to apply varnish, a treatment that is effective in preventing tooth decay in children. A grant from CMS and the Health Resources and Services Administration (HRSA) helped to finance the training. Another example comes from the state of Maryland, which recently instituted comprehensive coverage for breast and cervical cancer screening.

## **Insurance Mandates**

State insurance mandates affect some 60 million Americans whose insurance is provided by commercial health plans and insurers regulated by the states. Virtually all states have some mandates, including those for preventive services. A 2002 study by the National Conference of State Legislatures (sponsored by Partnership for Prevention) found wide variation in state mandates for preventive care services. Of 23 preventive services studied, states ranged from covering just a few to 14. The two most widely mandated preventive health services were childhood immunizations and mammography, followed by cervical cancer and prostate cancer screenings. Most states mandated fewer than eight preventive services. Ms. Bondi noted that, as with large employers and Medicare, most of the state mandates covering preventive care services do not track USPSTF recommendations. For example, colorectal cancer screening, strongly recommended by the USPSTF, is a required benefit in only 15 states. In contrast, 27 states mandate prostate cancer screening, which is not recommended by the USPSTF. Only one state (Maryland) specifically mentions the USPSTF as a guide for its prevention mandates.

Ms. Mercure noted that state government mandates that require insurers and health plans to cover certain medical services can increase costs and effectively block health plans from being able to expand their coverage of preventive health.

## ***Provider and Consumer Strategies***

Efforts to help providers deliver preventive services and behavioral counseling must be stepped-up, speakers agreed. Likewise, there was consensus that most Americans (a) still do not understand the importance of clinical preventive services and lifestyle counseling to their health, and (b) do not have enough information to access those services or find effective programs to help them make lifestyle modifications.

**Christina Wee, MD, MPH**, assistant professor of medicine in the Division of General Medicine and Primary Care at the Beth Israel Deaconess Medical Center and the Harvard Medical School, said deep structural obstacles militate against physicians engaging in behavioral counseling. She said these obstacles must be addressed if such services are to be more widely adopted. They include:

- ***Lack of time***

Short office visits do not permit physicians or nurses to address the multiple behavioral changes that are necessary for obese and/or physically inactive patients. The physician must do more than simply advise the patient to eat less. Physicians must recognize that successful counseling might require 20 in-person or over-the-phone contacts.

- ***Perception that behavioral counseling is ineffective***

Surveys indicate that most physicians (71%) do not believe that patients comply with dietary counseling and more than one in three (35%) do not believe that counseling will lead to a lasting change in patients' physical activity levels. These perceptions are wrong when structured, multi-session interventions and follow-up are employed, though the evidence is stronger for the effectiveness of weight counseling than it is for physical activity counseling.

- ***Lack of training and knowledge***

Studies indicate that a majority of physicians (60% in one study) feel inadequately trained to deliver advice on nutrition. This is exacerbated by fad diets and ever-changing recommendations from national groups on appropriate diet. In addition, medical schools do not train new doctors in how to provide effective counseling. Dr. Wee shared results from the WATCH study, which found that

physicians who get both training and office support are far more likely (by a factor of roughly 2 to 1) to counsel patients on nutrition. At the same time, they are far less likely to feel the need to refer patients elsewhere for such counseling. (See Figure 8 on next page.) The study also found that patients being treated by these physicians were more likely to change their diet.

- ***Inadequate resources***

Physician practices need funding to build new models of care that emphasize prevention. In particular they need both money and help organizing counseling programs, developing information systems, adopting team approaches to care, and implementing office-based quality improvement initiatives. Training must also be funded, both for physicians and support staff. Dr. Wee urged physician organizations to take a leadership role in securing government and private foundation funding for such efforts.

- ***Inadequate reimbursement***

Very few employers and health plans provide full or adequate reimbursement for behavioral counseling. And those that do usually cover only a single episode. In some cases, coverage is only available for patients with co-morbidities. In addition, very few plans provide coverage for telephone counseling, making it difficult or impossible for a physician group to justify hiring a qualified individual to conduct telephone follow-up with at-risk patients.

Dr. Wee and other speakers urged employers and health plans to play a larger role in helping physician practices use preventive services. Some means to that end include:

- Eliminating or reducing co-payments on a core set of evidence-based preventive care services.
- Paying physicians for the time they spend counseling patients about lifestyle changes.

**Figure 8: Results to WATCH\***

Counseling Points	Group A (%)	Group B (%)
1. Discussed cholesterol	81.5	95.8
2. Discussed diet connection	44.6	90.7
3. Discussed dietary change	43.5	79.7
4. Discussed past efforts	20.7	32.2
5. Discussed problems making change	13.0	37.3
6. Discussed solutions to problems	8.7	28.8
7. Patient agreed to changes/ goals	44.6	83.9
8. Provided nutrition materials	18.5	77.1
9. Referred for nutrition counseling	27.3	16.2
10. Planned future action	39.1	72.9

\*The Worcester Area Trial for Counseling in Hyperlipidemia. Group A served as the control group. Group B received training and office support.

Source: Ockene, *American Journal of Preventive Medicine*, July-August 1996, pp. 252-258.

- Subsidizing the cost of office-based software that helps physicians track the delivery of preventive care services, generate reminder notices, and the like.
- Coordinating with physicians on reminders and information packets sent to employees/enrollees.
- Rewarding providers who exhibit strong performance on standardized measures for the delivery of preventive care services.
- Promoting collaboration among competing health plans. For example, 25 of the nation’s largest insurers, representing 25 million Americans, have joined forces to form the Council for Affordable Quality Healthcare (CAQH). Via a public web site ([www.caqh.org](http://www.caqh.org)), this consortium is sharing the best practices for promoting adoption of preventive services.

## Low- and High-Tech Provider Approaches to Prevention

*Providers are taking a variety of approaches to accelerating the adoption of preventive services, including some that rely on new technologies and others that focus on old-style approaches.*

### The White River Family Practice

White River is a six-physician primary care family practice located near the New Hampshire border in White River Junction, one of Vermont’s handful of mid-sized cities. The practice provides care to about 15,000 individuals in a community of about 100,000. **Mark Nunlist, MD**, runs the practice. He and his colleagues believed until a few years ago that they were providing adequate, even state-of-the-art preventive care. But a series of events in the late 1990s led them not only to change their minds but also the way they practiced medicine.

It started when the practice’s largest managed care payer, Anthem Blue Cross, began to audit the practice’s delivery of certain services. The health plan first noted that the group had no system in place to track whether adults were getting tetanus shots. About the same time, Anthem began reporting results (see chart at right) on the proportion of their enrollees cared for by White River who were receiving mammography, cervical cancer screening, and well-child visits. In addition, Anthem monitored the percentage of diabetics getting routine eye exams.

The results were “not great,” said Dr. Nunlist. “Let’s just say we had a lot of room for improvement...and that surprised us. We really thought we were delivering pretty good preventive care.”

Dr. Nunlist and his colleagues went about diagnosing the reasons for their poor performance, and quickly focused on two: the lack of time committed to preventive care in office visits and the practice’s inefficient, paper-based patient record system.

The first change White River implemented was to integrate preventive care assessments into most office visits in a more rigorous and systematic way. But they quickly realized they would need a much better record system to support that approach and to track the delivery of preventive care as well as other services. And that led them – after rejecting modifications to their paper-based system – to make the switch to (and investment in) an electronic record system.

With financial assistance (roughly \$7,000) from Anthem, the group spent about \$20,000 to buy a software system called *Medical Manager*, now sold by WebMD. The system was installed in the summer of 2001. At the time, White River was only the third practice in New England to adopt this type of system. Some 200 group practices in New England now have *Medical Manager*.

*(continued on next page)*

### White River Rates, 2001

Measure	Compliance Rate (Among eligible members)	NH Network Average (Among eligible members)
Mammography	83.3%	82.61%
Cervical Cancer Screening	92.53%	86.58%
Dilated Retinal Exams in Diabetics	76.1%	61.16%
Well-Child Exams	85.71%	83.99%

**Low- and High-Tech Provider Approaches to Prevention** (continued from page 21)

Medical Manager promotes the use of preventive services in a number of ways. First, it prompts providers to offer due and overdue preventive services at every patient encounter, and tracks any services that are administered. The system can be customized to prompt by disease or other patient-specific criteria. This approach is especially useful for patients with chronic conditions, as it allows multiple providers to see what services the patient has received and needs at any point in time. The system also creates point-of-care reminders for physicians (see below) and reminder notices for patients, along with practice-wide and individual provider performance feedback reports. Underlying the system is agreement by providers on a core set of scientifically-based preventive services.

Not surprisingly, White River has faced some barriers in implementing the system. As with any new technology, physicians have adopted the system at varying rates—some being early adopters, and a couple not complying at all. Dr. Nunlist noted that physicians needed training on how to raise issues with patients and to offer services not on the patients' agenda.

White River has also re-organized workflow to make better use of the reminder prompts. In addition, because the system initially flagged so many patients who needed preventive services, the practice had to manage this influx by setting priorities for follow-up preventive care visits.

Despite these barriers, Dr. Nunlist believes that the new system is indeed yielding increased use of preventive services. (White

**WHITE RIVER FAMILY PRACTICE**

331 OLCOTT DRIVE STE. U3 WHITE RIVER JCT, VT 05001 (802) 295-6132

Date	Patient Name	DOB	Account #	SSN #	Encounter Form #
09/20/02	Jane Doe.	06/27/38	xxx.x	123 45 6789	202257

**MEDICAL HISTORY**

250.00	DIABETES TYPE 2 (NIDDM)	08/06/99	*
272.0	HYPERCHOLESTEROLEMIA	01/02/02	*
401.1	HYPERTENSION ESSEN, BENIGN	09/13/00	*

**GUIDELINES (Family Practice Medicine) - [Merged-All]**

Physical exam . . . . .	<= Every 5 Years . . .	09/08/97	D
Cholesterol . . . . .	<= Every 5 Years (1)	01/02/02	NA
Stool Blood Test. . . . .	Annually. . . . . (2)	08/06/02	NA
Digital Rectal Exam . . . . .	Annually . . . . . (3)	08/06/02	NA
Sigmoidoscopy . . . . .	Every 3-5 Years . . . (4)		*
Td Booster . . . . .	Every 10 Years . . . .	11/26/99	
Mammogram . . . . .	Annually. . . . . (5)		*3
Clinical Breast Exam . . . . .	Annually . . . . . (6)	08/06/02	NA
Papanicolaou Smear. . . . .	Every 1-3 Years . . . (7)	08/06/02	NA
Pelvic Exam . . . . .	Every 1-3 Years . . . (8)	08/06/02	NA
LIPID PANEL . . . . .	Annually. . . . .	01/02/02	
BASIC METABOLIC PANEL . . . . .	Annually . . . . .		D
HGB A1C . . . . .	EVERY 3 MONTHS. . .	06/20/02	D
MICROALBUMIN . . . . .	Annually . . . . .	02/18/00	*
RETINAL EXAM. . . . .	Annually. . . . .		D
Influenza Vaccine . . . . .	Annually . . . . .	12/27/00	*
FOOT EXAM . . . . .	Annually. . . . .		D
HEPATIC PANEL . . . . .	Every 6 Months . . . (9)		NA
CPK . . . . .	If [STATIN] . . . . . (10)		NA
UA . . . . .	<= Every 2 Years . . .		D

River had not yet collected data since the practice had less than a year of experience with the system at the time of the conference.) Data from Dr. Paul Frame, a family practitioner in New York who developed the system and has studied its use, indicates that *Medical Manager* increases compliance by an average of 15% at an estimated annual cost of \$0.78 per patient.

Looking ahead, Dr. Nunlist plans to improve the reminder report format to increase its usefulness and to provide preventive care report cards to patients. White River also plans to compare its performance in delivering preventive services to that of other group practices.

### **Bayou La Batre Rural Health Clinic**

The experiences of **Regina Benjamin, MD, MBA**, and the Bayou La Batre Rural Clinic in Bayou La Batre, Alabama, demonstrate that low-tech approaches are still critical. They also show how a dedicated physician can make a difference.

Dr. Benjamin runs and is the sole physician at the clinic, which caters to a predominately poor population. Half her patients are uninsured and “self-pay.” Twenty percent are Medicare or Medicaid beneficiaries and most of the rest have insurance through the largest local employer, a shipyard. The shipyard’s plan is not particularly generous. For example, enrollees pay a \$25 co-payment for a physician visit, even if it is for essential preventive care or a recommended screening test.

That \$25 co-payment represents a serious obstacle to preventive and routine care visits for her insured patients. As a result, many of Dr. Benjamin’s patients wait to see her until they feel they must, and sometimes that is too late. But it is the uninsured patients she worries most about.

Complicating her challenge and their own care, Dr. Benjamin’s patients tend to have very poor health status, knowledge of health

issues, and lifestyle habits. Their diets are rich in fat, a high proportion smoke, and exercise is a foreign concept to most of them. Some have poor sanitation habits complicated by rural conditions that can compromise sanitation.

Working in this environment, Dr. Benjamin takes on the role of health educator and lifestyle counselor as well as doctor. “It is the only thing to be done,” she said. “I feel compelled to do what I can to try and keep them healthy.”

This approach has forced her to structure her practice in a way that allows residents easier access to care. For example, Dr. Benjamin does not require patients to schedule visits. She will see them even if they just “wander in” at a time convenient to them. Even if she is busy dealing with a patient who has a more urgent problem, she tries to make time for the walk-ins.

Dr. Benjamin views these visits as opportunities. They build rapport and trust with the patient, laying the foundation for imparting lifestyle advice and recommendations. Her experience is that the closer she can get to a patient, the more likely that the patient will heed her advice.

Dr. Benjamin counsels all her patients about prevention and lifestyle issues. She consistently advises patients not to smoke and asks about family histories with respect to smoking and alcohol. She inquires about previous preventive services, including Pap smears and self-breast exams. She uses patient-reminder “systems” for preventive services, encouraging women to get a Pap smear every year during their birthday month and advising self-examination of the breasts each month when the utility bill comes. She also urges wives to remind their husbands to go in for prostate exams. She counsels elderly patients to exercise by lifting cans of soup or one-pound packages of sugar.

## Conclusion

Clinical preventive care services and promotion of healthy lifestyles continue to be underutilized health strategies in the United States – for a complex array of reasons. Though employer, health plan, and government coverage of such services has expanded significantly in the last decade, coverage remains inconsistent with the recommendations of key expert bodies.

Providers and clinicians embrace prevention in principle but often fail to deliver specific services even when they are a covered benefit.

Consumers are largely still unaware of the value of many preventive services and often do not know when and where to access them. Systems are largely not in place that could remind providers of a patient's need for a service. Nor are systems widely available to remind consumers of their need for a specific preventive care service, such as a cancer or heart disease screening test. New tools based on information technology and the internet should make such systems easier and less expensive to build in the near future.

Skepticism of the near-term payoff and benefit from specific preventive health services is still widespread. This is despite growing evidence of a positive return-on-investment (ROI) for many preventive services. Employers and

government remain reluctant to pay for some clinical preventive services in the absence of even stronger ROI data and clear guidelines about which services both benefit the health of employed or enrolled populations and also save money in a relatively short time frame. Speakers supported the process and recent recommendations to emerge from the United States Preventive Services Task Force (USPSTF, housed at the Agency for Healthcare Research and Quality). They also supported the work of the Centers for Disease Control and Prevention (CDC) in creating the *Guide to Community Preventive Services*.

Both initiatives make preventive services recommendations based on systematic reviews of the scientific evidence. Speakers urged health benefit managers and consultants, health plan administrators, and clinicians to learn more about these initiatives and more broadly the evidence supporting the clinical and financial return from preventive care services. Payers, including Medicare, should consider expanding coverage of preventive care services, and aligning it with USPSTF and CDC recommendations.

Speakers strongly recommended that employers, government, health plans, and provider organizations work in collaboration to promote prevention among both providers and consumers.

## Endnotes

<sup>1</sup> *Morbidity & Mortality Weekly Report* 50. September 7, 2001. 35:31.

<sup>2</sup> Lightwood JM and SA Glantz. 1997. Short-term Economic and Health Benefits of Smoking Cessation. *Circulation*. 96:1089-1096.

<sup>3</sup> Wagner EH, Sandhu N, Newton KM, McCulloch DK, Ramsey SD, and LC Grothaus. 2001. Effect of Improved Glycemic Control on Health Care Costs and Utilization. *Journal of the American Medical Association*. 285(2):182-189.

<sup>4</sup> Testa MA and DC Simonson. 1998. Health Economic Benefits and Quality of Life During Improved Glycemic Control in Patients with Type 2 Diabetes Mellitus. *Journal of the American Medical Association*. 280(17):1490-1496.

<sup>5</sup> For more information, see the article by Aldana in the May/June 2001 issue of *American Journal of Health Promotion*.

<sup>6</sup> For more information, see the article by Goetzel, et al. in *AWHP's Worksite Health*, 1999, Volume 6, Number 3.

<sup>7</sup> For more information, see the article by Ozminkowski, RJ, et al in *American Journal of Health Promotion*, 1999, Volume 14, Number 1.

<sup>8</sup> For more information, see the article by Goetzel, et al. in the *Journal of Occupational Health and Environmental Medicine*, May 2002, Volume 44, Number 5.

<sup>9</sup> For more information, see Krumholz, et al. in the *Journal of the American College of Cardiology*, 2002, Volume 40, Number 4.

## Appendix A

### The CDC *Guide to Community Preventive Services* [www.thecommunityguide.org](http://www.thecommunityguide.org)

The Centers for Disease Control and Prevention's *Guide to Community Preventive Services* provides recommendations on population-based interventions to promote health and prevent disease, injury, disability, and premature death. The recommendations are for use by communities and health care systems. The Task Force on Community Preventive Services, an independent body of experts, makes the recommendations based on a comprehensive review of scientific evidence. The Guide is a federally-sponsored initiative and is part of a family of federal public health initiatives that include *Healthy People 2010* and the *Guide to Clinical Preventive Services* (the report of the US Preventive Services Task Force; see Appendix D).

The Community Guide is being developed over time and is thus a virtual, web-based publication. Chapters on different preventive services are added as they are developed. Each chapter has extensive links to back-up scientific information as well as practical information on interventions for providers. Community Guide chapters are also published as supplements in the *American Journal of Preventive Medicine*.

As of July 2003, seven chapters have been produced on the following topics:

- Tobacco Product Use, Prevention, and Control
- Physical Activity
- Vaccine Preventable Diseases
- Diabetes
- Motor Vehicle Occupant Injury
- Oral Health
- Social Environment

Chapters now in preparation will cover these five topics:

- Cancer (Fall 2003)
- Mental Health (Spring 2004)
- Alcohol Abuse (Winter 2004)
- Sexual Behavior (Spring 2004)
- Violence (Summer 2003)

All dates of future publication are tentative.

## Appendix B

### List of Conference Faculty with Contact Information

(In alphabetical order)

**Regina Benjamin, MD, MBA**  
CEO and Founder  
Bayou La Batrie Rural Health Clinic  
rmbenjamin@aol.com  
251-824-4985

**Linda Bergthold, PhD**  
Senior Consultant  
Watson Wyatt Worldwide  
lbergth@aol.com  
831-462-1334

**Abby Block, MSW, MA, MBA**  
Assistant Director, Office of Insurance  
Programs  
Office of Personnel Management  
alblock@opm.gov  
202-606-0770

**Maris Bondi, MPH**  
Senior Policy Analyst  
Partnership for Prevention  
mbondi@prevent.org  
412-683-9029

**Nancy Chockley, MBA**  
President  
NIHCM Foundation  
nchockley@nihcm.org  
202-296-4426

**Tami Collin**  
Senior Consultant  
William M. Mercer, Inc.  
tami.collin@mercer.com  
312-902-7849

**Kathleen Curtin**  
Vice President, Quality Management  
Univera Healthcare  
kathleen.curtin@excellus.com  
716-857-6204

**Richard Dixon, MD**  
Director, Division of Prevention Research and  
Analytic Methods  
Centers for Disease Control and Prevention  
rdixon1@cdc.gov  
770-488-8188

**Kenneth Fink, MD, MPH**  
Visiting Scholar  
Agency for Healthcare Research and Quality  
kfink@ahrq.gov  
301-594-1487

**Jon Gabel, MA**  
Vice President, Health System Studies  
Health Research and Education Trust  
American Hospital Association  
jgabel@aha.org  
202-626-2688

**Ron Goetzel, PhD**  
Vice President for Consulting and Applied  
Research  
The MEDSTAT Group  
ron.goetzel@medstat.com  
202-719-7850

**Catherine Gordon, RN, MBA**  
Special Assistant, Office of the Director  
Centers for Disease Control and Prevention  
cgordon@cdc.gov  
202-205-6405

**Charles Hackett, MD**

Chief Medical Officer  
Raytheon Company  
charles\_d\_hackett@raytheon.com  
781-860-2466

**Kathy Higgins, MS**

Senior Director, Community Relations  
Blue Cross and Blue Shield of North Carolina  
kathy.higgins@bcbsnc.com  
919-765-4104

**Peter Kongstvedt, MD**

Vice President  
Cap Gemini Ernest & Young  
peter.kongstvedt@cgey.com  
571-382-6250

**Suzanne Mercure**

Principal  
Barrington & Chapell  
mercures@bigfoot.com  
703-845-7712

**Steve Morgenstern**

Health Plan Manager  
Dow Chemical  
srmorgenstern@dow.com  
989-636-4164

**Mark Nunlist, MD**

Primary Care Physician  
White River Family Practice, Vermont  
mark.m.nunlist@dartmouth.edu

**Nicolas Pronk, PhD**

Vice President, Center for Health Promotion  
HealthPartners, Inc.  
nico.p.pronk@healthpartners.com  
952-967-6729

**Rhonda Rhodes, MS**

Acting Director, Division of Benefits and  
Coverage  
Family and Children's Health Programs  
Centers for Medicare and Medicaid Services  
rrhodes@cms.hhs.gov  
410-786-1848

**Robert Scalettar, MD, MPH**

Vice President, Medical Policy  
Anthem Blue Cross Blue Shield of Connecticut  
robert\_scalettar@anthem.com  
203-985-4258

**Cary Sennett, MD, PhD**

Vice President for Science and Quality  
Improvement  
American College of Cardiology  
csennett@acc.org  
301-897-2615

**Christina Wee, MD, MPH**

Assistant Professor of Medicine  
Harvard Medical School  
cweekuo@caregroup.harvard.edu

**D'Ann Whitehead, PsyD**

Former Manager, Health and Productivity  
Chevron-Texaco Corp.  
D\_annwhitehead@hotmail.com  
650-572-1532

**Dawn Wood, MD, MPH**

Vice President and Medical Director, State  
Sponsored Programs  
Blue Cross of California  
dawn.wood@wellpoint.com  
805-384-3558

## Appendix C

# Medicare and Preventive Care Services

Summary of Medicare Coverage, USPSTF Recommendations, National Use Rate Targets, Current Use Rates, and Frequency and Cost to Patient for Selected Clinical Preventive Services

Preventive Service	Medicare Coverage (Year Covered)	USPSTF Recommendation	Healthy People Target Use Rate	Current Use Rate Among Medicare Beneficiaries Over 65	Frequency and Cost to Patient
<b>Immunizations</b>					
Pneumoccal	Covered (1981)	Recommended at least once for individuals age 65 and over	90 percent of adults over 65	60 percent	Once, or repeat if needed; no copay or deductible
Hepatitis B	Covered (1984)	Recommended at least once for individuals at high risk of infection	90 percent of high-risk populations	35 percent of hemodialysis users <sup>2</sup>	3-shot series; 20% copay after \$100 deductible
Influenza	Covered (1993)	Recommended annually for individuals age 65 and over	90 percent of adults over 65	66 percent	Once a year; no copay or deductible
<b>Screening Services</b>					
Cervical cancer (Pap Smear)	Covered (1990)	Recommended every 3 years for all women who are or have been sexually active**	90 percent of all sexually active women within the past 3 years	72 percent	Every 24 mo, high risk every 12 mo; 20% copay, no deductible for pelvic exam and Pap collection; no lab copay or deductible
(Pelvic Exam)	(1998)	Not recommended			
Breast Cancer (Mammography)	Covered (1991)	Recommended every 2 years for women over 40	70 percent of women over 40 within past 2 years	75 percent	1 baseline age 35-39, then every 12 mos; 20% copay, no deductible
Vaginal Cancer (Pelvic Exam)	Covered (1998)	Not reviewed	No target set	N/A	Every 24 mo, high risk every 12 mo; 20% copay, no deductible for pelvic and breast exam
Colorectal cancer (Fecal-occult blood test)	Covered (1998)	Recommended for adults over age 50: Every year	50 percent of adults over age 50 within past 2 years	26 percent within the past year <sup>1</sup>	Every 12 mo; no copay or deductible on test
(Sigmoidoscopy) (Colonoscopy)		Every 5 years Every 10 years	50 percent of adults over age 50 ever in lifetime	44 percent within past 5 years <sup>1</sup>	Every 48 mo; 20 or 25% copay after \$100 deductible Every 10 y, every 24 mo if high risk; 20 or 25% copay after \$100 deductible
Osteoporosis (Bone Mass Measurement)	Covered (1998)	Routine screening is recommended for women over age 65	No target set	N/A	Every 24 mo, or more frequently if necessary; 20% copay for \$100 deductible
Prostate Cancer (Prostate specific antigen test and/or digital rectal examination)	Covered (2000)	Insufficient information to recommend for or against routine screening	No target set	63 percent	Every 12 months; no copay or deductible for PSA test; 20% copay after \$100 deductible for exam
Glaucoma	Covered (2002) NHIS	Recommended referring high-risk patients for an evaluation	Developmental measure with no target set	N/A	Every 12 months; 20% copay after \$100 deductible

<sup>1</sup> Data from BRFSS.

<sup>2</sup> Data from Annual Survey of Chronic Hemodialysis Centers.

\*\* According to the USPSTF, there is insufficient evidence whether to continue Pap smear testing for women over 65 with consistently normal results, but a case can be made to discontinue screening based on other grounds.

**Sources:** Adapted from Partnership for Prevention, *A Better Medicare for Healthier Seniors: Recommendations to Modernize Medicare Prevention Policies*; MedPAC, *Report to Congress: Assessing Medicare Benefits*. Washington, DC, 2002; United States General Accounting Office, *Medicare: Beneficiary Use of Clinical Preventive Services*. Washington, DC, 2002; Department of Health and Human Services, *Healthy People 2010*. Washington, DC, 2002 (available at <http://www.healthypeople.gov>); US Preventive Services Task Force, "Screening for Prostate Cancer: Recommendations and Rationale," *Annals of Internal Medicine*. 2002, 37(11): 915-6.

<b>Cost to Medicare of Covering Three New Preventive Services</b>		
<b>Services</b>	<b>Net Cost (average per year over 10 years)</b>	<b>Return On The Investment (cumulative over 10 years)</b>
<b>Cholesterol Screening</b>	<b>\$82 Million (savings begin in years 7-10)</b>	<b>62,362 Heart Attacks Prevented 44,912 Strokes Prevented</b>
<b>Tobacco Cessation Counseling</b>	<b>\$19.5 Million (savings begin in years 9-10)</b>	<b>95,000 Life Years Saved</b>
<b>Vision Screening</b>	<b>\$18 Million (savings begin in years 4-10)</b>	<b>21,000 Hip Fractures Prevented 4,400 Forearm Fractures Prevented</b>

**Services** recommended by the U.S. Preventive Services Task Force for persons 65 years and older that are not currently covered by Medicare.

**Net Cost** is the cost of the service minus the cost avoided by the service. The numbers in this column represent the average cost per year over a 10-year period in 2002 dollars. The costs of lipid-lowering drugs for cholesterol screening, the costs of nicotine replacement therapies for tobacco cessation counseling, and the costs of eyeglasses for vision were not considered since these services are not currently covered by Medicare.

**Returns On The Investment:** These represent the expected benefits over a 10-year period. For tobacco cessation counseling, deaths prevented (thus, life years saved) is the best measure available to represent this services' health benefits; the life years saved are the result of cancer cases, heart attacks, strokes, and other fatal diseases avoided.

**Source:** Adapted from Partnership for Prevention, *Covering Preventive Services Under Medicare: A Cost Analysis*.

## Appendix D

### Resources and Links

#### Government Agencies and Resources

Centers for Disease Control and Prevention  
Home page  
[www.cdc.gov](http://www.cdc.gov)  
404-639-3311

*CDC Recommends, Prevention Guidelines System*  
A searchable database of CDC  
recommendations  
[www.phppo.cdc.gov/cdcrecommends](http://www.phppo.cdc.gov/cdcrecommends)

CDC Division of Prevention Research and  
Analytic Methods (DPRAM)  
770-488-8188

*CDC Guide to Community Preventive Services*  
(See Appendix A)  
[www.thecommunityguide.org](http://www.thecommunityguide.org)

Department of Health and Human Services  
(DHHS)  
Home page  
[www.hhs.gov](http://www.hhs.gov)

DHHS Office of Disease Prevention and Health  
Promotion  
<http://odphp.osophs.dhhs.gov>

DHHS “Healthier US Initiative”  
[www.healthierus.gov](http://www.healthierus.gov)

DHHS “Healthy People 2010”  
Detailed goals for the nation  
[www.healthypeople.gov](http://www.healthypeople.gov)

DHHS Healthfinder  
Searchable database of government health-  
related information and activities  
[www.healthfinder.gov](http://www.healthfinder.gov)

Agency for Healthcare Research and Quality  
(AHRQ)  
Home page  
[www.ahrq.gov](http://www.ahrq.gov)

AHRQ’s United States Preventive Services Task  
Force (USPSTF)  
[www.ahrq.gov/clinic/uspstfix.htm](http://www.ahrq.gov/clinic/uspstfix.htm)

AHRQ’s “Putting Prevention into Practice”  
Initiative  
[www.ahrq.gov/clinic/ppipix.htm](http://www.ahrq.gov/clinic/ppipix.htm)

---

#### Organizations

Partnership for Prevention  
Washington, DC  
[www.prevent.org](http://www.prevent.org)

American College of Preventative Medicine  
Washington DC  
[www.acpm.org](http://www.acpm.org)

American Public Health Association  
Washington, DC  
[www.apha.org](http://www.apha.org)

American Association of Health Plans  
[www.aahp.org](http://www.aahp.org)

Blue Cross Blue Shield Association  
[www.bcbsa.com](http://www.bcbsa.com)

Washington Business Group on Health  
[www.wbgh.org](http://www.wbgh.org)

National Institute for Health Care  
Management Foundation  
[www.nihcm.org](http://www.nihcm.org)

## Selected Books, Reports, Issue Briefs, Papers

*Addressing Tobacco in Managed Care: A Resource Guide for Health Plans* (2001, 75 pages)

A publication by the American Association for Health Plans

Can be obtained at [www.aahp.org](http://www.aahp.org)

*Guide to Clinical Preventive Services* (2<sup>nd</sup> Edition; 1996, 933 pages)

Report of the U.S. Preventive Services Task Force, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion

Can be ordered from AHRQ at

[www.ahrq.gov/clinic/prevenix.htm](http://www.ahrq.gov/clinic/prevenix.htm)

Contains complete text of recommendations as of 1995

*Clinician's Handbook of Preventive Services* (2<sup>nd</sup> Edition, 1998, 524 pages)

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion

A publication of AHRQ's "Put Prevention into Practice" Program

Can be ordered at [www.ahrq.gov](http://www.ahrq.gov) or by calling 1-800-358-9295

*Medicare: Use of Preventive Services is Growing but Varies Widely*

U.S. General Accounting Office Report 02-777T  
Released May 23, 2002

Can be obtained at [www.gao.gov](http://www.gao.gov)

*Childhood Obesity – Advancing Effective Prevention and Treatment: An Overview for Health Professionals* (2003, 48 pages)

A publication of the National Institute for Health Care Management Foundation

Can be obtained at [www.nihcm.org](http://www.nihcm.org)

*A Better Medicare for Healthier Seniors: Recommendations to Modernize Medicare's Prevention Policies* (77 pages)

See also: *Covering Preventive Services Under Medicare: A Cost Analysis* (8 pages)

Two reports by Partnership for Prevention, May 2003

Can be obtained at [www.prevent.org](http://www.prevent.org)

*Preventive Services: Helping States Improve Mandates* (2002, 20 pages)

A report by Partnership for Prevention

Can be obtained at [www.prevent.org](http://www.prevent.org)

*Prevention Priorities: A Health Plan's Guide to the Highest Value Preventive Health Services* (2002, 5 pages)

A report by Partnership for Prevention

Can be obtained at [www.prevent.org](http://www.prevent.org)

*Prevention Priorities: Employers' Guide to the Highest Value Preventive Health Services* (2002, 5 pages)

A report by Partnership for Prevention

Can be obtained at [www.prevent.org](http://www.prevent.org)

## Selected Articles

David Atkins, et al., "The Third U.S. Preventive Services Task Force: Background, Methods, and First Recommendations," Supplement to the *American Journal of Preventive Medicine*, April 2001;20(3S).

E-mail: [ajpm@mail.sdsu.edu](mailto:ajpm@mail.sdsu.edu)

Ashley B. Coffield, et al., "Priorities Among Recommended Clinical Preventive Services," *American Journal of Preventive Medicine*, 2001;21(1).

E-mail: [ajpm@mail.sdsu.edu](mailto:ajpm@mail.sdsu.edu)

David E. Nelson, et al., "State Trends in Health Risk Factors and Receipt of Clinical Preventive Services Among US Adults During the 1990s," *Journal of the American Medical Association*, May 22/29, 2002; Vol. 287, No 20: 2659-2667.



**NIHCM**  
FOUNDATION

1225 19th Street, NW  
Suite 710  
Washington, DC 20036  
TEL 202.296.4426  
FAX 202.296.4319  
WEB [www.nihcm.org](http://www.nihcm.org)



Division of Prevention Research  
and Analytic Methods  
4770 Buford Highway – K73  
Atlanta, Georgia 30341  
TEL 770.488.8188  
FAX 770.488.8461  
WEB [www.cdc.gov](http://www.cdc.gov)

