

## Medicare's Prevention and Drug Benefits Will Work Together to Keep Beneficiaries Healthy

*Preventive Benefits Go Hand in Hand with Medicare Prescription Drug Benefit*

*"Instead of simply treating disease complications after they occur, Medicare will provide just as much support to proactively preventing diseases and managing conditions before they get worse.... So, instead of paying for surgery for bleeding ulcers or dialysis and limb amputations for diabetes complications, Medicare will pay for the prescription drugs that avoid these cost-intensive procedures. That's better for our health care system, better for patients, and better for taxpayers."<sup>1</sup>*

—Centers for Medicare & Medicaid Services (CMS)  
Administrator Mark B. McClellan

Disease prevention is of paramount importance for public health in the United States because of the increasing prevalence of and spending on conditions such as obesity, diabetes, and heart disease. According to the 2003 U.S. Department of Health and Human Services (HHS) report *Prevention Makes Common "Cents,"* "Expenditures for health care in the United States continue to rise. ... Much of these costs can be attributed to the diagnosis and treatment of chronic diseases and conditions such as diabetes, obesity, cardiovascular disease and asthma."<sup>2</sup> The report continues by stating that "A much smaller amount is spent on preventing these conditions. There is accumulating evidence that much of the morbidity and mortality associated with these chronic diseases may be preventable."<sup>3</sup>

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) will, among other things, provide seniors and people with disabilities with a prescription drug benefit starting in 2006. In January 2005, the MMA began covering an initial preventive physical examination upon enrollment, as well as periodic cardiovascular and diabetes screening tests. Thus, screening is now offered through Medicare for three of most expensive and preventable conditions: diabetes, hypertension, and high cholesterol.

Of particular relevance for the Medicare population is the mounting evidence which finds all three of these conditions are "undertreated" with recommended prescription medicines.<sup>4</sup> Screening and treatment for conditions like diabetes, hypertension, and high cholesterol will undoubtedly help seniors address these unmet health needs. The new preventive benefits go hand in hand with the Medicare prescription drug benefit and will help seniors optimize their care.

In light of the increasing prevalence of diabetes, hypertension, and high cholesterol; the growing population eligible for Medicare; and the "undertreated" population, diagnoses for these conditions are bound to increase. Preventive care and screening will undoubtedly bring more patients into treatment. A 2004 study by MEDTAP International, "The Value

of Investment in Health Care,” found that innovations in health care treatment and technologies during the 1980–2000 time period had reduced disability rates among the over-65 population by 25 percent. It stands to reason, then, that improving Medicare by providing greater access to high-quality preventive and diagnostic care will have a significant positive effect on the senior population.<sup>5</sup>

By encouraging preventive checkups, Medicare will link beneficiaries with advice from health care professionals on

*“Beginning in 2005, all newly enrolled Medicare beneficiaries will be covered for an initial physical examination, all beneficiaries will be covered for cardiovascular screening blood tests, and those at risk will be covered for a diabetes screening test in order to increase early detection and treatment of this life-threatening condition.”<sup>6</sup>*

—Centers for Medicare & Medicaid Services,  
2004 Press Release

**Cardiovascular Screening Tests**—Medicare provides coverage for cardiovascular screening blood tests, including tests for total cholesterol, high-density lipoprotein, and triglycerides. Beneficiaries will be allowed to be screened every five years in keeping with recommendations from the U.S. Preventive Services Task Force (USPSTF). There will be no deductible or co-pay for these tests.

**Diabetes Screening Tests**—Medicare provides coverage for diabetes screening tests for beneficiaries at risk for diabetes or diagnosed with pre-diabetes. This includes a fasting plasma glucose test and post-glucose challenges tests. Beneficiaries eligible for this screening will not have to meet a deductible or co-pay for the test. The MMA allows for diabetes screening tests up to twice a year.<sup>7</sup>

*“Seniors who embrace prevention can literally add years to their lives.”<sup>8</sup>*

—Then Health and Human Services Secretary  
Tommy Thompson

diet and exercise and will ensure that many seniors receive the prescription medicines that are the best means for treating their conditions. An increased emphasis on prevention means more proactive treatment for diabetes, hypertension, and high cholesterol and a greater utilization of medications to treat and prevent escalation of these conditions.

Treating individuals with these conditions not only helps patients but can also save the health system dollars. Not only can beneficiaries enjoy a greater quality of life, but the system will benefit from cost offsets gained through reduced hospitalizations and long-term care stays.

The preventive benefit takes a needed step toward proactively screening for, diagnosing, and treating serious chronic conditions. The Part D benefit will play a crucial role in providing needed access to medicines and 21st century technologies and health care approaches used to treat these chronic conditions.

These preventive benefits embody a profound change in Medicare’s mission. Conceived as a program that would help prevent individuals and families from experiencing financial calamity upon the onset of illness, the components of the MMA marry modern-day health care capabilities with the popular Medicare program to create a new entity that not only pays bills but actively keeps beneficiaries healthy.

## Increased Focus on Prevention and Early Treatment Leads to Increased, Appropriate, and Necessary Use of Medicines

As screening and prevention lead to increases in the number of people diagnosed with conditions such as diabetes, hypertension, and high cholesterol, use of prescription medicines will also increase. This is especially relevant to the Medicare population since use of medicines by this population is often suboptimal. According to a May 2004 study, The Quality of Pharmacologic Care for Vulnerable Older Patients, “In older patients, failures to prescribe indicated medications, monitor medications appropriately, document necessary information, educate patients, and maintain continuity are more common prescribing problems than is use of inappropriate drugs.”<sup>9</sup>

*“Congress already took a major step forward with the new benefits outlined in the Medicare Modernization Act of 2003. We improved payments to rural health providers and added a much-needed prescription drug benefit to keep the program strong for this generation and generations to come. We put a heavy emphasis on preventive health care and better management of beneficiaries with chronic illnesses. That’s much better for Medicare beneficiaries and also costs much less than treating illnesses that go undetected. We need to continue building on the successes of the most significant improvements to Medicare in history by making sure the new law works as Congress intended.”<sup>10</sup>*

—Senator Chuck Grassley, Chairman of the Senate Committee on Finance

## Studies Report Prescription Medicines Are Underused for Treatment of Diabetes, Hypertension, and High Cholesterol

Evidence is emerging that large numbers of patients underuse needed medical care, including prescription medicines, for many serious health conditions. According to a *Health Affairs* study, published in 2004, that examined the “growing philosophical conflict over the abundance and inequities that characterize the U.S. health care system,” there is “evidence of significant underuse [of prescription drugs].”<sup>11</sup> A literature search by the study’s author found little information on overuse of pharmaceuticals but considerable information on underuse. The preponderance of published medical literature and clinical guidelines, according to the article, compels the expansion of pharmaceutical use among Americans.

This view is supported by a landmark RAND Health study published in *The New England Journal of Medicine* in June 2003, which found that prescription medications were underused in the treatment of seven out of nine conditions studied.<sup>12</sup> The seven conditions characterized by underuse of medicines included several that clearly involve secondary prevention, including asthma,

cerebrovascular disease, congestive heart failure (CHF), diabetes, hypertension, and high cholesterol. These conditions produce many avoidable deaths, along with costly avoidable emergency room visits, hospitalizations, and nursing home admissions. Three of these conditions—diabetes, hypertension, and high cholesterol—will be screened for under the new preventive services benefits now covered by Medicare.

When conditions go undiagnosed, medicines are underused and patients are untreated, and emergency care, hospitalizations, and total health spending increase.<sup>13,14,15</sup> Medicare’s new features can ensure that conditions are caught at an early stage and treated appropriately with medications. According to CMS, “There is no question that prescription drugs have significantly improved the treatment and management of many major conditions, including: stroke (anticoagulant therapy), heart disease (antihypertensive medications), and heart failure (cholesterol-lowering statins). These drugs significantly reduce inpatient admissions and lengths of stay. They reduce future costs and, far more importantly, save lives.”<sup>16</sup> Treatment is especially important because of the high cost of not treating conditions such as diabetes, hypertension, and high cholesterol.

*“Evaluating blood pressure in adults is an effective way to identify individuals at risk for heart disease and provides an opportunity to intervene before the disease occurs. Screening for colon cancer using colonoscopy to detect pre-cancerous polyps is another example of secondary prevention. The bottom line is that individuals who receive primary or secondary prevention services have no obvious signs of illness; in clinical terms, they are asymptomatic.”<sup>17</sup>*

—Carolyn Clancy, M.D., Director, Agency for Healthcare Research and Quality

## Diabetes

If people with diabetic conditions do not receive early diagnosis and proper treatment and management of their disease, they can experience long-term complications such as cardiovascular disease, blindness, nerve damage, kidney

*“Patients with diabetes mellitus are at a high risk of developing cardiovascular disease, and therefore stand to benefit greatly from a preventive strategy.”<sup>18</sup>*

—“Current Recommendations for Prevention of Cardiovascular Disease in Patients with Diabetes Mellitus”

failure, heart attack, and death. Medicare’s new diabetes screening can save lives and help many people lead active, healthy lives.

Patients with type 2 diabetes can benefit in a number of ways from medicines and technological advances as a component of prevention. Preventive tools, such as self-monitoring blood glucose kits and more accurate hemoglobin A1c tests, can prevent progression of the disease to later stages and the clinical sequelae of that progression, such as renal failure requiring dialysis, blindness, and infected foot ulcers necessitating amputations. Prevention that targets existing disease can also prevent or slow the recurrence of diabetes-related events, such as hospitalizations or complications.

Angiotensin-converting enzyme (ACE) inhibitors, for example, are recommended to prevent or reduce kidney disease in diabetic patients with microalbuminuria, a condition in which the presence of protein in the urine leads to kidney damage. In recent clinical trials, ACE inhibitors have been shown to slow kidney damage associated with diabetes, while also reducing death rate from heart attack and stroke by 25 percent.<sup>19</sup> Additionally, April 2004 guidelines by the American College of Physicians stated that patients with type 2 diabetes should start taking statins as a preventive measure against heart disease, whether or not they have high cholesterol levels, if they have one of the following risk factors: 55 years of age or older, high blood pressure, high low-density lipoprotein (LDL) levels, smoking, obesity, inactivity, or existing heart disease.<sup>20</sup>

Although treatment of diabetes and comorbid conditions with prescription drugs is well supported, there is still significant undertreatment. According to a May 2003 article published in the *Journal of the American Geriatrics*

*Society*, “Income-Related Differences in the Use of Evidence-Based Therapies in Older Persons with Diabetes Mellitus in For-Profit Managed Care,” several medications reduce complications and death from diabetes, including statins to lower cholesterol, aspirin to prevent first-time or recurrent cardiovascular disease, and ACE inhibitors in those with diabetic nephropathy (diabetes-related kidney disease).<sup>21</sup> However, “these recommended medications are underused among elderly men and women who have diabetes, especially those with low incomes,” according to Arleen F. Brown, M.D., Ph.D., of the University of California, Los Angeles.<sup>22</sup>

These findings are consistent with a study that compared ACE inhibitor use in patients with type 2 diabetes enrolled in Tennessee’s state managed care plans at one and three years after clinical practice guidelines were published. According to the study, “...although ACE inhibitor use improved, fewer than 50 percent of patients received appropriate therapy.”<sup>23</sup>

Finally, a study of insured persons with type II diabetes found that between 17 and 30 percent are not treated with any anti-diabetic medicines or insulin over the course of an entire year. Patients who were entirely untreated with medicines had higher diabetes-related health costs and more hospitalizations than patients who had at least some treatment with medicines during the year. All patients included in the study, conducted by PharMetrics and commissioned by the Pharmaceutical Research and Manufacturers Association (PhRMA), had health insurance, including insurance coverage for prescription drugs.<sup>24</sup>

The results of this study suggest that a significant proportion of insured patients are untreated or undertreated, including important subgroups with surprisingly high rates of comorbid and disease-related complications. In addition, less than one-fourth of insured patients have acceptable levels of glycemic control, and many patients with partial or poor glycemic control are not receiving prescription drug therapy.

Despite growing evidence that diabetes disease management programs result in improved health outcomes, opportunities exist to improve the effectiveness of these interventions.<sup>25</sup> Adherence to treatment regimens and diet and exercise plans will not only make life with diabetes more manageable, but will also save the health system from more costly complications of this disease.

*“The longer people live with uncontrolled diabetes, the greater their risk for developing vascular complications, including retinopathy, end-stage renal disease, neuropathy and coronary heart disease. These complications are not only debilitating but expensive.”<sup>26</sup>*

—American College of Endocrinology and  
American Association of Clinical Endocrinologists  
Consensus Statement

## Cardiovascular Disease

Prevention of hypertension and of lipid disorders, such as high cholesterol, that can cause heart attacks and stroke, improve patient quality of life and help offset the need for costly medical procedures, such as coronary artery procedures. Early treatment of hypertension can prevent damage to the blood vessels.

Despite this evidence, there is still significant undertreatment of hypertension and high cholesterol. For example, a 2002 study, “Undertreatment of Hypertension: A Dozen Reasons,” found that despite a “better understanding of the benefits of controlling hypertension...blood pressure (BP) control in over 70 percent of patients remains inadequate.”<sup>27</sup> The study concludes by stating, “Hypertension is recognized as the most common chronic condition, and there is simply no excuse to treat this condition half-heartedly.” According to the study, the treatment of hypertension should follow “the clear-cut message from the Joint National Committee on the Detection, Evaluation and Treatment of Hypertension,” which recommends drug therapy and dietary changes for the management of this condition.

A study of insured persons with high cholesterol recently found that over half failed to receive cholesterol-lowering medicines. All patients in the study had health insurance, including insurance coverage for prescription drugs. The findings of this two-part study, conducted by PharMetrics and commissioned by PhRMA, revealed substantial undertreatment of those patients with hypercholesterolemia, which has tremendous implications for a patient’s future health status, including the possibility of

dramatic cost increases for managing complications resulting from untreated hypercholesterolemia.<sup>28</sup>

*“... nearly one-third of people age 65 or older whom the survey [Centers for Disease Control and Prevention National Health and Nutrition Examination Survey] found to have high cholesterol measurements said they had not before been told by a physician or other health professional that they had high cholesterol. Projected nationally, this percentage translates into about 2.1 million people who may have had high cholesterol without knowing it.”<sup>29</sup> [Figure 1]*

—“Medicare Preventive Services: Most Beneficiaries Receive Some but Not All Recommended Services”

According to the HHS report *Prevention Makes Common “Cents,”* “Given the age effects of CVD [cardiovascular disease], it poses a substantial economic burden on Medicare: in 1999, \$26.3 billion in payments were made to hospitals for Medicare beneficiaries’ expenses due to cardiovascular problems. That was an average of \$7,883 per discharge.”<sup>30</sup> While early screening, prevention, and treatment for cardiovascular disease may increase spending on prescription medicines, overall savings to the health system could be substantial. The MEDTAP International study showed, for example that increased use of antiplatelet therapy for the prevention of stroke in high risk patients can save the health care system two to six dollars for every dollar spent.<sup>31</sup>

## Prevention, Treatment, and Medication Adherence Can Save Dollars and Lives

Treating patients with conditions such as diabetes, obesity, and cardiovascular disease improves quality of life and can save the health system dollars. According to a study conducted by Milliman USA and commissioned by PhRMA, correcting underuse of medicines for treatment of

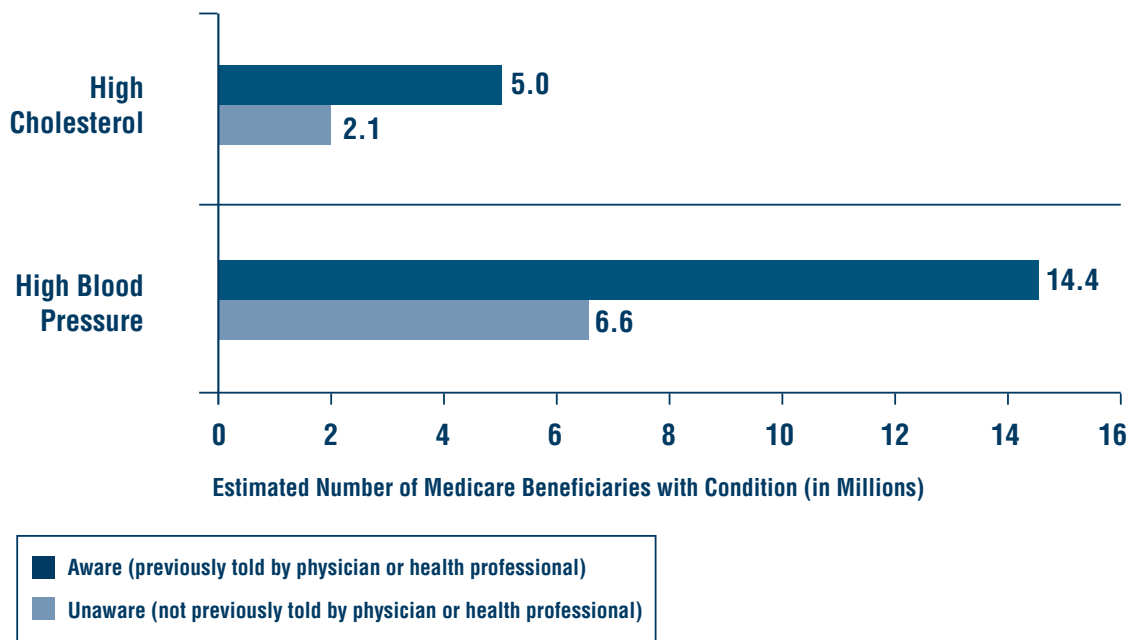
hypertension in the Medicare population, beginning in 2006, would annually avoid 77,000 deaths, 115,000 strokes, 106,000 coronary artery events, 46,000 fewer skilled nursing facility and recovery facility admissions, and 4,000 long-term care placements, at no additional overall cost to Medicare (since the savings on Parts A & B offset the cost of treating currently untreated and under-treated hypertension).<sup>32</sup>

Another recent study published in *Annals of Internal Medicine* found that Medicare first-dollar coverage of ACE inhibitors for beneficiaries with diabetes appears to extend life and reduce Medicare program costs. The study concludes that “While concern mounts over increasing Medicare costs, our analysis suggests that Medicare adoption of first-dollar coverage of ACE inhibitors for beneficiaries with diabetes not only saves lives but actually decreases total Medicare costs. Cost savings remained even when we conservatively compared first-dollar coverage of

ACE inhibitors with prescription coverage provided by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003.”<sup>33</sup>

Increased medication adherence can also reduce overall medical costs for diabetes and cardiovascular conditions. A recent study released by Medco Health Solutions, Inc., and published in *Medical Care* found that increased compliance or adherence to prescription drug treatment regimens can result in reduction of medical costs. For diabetes, the average incremental drug cost for a 20 percent increase in drug utilization is \$177, and the associated disease related medical cost reduction is \$1,251, for a net savings of \$1,074 per patient (an average return on investment [ROI] of 7.1:1). For cardiovascular conditions, the average ROI for a 20 percent increase in drug utilization is 4.0:1 (hypertension) and 5.1:1 (hypercholesterolemia). The study concludes that while medicines represent a “small fraction of total healthcare costs for these

**Figure 1: Estimated Number of Medicare Beneficiaries Age 65 or Older Who Were Aware or Unaware That They Had High Blood Pressure or High Cholesterol, 1999–2000**



Source: J. Heinrich, Director, Health Care—Public Health Issues, U.S. Government Accountability Office, “Medicare Preventive Services: Most Beneficiaries Receive Some but Not All Recommended Services,” testimony before the Subcommittee on Health, Committee on Energy and Commerce, House of Representatives (Washington, DC), 21 September 2004.

conditions, they have high leverage—a small increase in drugs costs (associated with improved adherence) can produce a much larger reduction in medical costs.”<sup>34</sup>

Quality of life improvements and cost offsets gained through prevention and treatment of patients with diabetes and cardiovascular diseases have the potential to be real successes for the new Medicare Part D benefit and the seniors and disabled it covers. The new Medicare preventive and prescription drug benefit are mutually reinforcing components of a strengthened and modernized Medicare program. The preventive benefit provides a mechanism to catch chronic diseases early while the Part D benefit will provide savings and coverage for prescription drugs where needed to treat these conditions.

*“There is accumulating evidence that much of the morbidity and mortality associated with these chronic diseases may be preventable. These new benefits can be used to screen Medicare beneficiaries for many illnesses and conditions that, if caught early, can be treated and managed, and can result in far fewer serious health consequences.”<sup>35</sup>*

—Centers for Medicare & Medicaid Services

## Conclusion

As the population ages, and as CMS gears up to provide new preventive, screening, and prescription drug coverage for Medicare enrollees, prevention and early treatment of disease will become a significant opportunity for better, more efficient care.

Screening, prevention, and disease management programs, which rely on diet, exercise, and medicines to treat and better manage illnesses, are increasingly a part of the health care solution. If medicines are needed to treat these conditions, the Part D benefit will provide Medicare beneficiaries with needed coverage. Appropriate prevention and treatment of diabetes, hypertension, and high cholesterol can help avoid costly emergency room visits, hospitalizations, and nursing home admissions while improving seniors’ quality of life. This combination of prevention and treatment makes the new Medicare prescription drug benefit a real success for seniors.

## Notes

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<sup>2</sup> U.S. Department of Health and Human Services, *Prevention Makes Common “Cents”* (Washington, DC: U.S. Department of Health and Human Services, 2003).

<sup>3</sup> *Ibid.*

<sup>4</sup> E. A. McGlynn et al., “The Quality of Health Care Delivered to Adults in the United States,” *New England Journal of Medicine* 348, no. 26 (23 June 2003): 2635–2645.

<sup>5</sup> MEDTAP International, Inc., *The Value of Investment in Health Care* (Bethesda, MD: MEDTAP International, Inc., 2004), <http://www.medtap.com/Products/policy.cfm>.

<sup>6</sup> Centers for Medicare & Medicaid Services, “Medicare’s Proposed Regulation to Implement New Preventive Services Under Medicare Modernization Act,” press release, 27 July 2004, <http://www.cms.hhs.gov/media/press/release.asp?Counter=1135> (accessed 13 April 2005).

<sup>7</sup> Centers for Medicare & Medicaid Services, *Medicare Preventive Services: Expanded Benefits* (Washington, DC: CMS, 28 January 2005), [http://www.cms.hhs.gov/medlearn/expanded\\_benefits\\_01-28-05.pdf](http://www.cms.hhs.gov/medlearn/expanded_benefits_01-28-05.pdf) (accessed 13 April 2005).

<sup>8</sup> J. Abrams, “Feds Tout Medicare’s Preventive Benefits,” *Miami Herald*, 10 January 2005.

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<sup>16</sup> J. D. Kleinke, as quoted in Centers for Medicare & Medicaid Services, *Improving Beneficiary Health Through Up-to-Date Medicare Coverage*, 18 January 2005, [http://www.cms.hhs.gov/medicarereform/issuepapers/title1and2/files/issue\\_paper\\_16\\_-\\_improving\\_beneficiary\\_health.pdf](http://www.cms.hhs.gov/medicarereform/issuepapers/title1and2/files/issue_paper_16_-_improving_beneficiary_health.pdf) (accessed 13 April 2005).

<sup>17</sup> C. Clancy, testimony before the House Energy and Commerce Subcommittee on Health (Washington, DC): 21 September 2004.

<sup>18</sup> C. J. Hupfeld and G. A. Wong, “Current Recommendations for Prevention of Cardiovascular Disease in Patients with Diabetes Mellitus,” *Preventive Cardiology* 6, no. 1 (2003): 34–37.

<sup>19</sup> National High Blood Pressure Education Program, “The Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure,” *Archives of Internal Medicine* 157 (1997): 2413–2446.

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