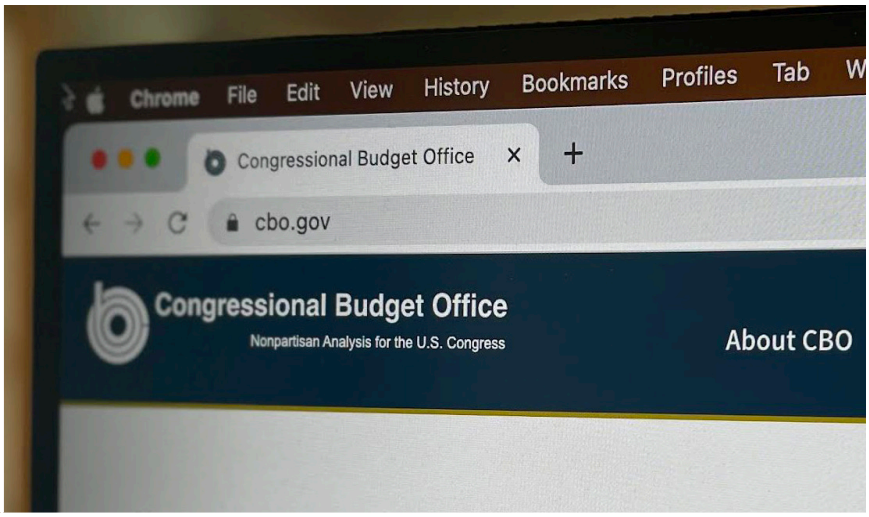



# Budgeting for Disease Prevention and Health Promotion: Improving the Federal Scorekeeping Process

HEALTH, MEDICINE & SOCIETY
aspen institute

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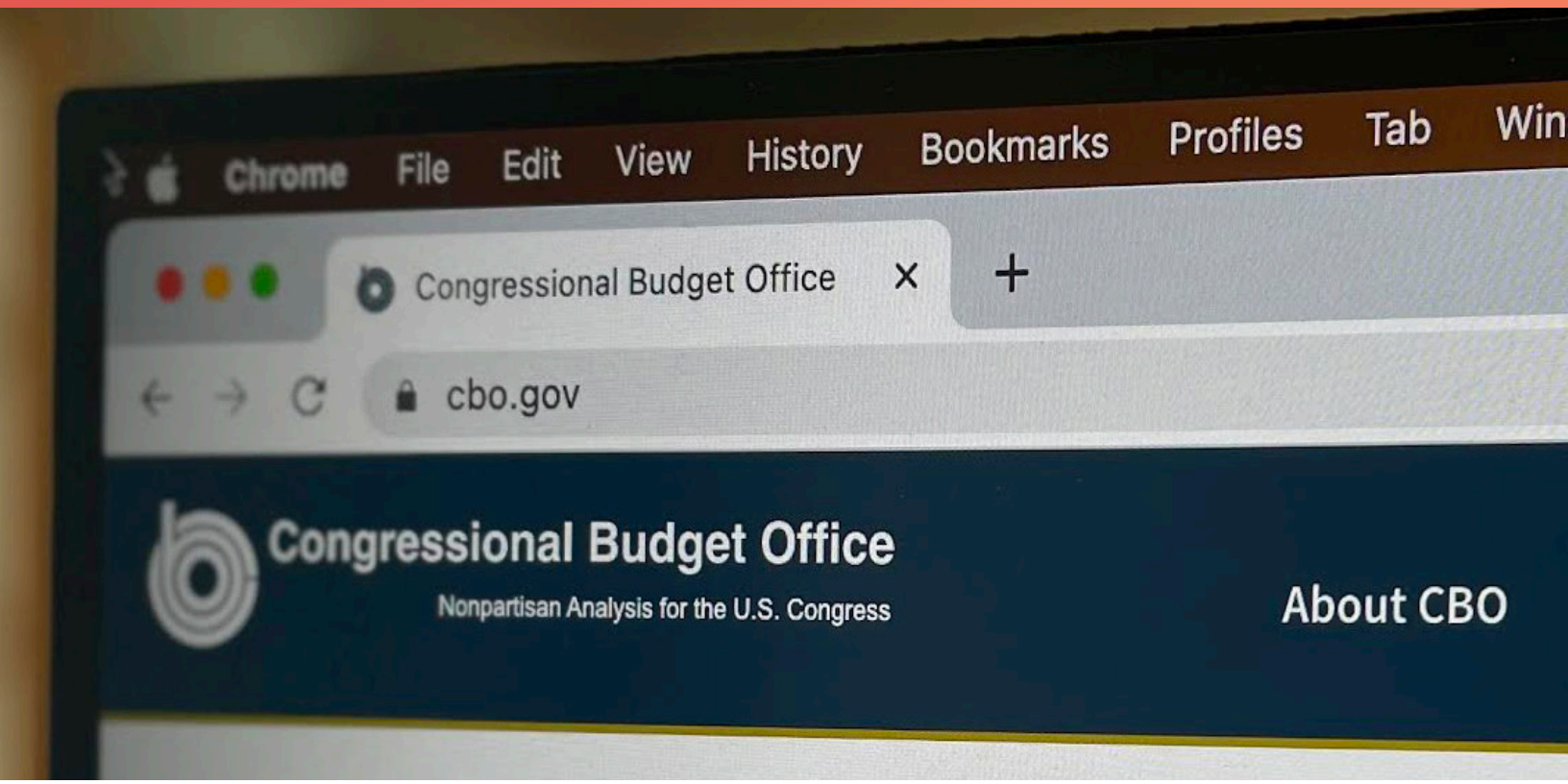

# Introduction

## It is my pleasure to introduce this report, *Budgeting for Disease Prevention and Health Promotion: Improving the Federal Scorekeeping Process.*

HEALTH, MEDICINE & SOCIETY
aspen institute

MARCH 2022

Policymakers and the general public readily agree that preventing disease and promoting health are desirable aims. But the federal requirements of budgeting for health initiatives and the process involved in estimating the cost of preventive health legislation too often impede measures that might otherwise garner support from both sides of the political aisle.

In the fall of 2021, the Health, Medicine & Society Program of the Aspen Institute brought together a nonpartisan group of budget experts—all former senior officials at the Congressional Budget Office or the federal Office of Management and Budget—to examine the budgeting rules used to assess proposed disease prevention and health promotion legislation. Informed by background papers and the wide-ranging expertise and experience of the participants, they examined current estimating and scorekeeping practices and recommended structural changes to clarify the value of prevention.

This report makes recommendations to the Congress and the Congressional Budget Office, as well as the Executive Branch and the Office of Management and Budget. It reflects the expert group's consensus on how best to alter requirements and practices so that more Americans can lead healthier lives. While somewhat technical in nature, their recommendations have very concrete implications, potentially making it easier to fund both clinical prevention (e.g., vaccinations, mammograms, diabetes treatment) and population-based prevention (e.g., removing lead from the water supply, sampling air quality for contaminants, supporting exercise classes for people with heart disease).

We are grateful to the David and Lucille Packard Foundation and the Blue Shield of California Foundation for their support. Neither the convening nor this report would have been possible without them. Our thanks as well to the experts who volunteered their time to work through these complex issues and develop a package of recommendations and to Tim Westmoreland, JD, of Georgetown University School of Law and a nationally recognized expert on the federal budgeting process, who prepared the background material and drafted this report.

It is our hope that their efforts have given us the roadmap for advancing the widely shared goals of preventing disease and promoting better health for all.

**Ruth J. Katz, JD, MPH**

*Vice President*
*Executive Director, Health, Medicine & Society Program*
*Aspen Institute*

# Participants

Co-Chair

## DAN CRIPPEN

*Former Director, Congressional Budget Office*
*Former Executive Director, National Governors Association*

Over the past two decades, Dan Crippen, PhD, has worked in health care in both the private and public sectors, tackling issues that include Medicaid, health IT, and health care for elderly and complex patients. As the executive director of the National Governors Association (NGA) from 2011 to 2015, he helped to identify and prioritize the most pressing issues facing states, striving to achieve consensus among stakeholders when possible.

Previously, he served as the director of the Congressional Budget Office, deputy assistant to the president for economic policy, assistant to the president for domestic policy under the Reagan Administration, and chief counsel and economic advisor to Senate Majority Leader Howard Baker. Crippen currently serves on the boards or advisory committees of the MIT Center for Finance and Policy, Center for Health Care Strategies, Peterson Center on Healthcare, Milken Institute, and Committee for a Responsible Federal Budget.

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Co-Chair

## NANCY-ANN DEPARLE

*Former Associate Director for Health and Personnel,*
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*Managing Partner and Co-Founder, Consonance Capital Partners*

Nancy-Ann DeParle, MA, JD, is a managing partner and co-founder of Consonance Capital Partners. She served as assistant to the president and deputy chief of staff for policy in the Obama White House from 2011 to 2013, and as counselor to the president and director of the White House Office of Health Reform from 2009 to 2011.

Previously, she was associate director for health and personnel at the White House Office of Management and Budget served as a Commissioner of MedPAC, the advisory board to Congress on Medicare policy, and as administrator of the Centers for Medicare and Medicaid Services. DeParle was also a senior fellow and adjunct professor of health systems management at The Wharton School of the University of Pennsylvania and a trustee of the Robert Wood Johnson Foundation, and served on numerous corporate boards. She currently serves as a director of Consonance Capital Partners portfolio companies Sellers Dorsey and Psychiatric Medical Care, as well as a director of HCA Healthcare and CVS Health. She is an elected member of the National Academy of Medicine.

# Participants

## MELINDA B. BUNTIN

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*Mike Curb Professor of Health Policy and Founding Chair, Department of Health Policy, Vanderbilt University School of Medicine*

Melinda B. Buntin, PhD, is the Mike Curb Professor of Health Policy and founding chair of the Department of Health Policy at Vanderbilt University School of Medicine. She was previously a director in the Health, Retirement and Long-Term Analysis Division at the Congressional Budget Office and deputy director of RAND Health's Economics, Financing, and Organization Program. At Vanderbilt, she focuses on health care delivery and costs, with an emphasis on improving the value created by health care systems. She is also co-leading the Vanderbilt Policies4Action Research Hub, which is conducting research on improving health and education outcomes for low-income children. An elected member of the National Academy of Medicine and the National Academy of Social Insurance, she is also deputy editor of JAMA Health Forum, which launched in January 2020.

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## DOUG ELMENDORF

*Former Director, Congressional Budget Office*

*Dean and Don K. Price Professor of Public Policy, Harvard Kennedy School*

Doug Elmendorf has been dean and Don K. Price Professor of Public Policy at Harvard Kennedy School since 2016. He had been a visiting fellow at the Brookings Institution after serving as the director of the Congressional Budget Office from January 2009 through March 2015. He had previously been a senior fellow at Brookings, assistant director of the Division of Research and Statistics at the Federal Reserve Board, deputy assistant secretary for economic policy at the Treasury Department, senior economist at the White House's Council of Economic Advisers, and an assistant professor at Harvard University. In those policy roles, Doug worked on budget policy, health care issues, the macroeconomic effects of fiscal policy, Social Security, income security programs, financial markets, macroeconomic analysis and forecasting, and a range of other topics. He earned his PhD and AM in economics from Harvard University and his AB summa cum laude from Princeton University.

## JULIAN HARRIS

*Former Associate Director of Health,*
*White House Office of Management and Budget*

*Chairman and Chief Executive Officer, ConcertoCare*

Julian Harris, MD, is the chairman and CEO of ConcertoCare, a tech-enabled, value-based provider of at-home, comprehensive care for seniors and other adults with unmet health and social needs. Previously, he served as president of CareAllies, and led U.S. Strategic Operations across Cigna's commercial and government businesses. He has also served as an adviser to Google Ventures. Dr. Harris led the healthcare team in the Office of Management and Budget (OMB) as the chief health care finance official and served as the chief executive of the Massachusetts Medicaid program. Trained in internal medicine and primary care at Brigham and Women's Hospital, Dr. Harris is a graduate of Duke University, and the Wharton School of Business and the Perelman School of Medicine at the University of Pennsylvania, where he serves as an adjunct professor. In addition, he is an operating partner at Deerfield.

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## G. WILLIAM HOAGLAND

*Former inaugural employee, Congressional Budget Office*

*Senior Vice President, Bipartisan Policy Center*

As senior vice president at the Bipartisan Policy Center, G. William Hoagland, MS, helps direct and manage fiscal, health, and economic policy analyses. Previously, he served as vice president of public policy for CIGNA, a post he held after completing 33 years of federal government service. Hoagland served as the director of Budget and Appropriations in the office of Senate Majority Leader Bill Frist and as director of the Senate Budget Committee, where he reported to Senator Pete V. Domenici. He participated in major federal budget negotiations, including the 1985 Gramm-Rudman-Hollings Budget Deficit Reduction Act, the 1990 Omnibus Budget Reconciliation Act, and the historic 1997 Balanced Budget Agreement. Hoagland was one of the first employees of the Congressional Budget Office in 1975, working with its first director, Alice Rivlin.

## STEVE LIEBERMAN

*Former Assistant Director, Congressional Budget Office*

*Former Assistant Director and Chief of Health Financing, White House Office of Management and Budget*

*President, Lieberman Consulting*

Currently a nonresident senior fellow at the USC Schaeffer Center for Health Policy & Economics, a nonresident fellow in Economics at Brookings, and president of Lieberman Consulting, Inc., Steve Lieberman, MPhil, MA, is an expert on health care policy, analysis of reimbursement, and budgetary, economic, and strategic issues. He played a pivotal role in the Medicare Modernization Act as executive associate director and assistant director of the Congressional Budget Office from 1999 to 2004 and subsequently led implementation of the Medicare Part D drug benefit, as senior advisor to CMS Administrator Mark McClellan. Lieberman has also held positions as chief of health financing and assistant director at the White House Office of Management and Budget and the National Governors Association, as well as in the private and academic health sectors. He is a board member at several health care companies and publishes health policy analyses in Health Affairs and at Brookings.

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## ROB NABORS

*Former Deputy Director, White House Office of Management and Budget*

*Senior Director for North America, Bill & Melinda Gates Foundation*

Rob Nabors, MA, is the senior director for North America at the Bill & Melinda Gates Foundation, where he leads the team that manages government relations, policy, advocacy, and communications in North America. His team develops and implements strategies to mobilize resources and the political and public commitments necessary to achieve the foundation's programmatic goals. Nabors joined the foundation from the US Department of Veterans Affairs where he served as chief of staff. Previously, he served in the Obama Administration as the White House's director of legislative affairs and deputy chief of staff for policy. Nabors has also held positions in the White House Office of Management and Budget, most recently as deputy director, and on the US House of Representatives Appropriations Committee, including as majority staff director.

## SUSAN TANAKA

*Former Associate Director for Communications and Senior Analyst, Congressional Budget Office*

*Former Budget Examiner and Special Assistant, White House Office of Management and Budget*

*Senior Policy Advisor, Peter G. Peterson Foundation*

Susan Tanaka, MBA, MA, is senior policy advisor at the Peter G. Peterson Foundation, whose mission is to increase public awareness of urgent economic threats to America's future and accelerate action on them. Tanaka identifies new partners and pursues projects related to long-term demographic, economic, and fiscal trends. Previously, as vice president, research, she built the Foundation's research team and directed the development of policy materials. In earlier positions, she served as associate director for communications and senior analyst at the Congressional Budget Office; vice president of the Committee for a Responsible Federal Budget; and budget examiner and special assistant at the White House Office of Management and Budget. She also served on the Committee on the Fiscal Future of the United States, jointly sponsored by the National Academy of Public Administration and the National Academy of Sciences.

# Executive Summary

Advocates for public health, medicine, health finance, and insurance all widely recommend actions to prevent disease and promote health. Most of the broad improvements in the nation's health and well-being have arisen from such actions, rather than from incremental improvements in treatment. With chronic illness and disability representing increasingly large parts of healthcare spending, prevention activities have only grown in importance.

Despite professional recommendations and apparent political popularity, federal funding for prevention-related programs continue to lag far behind care services—"millions instead of billions." This reflects, in part, the structures of health finance. Most health promotion activities are funded by discretionary spending, which has often been governed by overall caps and which generally must be allocated by the Congress for a year or less. To succeed, prevention activities instead need a stable source of long-term funding comparable to what is provided for treatment. The Affordable Care Act (ACA) provided some of that by mandating coverage of recommended individual clinical prevention services, such as vaccinations and cancer screenings. But this coverage omits millions of people, including many on Medicaid, without insurance, or—for some benefits—on Medicare. Nor does it include effective population-based services such as community tobacco control and nutrition education.

*"To succeed, prevention activities need a stable source of long-term funding comparable to what is provided for treatment."*

Legislation needed to expand existing coverage and pay for additional services must encounter the Congressional budget process, a process by which the Congress has limited its own ability to increase spending and reduce revenues. To implement those limits, Congress relies on advice and information from the Congressional Budget Office. CBO provides a broad range of budget and economic data and is charged with estimating the costs of ongoing federal programs and legislation affecting those programs or creating new ones.

This estimation can often be a difficult task. Projecting new costs may seem straightforward. But projecting the positive and negative impacts of spending throughout the budget and across the economy is often complex. For example, while estimating the cost of legislation to fund nutrition counseling may be relatively easy, estimating the benefits of such counseling to the federal budget, such as reduced health spending on federal programs, is extremely difficult. Some of the rules of the estimation process result in understating the value of prevention while others lead to a failure to reveal the implicit choices and trade-offs that are used to estimate budget impacts.

Over the last year, the Health, Medicine & Society program of the Aspen Institute convened a small group of former senior budget officials from CBO and the Office of Management and Budget (OMB), experts with significant experience in the federal budget process and in health policy. The goal was to develop recommendations for improving budgeting as it affects legislation related to disease prevention and health promotion.

# Executive Summary

This group reviewed white papers on the funding of current health promotion programs and held two days of online meetings to discuss the challenges of budgeting for prevention. The group discussed the usefulness of current analytical practices and considered potential changes in the rules and procedures governing formal cost estimation ("scorekeeping") by CBO and OMB. Without altering the fundamentals of that process, this group aimed to improve the budgetary treatment of prevention legislation by providing additional transparency and supplementary information. Doing so may lessen the friction encountered in advancing new programs and funding and possibly make them easier to enact. It might also suggest research designed to uncover opportunities to mitigate the difficulties of these estimates.

This is the consensus report of that group. Note, however, that no specific section or statement in the report should be considered to represent the opinion of any individual participant.

In brief, the group believes that the scorekeeping process for preventive health legislation can be improved in the following ways:

- **Transparency of analysis:** In its cost estimates for disease prevention and health promotion legislation, CBO should improve the transparency of its work by displaying distinctly those major analyses that are included in and intrinsic to its overall scores. Providing only the bottom line of costs can be confusing and can obscure important information.
- **Distribution of costs and savings:** In its cost estimates for disease prevention and health promotion legislation, CBO should, wherever possible, disaggregate its overall totals and include the distribution by race, ethnicity, gender, and other demographic categories. Displaying only aggregates and averages can obscure both the problems and the benefits.
- **Context of costs and savings:** CBO scores of preventive health legislation should be accompanied by supplementary information to put the costs and savings in context, including the likelihood that costs and savings will accrue over the long term and possibly outside the federal system. Isolated figures can be easily misconstrued or inappropriately taken as complete.
- **Periodic in-depth analyses:** CBO should periodically undertake in-depth analyses of the budget implications of selected health prevention activities and proposals. The topics can be chosen by CBO initiative or at the request of the Congress. Estimates of individual pieces of legislation give too fragmentary a picture of some complex budgetary and health questions.
- **Congressional action on population-based services:** The Congress should reform the statute governing the Prevention and Public Health Fund to target its funding at proven population-based preventive health activities recommended by the Community Preventive Services Task Force (CPSTF). These valuable services, aimed at groups and communities rather than individuals, do not fit easily within the structures of scorekeeping or the requirements of the Congressional Budget and Impoundment Control Act of 1974, as amended (the Budget Act). They need a stable source of guaranteed funding, but the existing Fund has frequently been diverted to other uses.

*"Some of the rules of the estimation process result in understating the value of prevention while others lead to a failure to reveal the implicit choices and trade-offs."*

Adopting each of these proposals, which are described in more detail later in this paper, would make the value of disease prevention and health promotion more obvious. In turn, this would fulfill the objective of guiding the Congress to make prudent investments.

In addition to the proposals on which they agreed, the group considered a number of others. One suggestion has been to extend the ten-year time period used in cost estimates. However, some group members noted that longer budget windows can increase the uncertainty of estimates and that some long-term effects may move in different directions over time. Likewise, changes in the scorekeeping rules related to the effect of appropriations on mandatory spending were discussed, but some members noted that appropriations are often too short term to allow effects to be estimated and also that these rules had a foundation in Congressional committee jurisdictional disputes.

*(Note: For the purposes of this report, most descriptions and data are from Fiscal Year 2019. Fiscal Years 2020 and 2021 and the COVID pandemic are treated as extreme outliers, exceptional in terms of both health spending and budget process. This report and its recommendations are about the "routine" fiscal year, which we anticipate will return along with more typical health priorities and budget limitations.)*

*"Estimates of individual pieces of legislation give too fragmentary a picture of some complex budgetary and health questions."*

# Budgeting for Disease Prevention and Health Promotion: Improving the Federal Scorekeeping Process

## Background about the Budget

Almost 50 years ago, the Congress created a comprehensive budget process for itself through the Congressional Budget and Impoundment Control Act of 1974 (the Budget Act; US Congress n.d.a) (Schick 2007). Over the decades, the Budget Act has been amended, waived, renewed, and reinforced, but—aside from a few very major exceptions—it has continued to govern how the Congress enacts spending and revenue legislation.[1] Consequently, the rules defining and implementing the Budget Act have had a great deal of influence over which laws have been enacted and how they are structured (Sage & Westmoreland 2020; Westmoreland 2007). A brief description of these rules is merited here, although it is necessarily limited and focused on topics that directly affect proposals about health promotion and disease prevention. (Because this description is so limited and because the federal budget is so large and complex, there are specific exceptions to almost every rule or statement, but the overall generalizations are accurate.)

For purposes of the budget process, there are three types of federal funding: discretionary spending, mandatory spending, and tax spending. Each is treated differently in most respects.

Discretionary spending, also known as appropriations, is provided at the discretion of the Congress. Generally, funding is provided for a single year, although the time period has frequently been shortened in recent times. The amount of appropriated funding is also at the discretion of the Congress and may be reduced, continued at the same level, or increased from one year to the next. If the Congress fails to appropriate resources in a subsequent year, the program that has been funded will end.

Mandatory spending, also known as direct spending, is essentially an ongoing statutory promise that funding will be provided for specified payments, goods, and services. The promised funding can be reduced or increased if the Congress passes legislation to do so: otherwise, the funding will continue according to the terms of the existing law. (For example, the Congress could decrease Medicare spending by enacting a new law to delay eligibility until age 66; if it does not do so, then Medicare will continue to pay for goods and services beginning at age 65.)

Most mandatory spending statutes allow for uncapped total spending. For instance, Medicare and Medicaid promise to pay for allowable, medically necessary goods and services; what is included in that promise evolves over time. Thus, spending for Medicare and Medicaid grows from year to year because

[1]The Tax Cuts and Jobs Act of 2017 and the various COVID laws are recent examples of departures from the Budget Act's processes.

there are more beneficiaries, because prices increase for traditional services (such as physician office visits or hospital stays), and because of innovations (such as newly approved drugs and devices). This increased spending to meet program requirements occurs automatically, without new action by the Congress to provide additional funding. The beneficiaries and benefits can be changed if the Congress and the president agree to do so; if they do not, spending continues according to the existing statutes and regulations.

Tax spending is similar to mandatory spending in many respects. It is usually an ongoing statutory promise that valuable special tax treatments, essentially subsidies, will be provided in exchange for some sort of specific action by the taxpayer.

A promised tax subsidy can be reduced or increased if the Congress passes legislation to do so and the president agrees to it; if a new law is not enacted, then the subsidy will continue according to the terms of the existing law. (For example, the Congress, with the concurrence of the president, could reduce or eliminate the tax subsidy for employer-sponsored health insurance; if the Congress does not do so, then the subsidy will continue.) Such tax-based programs are defined as "spending" because they represent forgone revenue to the federal government that will increase the deficit and the debt.

Most tax spending statutes are general rules for tax treatment and do not specify a dollar amount. For example, the Internal Revenue Code promises not to count the payment for employer-sponsored health insurance as individual income. As the price of that insurance grows over time, the change automatically affects revenues, without new action by the Congress.

Out of concern for the growth in the federal debt, the Congress has amended its own procedural rules and the Budget Act to limit its ability to spend more money or to reduce revenues. Different mechanisms are imposed on discretionary spending and on mandatory and tax spending.

Generally, the Congress sets an overall maximum level for discretionary spending for the coming year (the discretionary spending cap); the total of all appropriations legislation must not exceed that level. This creates a zero-sum system in which health programs must compete with other health programs for increases (e.g., the Centers for Disease Control and Prevention [CDC] versus the National Institutes of Health [NIH]) and with nonhealth programs (e.g., CDC versus transportation). In recent times, this overall cap has sometimes been set for many years in advance, with separate subtotals for domestic and defense spending. On some occasions, the Congress has waived or increased these caps for specific legislation, often for emergencies (e.g., hurricane relief) or unexpected contingencies (e.g., international conflicts). On other occasions, the Congress has increased the caps for a given year and imposed reduced caps for future years.

If a similar cap were imposed on mandatory spending or on tax spending it would erode and eventually break the statutory promises that have been made. Without automatic growth in spending over time, Medicaid and Medicare would cover fewer promised health benefits; likewise, the tax code would provide smaller subsidies for employer-sponsored health insurance.

Instead, beginning in 1990 and in various forms since, the Congress created a budget mechanism called "Pay As You Go" (PAYGO). If spending automatically increases because of the promises already made in a statute, PAYGO has no effect. But if the Congress passes new legislation that increases mandatory spending or reduces revenues beyond the "baseline" (i.e., the levels required under the law before the new legislation was enacted), it must also find offsets by cutting existing mandatory or tax spending programs, increasing revenue, or some combination of both of those. The PAYGO requirement is intended to prevent any net increase in the projected federal debt because of new actions of the Congress.

To make the PAYGO limits possible, the cost of new legislation must be estimated. This estimation is done by the Congressional Budget Office (CBO), a nonpartisan agency of the Congress that was established by the Budget Act (Congressional Budget Office 2021b). (CBO relies for revenue estimates on the staff of the Joint Committee on Taxation [JCT], a nonpartisan committee of the Congress that was established almost a hundred years ago.) Each piece of legislation is given a "score" by CBO, reflecting its estimate of the budgetary effects of enacting the legislation. These estimates are done according to rules and precedents set out in statutes and guidance (Congressional Budget Office 2021a). These rules and precedents include both technical and fundamental matters, from the treatment of expired discretionary spending that is reappropriated to the number of years that get included in an estimate (Congressional Budget Office 2021a; Congressional Budget Office 2020b). Within this framework, the estimation is done by CBO's professional, nonpartisan staff, working with economic models and simulations that include data from public and private sources.

*"Out of concern for the growth in the federal debt, the Congress has amended its own procedural rules and the Budget Act to limit its ability to spend more money or to reduce revenues."*

The discretionary spending cap and the PAYGO rules provide parliamentary restrictions on what legislation the Congress can consider for passage. Typically, legislation violating either of these restrictions is subject to a point of order that can be waived by a rule in the House or a majority vote in the Senate (with the potential of a Senate filibuster). The restrictions are sometimes bypassed or ignored through other legislative or parliamentary means. This happened with the Tax Cuts and Jobs Act of 2017 (the 2017 Tax Act) (Tax Policy Center 2020), and for much of the legislation enacted in response to COVID-19 (Congressional Budget Office 2020a). But these rules have been enforced when some of the most high-profile and controversial legislation of recent times has been considered, including the Affordable Care Act (ACA) and the proposals to "repeal and replace" the ACA (Congressional Budget Office 2010; Congressional Budget Office 2017).

In addition to creating internal parliamentary rules, the Congress has enacted measures to provide statutory consequences for spending beyond the anticipated targets. Complex statutes require that the Office of Management and Budget (OMB), the budgeting agency of the executive branch, review all enacted legislation and determine if the Congress has exceeded the discretionary spending cap or the net-zero requirements of PAYGO. If the Congress has done so, OMB is required to implement across-the-board spending reductions in discretionary programs and in nonexempt mandatory spending in order to bring the total within the targeted range. This reduction mechanism is known as a "sequester" and is an effort to penalize different Congressional interests in spending and thus to force compromise. (It must be noted that often the sequester is not implemented because the Congress delays or eliminates its use through other legislation [House Budget Committee 2020; Matthews 2013].)

Even though they are sometimes waived or overruled, the discretionary spending cap, PAYGO, and the sequester can be powerful constraints on creating new spending programs. Legislation with extraordinary political momentum (such as the COVID-19 responses) may overcome these budget restrictions, but smaller proposals with less political power behind them (such as grants for fluoridating water or for lead abatement in public housing) are generally required to conform to these rules. Consequently, it is important to assure that the budget process and the scorekeeping practices that underpin it do not disadvantage health promotion and disease prevention activities.

*"It is important to assure that the budget process and the scorekeeping practices that underpin it do not disadvantage health promotion and disease prevention activities."*

## Preface about Prevention

It is axiomatic in health and medicine that preventive health and health promotion are preferable to avoidable illness, delayed diagnosis, or expensive treatment (see, e.g., US Department of Health and Human Services 2020; Bipartisan Policy Center 2015; Institute of Medicine 2003). Most major improvements in life expectancy and quality of life have come from population-based and clinical preventive activities. Sanitation, vaccination, and tobacco reduction alone have prevented—and continued to prevent—millions of cases of serious and expensive illness and premature deaths (Centers for Disease Control and Prevention 2011; Centers for Disease Control and Prevention 1999).

For decades, public health advocates have called for incorporating this view into federal financing (e.g., McGinnis, Williams-Russo, & Knickman 2002). The need to do so has become more pressing as healthcare treatment costs rise and chronic illness and disability account for larger shares of national health spending. Other health policy experts, outside traditional public health but concerned with health financing, have also supported increased health promotion activities: the goal of prevention has been offered as a justification for managed care, patient-centered care, accountable care, value-based purchasing, expanded insurance coverage, and universal insurance coverage (e.g., Tolbert, Orgera, & Damico 2020; Centers for Disease Control and Prevention 2015; Damberg, Sorbero, Lovejoy, Martsolf, et al. 2014; Parkinson 2006; Centers for Disease Control and Prevention 1995).

Disease prevention and health promotion have also become some version of a "mom-and-apple-pie" issue in politics. For example, in the most recent full Congress (January 2019 through January 2021), about 800 bills were introduced that included the phrase "health promotion" (Nguyen 2021). These made up about half of all bills about health and 5% of all bills about any topic at all (Nguyen 2021).

The terms "disease prevention" and "health promotion" cover a wide variety of activities. Different people sometimes use them to mean different things, and the terms are often used interchangeably by laypeople and professionals alike. They may include primary prevention (i.e., activities to prevent a healthy person from getting a disease or condition), secondary prevention (i.e., activities to detect a disease or condition early in its course and to provide treatment to arrest its progress), and tertiary prevention (i.e., activities to treat a known disease or condition to forestall chronic illness and disability).

One useful distinction for approaching budgeting for prevention is to divide the various disease prevention and health promotion efforts into two groups: clinical preventive services and population-based preventive services.

- Clinical preventive services are provided to an individual patient, usually by a healthcare provider. They may be primary prevention, such as a vaccination; secondary prevention, such as a mammogram; or tertiary prevention, such as treating diabetes to prevent the onset of blindness or gangrene.
- Population-based preventive services are provided to groups, often by someone other than a healthcare provider. Again, they may be primary prevention, such as removing lead from the water supply; secondary prevention, such as air quality sampling for contaminants; or tertiary prevention, such as group exercise classes for people with known heart disease.

*"Most major improvements in life expectancy and quality of life have come from population-based and clinical preventive activities."*

Although their methods and reach differ, all of these services can prevent or forestall disease, disability, and death. While this is good for the individuals whose health is improved, few of these services simply reduce direct health spending immediately or across the board (Goodell, Cohen, & Neumann 2009). Vaccines and many population-based services are almost always judged to save money, as recent experience with COVID-19 has vividly shown. But many recommended clinical preventive services require widespread use to prevent a much smaller number of cases or to improve treatment outcomes. The value to the individuals may be large, perhaps incalculably so, but the costs to provide services to the entire group may be significant (Congressional Budget Office 2020c).

## About Prevention Finance

Despite the universally expressed support for prevention, increases in spending for healthcare treatment continue to outpace increases in prevention spending by a vast margin (Himmelstein & Woolhandler 2016; see also discussion of state funding in Alfonso, Leider, Resnick, McCullough, & Bishai 2021). At the federal level, there is the crude comparison between funding for the Centers for Disease Control and Prevention and the Centers for Medicare and Medicaid Services (CMS). The rueful joke among public health advocates is, "Millions instead of billions," and

that is not far from the truth. Total Medicare and Medicaid spending in 2019 was more than $1.4 trillion (some small portion of which was for clinical preventive care) (Centers for Medicare and Medicaid Services 2020). Total spending for CDC was less than $7 billion, or less than half of 1 percent of Medicare and Medicaid spending (Centers for Disease Control and Prevention 2019c).[2]

Part of this difference arises from the respective financing structures of these activities. Healthcare treatment services are generally paid for by public and private insurance, with public coverage financed by open-ended mandatory spending and private coverage subsidized by open-ended tax spending. Both are complex programs, but in general, federal spending for them grows automatically, without the need for congressional action.

In contrast, most federal funding for health promotion and public health comes from discretionary spending that grows—if it grows at all—at the discretion of the Congress within a short-term and capped system. For nonfederal funding, health promotion and disease prevention activities have traditionally relied on state and municipal budgets, foundation grants, or voluntary funding from charities and community organizations, especially during economic downturns (see, generally, National Academies of Sciences, Engineering, Medicine 2012).

*"Healthcare treatment services are generally paid for by public and private insurance while most federal funding for health promotion and public health comes from discretionary spending."*

The Affordable Care Act was a paradigm shift for one type of prevention—clinical preventive services (US Congress n.d.d). Before the ACA, the only group of people who were federally guaranteed access to all such services were children enrolled in Medicaid. Since the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit was enacted in 1967, Medicaid has paid for a range of clinical preventive services for children, including immunization and a federally specified minimum range of screening services (Medicaid and CHIP Payment and Access Commission 2016); the Children's Health Insurance Program (CHIP) insurance is required to cover such services if the state administers it as part of Medicaid but not if it is a "stand-alone" program (Congressional Budget Office 2020c). Pregnant women enrolled in Medicaid were also guaranteed preventive services, but only if the services were defined as "pregnancy-related," a determination largely left to the states (Gifford, Walls, Ranji, Salganicoff, & Gomez 2017). States could choose to provide clinical preventive services to other Medicaid beneficiaries as well, but few offered the full range of services to all enrolled adults.

Since 2008, CMS has also had the authority under Medicare to cover preventive services that are "reasonable and necessary for the prevention or early detection of an illness or disability and that are recommended by the US Preventive Services Task Force" (USPSTF is an independent advisory body convened by the Department of Health and Human Services' [HHS] Agency for Healthcare Research and Quality [AHRQ]) (US Congress n.d.b). Cost-sharing was allowed in some circumstances, and vaccines were only partially covered (Seiler, Malcarney, Horton, & Dafflitto 2014).

[2] CDC also administers Vaccines for Children (VFC), a mandatory spending program enacted and codified as part of the Medicaid statute (Section 1928 of the Social Security Act {42 US 1396s}). That program spent an additional $4 billion in 2019 (Centers for Disease Control and Prevention 2019, p. 68).

Likewise, before the ACA, some states required that commercial insurance cover specific preventive clinical services, such as screening for diabetes or osteoporosis. These requirements were uneven and not comprehensive (Cubanski & Schauffler 2002). Moreover, after the Employee Retirement Income Security Act (ERISA) was enacted in 1974, those state requirements were preempted and did not apply to the ever-increasing number of self-funded health benefits plans, and ERISA itself included no such minimum standards (US Congress n.d.c).

The ACA, however, mandates that all private health insurance plans cover federally recommended immunizations and preventive health screening and services without cost-sharing (US Congress n.d.d). Section 2713 of the Affordable Care Act requires coverage of:

- All items or services that have an A or B rating from the USPSTF;
- All immunizations as recommended by the Advisory Committee on Immunization Practices (ACIP, an independent advisory committee convened by CDC);
- All children's preventive care and screening as recommended in guidelines from HHS's Health Resources and Services Administration (HRSA); and
- All women's preventive care and screening as recommended in guidelines from HRSA.

This requirement applies to all employer-sponsored insurance (whether commercial or self-funded under ERISA), small-group and individual plans, and all plans sold on the ACA exchanges. (It does not apply to noncompliant plans such as short-term plans or healthcare-sharing ministries.) It also applies to Medicaid beneficiaries who are eligible because of the ACA Medicaid expansion.

The ACA also eliminates cost-sharing for USPSTF-recommended services that are covered by Medicare, although it does not change the CMS "patchwork of preventive services coverage requirements" (Seiler, Malcarney, Horton, & Dafflitto 2014). The Medicare-covered services are extensive, but some vaccines are not included (Seiler, Malcarney, Horton, & Dafflitto 2014; see also Centers for Medicare and Medicaid Services 2020).

Notably, the Section 2713 requirement does not apply to Medicaid beneficiaries who are members of the traditional Medicaid eligibility categories that predate the ACA expansion, such as low-income parents and disabled people who are not on Medicare (Ku, Paradise, & Thompson 2017). While children and pregnant women have the federal guarantees noted above, Medicaid coverage of preventive services for other groups remains a state option. States that choose to meet all of the ACA prevention standards are given a 1% increase in their federal matching payments for these services in their Medicaid programs (Mann 2013). Data are hard to come by, but the most recent survey data (2013) show that only eight states meet the ACA standards for these beneficiaries; another four cover all required services but impose cost-sharing (Gates, Ranji, & Snyder 2014). In addition, the ACA provides no preventive services for uninsured citizens (about 21 million people in 2018) or undocumented people (an estimated 7 million people in 2018) (Kaiser Family Foundation 2020). These people may be provided some preventive services in community health centers, which receive limited mandatory spending under the ACA (US Congress n.d.f).

Coverage—even without cost-sharing—does not mean that clinical preventive services are universally used. Such services are easy to postpone, and many of them—such as blood tests and colonoscopies—are uncomfortable, even painful. Confusion about coverage or cost-sharing is common (Tiperneni, Politi, Kullgren, et al. 2018). Cost-sharing may still be imposed on an office visit in some circumstances (e.g., for out-of-network preventive services) and for necessary follow-up treatments (Kaiser Family Foundation 2015). Ready solutions to real-world issues such as workplace flexibility, transportation, and childcare may not be available (Congressional Budget Office 2020c).

Despite the limitations, clinical preventive services without cost-sharing are covered for most privately and publicly insured people. Importantly for this project, the costs of many of these services are now in the CBO baseline for 60 million Medicare beneficiaries and 15 million beneficiaries of the Medicaid expansion (MACPAC 2021; Kaiser Family Foundation n.d.). What's more, because the statute is not a catalogue of specific services but rather a cross-reference to a regularly updated list of recommendations, all new screens and interventions that are recommended by the USPSTF, ACIP, or HRSA will also be covered. Then the costs of those, too, will be added to the CBO baseline—without an additional act of Congress.

*"The cost of many clinical preventive services are now in the CBO baseline. Population-based health promotion services have not fared so well and are generally funded by limited discretionary spending."*

But financing the provision of services to individuals is only part of the challenge. Services to groups and communities are also valuable, but such population-based health promotion services have not fared so well and are not well financed—even after the ACA. CDC and HRSA have a range of categorical grants for such services, but they are funded by limited discretionary spending. Almost none of them are mandatory spending.

Some are quite general. The Preventive Health and Health Services Block Grant is appropriated at $160 million and is available for states (and some cities) to pay for a range of activities, such as "clinical services," "environmental health," and "emergency medical response" (Centers for Disease Control and Prevention 2019a). Other grant programs are quite specific. For example, tuberculosis control grants to states are funded at $135 million (Centers for Disease Control and Prevention 2020b), and lead poisoning prevention programs are funded at $37 million (Centers for Disease Control and Prevention 2020b).[3]

The ACA created a limited mandatory funding stream for population-based prevention services with the Prevention and Public Health Fund (the Fund) (US Congress n.d.e; see also American Public Health Association 2020). Section 4002 of the statute says that the Fund is to "provide for expanded and sustained national investment in prevention and public health programs to improve health and help restrain the growth in private and public sector costs" (US Congress n.d.e). It provides a specific or "capped" amount of mandatory spending,

[3] This budget reflects both $20 million of newly appropriated funds and $17 million transferred from the Prevention and Public Health Fund, discussed in the following section.

beginning at $500 million in 2010 and growing to $2 billion in 2025 and for each year thereafter, representing the first long-term investment of its kind in population-based services. CDC houses the Fund and is to make grants from it to state and local governments and to nongovernmental organizations.

The Fund has, however, been used by both the legislative and executive branches to pay for activities that would previously have been supported with their own discretionary appropriations (Lister 2017). Often this has been outright substitution for previous appropriations from general revenues. In many years, more than half of the CDC immunization grants and all of the lead poisoning prevention program—both longstanding programs for state infrastructure and personnel—were paid for through transfers from the Fund. Likewise, the Preventive Health and Health Services Block Grant is now entirely funded by transfers from the Fund (Lister 2017). In other instances, Fund resources have been used for nonprevention activities: for 2018–24, the Congress reduced the Fund spending by $500 million a year for seven years to offset new spending in other areas, principally NIH biomedical research (US Congress 2016).

In sum, there is much agreement about the large and growing need for disease prevention and health promotion and the ACA has enabled dramatic progress in coverage for clinical preventive services. But significant gaps remain. More than 28 million uninsured people have no coverage at all for the clinical preventive services that are the standard of medical care. A large portion of another 60 million Medicaid beneficiaries have no federal guarantee of such coverage; their access to some services is uneven and dependent on state options. As to population-based services, no federal program has sufficient or stable funding to reach longstanding goals.

*"No obvious barrier exists to filling the gaps in funding for disease prevention and health promotion."*

## Structural Challenges of Congressional Budgeting for Disease Prevention and Health Promotion

No obvious barrier exists to filling the gaps in funding for disease prevention and health promotion, as these points suggest:

- Academic and policy agreement on the needs is widespread. Medical, public health, and health policy journals frequently publish articles and studies that recommend cost-effective prevention and promotion, without attracting controversy or objection to their basic premises.
- There is no opposition from payors or providers. Prevention is the common denominator among all proposals for reorganizing health coverage.
- There is no political opposition, at least in the sense that there is no such thing as, say, a pro-tuberculosis lobby or a political action committee (PAC) for late cancer diagnoses.
- There is legislative interest, or at least the appearance of it. As mentioned, almost one of 20 bills introduced in the last Congress included the phrase "health promotion." At a minimum, this suggests politicians believe that their constituents are in favor of prevention.

Yet funding gaps persist. This project will not provide all of the solutions. There are complex theories of public choice, agenda-setting, and tipping points that occupy social scientists, economists, and political consultants for their entire careers. Nor can this project construct a unified field theory of health promotion legislation or issue a manifesto of preventive health. There are volumes and courses and degrees on such far-reaching questions. Moreover, there are advocacy groups, trade associations, and blue-ribbon panels that aim at advancing prevention—some targeting specific diseases, some focused on the overall good of the nation.

The question for this project is how to improve the Congressional budget process to deal better with legislative efforts relating to health promotion and disease prevention.

The PAYGO rules, estimates, and sequesters designed by the Congress to inform budget choices and impose fiscal discipline frequently make budget rules a crucial factor in advancing a policy. Central to all of this complexity are the scorekeeping rules that govern CBO, as described in the OMB Circular A-11 (Executive Office of the President 2021). If disease prevention and health promotion are to have a stable funding base, they need some form of mandatory spending, tax spending, or both. Cost estimates by CBO are a necessary step toward enacting this spending, and many political efforts with widespread support have been stopped at this stage.

It may be that the only possible response is to agree that prevention costs money and that scoring and PAYGO simply do not allow new spending without finding the offsets (or "pay-fors") that can be achieved by cuts in other mandatory programs or by raising revenues. The ACA's required coverage of clinical preventive services did just that and made great progress while meeting the Budget Act's requirements. Moreover, whatever the shortcomings of the ACA's Prevention and Public Health Fund may be, they cannot be traced to estimation techniques.

It might also be possible simply to exempt prevention legislation from PAYGO and other rules. However, such an approach would open the doors to more legislation that uses "prevention" in its title, whatever its true focus, to take advantage of the exemption. That risk is evident in the increasing use of the term "emergency spending," a designation that waives appropriations caps.

Instead of those approaches, it is useful to consider the features of CBO scoring that pose specific problems for disease prevention and health promotion. These are outlined here, along with proposals to address them that can be immediately implemented by the Congress and CBO.

These proposals also have implications for the Office of Management and Budget, which is staffed by a mix of political appointees and civil service professionals. As part of the Executive Office of the President, OMB's principal mission is to implement the president's vision; one of its main functions is budget development (White House n.d.). It works closely with the Congress and CBO and is deeply involved in defining budget scorekeeping rules and enforcing them

after legislation is enacted (especially in terms of sequesters) (see Executive Office of the President 2021, section 21). Novel issues and potential changes in the guidelines are "periodically" reviewed by CBO, OMB, and Congressional Budget Committees (Executive Office of the President 2021).

The proposals below are framed in terms of CBO activities in legislative scorekeeping as Congress enacts legislation, but parallel recommendations of transparency, distribution, and context should be considered in OMB's scorekeeping activities. OMB could be particularly useful in assisting with the in-depth analyses of the budgetary implications of specific approaches to prevention.

## Specific Problems and Proposals

### *Transparency*

Cost estimates are complex, requiring voluminous data, careful assumptions and projections, and detailed analysis and modeling. Despite these complexities, the estimate itself is often provided to the Congress as a table of numbers, without the full trail of work that has produced them. The Congress may be unable to parse these or to appreciate the many noteworthy subtotals and ancillary calculations that lead to them. Disaggregating some of these cost estimates could reveal relevant factors that would make the consideration of legislation more informed and more comprehensive.

*"Disaggregating some of the cost estimates could reveal relevant factors that would make the consideration of legislation more informed and more complex."*

For instance, some nonmonetary calculations may be intrinsic to determining the CBO monetary score. In considering federal health insurance proposals (both the initial passage of the Affordable Care Act and subsequent proposals to repeal and replace it), CBO and JCT had to project changes in insurance coverage to estimate overall costs of the legislation. In these instances, CBO provided coverage estimates as well as spending estimates, and they became an important element in legislative deliberations (Congressional Budget Office 2017; Elmendorf 2011). Similar estimates of coverage of preventive services, the uptake of that coverage, and the resulting changes in health status would add depth to the consideration of health promotion proposals.

Likewise, and more counterintuitively, changes in life expectancy sometimes underlie increased costs in estimating preventive health proposals. Keeping people alive longer is generally agreed to be a good thing, but if those people are beneficiaries of federal mandatory spending, longer lives also may be estimated as an added budgetary expense.

For example, in a 2002 background memo on how it would analyze a Medicare prescription drug plan under consideration, CBO wrote, "[T]o the extent that a drug benefit helps people live longer, they may consume more healthcare over their remaining lifetime than they would have without the benefit" (Congressional Budget Office 2002). And as recently as in its 2020 background memo on preventive health, CBO wrote, "[P]reventive medical services may reduce costs initially (by averting disease) but increase costs over time (as longevity increases and patients develop unrelated conditions that require treatment). . . . CBO also estimates the budgetary effects of other outcomes, such as longevity and disability, on federal retirement and disability programs" (Congressional Budget Office 2020c).

Perhaps no example of this conundrum is clearer than a CBO analysis of a possible tax measure. While not an estimate of a public health activity, per se, it is a revealing example of the considerations employed in analyzing increasing life expectancy. In "Options for Reducing the Deficit: 2019–2028," CBO and JCT concluded that increasing the excise tax on tobacco products by 50 percent would raise revenues within the ten-year snapshot and "contribute to a decline in smoking rates . . . which would also lead to improvements in health and an increase in longevity."

They went on to say, "Improvements in the health status of the population would reduce the federal government's per-beneficiary spending for healthcare programs, which would initially reduce outlays for those programs. But that reduction in outlays would erode over time because of the increase in longevity. A larger elderly population would place greater demands on federal healthcare and retirement programs in the future. The effect of greater longevity on federal spending would eventually outweigh the effect of lower healthcare spending per beneficiary, and federal outlays would be higher after that than they are under current law" (Congressional Budget Office 2018).

*"When death is forestalled by disease prevention, people live to consume other health services. Prevention appears costly because it works."*

In other words, those people whose death is forestalled by disease prevention will live to consume other health services and to draw other income support payments. Consequently, prevention appears costly because it works.

Additional federal costs resulting from increases in longevity are indeed likely to occur. Those who are focused on the balances of the Social Security Trust Fund or the Medicare Trust Fund need to know if outlays will rise over time because beneficiaries will live longer. But including these so-called survivors' costs could make preventive health activities appear to be more expensive through the lens of PAYGO review, compared to tallying only the costs of those activities and the direct savings that result from averted illness.

It is unlikely that most members of Congress would place increased life expectancy in the debit column when considering the price tag of expanding clinical or population-based prevention services. Yet few recognize that this is sometimes part of the scoring. Rather, although members would instead be likely to place a premium on extending lives, cost estimates of legislation do not display the number of years of additional life gained, nor break out the costs attributable to longevity from the spending on goods and services under consideration.

**In its cost estimates for disease prevention and health promotion legislation, CBO should improve the transparency of its work by displaying distinctly those major analyses that are included in and intrinsic to its overall scores.** In some instances, these will be nonmonetary, as in changes in insurance coverage and additional years of life. In some, additional federal spending will result and be included as a monetary part of the budget score, as in survivors' costs. But in every case, the Congress will be aided in making prudent investments by better understanding what is included in the price.

### *Distribution*

Budget analyses are generally done in national aggregates, often without subtotals by important demographic categories. This provides an overarching picture of costs and savings, but does so at the expense of clarity and nuance when applied to individual legislation.

For example, the average infant mortality rate in the US has declined dramatically when all groups are averaged together, although it remains unacceptably high. But the rate of Black infant mortality is more than double that of non-Hispanic White infants, a disparity that has grown over the last decades (Centers for Disease Control and Prevention 2019d; Singh & Yu 2019; Kaiser Family Foundation 2018; Hogue & Hargraves 1993). A cost estimate of a legislative proposal to expand or reduce insurance for pregnancy coverage will have widely differing effects by race and ethnicity (see Cook & Stype 2020; Wiggins, Karaye, & Horney 2020; Bhatt & Beck-Sagué 2018).

*"Most members of Congress would not place increased life expectancy in the debit column when considering the price tag of expanding clinical or population-based prevention services."*

Likewise, life expectancy at birth in the US differs by gender. On average, women live five years longer than men (Arias, Tejada-Vera, & Ahmad 2021). A bill to deal with disability prevention programs that combines projections for women and men would underestimate life expectancy for one group and overestimate it for the other. Disaggregating estimates by gender could clarify who benefits and who loses with different program designs.

The distribution of wealth and income is even more dramatic when considered by race, ethnicity, and gender. On average, Black families have a financial net worth that is less than 15% of White families (see Bhutta, Chang, Dettling, & Hsu 2020; US Department of Labor 2019). Black women's median earnings are 63% of those of White men (US Department of Labor, Women's Bureau 2020). Demographic analyses could be expected to show major differences on the effect of cost-sharing for clinical preventive services or tax subsidies for health promotion activities.

**In its cost estimates for disease prevention and health promotion legislation, CBO should, wherever possible, disaggregate its overall totals and include the distribution by race, ethnicity, gender, and other demographic categories. Where it is not possible to do so, CBO should identify the data, modeling, and analyses that would make it possible.** Such analyses of distribution of costs and savings may be complex. CBO will necessarily rely on data and findings from other sources, including CDC, the National Center for Health Statistics (NCHS), AHRQ, NIH, other parts of HHS, and the Department of Labor. While a wide range of data is often gathered by these agencies, CBO is unique in its focus on providing nonpartisan analysis of proposed legislation and projections of the effects if enacted.

## Context

Cost estimates from CBO are deliberately circumscribed in several ways. One of the principal difficulties in evaluating disease prevention and health promotion legislation is capturing the savings of a long-term investment whose benefits (and sometimes savings) appear outside the usual ten-year time period that CBO employs in its estimates.

Perhaps the clearest example is the prevention of childhood lead poisoning. Recent studies have concluded that no level of lead is safe for children (Centers for Disease Control and Prevention 2020a). Lead poisoning inevitably leads to a lifetime of increased medical care, special education, developmental disability, lower educational achievement, lower productivity, increased criminal activity, and increased incarceration (Partnership for America's Economic Success 2010). The longitudinal studies are dramatic (Yglesias 2019).

Removing lead from homes and water supplies, however, is complicated and expensive. The average cost for removing lead paint from housing is estimated at nearly $10,000 per unit (Health Impact Project, 2017). Removal from all US housing could cost as much as $250 billion (Dolan 2016), while replacing lead pipes in municipal water supplies has an estimated cost of $50 billion (Yglesias 2019). Those expenses would accrue during the ten-year cost projections of any legislation providing mandatory spending for them.

*"It is difficult to capture the savings of a long-term investment in disease prevention and health promotion if it appears outside the usual ten-year time period that CBO employs in its estimates."*

Savings from avoiding the many personal and societal costs of lead poisoning are estimated to be even larger, perhaps much larger. But most would necessarily accrue over a lifetime, not within the first ten years.

Consequently, eliminating lead from homes and from drinking water—universally endorsed goals whose costs are likely to be fully offset by savings over time—almost certainly would not appear to be budget-neutral in a PAYGO review. Even eliminating lead only from the homes of children who are Medicaid beneficiaries would probably not pay for itself under PAYGO.

Another limitation on CBO estimates is their focus solely on the costs and savings to the federal government; this is deliberate, because the main purpose of estimation is to assess the effects of new legislation on the budget. But federal spending frequently generates savings for other public programs (such as at the state level) and for nonfederal entities (such as insurance companies or employers). The spending comes from one pocket, but the savings go into another (the "wrong-pocket problem" [Bipartisan Policy Center 2015]).

In some contexts, this might be considered the essence of good government. Some people might argue that the government should save money for its citizens, not for itself. But in the world of PAYGO, it is a problem. Both the baseline and scorekeeping focus on the fiscal outcome at the federal level; for budget purposes, no value is assigned to nonfederal savings.

Even with an intervention as reliably cost-saving as immunization, the calculation for a federal program to provide a free vaccine would only include the projected savings associated with forgone illness among Medicaid and Medicare beneficiaries and, in some instances, federal employees and retirees. The very real savings to private insurers and to individuals would not be counted. This problem is particularly severe with population-based services, where individual beneficiaries cannot typically be known.

As these examples suggest, it is harder to assess preventive health measures whose value emerges over the long term or that offer benefits that accrue to third parties. Because the Congress will be less likely to achieve the offsets required by PAYGO, it will be less likely to adopt certain kinds of preventive legislation—however advantageous they may be over time or across the nation.

The budget rules do have rationales for these limitations. Longer projections are more subject to uncertainty. Often the original studies on which projections are based do not have long time horizons themselves. A longer projection is more subject to information gaps and confounding effects and can become dependent on assumptions rather than data. Legislative costs and benefits to nonfederal payors are also subject to increased uncertainty; information about private insurance and retirement programs may be incomplete and noncomparable.

*"Federal spending frequently generates savings for other public programs (such as at the state level) and for nonfederal entities (such as insurance companies and employers), but CBO assigns no value to these savings."*

Moreover, CBO can only work with the data that are available. Many prevention measures are widely accepted medically but have not been deeply studied over an extended time. Studies that show, for example, that obesity is associated with many chronic illnesses do not necessarily show which weight-loss programs work, how many people are likely to participate in them, and how much weight reduction over what period of time would produce a measure of improvement in those illnesses (Congressional Budget Office 2015). Although longer-term studies with more robust data have helped to improve the analyses, reasonable epidemiologists and health economists may differ about any of these topics. More research may be needed before savings can be projected with confidence.

Nonetheless, while it may be problematic to develop specific estimates for outcomes further off in time or more removed from the US Treasury, it may be possible to answer the basic question of whether or not there will be costs or savings. Even if a specific quantitative answer is uncertain, a qualitative answer of this limited sort may be given with some confidence and would likely help the Congress.

**CBO scores of preventive health legislation should be accompanied by supplementary information to put the costs and savings in context, including the likelihood that costs and savings will accrue over the long term and possibly outside the federal system.** These reports would be comparable to the "unfunded mandate" reports already required of CBO, in which the agency must determine whether the direct costs of mandates on public and private entities included in legislation exceed a specified threshold (Congressional Budget Office n.d.). Recognizing that these supplementary reports could not be used in helping the legislation achieve PAYGO offsets, they would highlight the limits of official scorekeeping in such legislation and put the estimated cost of federal preventive health efforts in the context of long-term and widespread value for the nation.

### *Periodic In-Depth Analyses*

The problems and paradoxes of budgeting for disease prevention and health promotion have been lamented and studied for decades (Institute of Medicine 2003). The recommendations offered here would improve scorekeeping, but they will not solve all the issues. Estimating individual pieces of legislation as the Congress considers them is too demanding and time sensitive a process to allow CBO to take deep dives into their promises and prices. Scorekeeping by its very nature often involves assumptions that cannot be tested for each estimate.

But given the near-universal agreement that prevention is the best course for improving the nation's health in the long run, a more thorough understanding of the budget implications for the federal government and the nation as a whole is needed.

**CBO should periodically undertake in-depth analyses of the budget implications of selected health prevention activities and proposals. The topics for such review could be chosen by CBO, perhaps in consultation with its panel of health advisors, or at the request of the Congress.** A clear example of such a project is the 2012 CBO analysis of the implications of increasing the tobacco excise tax (Congressional Budget Office 2012). The conclusion of this detailed analysis was that the overall effect on the budget would be comparatively small in both the short and long terms. ("Small" in this study is expressed in terms of a percentage of total Medicare, Medicaid, and Social Security spending, a very large baseline amount.)

*"Supplementary reports would highlight the limits of official scorekeeping and put the estimated cost of federal preventive health efforts in the context of their long-term and widespread value for the nation."*

If legislation directed at lead abatement, the fluoridation of water, providing clinical prevention services to the uninsured, or myriad other actions were estimated in similar detail and with similar considerations in mind, it could make or break a PAYGO review. The high regard in which CBO is held for its nonpartisan expertise in health economics would assure serious consideration of its findings and advance the Congress's understanding of whatever prevention topic is being analyzed. These reviews would also serve health professionals by translating the lawmaking enterprise and improving understanding of the budget process—and most importantly, it could eventually improve the prospects of legislation aimed at reducing preventable chronic illness, disability, and premature death.

### *Mandatory Spending and Population-Based Services*

As has been discussed, the ACA has provided clinical preventive services as an "essential health benefit" in a wide swath of insurance coverage. New services can be added through actions of ACIP, the USPSTF, or HRSA without running the gauntlet of PAYGO because the benefit guarantee is already a promise in statute and so included automatically in the CBO baseline. (Similar actions are permitted through CMS and through the Supplemental Benefits of Medicare Advantage, which are also embedded within the current baseline [Kornfield, Kazan, Frieder, Duddy-Tenbrunsel, et al. 2021].)

No such general, qualitative benefit is in law for population-based prevention services. There is no stream of direct spending for these activities in baseline and no updating as new interventions prove effective and are recommended. Indeed, it is difficult to imagine how a program of automatically improved guaranteed funding could be constructed within the structures of PAYGO and the Budget Act given that the beneficiaries would often be all payors and all US residents, and the benefits would usually materialize only over long periods of time, well beyond the budget window.

This different budget treatment results in some paradoxical outcomes. For example, fluoridation of community water has no direct source of federal funding, even though CDC has recognized it to be "one of ten great public health achievements of the 20th century," with community cost savings of twenty to one (Centers for Disease Control and Prevention 2019b; Centers for Disease Control and Prevention 1999). By contrast, individual fluoride treatment by primary care clinicians is recommended by the USPSTF "for children whose water supply is deficient in fluoride" (USPSTF 2014). It is, therefore, covered as an essential health benefit under the ACA even though providing it in a clinical setting costs more and reaches only a portion of the target population.

Similarly, tobacco "quitline" counseling is supported by a total of only $16 million in federal funding, even though there is "strong evidence" of such counseling "increasing tobacco cessation among clients interested in quitting." The data show a three-percentage-point increase in cessation among those who used the quitline (CPSTF 2015). More expensive pharmacotherapy and individual counseling for tobacco cessation are, by contrast, recommended by the USPSTF and thus covered by all qualified insurance plans.

An existing expert group reviews study findings of population-based services and makes recommendations—the Community Preventive Services Task Force (CPSTF) (Community Guide n.d.). Like the USPSTF, this group is independent of the federal government; it is administratively supported by CDC, while the USPSTF is supported by AHRQ.

As noted previously, the Prevention and Public Health Fund, which is already in statute, offers a potential source of capped mandatory spending for population-based services. While the Fund's mandatory spending has frequently been reduced to offset other activities, its FY2022 budget is $1 billion and will gradually return to $2 billion in FY2028 "and each fiscal year thereafter" (US Congress n.d.e).

**The Congress should reform the statute governing the Prevention and Public Health Fund to target its funding at proven population-based preventive health activities recommended by the Community Preventive Services Task Force.** The Congress should also establish statutory guardrails to discourage legislative or executive use of the Fund for other purposes in the future. The amount of the Fund is capped and will likely remain so; it should be reserved for activities whose estimated efficacy is evidence based and widely endorsed.

## CBO Resources

We must end this discussion by stipulating that each of these proposals—and likely all others—would add to CBO's current workload and require additional resources, staff, and modeling capacity. Considering the size and significance of its work, the agency's budget is quite small and its tasks are already enormous (Swagel 2021). Some of these proposals would also require significant additional data, modeling, and research in order to give credibility to new types of assessment. At present, CBO does little original research, relying instead on research from outside the agency. Additional funding could be used to secure further assistance from other federal agencies (e.g., CDC, NIH, or NCHS). Contracting with private entities for some issues could also be considered.

It is obvious, however, that the resources given to CBO are dwarfed by the value that could be added by improving the information it provides to the Congress about health financing, the largest sector of the federal budget. Clearly, investing in CBO's ability to guide the Congress in this area is warranted.

## Conclusion

The systemic limitations within scorekeeping rules and conventions pose particular challenges to legislation aimed at improving disease prevention and health promotion. While this consensus report has not identified any silver bullets, it has highlighted some potential avenues to lowering the barriers to such legislation and improving the Congress's understanding of the limits and artifacts of the estimation process. By improving transparency, clarifying distribution, providing supplementary context, and periodically conducting in-depth analyses, the scoring process can be adapted and supplemented in ways that will improve the health of all who live in the US.

This report recommends that these improvements be adopted and combined with additional resources so that the Congressional Budget Office can implement them. Disease prevention and health promotion are the universally recommended path toward improving the nation's health and reducing the nation's health spending. Budget analysis should recognize this potential.

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