

## Prevention: A Key Indicator of Quality

There is ample evidence to show that increasing use of proven preventive services will result in fewer people suffering from diseases that could have been prevented or treated with less pain at early stages. Also, preventive services are often more cost effective—meaning they provide better value for the dollar—than waiting to treat diseases, and some preventive services even save more money than they cost. Underuse of effective preventive care is a wasted opportunity. The U.S. health care system suffers a quality deficit in part because too many patients do not get the effective preventive care they need when they need it.

**How Cost-Effective is Evidence-Based Preventive Care?** The NCPP’s analysis of the cost effectiveness of 25 recommended preventive services demonstrates that for a relatively small net cost, most of these services produce valuable health benefits. Eighteen of the 25 preventive services evaluated by the NCPP cost \$50,000 or less per quality-adjusted life year (QALY) and 10 of these cost less than \$15,000 per QALY, all well within the range of what is considered a favorable cost-effectiveness ratio. (A QALY is a measure that accounts for both years of life gained and disease and injury avoided.<sup>5</sup>) Six preventive services—advising at-risk adults about regular aspirin use, counseling smokers to help them quit, immunizing children, screening/counseling adults about alcohol misuse, vision screening among older adults, and the pneumococcal immunization for older adults—all save more money than they cost.

### Measuring Cost Effectiveness

Cost effectiveness (CE) measures economic value, or the cost of producing a unit of health, such as a quality-adjusted life year or QALY. A QALY is a measure that accounts for both mortality (years of life lost) and morbidity (quality of life lost due to days lived with sickness).

$$\text{CE} = \frac{\$s \text{ spent} - \$s \text{ saved}}{\text{QALYs saved}}$$

The fewer dollars spent per QALY, the more cost effective the service. If the dollars saved are greater than the dollars spent, the service is cost saving.

By itself, a service’s CE ratio does not indicate whether or not the service is cost effective because there is no specific figure that separates services that are sufficiently cost effective from those that are not. CE ratios must be compared to one another to see which services require the fewest dollars to produce the same unit of health. However, as a general rule of thumb, health care services are considered “cost effective” at less than \$50,000 per QALY.

<sup>5</sup> A **quality-adjusted life year (QALY)** is a year of life adjusted for its quality. Saving one QALY through prevention is equivalent to extending a life for 1 year in perfect health.

The bottom line: A health care system that optimizes use of high-impact, cost-effective preventive services is using its resources efficiently. Low utilization of these high-value preventive services squanders the chance to prevent pain and suffering for fewer dollars compared to waiting to treat diseases after they occur.

<b>Most Cost-Effective Preventive Services*</b>
<b>Cost Saving</b>
Advising at-risk adults to consider taking aspirin daily
Childhood immunizations
Pneumococcal immunization (adults 65+)
Smoking cessation advice and help to quit
Screening adults for alcohol misuse and brief counseling
Vision screening (adults 65+)
<b>\$0 to \$15,000/QALY</b>
Chlamydia screening (sexually active adolescents and young women)
Colorectal cancer screening (adults 50+)
Influenza immunization (adults 50+)
Pneumococcal immunization (adults 65+)
Vision screening in preschool age children
<b>\$15,000 to \$50,000/QALY</b>
Breast cancer screening (women 40+)
Cervical cancer screening (all women)
Cholesterol screening (men 35+ and women 45+)
Counseling women of childbearing age to take folic acid supplements
Counseling women to use calcium supplements
Injury prevention counseling for parents of young children
Hypertension screening (all adults)
<p>*Most cost-effective preventive services among the 25 preventive services recommended by the USPSTF and ACIP that were evaluated by the National Commission on Prevention Priorities.</p> <p>Source: Maciosek MV, Coffield AB, Edwards NM, Goodman MJ, Flottemesch TJ, Solberg LI. Priorities among effective clinical preventive services: results of a systematic review and analysis. <i>Am J Prev Med</i> 2006; 31(1):52-61.</p>

**Why Don't More People Receive the Preventive Services They Need?** Although the reasons are complex, the following are important factors:

- ▶ Many health care providers lack systems or fail to use systems to 1) track their patients to determine who needs preventive services, 2) contact those patients to remind them to get the services, 3) remind themselves to deliver preventive services when they see their patients, 4) ensure the services are delivered correctly and that appropriate referrals and follow-up occur, and 5) make certain that patients understand what they need to do.
- ▶ The U.S. health care system benefits specialty care and acute care treatment at the expense of primary care and prevention, as evidenced by limited investment in developing a prevention-oriented health care workforce and limited training for doctors and other health care providers in delivering preventive care, in particular, how to deliver effective brief counseling messages to change behavior and improve compliance with prescribed medications that prevent disease and death.
- ▶ Demand for preventive services among consumers is weakened by high out-of-pocket costs for preventive services faced by the uninsured and those who have high-deductible insurance plans without exceptions for preventive care. Approximately 46 million Americans have no health insurance coverage at all. Two-thirds of the uninsured are either poor or near-poor, and minorities are more likely to be uninsured than white Americans.<sup>6</sup>
- ▶ Many Americans, particularly minorities, have no connection to a regular source of health care with providers that will help ensure they are getting all the preventive services they need. In a 2006 survey, only 27 percent of Americans ages 18 to 64 reported having a regular doctor or source of health care and a medical home.<sup>7</sup> Three-fourths of whites, African Americans, and Hispanics with medical homes reported getting the health care they need when they need it compared to 38 percent of adults without any regular source of health care.<sup>8</sup>
- ▶ People are often unaware of the preventive services that are recommended for individuals of their age, gender, and risk factors, do not consider themselves to be at-risk, or are uncertain about the effectiveness of certain preventive services. Behavior change is also very challenging. Many people have great difficulty increasing and maintaining their exercise levels, changing and maintaining their diets, and permanently quitting smoking. Some preventive services, such as colorectal cancer screening, can be difficult to prepare for and are time-consuming.

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<sup>6</sup> The Kaiser Commission on Medicaid and the Uninsured. *The Uninsured: A Primer*. October 2006. <http://kff.org/uninsured/7451.cfm>.

<sup>7</sup> A medical home was defined as a health care setting that provides timely, well-organized care with providers who are easy to contact.

<sup>8</sup> Beal AC and Doty MM. *Closing the Divide: How Medical Homes Promote Equity in Health Care: Results From The Commonwealth Fund 2006 Health Care Quality Survey*. The Commonwealth Fund, June 2007.