CONGRESSIONAL BUDGET OFFICE
U.S. Congress
Washington, DC 20515

Douglas W. Elmendorf, Director

August 7, 2009

Honorable Nathan Deal
Ranking Member
Subcommittee on Health
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Congressman:

This letter responds to the question you asked at a July 16, 2009, committee markup concerning the Congressional Budget Office's (CBO's) analysis of the budgetary effects of proposals to expand governmental support for preventive medical care and wellness services. Specifically, you asked whether the agency's scoring methods reflect potential reductions in federal costs from improvements in health that might result from expanded support for those activities.[1]

Preventive Medical Care

Preventive medical care includes services such as cancer screening, cholesterol management, and vaccines. In making its estimates of the budgetary effects of expanded governmental support for preventive care, CBO takes into account any estimated savings that would result from greater use of such care as well as the estimated costs of that additional care. Although different types of preventive care have different effects on spending, the evidence suggests that for most preventive services, expanded utilization leads to higher, not lower, medical spending overall.

That result may seem counterintuitive. For example, many observers point to cases in which a simple medical test, if given early enough, can reveal a condition that is treatable at a fraction of the cost of treating that same illness after it has progressed. In such cases, an ounce of prevention improves health and reduces spending—for that individual. But when analyzing the effects of preventive care on total spending for health care, it is important to recognize that doctors do not know beforehand which patients are going to develop costly illnesses. To avert one case of acute illness, it is usually necessary to provide preventive care to many patients, most of whom would not have suffered that illness anyway. Even

[1] For additional information on both topics, see Congressional Budget Office, *Key Issues in Analyzing Major Health Insurance Proposals* (December 2008), pp. 132–139.

when the unit cost of a particular preventive service is low, costs can accumulate quickly when a large number of patients are treated preventively. Judging the overall effect on medical spending requires analysts to calculate not just the savings from the relatively few individuals who would avoid more expensive treatment later, but also the costs for the many who would make greater use of preventive care.[2] As a result, preventive care can have the largest benefits relative to costs when it is targeted at people who are most likely to suffer from a particular medical problem; however, such targeting can be difficult because preventive services are generally provided to patients who have the potential to contract a given disease but have not yet shown symptoms of having it.

Researchers who have examined the effects of preventive care generally find that the added costs of widespread use of preventive services tend to exceed the savings from averted illness. An article published last year in the *New England Journal of Medicine* provides a good summary of the available evidence on how preventive care affects costs.[3] After reviewing hundreds of previous studies of preventive care, the authors report that slightly fewer than 20 percent of the services that were examined save money, while the rest add to costs. Providing a specific example of the benefits and costs of preventive care, another recent study conducted by researchers from the American Diabetes Association, the American Heart Association, and the American Cancer Society estimated the effects of achieving widespread use of several highly recommended preventive measures aimed at cardiovascular disease—such as monitoring blood pressure levels for diabetics and cholesterol levels for individuals at high risk of heart disease and using medications to reduce those levels.[4] The researchers found that those steps would substantially reduce the projected number of heart attacks and strokes that occurred but would also increase total spending on medical care because the ultimate savings would offset only about 10 percent of the costs of the preventive services, on average. Of particular note, that study sought to capture both the costs and benefits of providing preventive care over a 30-year period.

Of course, just because a preventive service adds to total spending does not mean that it is a bad investment. Experts have concluded that a large fraction of preventive care adds to spending but should be deemed "cost-effective," meaning that it provides clinical benefits that justify those added costs: Roughly 60 percent of the preventive services examined in the review cited above have additional

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[2] In the case of screening tests, additional spending may also arise from treatment of newly diagnosed conditions as well as treatment stemming from tests yielding false positive results—that is, results indicating that a disease is present even though it is not.

[3] Joshua T. Cohen, Peter J. Neumann, and Milton C. Weinstein, "Does Preventive Care Save Money? Health Economics and the Presidential Candidates," *New England Journal of Medicine*, vol. 358, no. 7 (February 14, 2008), pp. 661–663.

[4] Richard Kahn and others, "The Impact of Prevention on Reducing the Burden of Cardiovascular Disease," *Circulation,* vol. 118 (July 28, 2008), pp. 576–585.

costs that many in the health care community consider to be reasonable relative to their clinical benefits. Still, providing that preventive care would represent a net use of resources rather than a source of funding for other activities. (About 20 percent of the services reviewed have costs that are large relative to their benefits, and a small fraction actually impair health while adding to costs.)

That pattern is not unique to preventive services. Treatments for existing medical conditions range from those that save money to those that cost money in much the same way that preventive services do: About 20 percent save money, and about 60 percent have costs that many consider reasonable relative to their benefits, according to the study cited above. Thus, not only preventive services but medical services more generally could be evaluated in order to encourage high-value services of both types and discourage low-value ones. (Note that with respect to both preventive care and treatments, the review encompassed only those approaches that had been carefully studied, and not the whole spectrum of each type of service.)

Even if the provision of preventive medical care saves money, potential savings from expanded federal support might be limited depending on how frequently that service is currently provided. Many studies of preventive care compare the costs and benefits of a preventive service with the costs and benefits of doing nothing. In practice, of course, a great deal of preventive medicine is already being performed—examples include periodic screening for colon or breast cancer, the use of cholesterol-lowering drugs that help prevent serious heart disease, and the use of vaccines—and many insurance plans already cover certain preventive services at little or no cost to enrollees.

Consequently, a new government policy to encourage prevention could end up paying for preventive services that many individuals are already receiving—which would add to federal costs but not reduce total future spending on health care. In particular, Medicare already covers preventive services that have been shown to reduce net costs. Moreover, legislation enacted last summer authorizes Medicare to add coverage of preventive services that improve health, including those that also reduce costs. For their part, private insurers are likely to be motivated to cover services that are shown to reduce costs in the short run, so the potential to increase the use of such services among privately insured individuals is especially limited. However, the turnover that occurs as individuals change jobs and switch insurers may discourage insurers from subsidizing preventive care that takes a long time to pay off, because the initial insurers may not be the ones to realize the resulting benefits.

A further consideration affecting the budgetary impact of proposals is that some types of preventive care may increase longevity. Of course, that effect reinforces the desirability of such care, but it also could add to federal spending in the long run: Social Security outlays rise when people live longer, and Medicare outlays may rise because, even if a preventive service lowers a beneficiary's risk of one

illness, a longer lifespan allows for more time to incur other health care expenses associated with age.

In sum, expanded governmental support for preventive medical care would probably improve people's health but would not generally reduce total spending on health care. However, government funding for some specific types of preventive care might lower total spending. In its estimates, CBO seeks to capture the likely future effects on the budget on a case-by-case basis.

Wellness Services

Wellness services include efforts to encourage healthy eating habits and exercise and to discourage bad habits such as smoking. As with preventive care, CBO's estimates of the budgetary effects of expanded governmental support for wellness services endeavor to account for any savings that would result from greater use of those services as well as the costs of those services. However, evidence regarding the effect of wellness services on subsequent spending on health care is limited, and CBO is continuing to evaluate the evidence that does exist.

Where CBO has identified evidence about the effects on future medical spending of broader government policies that encourage better health, the agency tries to include those effects in its analysis. For example, CBO's estimates of the budgetary effects of reduced tobacco use (from a higher excise tax, for example) include a reduction in Medicaid spending because less smoking would result in fewer low-birthweight babies, who have higher costs at birth and afterward.

More generally, however, designing government policies that are effective at inducing people to be healthier is challenging. Even successful efforts might take many years to bear fruit and could involve significant costs. Moreover, many employers already support some wellness services for their employees, and new government efforts to encourage such services could end up paying for services that some individuals are already receiving—which would add to federal costs but not reduce total future spending on health care. As with preventive medicine, the net budgetary effect of government support for wellness services depends on the balance of two factors—the reduction in government spending for people who reduce their future use of medical care and the costs to the government of providing or subsidizing wellness services.

One notable success story in improving health is the large reduction in smoking that has occurred in the United States over the past several decades: The fraction of adults who smoke today is roughly half of what it was in 1965. But public policies that discouraged smoking took decades to develop, implement, and reach fruition. Obesity, which is perhaps the most pressing public health problem facing the country, is probably even more difficult to address. Unlike smoking, which involves a unique substance that is not healthy in any quantity, obesity is the end result of several interacting factors that are not all intrinsically unhealthy. One of those factors is obviously diet, which can be hard to regulate because many foods

are safe to eat in moderation. Another key factor is lack of exercise, a bad habit that—like a poor diet—can be difficult for individuals to change and is particularly difficult for policymakers to influence. Approaches for losing weight reflect those difficulties: A variety of interventions appear to succeed in the short run, but relatively few participants are able to maintain their weight loss for a long period of time. Keeping to a lower weight may require longer-lasting, and potentially more expensive, approaches.

One recent study that analyzed the interactions of different chronic conditions and the costs of treating them—but did not address the costs of avoiding the conditions—found that cutting obesity rates in half would reduce total medical spending by the elderly Medicare population by roughly 10 percent in 2030.[5] However, the study also summarized other researchers' findings that, although better diets and increased physical activity lead to weight loss, "the majority of patients regain the initial weight loss within two to five years, [so] attention has thus focused on more intensive interventions to sustain weight loss." Another recent study estimated that the annual medical burden of obesity is now almost 10 percent of all medical spending and, specifically, that Medicare and Medicaid spending would be about 10 percent lower in the absence of obesity.[6] However, the article also noted, "The extent to which greater use of obesity treatments would reduce spending in either the short or the long run remains unknown. The same is true for prevention. Many successful obesity prevention efforts are likely to be cost-effective … but not cost saving. From a public health perspective, … these interventions may still be worth pursuing."

In an effort to improve health and reduce medical costs, many employers—particularly large employers—offer their workers wellness programs designed to encourage healthy living.[7] Those programs include nutrition and weight loss programs, discounts for gym membership, smoking cessation programs, and other personal health coaching. Although some case studies suggest that certain wellness programs reduce subsequent medical care, little systematic evidence exists. The findings from case studies may not be applicable to programs that would be implemented more broadly, either because the characteristics of the affected people may be different or because employers' adoption of wellness programs has been combined sometimes with other changes in health insurance (such as changes in payments to providers or changes in employees' cost-

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[5] Dana P. Goldman and others, "The Value of Elderly Disease Prevention," *Forum for Health Economics and Policy,* vol. 9, no. 2 (2006), www.bepress.com/fhep/biomedical_research/1/.

[6] Eric A. Finkelstein and others, "Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates," *Health Affairs,* Web Exclusive (2009), pp. w822–w831.

[7] Steven G. Aldana, "Financial Impact of a Comprehensive Multisite Workplace Health Promotion Program," *Preventive Medicine,* vol. 40 (2005), pp. 131–137.

sharing).[8] Identifying the effects of wellness services on health is especially difficult because those effects may not emerge for years: According to a review of the literature in 2001, studies of wellness activities generally follow participants for a few years—long enough to change some risk factors but not usually long enough to generate significant reductions in disease.[9] Because the evidence about such programs continues to evolve, CBO will continue to examine that evidence closely in evaluating specific proposals—the effects of which could depend very importantly on the proposals' design.

Scorekeeping Rules and Procedures

Beyond the substantive factors that can limit the effect of expanded governmental support for preventive medical care and wellness services on future government spending on health care, budget "scorekeeping" rules specify that only certain types of spending effects can be considered for purposes of Congressional budget enforcement. Scorekeeping rules were set forth by the Congress in the conference report for the Balanced Budget Act of 1997 and are updated occasionally upon agreement by the full group of "scorekeepers," a group that consists of the House and Senate Committees on the Budget, the Congressional Budget Office, and the Office of Management and Budget. The purpose of those rules is to ensure consistent budgetary treatment across programs and over time.

Two particular scorekeeping rules could affect provisions that provide funding for preventive care or wellness services. They prohibit counting any changes in mandatory spending as a result of changes in the amount of mandatory funding for administration or program management or in the amount of discretionary appropriations for any activity. (A mandatory spending program is one that does not require annual appropriations—for example, Medicare and Medicaid; discretionary programs are funded each year in an appropriation bill—including, for example, the research programs of the National Institutes of Health.) The rules were adopted in part to avoid situations in which hoped-for, but quite uncertain, savings are used to offset near-term, certain spending increases or revenue decreases in the same legislation.

As a result, even when new prevention and wellness activities funded from discretionary appropriations would, in CBO's judgment, generate eventual savings in Medicare or Medicaid, those savings would not be credited to the appropriation action as part of the budget scorekeeping process. Some legislation would authorize such appropriations, but not provide them, leaving that action for future appropriation bills. Because such legislation would not actually provide funding for prevention or wellness activities, it too could not be credited with

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[8] See, for example, Victoria Colliver, "Preventive Health Plan May Prevent Cost Increases," *San Francisco Chronicle* (February 11, 2007).

[9] Steven G. Aldana, "Financial Impact of Health Promotion Programs: A Comprehensive Review of the Literature," *American Journal of Health Promotion*, vol. 15, no. 5 (May-June 2001), pp. 296–320.

savings in mandatory programs. However, once an appropriation bill becomes law, any estimated savings in Medicare or Medicaid are factored into CBO's baseline projections; consequently, any realized savings in such cases will in fact reduce budget deficits (unless they are used for other purposes).

I hope that you find this information useful. If you have any further questions, please contact me or my staff. The CBO contacts are Jim Baumgardner and Colin Baker.

Sincerely,

Douglas W. Elmendorf

Douglas W. Elmendorf
Director

cc: Honorable Frank Pallone, Jr.
Chairman
Subcommittee on Health

Honorable Henry A. Waxman
Chairman
Committee on Energy and Commerce

Honorable Joe Barton
Ranking Member
Committee on Energy and Commerce