# Mandatory Spending Options 

Mandatory spending-which totaled about $\$ 2.8$ trillion in 2017, or 70 percent of federal outlays-consists of spending that is generally governed by statutory criteria and is not normally constrained by the annual appropriation process. Mandatory spending also includes certain types of payments that federal agencies receive from the public and from other government agencies. Those payments are classified as offsetting collections or offsetting receipts and reduce gross mandatory spending. ${ }^{1}$ Lawmakers generally determine spending for mandatory programs by setting the programs' parameters, such as eligibility rules and benefit formulas, rather than by appropriating specific amounts each year.

The largest mandatory programs are Social Security and Medicare. Together, those programs accounted for 60 percent of mandatory outlays in 2017. Medicaid and other health care programs, including the Children's Health Insurance Program and subsidies for insurance under the Affordable Care Act, accounted for 16 percent of mandatory spending in that year (see Figure 2-1). The rest of mandatory spending is for income security programs (such as unemployment compensation, nutrition assistance programs, and Supplemental Security Income, or SSI), retirement benefits for civilian and military employees of the federal government, veterans' benefits, student loans, and agriculture programs. ${ }^{2}$

[^0]
## Trends in Mandatory Spending

As a share of the economy, mandatory spending increased significantly between 1968 and 1975, from 5.5 percent to 9.4 percent of gross domestic product (GDP). That increase was attributable mainly to growth in spending for Social Security and other income security programs, and to a lesser extent for Medicare and Medicaid. From 1975 through 2007, mandatory spending varied between roughly 9 percent and 10 percent of GDP. Such spending peaked in 2009 at 14.5 percent of GDP, boosted by the effects of the 2007-2009 recession and policies enacted in response to it. Mandatory spending as a share of GDP fell through 2014—as the effects of a gradually improving economy, the expiration of temporary legislation enacted in response to the recession, and payments from Fannie Mae and Freddie Mac partially offset the increase associated with the reces-sion-and then started to rise again (see Figure 2-2). If no new laws were enacted affecting mandatory programs, the Congressional Budget Office estimates that mandatory outlays would continue to increase as a share of the economy, rising from 13.1 percent of GDP in 2017 to 15.2 percent in $2028 .{ }^{3}$ By comparison, such spending averaged 9.8 percent of GDP over the past five decades.

Spending for Social Security and the major health care programs-particularly Medicare-will drive much of the growth in mandatory spending over the coming decade, CBO expects. CBO projects that, under current law, spending for those programs will increase from 10.2 percent of GDP in 2019 to 12.5 percent in 2028, accounting for almost two-thirds of the total increase in outlays for mandatory spending over that period. (Those percentages reflect adjustments to eliminate the effects of shifts in the timing of certain payments.)

[^1]Figure 2-1.
Composition of Mandatory Spending, 2017


Source: Congressional Budget Office, using data from the Office of Management and Budget.
Other health programs include the Children's Health Insurance Program as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
Other mandatory spending includes outlays for federal civilian and military retirement, certain veterans' benefits, and a variety of other programs.

Much of the projected growth in mandatory spending over the coming decade is attributable to the aging population and rising health care costs per person, both of which spur spending on retirement programs and health care. The number of people age 65 or older has grown significantly-more than doubling over the past 50 years-and is expected to rise by more than one-third by 2028. Moreover, CBO projects that spending per enrollee in federal health care programs will grow more rapidly over the coming decade than it has in recent years. As a result, in CBO's projections, spending on people age 65 or older for Social Security, Medicare, and Medicaid would increase from 6.7 percent of GDP in 2018 to 8.8 percent in 2028.

In contrast, mandatory spending for people under age 65 is projected to remain roughly unchanged at just above 6 percent of GDP over the next 10 years, after adjustments to eliminate the effects of shifts in the timing of certain payments.

## Method Underlying Mandatory Spending Estimates

The budgetary effects of the various options examined in this chapter are measured in relation to the spending that CBO projected in its adjusted April 2018 baseline. ${ }^{4}$

[^2]In creating its mandatory baseline budget projections, CBO generally assumes that federal fiscal policy follows current law and that programs now scheduled to expire or to begin in future years will do so. That assumption applies to most, but not all, mandatory programs. Following procedures established in the Deficit Control Act of 1985, CBO's projections incorporate the assumption that some mandatory programs scheduled to expire in the coming decade under current law will instead be extended. In particular, in CBO's baseline, all such programs that predate the Balanced Budget Act of 1997 and that have outlays in the current year above $\$ 50$ million are presumed to continue. For programs established after 1997, continuation is assessed on a program-by-program basis in consultation with the House and Senate Committees on the Budget. The Supplemental Nutrition Assistance Program (SNAP) is the largest expiring program assumed to be extended in the baseline.

In addition, under Section 257 of the Deficit Control Act, CBO is required to assume that entitlement programs, including Social Security and Medicare, will be able to make all scheduled payments. For example, CBO must assume that scheduled Social Security benefits would be paid even after the program's trust funds were exhausted and annual payroll tax revenues were inadequate to fund those payments.

Figure 2-2.

## Mandatory Spending

Percentage of Gross Domestic Product


Source: Congressional Budget Office.
The projected values shown underlie the projections in Congressional Budget Office, An Analysis of the President's 2019 Budget (May 2018, revised August 2018), www.cbo.gov/publication/53884.
Total mandatory spending includes offsetting receipts (funds collected by government agencies from other government accounts or from the public in businesslike or market-oriented transactions that are recorded as offsets to outlays).

The estimates in this chapter are uncertain for a number of reasons. For instance, the estimates depend in part on CBO's baseline projections, but those projections are uncertain. For example, CBO's projections of participation in certain income support programs depends in part on the overall strength of the economy. If an unanticipated economic downturn occurred, participation in those programs would probably be higher than CBO currently estimates, which would affect estimates for relevant options in this chapter.

In addition, CBO's estimates depend on numerous estimates regarding behavior and choices made by individuals, state governments, and other entities. For example, if Medicare's eligibility age rose, as is described in Option 19, some people would probably choose to work longer to maintain employer-sponsored health insurance. In analyzing that option, CBO's estimate of the number who would make that choice may differ from what would actually happen if that policy was enacted. Furthermore, legislation would be required to implement the options in this chapter, and the details of such legislation could differ from the policy assumptions CBO made in developing its estimates. The estimates for each option in this chapter only include its effects in isolation. If one option was combined with other proposals, as
would happen if the option was part of a broader legislative proposal, then there would be potential interactions between the option and those other changes, and the cost estimate for a broader package would account for those interactions. As a result, the estimated budgetary effects of an option if it were combined with other policy changes could be quite different than the estimate for the option in isolation. Also, at the time of this volume's publication, the Congress was deliberating changes to agriculture and nutrition programs, including crop insurance, commodity support, and SNAP. If legislation was enacted to modify those programs, estimates for related options would probably differ from those published in this volume.

## Options in This Chapter

The 38 options in this chapter encompass a broad array of mandatory spending programs. The options are grouped by program, but some are conceptually similar even though they concern different programs. For instance, several options would shift spending from the government to a program's participants or from the federal government to the states. Other options would redefine the population eligible for benefits or would reduce the payments that beneficiaries receive.

Fourteen options in this chapter focus on health care. One health option-which would impose caps on federal spending for Medicaid-takes a broader approach to changing federal health care policy than the other options examined in this report. Six options concern Social Security. Another five involve means-tested benefit programs (including nutrition assistance programs and SSI). The remaining options in this chapter focus on programs that deal with education, veterans' benefits, federal pensions, agriculture, Fannie Mae and Freddie Mac, and natural resources. Some options would affect revenues as well as outlays and so include an estimate of that revenue effect.

Some options to reduce federal spending on health care in which lawmakers have recently expressed interest and that appeared in prior volumes of this report are not in this volume. One such option would convert Medicare to a premium support system in which beneficiaries would purchase health insurance from a list of competing plans and the federal government would pay part of the cost of the coverage. CBO published an analysis of the effects of such a system on federal spending and beneficiaries' choices and payments in 2017, and the agency has not updated that analysis. ${ }^{5}$ Another option would impose federal limits on medical malpractice torts. It is not part of the current volume because the agency is revising its analytical approach and expects to publish an updated model and estimates in the spring of 2019.

[^3]Also excluded are options that would make major changes to the Affordable Care Act-such as repealing its coverage provisions or replacing those provisions with a flat tax credit or block grants to the states. CBO is currently devoting the resources needed to analyze such options to the development and testing of a new version of its health insurance simulation model. ${ }^{6}$ The new model incorporates new data into early stages of the modeling process, better accounts for consumers' selection of types of insurance plans, and allows easier simulation of new insurance products.

Apart from health, there are other policy options that are not in this volume despite interest from lawmakers. In particular, there are no options related to immigration. Estimating the effects of legislation that would change immigration law is often complicated, involving analysis of both budgetary and macroeconomic effects, and such analysis is beyond the scope of this volume. ${ }^{7}$

Some options that were included in previous volumes, including changing the eligibility for SNAP, have not been included in this chapter, but instead are contained in this edition's appendix in an abbreviated format.
6. See Congressional Budget Office, CBO's Health Insurance Simulation Model: Overview of Planned Updates (October 2018), www.cbo.gov/publication/54623.
7. For CBO's most recent estimates of comprehensive immigration legislation, see Congressional Budget Office, cost estimate for H.R. 3440, Dream Act of 2017 (December 15, 2017), www.cbo.gov/publication/53409; and cost estimate for $S$. 1615, Dream Act of 2017 (December 15, 2017), www.cbo.gov/ publication/53410.

Limit Enrollment in the Department of Agriculture's Conservation Programs

|  | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

This option would take effect in October 2019.

* $=$ between $-\$ 50$ million and zero.


## Background

Under the Conservation Stewardship Program, landowners enter into contracts with the Department of Agriculture (USDA) to undertake various conservation measures-including measures to conserve energy and improve air quality-in exchange for annual payments and technical help. Those contracts last five years and can be extended for another five years. For every acre enrolled in the CSP, a producer receives compensation for carrying out new conservation activities and for improving, maintaining, and managing existing conservation practices. Current law limits new enrollment in the CSP to 10 million acres per year. In 2018, approximately 110 million acres were enrolled, and USDA spent $\$ 1.3$ billion on the program.

Under the Conservation Reserve Program, landowners enter into contracts to stop farming on specified tracts of land, usually for 10 to 15 years, in exchange for annual payments and cost-sharing grants from USDA to establish conservation practices on that land. One type of tract used in the program is a "conservation buffer"-a narrow strip of land maintained with vegetation to intercept pollutants, reduce erosion, and provide other environmental benefits. Acreage may be added to the reserve program through general enrollment, which is competitive and conducted periodically for larger tracts of land, or through continuous enrollment, which is available during annual sign-up periods announced by USDA, for smaller tracts of land. Current law caps total enrollment in the reserve program at 24 million acres by 2018; in 2018, USDA spent $\$ 2$ billion on the roughly 23 million acres enrolled.

The Agriculture Act of 2014 (the 2014 farm bill) was the most recent comprehensive legislation addressing farm programs. It authorized the Conservation Stewardship Program and the Conservation Reserve Program through 2018.

## Option

Beginning in 2020, the first part of this option would prohibit new enrollment in the stewardship program. Land enrolled now-and therefore hosting new or existing conservation activities-would be eligible to continue in the program until the contract for that land expired (after as long as 10 years if the contract is extended). As a result, starting in 2029—after all of the current contracts expired-there would be no land enrolled in the program.

Beginning in 2020, the second part of this option would prohibit both new enrollment and reenrollment in the general enrollment portion of the reserve program; continuous enrollment would remain in effect.

## Effects on the Budget

The budgetary effects of this option are estimated relative to the Congressional Budget Office's baseline projections for the affected programs, which—as required by law-incorporate the assumption that the programs will continue to operate beyond their scheduled expiration date. The options would generate savings with respect to those baseline projections because the programs that are assumed to continue would be eliminated.

By the Congressional Budget Office's estimates, prohibiting new enrollment in the stewardship program would reduce federal spending by about $\$ 7$ billion through 2028. That prohibition would eliminate the possibility of adding up to 10 million acres per year, at an average annual federal cost of $\$ 18$ per acre, to the stewardship program.

Ending general enrollment in the reserve program would reduce spending by $\$ 3$ billion through 2028, CBO estimates. That change would reduce the amount of land enrolled in the reserve program (at an average federal cost of $\$ 52$ per acre) by almost half-by about 11 million acres in 2028.

Under this option, reductions in federal spending would grow over time because both the stewardship program and the reserve program operate through multi-year contracts. Existing contracts would remain in place until they expired, and as they did the federal government would realize savings. (The option's prohibitions on further enrollment mean that the government would make no payments to new enrollees under the stewardship program or to new enrollees or reenrollees under the general enrollment portion of the reserve program.)

Uncertainty about the budgetary effects of this option stems from uncertainty regarding the average federal costs per acre. Those costs depend on the types of land enrolled in the programs; contracts for different types of land involve different payment rates. Because the projection of the types of land that would be enrolled or reenrolled in the programs under current law is uncertain, those average costs are uncertain.

## Other Effects

One argument for prohibiting new enrollment in the stewardship program and thus phasing out the program is that some of the program's provisions limit its effectiveness. For example, paying farmers for conservation practices they have already adopted may not enhance the nation's conservation efforts. Moreover, USDA's criteria for determining payments for conservation practices are not clear, and payments may be higher than necessary to encourage farmers to adopt new conservation measures.

An argument against prohibiting new enrollment in the stewardship program is that, unlike traditional cropbased subsidies, the stewardship program may offer a way to support farmers while also providing environmental benefits. Furthermore, conservation practices often impose significant up-front costs, which can reduce the net economic output of agricultural land, and stewardship program payments help offset those costs.

One argument for scaling back the reserve program is that the land could become available for other uses, some of which might provide greater environmental benefits. For example, reducing enrollment could free more land to produce crops and biomass for renewable energy products.

An argument against scaling back the reserve program is that studies have indicated that the program yields high returns-in the form of enhanced wildlife habitat, improved water quality, and reduced soil erosion-for the money it spends. Furthermore, USDA is enrolling more acres targeting specific environmental and resource concerns, perhaps thereby improving the cost-effectiveness of protecting fragile tracts.

RELATED OPTIONS: Mandatory Spending, "Eliminate Title I Agriculture Programs" (page 17), "Reduce Subsidies in the Crop Insurance Program" (page 19), "Limit ARC and PLC Payment Acres to 30 Percent of Base Acres" (page 21)

Eliminate Title I Agriculture Programs

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | 0 | 0 | 0 | 0 | -0.6 | -0.7 | -6.3 | -6.0 | -6.1 | 0 | -19.7 |

This option would take effect in October 2023.

## Background

Since 1933, lawmakers have enacted and often modified a variety of programs to support commodity prices and supplies, farm income, and producers' liquidity. The Agriculture Act of 2014 (the 2014 farm bill) was the most recent comprehensive legislation addressing farm income and price support programs. Title I of that bill authorized programs through 2018 for producers of major commodities (such as corn, soybeans, wheat, and cotton), as well as specialized programs for dairy and sugar.

## Option

Beginning with the 2024 marketing year, this option would eliminate all Title I commodity support programs. (For example, commodity support for wheat would end on June 1, 2024, and commodity support for corn would end on September 1, 2024.)

Under this option, the permanent agriculture legislation enacted in 1938 and 1949 would be repealed. (That permanent legislation would offer producers price and income support at a relatively high level after the 2014 farm bill or any new farm legislation expired.)

## Effects on the Budget

The budgetary effects of this option are estimated relative to the Congressional Budget Office's baseline projections for the affected programs, which-as required by lawincorporate the assumption that the programs will continue to operate beyond their scheduled expiration date. The effective date for this option is set for 2024 under the assumption that the option could not be implemented before legislation is passed that authorizes the programs to continue to operate through 2023. The option would generate savings with respect to CBO's baseline projections, starting in 2024, which incorporate the assumption that the programs continue through 2028.

Reductions in government spending with respect to CBO's baseline would begin in fiscal year 2024 and savings would rise sharply in fiscal year 2026, when most outlays for the 2024 marketing year would occur. CBO estimates that this option would reduce spending by $\$ 20$ billion, with respect to that baseline, over the 2019-2028 period.

This estimate is derived by eliminating projected spending for the Title I commodity support programs, which is uncertain because it can vary greatly from year to year as a result of changes in weather, trade, and market demand. Such changes have a direct effect on commodity production and prices, which affect the cost of the programs.

## Other Effects

During the Great Depression of the 1930s, the 25 percent of the population that lived on farms had less than half the average household income of urban households; federal commodity programs came about to alleviate that income disparity. One argument for eliminating Title I commodity support programs is that the structure of U.S. farms has changed dramatically since then: The significant income disparity between farm and urban populations no longer exists. In 2014, about 97 percent of all farm households (which now constitute about 2 percent of the U.S. population) were wealthier than the median U.S. household. Farm income, excluding federal program payments, was 52 percent higher than median U.S. household income. Moreover, payments made through programs that support commodity prices and incomes are concentrated among a relatively small portion of farms. Three-quarters of all farms received no farm-related government payments in 2014; most program payments, in total, went to mid- to large-scale farms (those with annual sales above $\$ 350,000$ ).

Moreover, agricultural producers have access to a variety of other federal assistance programs, such as subsidized crop insurance and farm credit assistance programs. In addition, eliminating Title I programs would limit spending that may distort trade between U.S. producers and other countries, thereby reducing the risk that the World Trade Organization might again challenge agricultural support by the federal government (as it did with the U.S. cotton program).

An argument against eliminating commodity support programs is that despite relatively high average income among farmers, the farm sector still faces significant
challenges. Farm income fluctuates markedly and depends on the vagaries of the weather and international markets. Commodity programs try to stabilize crop revenues over time. Also, a significant portion of U.S. agricultural production is exported to markets where foreign governments subsidize their producers. Without support from the government's commodity programs, U.S. producers might not be able to compete as effectively in those export markets. Finally, many years of continual government payments from commodity programs have been capitalized into the fixed assets of farm operations (primarily land); abruptly removing that income stream would cause farmers' wealth to drop significantly.

RELATED OPTIONS: Mandatory Spending, "Limit Enrollment in the Department of Agriculture's Conservation Programs" (page 15),
"Reduce Subsidies in the Crop Insurance Program" (page 19), "Limit ARC and PLC Payment Acres to 30 Percent of Base Acres" (page 21)

Reduce Subsidies in the Crop Insurance Program

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- 2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Reduce premium subsidies | 0 | -0.2 | -1.8 | -2.1 | -2.1 | -2.1 | -2.1 | -2.2 | -2.2 | -2.2 | -6.2 | -16.9 |
| Limit administrative expenses and the rate of return | 0 | -0.1 | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 | -0.5 | -1.6 | -4.1 |
| Both alternatives above | 0 | -0.2 | -2.3 | -2.6 | -2.6 | -2.6 | -2.7 | -2.7 | -2.7 | -2.7 | -7.7 | -21.0 |

This option would take effect in June 2019.

## Background

The federal crop insurance program, a permanent program that is frequently updated by the Congress, protects farmers from losses caused by drought, floods, pest infestation, other natural disasters, and low market prices. Farmers can choose various amounts and types of insurance protection-for example, they can insure against losses caused by poor crop yields, low crop prices, or both. The Department of Agriculture (USDA) sets premium rates for federal crop insurance so that the premiums equal the expected payments to farmers for crop losses. The federal government pays about 60 percent of total premiums, on average, and farmers pay about 40 percent.

Private insurance companies-which the federal government reimburses for their administrative costs-sell and service insurance policies purchased through the program. The current Standard Reinsurance Agreement (SRA) establishes a limit for administrative expenses (currently $\$ 1.4$ billion per year). The SRA establishes the terms and conditions under which the federal government provides subsidies and reinsurance on eligible crop insurance contracts sold or reinsured by private insurance companies. In addition, the federal government reinsures those private insurance companies by agreeing to cover some of the losses when total payouts exceed total premiums. Overall, the Congressional Budget Office projects that under current law the average rate of return to crop insurance companies will be 14 percent through 2020. Under current law, CBO projects that federal spending for crop insurance would total $\$ 78$ billion from 2020 through 2028.

## Option

Beginning in June 2019, this option would reduce the federal government's subsidy to 40 percent of the crop insurance premiums, on average. It also would limit the federal reimbursement to crop insurance companies for administrative expenses to 9.25 percent of estimated premiums (or to an average of $\$ 1$ billion each year from 2020 through 2028) and limit the rate of return on investment for those companies to 12 percent each year.

## Effects on the Budget

This option would save $\$ 21$ billion from 2020 through 2028, CBO estimates.

A change in premium subsidies would alter the cost of crop insurance to producers. As a result, a producer might make no change, change the type of insurance purchased (for example, switching from revenue coverage to yield coverage, which is less expensive), reduce coverage on particular acres, reduce the number of acres covered by insurance (for example, not insuring every field on the farm), drop insurance coverage altogether, or take some combination of those actions. CBO accounted for each of those possible outcomes, making determinations of likely behavior after consulting with producers, academic experts, people working in the crop insurance industry, and others.

The reduction in premium subsidies in this option would save $\$ 17$ billion from 2019 through 2028, CBO estimates. Those savings are uncertain largely because the response by producers is difficult to predict. Generally, the more producers drop insurance or switch to lower coverage levels, the more this option would save.

Limiting administrative expenses and the rate of return of crop insurance companies under the option would save $\$ 4$ billion through 2028, CBO estimates. The savings from an annual restriction on the administrative reimbursement, such as that in this option, would be the difference between the SRA limit and what the option would allow. In addition, CBO estimates that limiting the average rate of return to crop insurance companies to 12 percent would reduce the rate of return by 2 percentage points. As a result, the government would cover less of the companies' losses. Generally, the amount of savings from limiting administrative expenses and the rate of return of crop insurance companies is proportional. For example, each additional 1 percentage point reduction in the limit on reimbursements for administrative expenses as a percent of premiums would save an additional $\$ 1$ billion over the 10 -year period. Similarly, an additional 1 percentage point reduction in the rate of return would save around $\$ 0.8$ billion.

## Other Effects

An argument in favor of this option is that cutting the federal subsidies for premiums would probably not substantially affect participation in the program. Private lenders to farmers increasingly view crop insurance as an important way to ensure that farmers can repay their loans, which encourages participation. Moreover, the farmers who dropped out of the program would generally continue to receive significant support from other federal farm programs.

Another argument in favor of this option is that it would reduce reimbursement rates for administrative expenses to a level more in line with current premiums. Current
reimbursements to crop insurance companies for administrative expenses (around $\$ 1.3$ billion per year) were established in 2010, when premiums were relatively high. Recent reductions in the value of the crops insured (partly the result of lower average commodity prices) have resulted in lower average premiums for crop insurance. However, administrative expenses have not shown a commensurate reduction. A cap of 9.25 percent, or about $\$ 1$ billion, would be close to average reimbursements during the years before the run-up in commodity prices in 2010. Furthermore, according to a recent USDA study, the current rate of return on investment for crop insurance companies, 14 percent, is higher than that of other private companies, on average.

An argument against this option is that cutting the federal subsidies for premiums would probably cause farmers to buy less insurance and leave them more vulnerable to risk. All else being equal, the option would increase the cost of insurance by 50 percent and could lead to a reduction in insured acres. If the amount of insurance declined significantly, lawmakers might be more likely to enact special relief programs when farmers encountered significant difficulties, which would offset some of the savings from cutting the premium subsidy. (Such ad hoc disaster assistance programs for farmers cost an average of about $\$ 700$ million annually in the early 2000 s.) In addition, limiting reimbursements to companies for administrative expenses and reducing the targeted rate of return to companies could add to the financial stress of companies in years with sizable payouts for covered losses. Moreover, if significantly fewer farmers participate, then some smaller crop insurance companies would probably go out of business.

RELATED OPTIONS: Mandatory Spending, "Limit Enrollment in the Department of Agriculture's Conservation Programs" (page 15), "Eliminate Title I Agriculture Programs" (page 17), "Limit ARC and PLC Payment Acres to 30 Percent of Base Acres" (page 21)

Limit ARC and PLC Payment Acres to 30 Percent of Base Acres

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019 | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -3.3 | -3.3 | -3.4 | 0 | -10.0 |

This option would take effect in crop year 2024.

## Background

The Agricultural Act of 2014 (Public Law 113-79) provides support to producers of covered commodities (wheat, oats, barley, corn, grain sorghum, long-grain rice, medium-grain rice, soybeans and other oilseeds, peanuts, chickpeas, dried peas, and lentils) through the Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) programs.

Eligibility under the ARC and PLC programs is determined from a producer's planting history. Only producers who have established base acres (that is, who have shown a history of planting covered commodities on their farms) with the Department of Agriculture under statutory authority granted by previous farm bills may participate. Growers with base acres for covered commodities need not plant a crop to receive payments.

The ARC program pays farmers when the revenues in a crop year fall short of guaranteed amounts at either the county level (ARC-County, or ARC-CO-accounting for most coverage) or the individual farm level (ARCIndividual Coverage, or ARC-IC). (A crop year begins in the month that the crop is first harvested and ends 12 months later. For example, the corn crop year begins September 1 and ends the following August 31.) The PLC program pays farmers when the national average market price for a covered commodity in a given crop year falls below a reference price specified in the law.

When a payment for a crop is triggered, total payments are calculated by multiplying the payment per acre by a producer's payment acres for that crop. For ARC-CO and PLC, the number of payment acres equals 85 percent of base acres; for ARC-IC, it is 65 percent of base acres. Fiscal year 2017 payments for ARC-CO and PLC were $\$ 2.4$ billion and $\$ 2.9$ billion, respectively. The Congressional Budget Office estimates that ARC-IC payments in the same year were $\$ 36$ million, but data from

USDA do not distinguish ARC-CO payments from ARC-IC payments.

## Option

Beginning with the 2024 crop year, this option would limit payment acres for ARC-CO and for PLC to 30 percent of base acres and would make a comparable cut to ARC-IC (to 23 percent of base acres). This option reflects the baseline assumption that the programs (which are scheduled to expire with the beginning of the 2019 crop year) are extended as they exist in the 2014 farm bill, and that the first contracts under that extension would run through crop year 2023. Producers are assumed to enter into contracts under the current system covering the period through the 2023 crop year, so CBO assumes that the option's new limits on payment acres would take effect in crop year 2024.

## Effects on the Budget

Savings would begin in fiscal year 2026, when ARC and PLC payments for crop year 2024 would be made. Any payments come well after crop harvest for two reasons: First, the crop year for each commodity must be complete before the season-average price is known. Second, the 2014 farm bill requires payments to be made beginning October 1 after the end of the applicable crop year, which pushes them into the next fiscal year. Total savings over the 2026-2028 period would be $\$ 10.0$ billion, CBO estimates. Savings would be proportional-reducing payment acres by an additional 10 percent would increase the savings by 10 percent.

This estimate relies upon CBO's estimates for crop price and yield, which are forecast 8 to 10 years into the future. CBO takes uncertainty into account in various ways, such as projecting the chances that prices of covered crops would be below certain thresholds. Nonetheless, given that agricultural markets can vary because of weather, annual planting decisions, and
changes in consumption and trade patterns, actual savings from implementing this option could be higher or lower than projected.

## Other Effects

One argument in favor of this option is that it would limit the competitive advantage that farmers with base acres have over farmers without base acres. Those advantages include the payments themselves, as well as decreased risk and the expectation of a more stable income.

The option might also affect the production and prices of some crops. Factors other than federal payments-such as consumers' demand, climate, infrastructure, and producers' investment in specialized equipment-generally
have the greatest impact on producers' planting choices. However, because only covered commodities are eligible for ARC and PLC support, the availability of those payments tends to encourage farmers to plant crops they might not otherwise plant. Prices for fruits and vegetables (which are not covered by the ARC or PLC programs) may be higher than they would be without those programs. Program rules require a reduction in payments if a farmer plants fruits, vegetables, or wild rice, which tends to reduce the supply of such crops. Those effects might be reduced if the programs were cut back.

An argument against this option is that farming is an inherently risky enterprise. Many growers favor the income stability fostered by federal programs.

RELATED OPTIONS: Mandatory Spending, "Limit Enrollment in the Department of Agriculture's Conservation Programs" (page 15), "Eliminate Title I Agriculture Programs" (page 17), "Reduce Subsidies in the Crop Insurance Program" (page 19)

## Raise Fannie Mae's and Freddie Mac's Guarantee Fees and Decrease Their Eligible Loan Limits

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- 2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Increase guarantee fees | 0 | -0.7 | -0.1 | -1.4 | -1.0 | -1.3 | -1.3 | -1.4 | -1.5 | -1.5 | -5.1 | -12.0 |
| Decrease loan limits | 0 | -0.1 | 0.1 | -0.1 | -0.3 | -0.5 | -0.5 | -0.6 | -0.7 | -0.8 | -0.3 | -3.3 |
| Both alternatives above ${ }^{\text {b }}$ | 0 | -0.7 | -0.1 | -1.4 | -1.4 | -1.5 | -1.7 | -1.7 | -1.8 | -1.8 | -3.5 | -11.8 |

This option would take effect in October 2019.
a. Excludes the potential effects on federal spending for the Federal Housing Administration and the Government National Mortgage Association. Spending for those agencies is set through annual appropriation acts and thus is classified as discretionary, whereas spending for Fannie Mae and Freddie Mac is not determined by appropriation acts and thus is classified as mandatory.
b. If both alternatives were enacted together, the total effects would be less than the sum of the effects for each alternative because of interactions between the approaches.

## Background

Fannie Mae and Freddie Mac are government-sponsored enterprises (GSEs) that were federally chartered to help ensure a stable supply of financing for residential mortgages, including those for low- and moderate-income borrowers. The GSEs carry out that mission in the secondary mortgage market (the market for buying and selling mortgages after they have been issued): They buy mortgages from lenders and pool those mortgages to create mortgage-backed securities (MBSs), which they sell to investors and guarantee against losses from defaults. Under current law, in 2018 Fannie Mae and Freddie Mac generally can purchase mortgages of up to $\$ 679,650$ in areas with high housing costs and up to $\$ 453,100$ in other areas; regulators can alter those limits if house prices change. The two GSEs provided credit guarantees for about half of all mortgages for single-family homes that originated in 2017.

In September 2008—after falling house prices and rising mortgage delinquencies threatened the GSEs' solvency and impaired their ability to ensure a steady supply of financing to the mortgage market-the federal government took control of Fannie Mae and Freddie Mac in a conservatorship process. As a result, the Congressional Budget Office concluded that the institutions had effectively become government entities whose operations should be reflected in the federal budget. By contrast, the Administration considers the GSEs to be nongovernmental entities.

Under current law, CBO projects, the mortgage guarantees that the GSEs issue from 2019 through 2028 would cost the federal government $\$ 19$ billion. That estimate reflects the subsidy rate that CBO attributes to the guar-antees-the difference between the cost of the guarantees and any fees received by the GSEs as a percentage of the original unpaid principal balance. CBO's estimates are constructed on a present-value basis. (Present value is a single number that expresses a flow of current and future income or payments in terms of an equivalent lump sum received or paid today.)

The Administration's projections focus on the annual cash transactions between the enterprises and the Treasury. Those transactions include potential outlays for purchases of stock from the GSEs that would be needed to maintain the GSEs' solvency. Those transactions also include dividends on the Treasury's stock holdings, which are paid to the Treasury. Essentially, those dividend payments reflect the GSEs' quarterly income. Those cash flows stem from both existing and new business. Under current law, both CBO and the Administration expect that the Treasury would receive substantial net cash inflows from Fannie Mae and Freddie Mac over the 10 -year period; CBO views those transactions as intragovernmental, whereas the Administration considers them to be payments from private firms to the government.

## Option

This option includes two alternatives to reduce the budgetary costs of Fannie Mae and Freddie Mac. In the first alternative, the average guarantee fee that Fannie Mae and Freddie Mac assess on loans they include in their MBSs would increase by 5 basis points ( 100 basis points equal 1 percentage point), to more than 60 basis points, on average, beginning in October 2019. In addition, to keep guarantee fees constant after 2021-when an increase of 10 basis points that was put in place in 2011 is scheduled to expire-the average guarantee fee would be increased by 15 basis points, relative to the fee that would be in effect under current law, after 2021.

In the second alternative, the size of the mortgages that Fannie Mae and Freddie Mac included in their MBSs would be reduced, beginning by setting the maximum mortgage in all areas at $\$ 453,100$ in 2020 (eliminating the higher limit in high-cost areas) and then reducing that maximum by 5 percent a year until it reaches about $\$ 300,000$ by 2028. (Guarantee fees would remain as they are under current law.)

## Effects on the Budget

The first alternative, increasing guarantee fees, would reduce net federal spending by $\$ 10$ billion from 2019 through 2028 and would cause the volume of new guarantees by Fannie Mae and Freddie Mac to fall by around 16 percent, CBO estimates. (The projected reduction in spending each year is the decrease in subsidy costs for mortgages guaranteed in that year.)

The second alternative, reducing loan limits, would save $\$ 3$ billion from 2019 through 2028 because the volume of new guarantees would fall by about 29 percent, CBO estimates. That is because fewer loans would be eligible for the entities to purchase and pool as MBSs.

Taking both alternatives together would lower net federal spending by $\$ 12$ billion from 2019 through 2028 and would result in a drop in new guarantees of about 38 percent, according to CBO's estimates. Because raising guarantee fees by 5 basis points initially and by 15 basis points after 2021 would eliminate most of the federal subsidy costs for the GSEs' guarantees, lowering the loan limits would have a smaller budgetary effect.

However, because the GSEs' profits would drop, CBO estimates that the alternatives would result in net reductions in cash receipts over 10 years under the Administration's cash accounting approach: The
reduction in the amount the two GSEs paid the government would be greater than the amount that the government saved on potential stock purchases. Under the first alternative, increasing the fees would raise the net amount of cash flowing to the Treasury per loan, but the drop in the volume of guarantees would reduce that net cash flow by a larger amount. The effect would be a relatively small drop in net cash receipts from the GSEs to the Treasury. Under the second alternative, the decline in the volume of the guarantees would lead to substantial drops in cash receipts to the Treasury. Taking both alternatives together would also lead to significant decreases in net cash receipts.

To estimate changes in costs from increasing guarantee fees or decreasing loan limits, CBO estimates the effect on total loan guarantees and their subsidy rate. Raising guarantee fees would lower the cost of each guarantee and would reduce the number of guarantees because some borrowers would turn to privately backed mortgages. CBO's estimates of subsidy rates take into account how reducing loan limits and increasing fees would change the mix of borrowers and thus the credit risks borne by the GSEs.

Because the GSEs' guarantee fees are already close to those that CBO estimates private firms would charge, increases in those fees that were larger than those encompassed by this option would result in more borrowers taking out privately backed mortgages and would only marginally increase budgetary savings. Savings from changing the loan limits would be roughly proportional to the change in loan volume. (Whether savings would be proportional for bigger changes in loan limits is uncertain because the composition of the borrowers would change more.) Reducing loan limits more rapidly—say, over 5 years instead of 10 years-would save more money but would risk disrupting the supply of housing credit.

Many factors affect CBO's estimates of federal subsidies for Fannie Mae and Freddie Mac. CBO's model for the GSEs captures how changes in the mortgage market and in macroeconomic conditions affect mortgage performance and originations. Its inputs include projections of home prices, interest rates, unemployment rates, total mortgage originations, the GSEs' market share, and mortgage characteristics. CBO's estimates of subsidy rates are based on a large number of repeated (stochastic) simulations of mortgage defaults, losses given default, and the rate at which borrowers prepay their mortgages
based on the GSEs' reported data on mortgage performance from 2000 to 2015.

The estimates for those alternatives are uncertain because both the total number of new guarantees and the cost per guarantee are uncertain. Those estimates rely in part on CBO's projections of the economy over the next decade. If a downturn in either the economy or in housing markets occurred, more borrowers would probably default on their mortgage loans and recoveries would be lower than in normal times, and as a result, budgetary costs would be higher than estimated. Conversely, if the GSEs purchased and guaranteed fewer mortgages than expected or if defaults were lower than expected, costs would be lower than estimated.

## Other Effects

Because some of the benefits of Fannie Mae's and Freddie Mac's guarantees flow to mortgage borrowers in the form of lower rates, both alternatives in this option would slightly raise borrowing costs. The higher guarantee fees would probably pass directly through to borrowers in the form of higher mortgage rates. The lower loan limits would push some borrowers into the so-called jumbo mortgage market, where loans exceed the eligible size for guarantees by Fannie Mae and Freddie Mac and where rates might be slightly higher, on average.

One argument for the alternatives is that they could support a larger role for the private sector in the secondary mortgage market, which would reduce taxpayers' exposure to the risk of defaults. Lessening subsidies also would help address the GSEs' current underpricing of mortgage credit risk, which encourages borrowers to take out bigger mortgages and buy more expensive homes. Consequently, the option could reduce overinvestment
in housing and shift the allocation of some capital toward more productive activities.

An argument for lowering loan limits instead of raising fees is that many moderate- and low-income borrowers would continue to benefit from the subsidies provided by the GSEs. More-affluent borrowers generally would lose that benefit, but they typically can more easily find other sources of financing. The $\$ 300,000$ limit in 2028 would allow for the purchase of a home costing about $\$ 375,000$ (with a 20 percent down payment). By comparison, the median price of an existing single-family residence in August 2018 was about \$267,000; thus, lowering loan limits as specified here would probably not affect most moderate- and low-income borrowers.

One argument against taking steps that would increase the cost of mortgage borrowing is that doing so could slightly reduce home prices, hurting existing homeowners. Posing another drawback, the slightly higher mortgage rates resulting from lower subsidies would limit some opportunities for refinancing-perhaps constraining spending by some consumers and thereby dampening the growth of private spending. Phasing in the specified changes more slowly could mitigate those concerns, although that approach would reduce the budgetary savings as well.

Finally, both alternatives would make loans guaranteed by the Federal Housing Administration (FHA) more attractive to the riskiest borrowers (unless there are corresponding changes to the rules governing such loans), which could increase risks for taxpayers because FHA guarantees loans with smaller down payments than do the GSEs.

RELATED OPTION: Appendix, Discretionary, "Convert the Home Equity Conversion Mortgage Program Into a Direct Loan Program" (page 311)

RELATED CBO PUBLICATIONS: Accounting for Fannie Mae and Freddie Mac in the Federal Budget (September 2018), www.cbo.gov/ publication/54475; Transitioning to Alternative Structures for Housing Finance: An Update (August 2018), www.cbo.gov/ publication/54218; Modeling the Subsidy Rate for Federal Single-Family Mortgage Insurance Programs (January 2018), www.cbo.gov/ publication/53402; Transferring Credit Risk on Mortgages Guaranteed by Fannie Mae or Freddie Mac (December 2017), www.cbo.gov/ publication/53380; The Effects of Increasing Fannie Mae's and Freddie Mac's Capital (October 2016), www.cbo.gov/publication/52089; The Federal Role in the Financing of Multifamily Rental Properties (December 2015), www.cbo.gov/publication/51006; Transitioning to Alternative Structures for Housing Finance (December 2014), www.cbo.gov/publication/49765; Modifying Mortgages Involving Fannie Mae and Freddie Mac: Options for Principal Forgiveness (May 2013), www.cbo.gov/publication/44115; The Budgetary Cost of Fannie Mae and Freddie Mac and Options for the Future Federal Role in the Secondary Mortgage Market (June 2011), www.cbo.gov/ publication/41487; Fannie Mae, Freddie Mac, and the Federal Role in the Secondary Mortgage Market (December 2010), www.cbo.gov/ publication/21992; CBO's Budgetary Treatment of Fannie Mae and Freddie Mac (January 2010), www.cbo.gov/publication/41887; An Overview of Federal Support for Housing (November 2009), www.cbo.gov/publication/41219

Eliminate or Reduce the Add-On to Pell Grants, Which Is Funded With Mandatory Spending

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Eliminate Mandatory Add-On Funding | -1.7 | -6.2 | -6.4 | -6.5 | -6.6 | -6.7 | -6.8 | -6.9 | -7.1 | -7.2 | -27.4 | -62.2 |
| Reduce Mandatory Add-On Funding | -0.8 | -3.1 | -3.2 | -3.3 | -3.3 | -3.4 | -3.4 | -3.5 | -3.6 | -3.7 | -13.8 | -31.3 |

This option would take effect in July 2019.
The estimates are relative to the Congressional Budget Office's adjusted April 2018 baseline, updated to account for the increase to the maximum discretionary award in the appropriation for fiscal year 2019.

## Background

The Federal Pell Grant Program is the largest source of federal grant aid to low-income students for undergraduate education. For the 2016-2017 academic year, the program provided $\$ 27$ billion in aid to 7.2 million students. A student's Pell grant eligibility is chiefly determined on the basis of his or her expected family contribution (EFC)—the amount, calculated using a formula established under federal law, that the federal government expects a family to pay toward the student's postsecondary education expenses. The EFC is based on factors such as the student's income and assets. For dependent students (in general, unmarried undergraduate students under the age of 24 who have no dependents of their own), the parents' income and assets, as well as the number of other dependent children in the family who are attending postsecondary schools, are also taken into account. To be eligible for the maximum grant, which is $\$ 6,195$ for the 2019-2020 academic year, a student must have an EFC of zero and be enrolled in school full time. For each dollar of EFC above zero, a student's eligible grant amount is reduced by a dollar. Students with an EFC exceeding 90 percent of the maximum grant (that is, an EFC of more than $\$ 5,575$ for the 2019-2020 academic year) are ineligible for a grant. Part-time students are eligible for smaller grants than those received by full-time students with the same EFC.

Funding for the Pell grant program has both discretionary and mandatory components. The maximum award funded by the discretionary component is set in each fiscal year's appropriation act. For the 2019-2020 academic year, that amount is $\$ 5,135$ per student. One mandatory component is the funding stemming from
the Higher Education Act that is dedicated to supporting the discretionary program. The other mandatory component is so-called add-on funding, which under current law increases the maximum award by $\$ 1,060$ to $\$ 6,195$.

## Option

This option would reduce the maximum award in the Pell grant program. There are two alternatives under the option. One alternative would eliminate the mandatory add-on component of Pell grant funding, thereby reducing the maximum grant awarded to students to $\$ 5,135$ for the 2019-2020 academic year. The second alternative would reduce the mandatory component by half, causing the maximum grant to decline to $\$ 5,665$ in that year.

## Effects on the Budget

Under the first alternative, the grant amount would be reduced by an average of $\$ 710$ during the period. (That amount is smaller than the reduction in the maximum award because some students do not receive the maximum award.) The number of Pell recipients would be lower by about 3 percent, or about 275,000 people per year, during the 2019-2028 period. (Under current law, a student cannot receive less than 10 percent of the maximum Pell grant award. Because a student's award is the maximum award minus the student's EFC, students with an EFC exceeding 90 percent of the maximum Pell grant award- $\$ 5,575$ for the 2019-2020 academic year-do not qualify for a grant. As the maximum size of the grant shrinks, fewer students will meet that threshold.) CBO estimates that this alternative would reduce mandatory spending by $\$ 62$ billion over the 10 -year period.

Under the second alternative, the grant amount would be reduced by an average of $\$ 355$ during the period. The number of recipients would be about 2 percent lower during the 2019-2028 period, or about 130,000 people per year. CBO estimates that this alternative would result in a reduction of $\$ 31$ billion in mandatory spending over the 10 -year period.

Under current law, program costs and the number of Pell grant recipients would grow by about 2 percent per year, CBO estimates. Under the option, those amounts would still rise over 10 years, but not by as much. CBO estimates that the distribution of EFC among applications would remain relatively stable over the next decade. CBO also estimates that most of the affected students would add to their federal student loans to the extent allowed under current law.

Uncertainty about the number of Pell grant recipients is the primary source of uncertainty in CBO's estimates. The number of recipients is affected by economic factors including job opportunities, the cost of attending school, and expectations of future opportunities for graduates. The number of Pell grant recipients is also affected by the maximum discretionary award amount, which is set each year in an appropriation act.

## Other Effects

A few studies suggest that some postsecondary institutions have responded to past increases in the size of Pell grants by raising tuition or shifting more of their own aid to students who did not qualify for Pell grants. An argument for reducing the maximum Pell grant, therefore, is that institutions might become less likely to raise tuition and more likely to aid students who had lost eligibility for a Pell grant or who were receiving a smaller Pell grant.

An argument against this option is that even with the grant at its current amount, the cost of attending a public four-year college is greater for most recipients than their EFC plus all financial aid-and for many recipients attending private colleges, the gap is even larger. Reducing Pell grant amounts (and eliminating Pell grants for some students) would further increase that financial burden and might cause some students to choose a less suitable institution or to forgo some or all postsecondary education. Moreover, among students who remained eligible for Pell grants under this option, grant amounts would be reduced uniformly, regardless of the students' financial need. By contrast, targeted reductions in grants might be more effective in protecting one of the program's goals: boosting the educational attainment of students from the lowest-income families.

RELATED OPTIONS: Mandatory Spending, "Reduce or Eliminate Subsidized Loans for Undergraduate Students" (page 31); Discretionary Spending, "Tighten Eligibility for Pell Grants" (page 179); Revenues, "Eliminate Certain Tax Preferences for Education Expenses"
(page 244)
RELATED CBO PUBLICATIONS: Federal Aid for Postsecondary Students (June 2018), www.cbo.gov/publication/53736; Distribution of Federal Support for Students Pursuing Higher Education in 2016 (June 2018), www.cbo.gov/publication/53732; The Pell Grant Program: Recent Growth and Policy Options (September 2013), www.cbo.gov/publication/44448; Options to Change Interest Rates and Other Terms on Student Loans (June 2013), www.cbo.gov/publication/44318

Limit Forgiveness of Graduate Student Loans


This option would take effect in July 2019.
By law, the costs of federal student loan programs are measured in the budget according to the method established in the Federal Credit Reform Act. The fair-value method is an alternative and is included in this table for informational purposes.

IDR = income-driven repayment.
a. If both alternatives were adopted, the total savings would be greater than the sum of the savings if the alternatives were individually adopted because of interactions between the two alternatives.

## Background

Federal student loans can be forgiven under certain circumstances. The federal government offers several income-driven repayment (IDR) plans in which borrowers make monthly payments for a certain period of time based on their income, after which the outstanding balance of their loans is forgiven. IDR plans do not impose a limit on the amount that can be forgiven. The Congressional Budget Office expects that the biggest benefits of those plans currently go to people who borrow to attend graduate or professional school, because those people tend to borrow larger amounts than do people who borrow for undergraduate studies.

## Option

This option includes two alternatives that would reduce loan forgiveness for borrowers who took out federal student loans to pay for graduate school, starting with loans made to new borrowers in July 2019.

The first alternative would increase the percentage of income above 150 percent of the poverty guidelines that graduate borrowers in IDR plans pay on loans to 15 percent, up from the current 10 percent in most plans. (The amount those borrowers pay is capped by the amount that would be required under the Standard Repayment Plan with a 10-year repayment period, so borrowers with sufficiently high income would pay less than 15 percent of their income.)

The second alternative would extend the repayment period from 20 years to 25 years for several IDR plans used by borrowers who take out loans to finance graduate school. (The percentage of income required for monthly payments and the length of the repayment period for borrowers with only undergraduate loans would continue to be 10 percent and 20 years, respectively.)

## Effects on the Budget

When estimating the budgetary effects of proposals to change federal loan programs, CBO is required by law to use the method established in the Federal Credit Reform Act (FCRA). That approach uses accrual accountingwhich, unlike cash accounting, records the estimated present value of credit programs' expenses and related receipts when the legal obligation is first made rather than when subsequent cash transactions occur. (Present value is a single number that expresses a flow of current and future payments in terms of an equivalent lump sum paid today and that depends on the rate of interest, or discount rate, that is used to translate future cash flows into current dollars.) FCRA accounting, however, does not consider all the risks borne by the government. In particular, it does not consider market risk-which arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions. The government is exposed to market risk because, when the economy is weak, borrowers default on their debt obligations more frequently, and recoveries from borrowers are lower. Under an alternative method, the fair-value approach, estimates are based on market values-market prices when they are available, or approximations of market prices when they are not-which better account for the risk that the government takes on. As a result, the discount rates used to calculate the present value of higher loan repayments under this option are higher for fair-value estimates than for FCRA estimates, and the savings from those higher repayments are correspondingly lower.

Because loan repayments under IDR plans would be expected to increase under this option, the government would face less risk on loans in those plans; however, in estimating the budgetary effects of this option, CBO did not decrease the fair-value discount rates to account for the anticipated decline in risk.

Under current law, the student loan program will generate $\$ 18$ billion for the government from 2019 to 2028, according to the FCRA method, CBO estimates. Under the first alternative, the government would save an additional $\$ 18$ billion over the same period, according to FCRA accounting. According to the fair-value method, over the same period, federal costs would be reduced from $\$ 212$ billion to $\$ 196$ billion, for a savings of $\$ 16$ billion. Under either method, the annual savings grow over time, because each year the number of
borrowers and volume of loans are projected to increase as more borrowers enter the repayment plans. (The numbers for savings and costs account only for mandatory costs-both subsidy and administrative costs-for direct student loans.)

Under the second alternative, CBO estimates, federal spending from 2019 to 2028 would be reduced by $\$ 12$ billion, according to the FCRA method. According to the fair-value method, spending would be reduced by $\$ 9$ billion.

If both alternatives were implemented, the total savings would be slightly greater than the sum of the savings if the alternatives were individually adopted because of interactions between the two alternatives.

Both alternatives would encourage prospective borrowers who use an IDR plan to limit their borrowing because the cost of repaying the loan would increase. Under the first alternative, the cost of repaying the loan could be as much as 50 percent higher than under current law. The second alternative would increase by 25 percent the number of payments made by affected borrowers-and because income tends to increase with work experience, adding more years of payments would probably increase the sums that borrowers would have to repay by an even larger percentage.

Accordingly, under both alternatives CBO expects the volume of loans in IDR plans would be reduced. Under current law, CBO estimates that 45 percent of the volume of the loans made to all student borrowers and about 55 percent of those made to graduate student borrowers will enter an IDR plan. Under this option, CBO estimates that by 2028, the volume of loans originated to graduate student borrowers who entered an IDR would be reduced by about 20 percent (to about 44 percent of the loans originated to graduate student borrowers) in the first alternative and by 15 percent in the second alternative.

There are several sources of uncertainty in the estimates associated with this option. CBO must project future enrollment, the number of students who will take out a government loan, and the future earnings of those borrowers under current law and under each of the two alternatives. To estimate the effects of the option, CBO must then predict how those borrowers would respond
to increases in the effective cost of borrowing that would occur under either or both alternatives.

It is difficult to determine how savings would be affected by variations in the option. For example, increasing the share of income borrowers pay on their loans from 10 percent to 20 percent (rather than from 10 percent to 15 percent, as specified in the first alternative) would not double the savings under the first alternative. That is because, if loan repayments had to be a higher portion of their income, more borrowers would completely pay off their loans or switch to other types of repayment plans. Similarly, if the repayment period was increased by 10 years (rather than by 5 years as specified in the second alternative), the savings would not double.

## Other Effects

An argument in favor of this option is that reducing the amount of student debt that is forgiven-either by increasing the amount of the monthly payment or by extending the repayment period-would reduce students' incentive to borrow and would encourage them to enroll in graduate programs whose benefits, in terms of improved opportunities for employment, justified the costs of the additional schooling.

A second argument in favor of this options is that it focuses on people who have borrowed for graduate studies, who often have relatively high income and are therefore more likely to be able to eventually pay back their loans. Under both alternatives, affected borrowers would pay back more of their loans than they otherwise would, and more of those borrowers would completely pay off their debt before the end of the repayment period. (Under either alternative, IDR plans would continue to forgive any amount that was not repaid, so debt relief would be provided to borrowers who, despite making regular payments for 20 years or 25 years, could not pay off their debt.)

An argument against this option is that it would increase the risk that students would not be able to repay their loans. The increased risk might lead some students to choose less graduate education or to forgo it altogether. Both alternatives would disproportionately affect prospective graduate students with fewer financial resources, such as those who come from low-income families. Such students would be less likely to attend graduate school and consequently would have lower future earnings; and if they chose to take out loans to attend graduate school, they would be likelier to have heavy student debt later in life.

RELATED OPTION: Mandatory Spending, "Reduce or Eliminate Subsidized Loans for Undergraduate Students" (page 31)
RELATED CBO PUBLICATION: Options to Change Interest Rates and Other Terms on Student Loans (June 2013), www.cbo.gov/
publication/44318

Reduce or Eliminate Subsidized Loans for Undergraduate Students

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
|  | Savings Estimated Using the Method Established in the Federal Credit Reform Act |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Restrict access to subsidized loans to students eligible for Pell grants | -0.1 | -0.4 | -0.5 | -0.6 | -0.7 | -0.8 | -0.9 | -1.0 | -1.0 | -1.0 | -2.3 | -7.0 |
| Eliminate subsidized loans altogether | -0.4 | -1.1 | -1.6 | -1.9 | -2.2 | -2.5 | -2.8 | -3.0 | -3.1 | -3.2 | -7.1 | -21.6 |
| Savings Estimated Using the Fair-Value Method |  |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Restrict access to subsidized loans to students eligible for Pell grants | -0.1 | -0.3 | -0.4 | -0.5 | -0.5 | -0.6 | -0.7 | -0.7 | -0.8 | -0.8 | -1.8 | -5.4 |
| Eliminate subsidized loans altogether | -0.3 | -0.9 | -1.3 | -1.5 | -1.7 | -2.0 | -2.2 | -2.4 | -2.5 | -2.6 | -5.7 | -17.3 |

This option would take effect in July 2019.
By law, the costs of federal student loan programs are measured in the budget according to the method established in the Federal Credit Reform Act. The fair-value method is an alternative and is included in this table for informational purposes.

## Background

The William D. Ford Federal Direct Loan Program lends money directly to students and their parents to help finance postsecondary education. Two types of loans are offered to undergraduate students: subsidized loans, which are available only to undergraduates who demonstrate financial need, and unsubsidized loans, which are available to undergraduates regardless of need (and to graduate students as well).

For undergraduates, the interest rates on the two types of loans are the same, but the periods during which interest accrues are different. Subsidized loans do not accrue interest while students are enrolled at least half time, for six months after they leave school or drop below half-time status, and during certain other periods when they may defer making repayments. Unsubsidized loans accrue interest from the date of disbursement. The program's rules cap the amount-per year, and also for a lifetime-that students may borrow in subsidized and unsubsidized loans. By the Congressional Budget Office's estimates, subsidized and unsubsidized loans will each constitute roughly half of the dollar volume of federal loans to undergraduate students for the 2018-2019 academic year.

## Option

This option includes two possible changes to subsidized loans. In the first alternative, only students who were eligible for Pell grants would have access to subsidized loans. (In the 2015-2016 academic year, about twothirds of subsidized loan recipients received Pell grants, CBO estimates.) In the second alternative, subsidized loans would be eliminated altogether. In both alternatives, students would be able to borrow additional amounts in the unsubsidized loan program equal to what they were eligible to borrow in the subsidized loan program.

The Federal Pell Grant Program provides grants to help finance postsecondary undergraduate education; to be eligible for those grants, students and their families must demonstrate financial need. Under current law, only students with an expected family contribution (EFC) the sum that the federal government expects a family to pay for a student's postsecondary education-of less than about $\$ 5,575$ are eligible for a Pell grant. However, students with a larger EFC are eligible for subsidized loans as long as the EFC is less than their estimated tuition, room, board, and other costs of attendance, adjusted for other aid received. Under the first alternative, those
students with a larger EFC would no longer qualify for subsidized loans.

## Effects on the Budget

When estimating the budgetary effects of proposals to change federal loan programs, the Congressional Budget Office is required by law to use the method established in the Federal Credit Reform Act (FCRA). Under FCRA accounting, projected cash flows-including projected flows after 2028-are discounted to the present value in the year the loan is taken out using interest rates on Treasury securities. (Present value is a single number that expresses a flow of current and future payments in terms of an equivalent lump sum paid today and that depends on the rate of interest, or discount rate, that is used to translate future cash flows into current dollars.)

FCRA accounting, however, does not consider all the risks borne by the government. In particular, it does not consider market risk-which arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions. The government is exposed to market risk because, when the economy is weak, borrowers default on their debt obligations more frequently, and recoveries from borrowers are lower. Under another method, the fair-value approach, estimates are based on market values-market prices when they are available, or approximations of market prices when they are notwhich better account for the risk that the government takes on. As a result, the discount rates used to calculate the present value of higher loan repayments under this option are higher for fair-value estimates than for FCRA estimates, and the savings from those higher repayments are correspondingly smaller.

According to the FCRA method, under current law the direct loan program would produce $\$ 18$ billion in budgetary savings from 2019 to 2028, CBO estimates, and the option would produce additional savings of $\$ 7$ billion under the first alternative and $\$ 22$ billion under the second alternative. According to the fair-value method, under current law the direct loan program would cost $\$ 212$ billion over the same period, and under the option those outlays would be reduced by $\$ 5$ billion under the first alternative and by $\$ 17$ billion under the second. This option would only affect new borrowers after July 1,2019 , so savings would rise over time because each new cohort of loans would include a larger share of new borrowers.

Under both alternatives, CBO expects that most of the affected students would continue to borrow through the unsubsidized loan program. However, not all of them would borrow as much in unsubsidized loans as they would have in subsidized loans because interest on unsubsidized loans starts to accrue earlier, from the date the loan is disbursed.

Under current law, CBO estimates that annual borrowing under the subsidized loan program would rise from $\$ 22$ billion in 2019 to $\$ 30$ billion in 2028. The option would gradually reduce the number of students who could take out subsidized loans. Under the first alternative, the volume of new subsidized loans would fall gradually over the 2019-2028 period and be $\$ 10$ billion lower in 2028 than it would be under current law, CBO estimates. The volume of unsubsidized student loans would be about $\$ 10$ billion higher in 2028 than it would be under current law. Under the second alternative, almost no subsidized loans would be originated in 2028 and the volume of unsubsidized loans would be almost $\$ 30$ billion higher in that year than it would be under current law.

Using the FCRA method, CBO projects that the federal government incurs a cost of about $\$ 0.13$ for every dollar of subsidized loans and a smaller cost-about \$0.02for every dollar of unsubsidized loans, because interest on an unsubsidized loan accrues from the date a loan is disbursed. To determine the government's savings, CBO calculates the amount that students would borrow in unsubsidized loans because they did not have access to subsidized loans, multiplied by the difference in cost ( $\$ 0.11$ ). Next, it calculates the amount the government would save from subsidized loans that would not be replaced (because some students would find unsubsidized loans too expensive). That figure is reached by multiplying the volume of such loans times $\$ 0.13$. CBO adds the two figures together to estimate savings under FCRA. (Under the fair-value method, the same calculations are made except for the estimates of the loans' costs: $\$ 0.31$ per dollar for subsidized loans and $\$ 0.23$ per dollar for unsubsidized loans.)

The growth of enrollment, the path of future interest rates, the repayment plans borrowers will choose, the speed with which they will repay the loans, and the sensitivity of borrowers to the higher cost of unsubsidized loans are all sources of uncertainty in CBO's estimates. The sensitivity to cost is particularly important. Even for
unsubsidized loans, the federal government provides a subsidy. So the fewer students who substitute unsubsidized loans for the subsidized loans that would no longer be available, the greater the reduction in federal costs.

## Other Effects

If a student who would have borrowed $\$ 23,000$ (the lifetime limit) in subsidized loans, beginning in the 2019-2020 academic year, instead borrowed the same amount in unsubsidized loans, that student would leave school with additional debt of about $\$ 3,700$. Over a typical 10-year repayment period, the student's monthly repayment would be $\$ 41$ higher than if he or she had borrowed the same amount in subsidized loans.

An argument in favor of this option is that the current program does not focus resources on people with the greatest needs as effectively as Pell grants. Also, providing subsidies by not charging interest on loans for a period of time may induce students to take loans without fully recognizing the difficulty they will face in repaying them once that period ends. Another argument in favor of the option is that some postsecondary institutions may increase tuition in order to benefit from some of the
subsidies that the government gives students; reducing subsidies might therefore slow the growth of tuition. If institutions responded in that way, they would at least partially offset the effect of higher borrowing costs on students' pocketbooks. Also, the prospect of higher loan repayments upon graduation might encourage students to pay closer attention to the economic value to be obtained from a degree and to complete postsecondary programs more quickly. And for most college students, $\$ 41$ a month in additional costs is small compared with the benefits that they obtain from a college degree.

An argument against this option is that students who face a higher cost of borrowing might decide against attending college, might leave college before completing a degree, or might apply to schools where tuition is lower but educational opportunities are not as well aligned with their interests and skills. Those decisions could eventually lead to lower earnings. Moreover, for any given amount borrowed, higher interest costs would require borrowers to devote more of their future income to interest repayment. That, in turn, could constrain their career choices or limit their ability to make other financial commitments, such as buying a home.

RELATED OPTIONS: Mandatory Spending, "Eliminate or Reduce the Add-On to Pell Grants, Which Is Funded With Mandatory Spending" (page 26); Discretionary Spending, "Tighten Eligibility for Pell Grants" (page 179); Revenues, "Eliminate Certain Tax Preferences for Education Expenses" (page 244)

RELATED CBO PUBLICATIONS: Federal Aid for Postsecondary Students (June 2018), www.cbo.gov/publication/53736; The Pell Grant Program: Recent Growth and Policy Options (September 2013), www.cbo.gov/publication/44448; Options to Change Interest Rates and Other Terms on Student Loans (June 2013), www.cbo.gov/publication/44318

Reduce or Eliminate Public Service Loan Forgiveness

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
|  | Savings Estimated Using the Method Established in the Federal Credit Reform Act |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Cap PSLF at \$57,500 | -0.2 | -0.3 | -0.5 | -0.6 | -0.8 | -1.0 | -1.2 | -1.4 | -1.6 | -1.7 | -2.4 | -9.3 |
| Eliminate PSLF | -0.4 | -0.8 | -1.2 | -1.5 | -1.9 | -2.4 | -2.9 | -3.4 | -3.8 | -4.1 | -5.8 | -22.4 |
|  | Savings Estimated Using the Fair-Value Method |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Cap PSLF at \$57,500 | -0.1 | -0.2 | -0.3 | -0.4 | -0.6 | -0.7 | -0.8 | -1.0 | -1.1 | -1.2 | -1.6 | -6.4 |
| Eliminate PSLF | -0.3 | -0.7 | -0.9 | -1.2 | -1.6 | -1.9 | -2.3 | -2.7 | -3.1 | -3.3 | -4.7 | -18.0 |

This option would take effect in July 2019.
By law, the costs of federal student loan programs are measured in the budget according to the method established in the Federal Credit Reform Act. The fair-value method is an alternative approach and is included in this table for informational purposes.

PSLF = Public Service Loan Forgiveness.

## Background

A variety of programs forgive federal student loans. In one kind of program, known as an income-driven repayment (IDR) plan, monthly payments are calculated each year as a share of a borrower's family income, typically 10 percent to 15 percent of an estimate of discretionary income. The amount of the monthly payment is recalculated each year in response to changes in the borrower's family income and family size. After the borrower has made payments for a certain period, usually 20 years, the outstanding balance of his or her loan is forgiven, although the borrower is liable for income taxes on that forgiven debt. In addition, borrowers in an IDR plan are eligible for the Public Service Loan Forgiveness (PSLF) program if they are employed full time in public service. The program provides debt forgiveness after 10 years of monthly payments. In addition, PSLF borrowers are not liable for income taxes on the forgiven debt. Neither IDR plans nor the PSLF program impose a limit on the amount of debt that can be forgiven.

## Option

This option includes two alternatives, which would apply to federal student loans taken out by new borrowers as of July 1, 2019. The first would cap the amount of debt that could be forgiven under PSLF at $\$ 57,500$ - the
current aggregate limit on loans to independent undergraduate students. Borrowers with a balance remaining after receiving the maximum forgiveness under PSLF would continue making payments under a repayment plan of their choice, including IDR plans, and, as a result, could receive additional forgiveness after making payments for the required additional time. Because the cap is equal to the limit for federal student loans for undergraduate studies, and because there is no such maximum for graduate studies, the first alternative would mostly affect students who borrow for graduate school, especially those borrowers who have high debt compared with their post-school income.

The second alternative would eliminate the PSLF program. Borrowers would still have the option of choosing an IDR plan and, as a result, could ultimately receive loan forgiveness (albeit at the end of a longer period of making payments). The alternative would affect all borrowers who enter public service with outstanding student loans, but again would have the greatest impact on those who have high debt compared with their income.

Neither alternative would eliminate debt forgiveness under IDR plans.

## Effects on the Budget

When estimating the budgetary effects of proposals to change federal loan programs, the Congressional Budget Office is required by law to use the method established in the Federal Credit Reform Act (FCRA). Under FCRA accounting, projected cash flows-including projected flows after 2028-are discounted to the present value in the year the loan was taken out using interest rates on Treasury securities. (Present value is a single number that expresses a flow of current and future payments in terms of an equivalent lump sum paid today and that depends on the rate of interest, or discount rate, that is used to translate future cash flows into current dollars.) FCRA accounting, however, does not consider all the risks borne by the government. In particular, it does not consider market risk-which arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions. The government is exposed to market risk because, when the economy is weak, borrowers default on their debt obligations more frequently, and recoveries from borrowers are lower. Under an alternative method, the fair-value approach, estimates are based on market values-market prices when they are available, or approximations of market prices when they are notwhich better account for the risk that the government takes on. As a result, the discount rates used to calculate the present value of higher loan repayments under this option are higher for fair-value estimates than for FCRA estimates, and the savings from those higher repayments are correspondingly lower.

Estimated according to the FCRA method, annual federal costs under the first alternative would fall by $\$ 9$ billion from 2019 to 2028. According to the fairvalue method, over the same period, annual federal costs would fall by $\$ 6$ billion. Under the second alternative, CBO estimates, federal costs from 2019 to 2028 would be reduced by $\$ 22$ billion according to the FCRA method and by $\$ 18$ billion according to the fair-value method.

The option would only affect new borrowers as of July 1, 2019, so savings would rise over time because each new
cohort of loans would include a larger share of borrowers who have not previously taken out student loans. Based on data for recent years showing IDR usage and eligibility for forgiveness of loans under PSLF, CBO projects that roughly 10 percent of federal loans to students originated each year between 2019 and 2028 ultimately will receive forgiveness of outstanding balances (calculated as the origination amount minus the principal repaid, plus accumulated interest) under PSLF.

Considerable uncertainty surrounds CBO's estimates of savings under this option. It arises from uncertainty about the number of borrowers who will enter public service occupations and remain in those occupations for 10 years, the earnings of those borrowers over their public service careers, and the amount of student loan debt those borrowers would still owe at the end of 10 years of service.

## Other Effects

An argument for eliminating PSLF is that doing so would remove the difference in compensation (including loan forgiveness) between public service employees with student loans and those without them. Student loan borrowers who receive loan forgiveness effectively receive more compensation for their public service work than other public service employees who did not receive loan forgiveness. If the goal of PSLF is to increase pay for public service jobs, it would be more efficient to subsidize everyone who chose to enter public service work.

An argument against eliminating PSLF is that it would reduce some incentives from accepting public service jobs over other jobs. PSLF reduces the risk of borrowing to pay for education for those who are likely to have public service employment options, such as law school graduates who could work as public defenders, because they can always enter public service and discharge their debt after making payments for a specified number of years. The elimination of public service loan forgiveness might also prevent some people from working in the public sector, possibly reducing the supply of workers for those types of jobs compared with the supply under current law.

Remove the Cap on Interest Rates for Student Loans

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
|  | Savings Estimated Using the Method Established in the Federal Credit Reform Act |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Remove the cap for PLUS and graduate loans | -0.1 | -0.6 | -1.4 | -1.7 | -1.5 | -1.2 | -1.1 | -1.1 | -1.1 | -1.2 | -5.3 | -10.9 |
| Remove the cap for all loans | -0.1 | -0.9 | -1.9 | -2.4 | -2.2 | -1.7 | -1.5 | -1.5 | -1.6 | -1.7 | -7.5 | -15.5 |
|  | Savings Estimated Using the Fair-Value Method |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Remove the cap for PLUS and graduate loans | -0.1 | -0.5 | -1.0 | -1.3 | -1.2 | -0.9 | -0.8 | -0.8 | -0.9 | -0.9 | -4.0 | -8.3 |
| Remove the cap for all loans | -0.1 | -0.7 | -1.5 | -1.8 | -1.7 | -1.3 | -1.1 | -1.2 | -1.2 | -1.3 | -5.7 | -11.7 |

This option would take effect in July 2019.

## Background

Through the William D. Ford Federal Direct Loan Program, the federal government lends money directly to students and their parents to help finance postsecondary education. The interest rates on new student loans are indexed annually to the 10-year Treasury note rate. For undergraduate subsidized and unsubsidized loans, the interest rate is the 10-year Treasury note rate plus 2.05 percentage points, with a cap of 8.25 percent. For unsubsidized loans to graduate students, the interest rate is the 10 -year Treasury note rate plus 3.6 percentage points, with a cap of 9.5 percent. Finally, for PLUS loans, which are additional unsubsidized loans to parents or graduate students, the rate is the 10-year Treasury note rate plus 4.6 percentage points, with a cap of 10.5 percent.

## Option

This option includes two alternatives. The first would remove the interest rate cap on all graduate loans and PLUS parent loans. The second would remove the interest rate cap on all federal student loans. Both policies would take effect in the 2019-2020 academic year. Without the caps, student loan interest rates would be higher than under current law for undergraduate borrowers if the 10-year Treasury note rate was higher than 6.2 percent or for graduate and parent borrowers if it was higher than 5.9 percent.

## Effects on the Budget

When estimating the budgetary effects of proposals to change federal loan programs, the Congressional Budget Office is required by law to use the method established in the Federal Credit Reform Act (FCRA). Under FCRA accounting, projected cash flows-including projected flows after 2028—are discounted to the present value in the year the loan was taken out using interest rates on Treasury securities. (Present value is a single number that expresses a flow of current and future payments in terms of an equivalent lump sum paid today and that depends on the rate of interest, or discount rate, that is used to translate future cash flows into current dollars.) FCRA accounting, however, does not consider all the risks borne by the government. In particular, it does not consider market risk-which arises from shifts in macroeconomic conditions, such as productivity and employment, and from changes in expectations about future macroeconomic conditions. The government is exposed to market risk because, when the economy is weak, borrowers default on their debt obligations more frequently, and recoveries from borrowers are lower. Under an alternative method, the fair-value approach, estimates are based on market values-market prices when they are available, or approximations of market prices when they are notwhich better account for the risk that the government takes on. As a result, the discount rates used to calculate the present value of higher loan repayments under the
option are higher for fair-value estimates than for FCRA estimates, and the savings from those higher repayments are correspondingly lower.

According to the FCRA method, eliminating the cap only on loans to graduate students and parents would reduce projected spending by $\$ 11$ billion from 2019 to 2028, CBO estimates. According to the fair-value method, projected spending would decline by $\$ 8$ billion.

According to the FCRA method, eliminating the cap on all federal student loans would reduce projected spending by $\$ 16$ billion from 2019 to 2028 . According to the fair-value method, projected spending would decline by $\$ 12$ billion.

Both alternatives are projected to lower spending because there is some possibility that the interest rate caps could bind under current law, even though that outcome does not occur in CBO's 10-year economic projections. In other words, the estimates take into account the possibility that interest rates will be higher than expected. CBO estimates a range of possible outcomes for borrower interest rates using statistical techniques designed to capture the effects of volatility in interest rates. Specifically, such estimates are based on Monte Carlo simulations, a technique based on statistical inference regarding the uncertainty in estimates and projections of economic variables. That technique allows CBO to account for the probability in each year that the 10-year Treasury note rate will be high enough for the caps to be in effect.

Uncertainty around the possible outcomes for future interest rates is one key factor that makes the estimates
of the two alternatives uncertain. Underlying the estimates is the probability that the Treasury rate will be high enough for student loan rates to be capped, which is based on CBO's April 2018 forecast of the Treasury rate. A greater probability of higher Treasury rates would increase the probability that the caps would bind. As a result, the estimated savings from this option would also increase. Likewise, a smaller probability of higher Treasury rates would decrease the probability that the caps would bind and, thus, the estimated savings would decrease.

## Other Effects

An argument for this option is that the program's subsidy would depend less on the level of interest rates. In other words, the cost to borrowers would always increase when the government's cost of funding increases and any underlying subsidy would remain unchanged. Removing the caps would also prevent student loan borrowing from becoming cheaper relative to other borrowing, such as taking out a home mortgage, when Treasury rates are high.

An argument against this option is that borrowers would face higher costs to repay their loans if their loan interest rates were higher than the current caps. The Congress originally included the caps so that there would be a limit to borrowers' interest costs if Treasury rates increased to very high levels. If the caps were removed, the potential for such high interest rates could cause people who would need to take out student loans to choose not to attend college. In addition, such high interest rates could increase borrowers' default rates.

RELATED OPTIONS: Mandatory Spending, "Limit Forgiveness of Graduate Student Loans" (page 28), "Reduce or Eliminate Subsidized Loans for Undergraduate Students" (page 31), "Reduce or Eliminate Public Service Loan Forgiveness" (page 34); Revenues, "Eliminate Certain Tax Preferences for Education Expenses" (page 244)

RELATED CBO PUBLICATION: Options to Change Interest Rates and Other Terms on Student Loans (June 2013), www.cbo.gov/
publication/44318

## Adopt a Voucher Plan and Slow the Growth of Federal Contributions for the Federal Employees Health Benefits Program

| Billions of Dollars |  |  |  |  |  |  |  |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2023 | 2028 |
|  | Adopt a Voucher Plan, With Growth Based on the CPI-U |  |  |  |  |  |  |  |  |  |  |  |
| Change in Mandatory Outlays ${ }^{\text {a }}$ | 0 | 0 | -0.7 | -1.6 | -2.7 | -3.9 | -5.0 | -6.1 | -7.1 | -8.2 | -5.0 | -35.2 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | 0 | * | * | * | * | * | -0.1 | -0.2 | -0.2 | -0.1 | -0.6 |
| Decrease (-) in the Deficit From Changes in Mandatory Outlays and Revenues ${ }^{\text {c }}$ | 0 | 0 | -0.6 | -1.6 | -2.7 | -3.8 | -4.9 | -6.0 | -7.0 | -8.0 | -4.9 | -34.6 |
| Change in Discretionary Spending |  |  |  |  |  |  |  |  |  |  |  |  |
| Budget authority | 0 | 0 | -0.6 | -1.4 | -2.3 | -3.2 | -4.1 | -5.0 | -5.9 | -6.8 | -4.3 | -29.2 |
| Outlays | 0 | 0 | -0.6 | -1.4 | -2.3 | -3.2 | -4.1 | -5.0 | -5.9 | -6.8 | -4.3 | -29.2 |
|  | Adopt a Voucher Plan, With Growth Based on the Chained CPI-U |  |  |  |  |  |  |  |  |  |  |  |
| Change in Mandatory Outlays ${ }^{\text {a }}$ | 0 | 0 | -0.7 | -1.8 | -2.9 | -4.1 | -5.3 | -6.5 | -7.6 | -8.7 | -5.4 | -37.5 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | 0 | * | * | -0.1 | -0.1 | -0.1 | -0.1 | -0.2 | -0.3 | -0.1 | -0.8 |
| Decrease (-) in the Deficit From Changes in Mandatory Outlays and Revenues ${ }^{\text {c }}$ | 0 | 0 | -0.7 | -1.7 | -2.9 | -4.1 | -5.2 | -6.3 | -7.4 | -8.5 | -5.3 | -36.8 |
| Change in Discretionary Spending |  |  |  |  |  |  |  |  |  |  |  |  |
| Budget authority | 0 | 0 | -0.7 | -1.5 | -2.5 | -3.4 | -4.3 | -5.4 | -6.3 | -7.3 | -4.7 | -31.4 |
| Outlays | 0 | 0 | -0.7 | -1.5 | -2.5 | -3.4 | -4.3 | -5.4 | -6.3 | -7.3 | -4.7 | -31.4 |

This option would take effect in January 2021.
CPI-U = consumer price index for all urban consumers; * = between -\$50 million and zero.
a. Includes estimated savings by the Postal Service, whose spending is classified as off-budget.
b. Estimates include the effects on Social Security payroll tax receipts, which are classified as off-budget.
c. Changes in discretionary spending are not included in this total because they would be realized only if future appropriations were adjusted accordingly and because the Congress uses different procedures to enforce its budgetary goals related to discretionary spending.

## Background

The Federal Employees Health Benefits (FEHB) program provides health insurance coverage to 4 million federal workers and annuitants, as well as to approximately 4 million of their dependents and survivors. In 2018, those benefits are expected to cost the government (including the Postal Service) about $\$ 38$ billion. Policyholders, whether they are active employees or annuitants, generally pay 25 percent of the premium for lower-cost plans and a larger share for higher-cost plans; the federal government pays the rest of the premium. That premium-sharing structure provides some incentive for federal employees to choose plans with lower
premiums, although the incentive is smaller than it would be if they realized the full savings from choosing such plans. The premium-sharing structure also imposes some competitive pressure on insurers to hold down premiums-but again, less pressure than would exist if employees paid the full cost of choosing more expensive plans.

## Option

This option consists of two alternatives. Each alternative would replace the current premium-sharing structure with a voucher, which would be excluded from income and payroll taxes, starting in January 2021. Under the
first alternative, the voucher would be updated each year by the projected rate of inflation as measured by the consumer price index for all urban consumers (CPI-U). The second alternative would index the voucher to the chained CPI-U, rather than the CPI-U.

According to the Congressional Budget Office's estimates, the voucher under the first alternative would cover roughly the first $\$ 6,500$ of a self-only premium, the first $\$ 14,000$ of a self-plus-one premium, or the first $\$ 15,000$ of a family premium in 2021. CBO calculated those amounts by taking its estimates of the government's average expected contributions to FEHB premiums in 2018 and then increasing them by the CPI-U from 2018 through 2021. Each year, the voucher would continue to grow at that rate of inflation, rather than at the average rate of growth for FEHB premiums.

Because the chained CPI-U grows more slowly than the CPI-U, the value of the voucher under the second alternative would cover less of the premium than the first alternative. Relative to current law, CBO estimates that average contributions to FEHB premiums would be 3 percent lower in 2021 and 22 percent lower in 2028 under the CPI-U alternative and 3 percent lower in 2021 and 23 percent lower in 2028 under the chained CPI-U alternative.

## Effects on the Budget

Under current law, FEHB premiums grow significantly faster than either measure of inflation in CBO's projections. (The expected rate of growth for FEHB premiums is similar to that for private insurance premiums, which the agency estimates on the basis of its projections of increases in disposable income and other factors that have historically been associated with growth in premiums.) Indexing the voucher to either measure of inflation would produce budgetary savings. However, in general, linking the voucher amount to an index that grows faster (as under the first alternative) would result in lower savings, and linking the voucher amount to an index that grows more slowly (as under the second alternative) would produce greater savings.

Mandatory Spending and Revenues. Both alternatives would affect mandatory spending and revenues. They would reduce mandatory spending for the FEHB program because the Treasury and the Postal Service would make lower payments for FEHB premiums for annuitants and postal workers. (That reduced spending
includes estimated savings by the Postal Service, whose spending is classified as off-budget.)

In addition, both alternatives would have other effects on mandatory spending because some FEHB participants would leave the program. On the one hand, mandatory spending would increase if FEHB participants disenrolled from FEHB and enrolled in federally subsidized insurance provided by Medicare or the health insurance marketplaces established under the Affordable Care Act. (People whose contributions to employment-based health insurance exceed a specified percentage of income are eligible for subsidies through the marketplaces if they meet other eligibility criteria; by increasing enrollees' premium contributions, this option would boost the number who qualify on that basis.) On the other hand, mandatory spending would be further reduced if annuitants who are FEHB participants disenrolled from the program and either became uninsured or bought unsubsidized coverage in the marketplaces or from insurers outside the marketplaces. The net effect of those disenrolled FEHB participants on changes in mandatory spending would be small relative to the savings from the voucher, but the direction of the change is uncertain.

Revenues also would be affected because of changes in the number of people with employment-based insurance (obtained through a spouse, for example). Those changes would affect the share of total compensation that takes the form of taxable wages and salaries and the share that takes the form of nontaxable health benefits. Taxable compensation would increase for some people and decrease for others. Those effects on revenues, however, would be minimal.

Overall, estimated changes in mandatory spending and revenues would reduce the deficit between 2021 and 2028 by $\$ 35$ billion under the first alternative and by $\$ 37$ billion under the second alternative.

Discretionary Spending. By reducing federal agencies' payments for FEHB premiums for current employees and their dependents, the first alternative would reduce discretionary spending by an estimated $\$ 29$ billion from 2021 through 2028, provided that appropriations were reduced to reflect those lower costs. The second alternative would reduce discretionary spending by an estimated \$31 billion from 2021 through 2028.

Uncertainty. The largest source of uncertainty in the estimate of savings over the next 10 years is CBO's estimate of how the growth of FEHB premiums under current law would compare with general inflation, as measured by either the CPI-U or the chained CPI-U. The difference between the FEHB premium and the voucher amount is a major contributor to the budgetary effects under both alternatives.

## Other Effects

An advantage of both alternatives is that they would increase enrollees' incentive to choose lower-premium plans: If they selected plans that cost more than the voucher amount, they would pay the full additional cost. For the same reason, both alternatives would strengthen price competition among health care plans participating in the FEHB program. Because enrollees would pay no premium for plans that cost no more than the value of
the voucher, insurers would have a particular incentive to offer such plans.

Both alternatives also could have several drawbacks. First, because the value of the voucher would grow more slowly over time than premiums would, participants would eventually pay more for their health insurance coverage. Some employees and annuitants who would be covered under current law might therefore decide to forgo coverage altogether. Second, many large private-sector companies currently provide health care benefits for their employees that are comparable to what the government provides. Under this option, the government benefits could become less attractive than pri-vate-sector benefits, making it harder for the government to attract highly qualified workers. Finally, the option would cut benefits that many federal employees and annuitants may believe they have already earned.

RELATED CBO PUBLICATION: Comparing the Compensation of Federal and Private-Sector Employees, 2011 to 2015 (April 2017), www.cbo.gov/publication/52637

Establish Caps on Federal Spending for Medicaid


## Background

Medicaid is a joint federal-state program that covers acute and long-term health care for groups of low-income people, chiefly families with dependent children, elderly people (people over the age of 65), nonelderly people with disabilities, and-at the discretion of individual states-other nonelderly adults whose family income is up to 138 percent of the federal poverty guidelines. Under current law, the federal and state governments share in the financing and administration of Medicaid. The federal government provides the
majority of Medicaid's funding; establishes the statutory, regulatory, and administrative structure of the program; and monitors state compliance with the program's rules. As part of its responsibilities, the federal government determines which groups of people and medical services states must cover if they participate in the program and which can be covered at states' discretion. For their part, the states administer the program's daily operations, reimburse health care providers and health plans, and determine which optional eligibility and service categories to adopt. The result is wide variation among states in

Establish Caps on Federal Spending for Medicaid

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
|  | Caps on Spending per Enrollee ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |
| Apply Caps to All Eligibility Categories, With Growth of Caps Based on the CPI-U |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | -1 | -3 | -40 | -64 | -82 | -102 | -123 | -146 | -169 | -109 | -731 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | * | -1 | -1 | -2 | -2 | -3 | -5 | -6 | -8 | -4 | -28 |
| Decrease (-) in the Deficit | 0 | -1 | -3 | -39 | -62 | -80 | -98 | -118 | -140 | -162 | -105 | -703 |
| Apply Caps to All Eligibility Categories, With Growth of Caps Based on the CPI-U Plus 1 Percentage Point |  |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | -1 | -3 | -21 | -39 | -51 | -64 | -78 | -93 | -109 | -64 | -460 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | * | -1 | -1 | -1 | -2 | -3 | -4 | -5 | -6 | -3 | -22 |
| Decrease (-) in the Deficit | 0 | -1 | -3 | -20 | -37 | -49 | -61 | -75 | -89 | -103 | -61 | -438 |
| Apply Caps to Adult and Children Eligibility Categories Only, With Growth of Caps Based on the CPI-U |  |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | -1 | -3 | -29 | -44 | -55 | -68 | -81 | -96 | -110 | -77 | -488 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | * | -1 | -1 | -2 | -2 | -3 | -4 | -5 | -6 | -4 | -24 |
| Decrease (-) in the Deficit | 0 | -1 | -3 | -28 | -42 | -53 | -65 | -77 | -90 | -104 | -74 | -464 |
| Apply Caps to Adult and Children Eligibility Categories Only, With Growth of Caps Based on the CPI-U Plus 1 Percentage Point |  |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | -1 | -3 | -18 | -30 | -39 | -48 | -58 | -68 | -79 | -53 | -345 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | * | -1 | -1 | -1 | -2 | -2 | -3 | -4 | -5 | -3 | -21 |
| Decrease (-) in the Deficit | 0 | -1 | -3 | -17 | -29 | -37 | -45 | -54 | -64 | -74 | -50 | -324 |

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.
CPI-U = consumer price index for all urban consumers; * $=$ between -\$500 million and zero.
a. This alternative would take effect in October 2021, although some changes to outlays and revenues would occur earlier.
b. Estimates include the effects on Social Security payroll tax receipts, which are classified as off-budget.
c. This alternative would take effect in October 2022, although some changes to outlays and revenues would occur earlier.
levels of enrollment, the scope of services covered, payment rates for providers and health plans, and spending per capita, among other aspects of how the program is implemented.

In 2017, the states received $\$ 375$ billion in federal funding for Medicaid and spent $\$ 230$ billion of their own funds for the program. Under current law, almost
all federal funding is open-ended: If a state spends more because enrollment increases or costs per enrollee rise, larger federal payments are generated automatically.
On average, the federal government pays about 62 percent of program costs, with a range among the states of 50 percent to the current high of 85 percent, reflecting the variation in state per capita income and in the share of enrollees (if any) in each state that became eligible for

Medicaid as a result of the optional expansion of that program under the Affordable Care Act (ACA). Through 2016, the federal government paid all costs for enrollees who became eligible as a result of the ACA. The federal government is scheduled to cover a slightly declining share of costs for that group from 2017 through 2019, and 90 percent of costs in 2020 and beyond.

Medicaid spending has consumed a rising share of the federal budget over the past several decades, representing a growing percentage of gross domestic product (GDP)—a trend that the Congressional Budget Office projects will continue into the future. Over the past 20 years, federal Medicaid spending has risen at an average rate of slightly more than 7 percent annually as a result of general growth in health care costs, mandatory and optional expansions of program eligibility and covered services, and the increasing amount of state spending that qualifies for federal matching payments.

CBO expects that, under current law, federal spending for Medicaid will grow more slowly in the next decade as the pressure grows on some states to constrain the program's increasing share of their budgets; however, it will continue to increase faster than GDP growth and general inflation, in part because of continued growth in health care costs and in part because more states are expected to expand Medicaid coverage under the ACA. (To date, 32 states and the District of Columbia have done so.) Medicaid spending is projected to rise at an average rate of 6 percent a year, whereas GDP is projected to increase by about 4 percent a year on a nominal basis, and general inflation is expected to average about 2 percent a year. CBO estimates that Medicaid's share of federal noninterest spending will rise from 10 percent in 2017 to 11 percent in 2028.

Lawmakers could make structural changes to Medicaid to decrease federal spending on the program. Among the possibilities are reducing the scope of covered services, eliminating eligibility categories, repealing the expansion of the ACA, reducing the federal government's share of total Medicaid spending, or capping the amount that states receive from the federal government to operate the program. This option focuses on the last approach, although the others could have similar implications for federal and state spending or for individual enrollees, depending on the way states were permitted to, or decided to, respond to such policy changes.

## Key Design Choices That Would Affect Savings

As outlined in this option, there are a variety of designs for caps that policymakers could consider that would significantly affect federal Medicaid savings. However, a number of major policy choices, with important implications, would have to be made. Those key design choices include the following:

- Whether to set overall or per-enrollee caps;
- What categories of Medicaid spending and what eligibility categories to include in the spending limits;
- Which year's spending to use to set the base year and what growth factor, or percentage rate, to use to increase the caps over time; and
- Whether optional expansion of coverage under the ACA also would be subject to the caps (thus creating special complexities for states that have not yet expanded coverage but that might do so in the future).

Overall or Per-Enrollee Spending Caps. The first consideration is whether to pursue a cap on federal Medicaid spending across the board or to provide each state with a fixed amount of funding for each enrollee.

Overall Caps. In general, overall caps would consist of a maximum amount of funding that the federal government would give a state to operate Medicaid. Once established, and depending on the way they were scheduled to increase, the federal caps generally would not fluctuate in response to rising or falling enrollment or as a result of changes in the cost of providing services.

Overall caps could be structured in one of two main ways. First, the federal government could provide block grants at amounts that would not change, regardless of fluctuations in costs or enrollment. Alternatively, the federal government could maintain the current financing structure-paying for a specific share of a state's Medicaid spending-but capping the total amount provided to states. In that case, each state would bear all additional costs above the federal caps, but the state and the federal government would share the savings if spending fell below the caps. In CBO's view, however, if caps were set below current projections of federal Medicaid spending, such additional federal savings would be unlikely. Given the incentive to maximize
federal funding, CBO expects that states would generally structure their programs to qualify for all available federal funds up to the amount of the caps.

Per-Enrollee Caps. Caps on per-enrollee spending would set an upper limit on the amount a state could spend on care for Medicaid enrollees, on average. Under such a plan, the federal government would provide funds for each person enrolled in the program, but only up to a specified amount per enrollee. As a result, each state's total federal funding would be calculated as the product of the number of enrollees and the capped per-enrollee spending amount. (Individual enrollees whose care proved to be more expensive than the average could still generate additional federal payments, as long as the total per capita average did not exceed the cap.) Unlike an overall spending cap, such an approach would allow for additional funding if enrollment rose (when a state chose to expand eligibility under the ACA, for example, or as a result of an increase in enrollment during an economic downturn). Funding would decline if Medicaid enrollment fell (for example, when a state chose to restrict enrollment or when enrollment fell as a result of an improving economy).

Several structures are possible for per-enrollee caps. Caps could be set on the basis of average federal spending per enrollee for all Medicaid beneficiaries or for people by eligibility category. In those circumstances, the federal government would count the enrollees overall or the number in each category and multiply that sum by the spending limit per enrollee. For caps based on eligibility category, the overall limit on Medicaid spending for each state would be the sum of the groups' limits. A similar but more flexible approach would be to set a total limit consisting of the sum of the limits for the chosen groups, but to allow states to cross-subsidize groups (that is, to spend more than the cap for some groups and less for others) as long as the state's total spending limit was maintained.

Spending Categories. Policy options to cap federal Medicaid spending could target all Medicaid spending or spending for specific categories of services. Most federal Medicaid spending covers acute care ( $\$ 260$ billion in 2017) or long-term care ( $\$ 88$ billion in 2017). Both types of spending could be divided among various subcategories. For example, caps could exclude payments to certain enrollees who are also enrolled in Medicare for their Medicare cost sharing because such payments,
which are typically included in acute care spending, are more related to Medicare than Medicaid. Other spending categories include disproportionate share hospital (DSH) payments to inpatient facilities that serve a higher percentage of Medicaid enrollees and uninsured patients; spending under the Vaccines for Children (VFC) program; and administrative spending. (The total in 2017 for those three categories was $\$ 27$ billion.) In general, the more spending categories that were capped, the greater the potential for federal budgetary savings.

Eligibility Categories. In addition to placing limits on spending for different categories of services, caps could limit spending for different eligibility categories. The main eligibility categories for Medicaid consist of the elderly; people with disabilities; children; nondisabled, nonelderly adults who would have been eligible before enactment of the ACA; and adults made eligible by the ACA. As with service categories, the more eligibility categories that are covered by the caps, the greater the potential for federal savings. For example, caps could limit federal spending (either overall or per enrollee) only for children and certain adults but leave spending unchanged for elderly and disabled enrollees. Because the latter two groups of enrollees currently account for about 47 percent of Medicaid spending-and are projected to account for about 46 percent in 2028-caps that did not apply to them would produce far smaller savings than caps that applied to all groups (assuming that the other characteristics of the two sets of caps were the same).

Per-enrollee caps could establish one average per-person cost limit for all enrollees or establish separate limits for different types of enrollees. If there was more than one per-enrollee cap, separate caps could be established for as many specific categories as could be identified in Medicaid administrative data (see the section on "Other Considerations"). For example, past proposals have considered separate caps for the elderly, people with disabilities, children, and nondisabled, nonelderly adults. Separate caps also could be established for pregnant women, for adults added as a result of the expansion of Medicaid under the ACA, or for other particular groups.

The choice of creating only one or more than one per-enrollee cap-and if so, which groups to select for each cap-could affect whether and to what extent the states would have an incentive to maximize enrollment of some groups over others. A single cap for all enrollees would average the costs of groups without regard to
substantial differences in the groups' health status, thus creating financial incentives for states to enroll people whose costs were expected to be below the cap. For example, per-enrollee spending for children and nonelderly, nondisabled adults, on average, is below that for elderly patients and people with disabilities. Therefore, the enrollment of every additional child and nonelderly, nondisabled adult would generate payments from the federal government in excess of their average costs, helping a state to remain below its total spending limit, and the enrollment of every additional elderly or disabled enrollee would make that goal more difficult to achieve because federal payments would be below their average cost. However, the degree to which states could effectively maximize enrollment of people in one category compared with another would depend on the degree of flexibility states were given to keep their costs below the caps.

Base-Year Spending. Establishing caps on federal spending for Medicaid requires selecting a particular year of Medicaid outlays as a "base year" and calculating that year's total spending for the service categories and eligibility groups that are included. The base year is usually not the first year in which the caps take effect, which could be any year in the budget window, but the year from which the future cap amounts are projected (as described in the next section). Thus, for overall and per-enrollee spending caps alike, the selection of the base year is important: A higher base-year amount would lead to higher caps (and lower federal savings) than a lower base-year amount would.

An important consideration in selecting a base year is whether to use a past or future year. Most proposals use a past year because Medicaid expenditures are known and because states cannot increase spending in a past base year to boost their future spending limits. By contrast, a future base year would allow states to increase spending in that year by raising payment rates for providers and health plans, making additional onetime supplemental payments, or moving payments for claims from different periods into the base year, thereby increasing the caps and lowering federal savings.

Choosing a past year as a base also would essentially lock in the spending that resulted from previous choices about the design of a state's Medicaid program, including the choice of whether to expand Medicaid. Once caps were set on the basis of a past year, states would be
responsible for the full cost of any expansionary program changes whose costs exceeded the caps, such as raising payment rates or voluntarily adding covered services (which some might consider a desirable outcome if a principal goal of the cap was to constrain state spending). In addition, states that have made efforts to operate their programs efficiently to keep costs low would receive caps that reflected that efficiency and were, all else being equal, lower than the caps of states with inefficient programs. Therefore, those states that maintained efficiency would have less flexibility to reduce spending to comply with the caps, and states that operated inefficiently would have more flexibility. Ways to address that issue would include supplementing base-year spending amounts or assigning higher growth rates to states that spent less to give them more room to change their programs over time. However, that approach would reduce the federal savings generated by the caps.

Growth Factors. The choice of which growth factor to use determines the annual rate of increase in spending subject to the caps from the base year and inflates the spending limits in future years. The growth factor is one of the most important drivers of savings derived from the option to cap Medicaid spending, as the caps are essentially limits on the degree to which the federal government would allow its payments to grow over time. However, the growth factor could be set to meet specific savings targets or to achieve other specific policy purposes. For example, if a growth factor was set roughly equal to the rate of increase projected for Medicaid spending under current law, little or no budgetary savings might be anticipated, but some other policy objective could be met, such as protecting the federal government from unanticipated cost increases in the future. Alternatively, the growth factor could be set to make the increase in federal Medicaid spending-overall or per enrollee-match changing prices in the economy as measured, for example, by the consumer price index for all urban consumers (CPI-U). The growth factor could be set to reflect the growth in health care costs per person, perhaps as measured by the per capita increase in national health expenditures, or at a rate that was consistent with economic growth as measured by the increase in per capita GDP. Growth factors that were tied to price indexes or to overall economic growth, however, would not generally account for increases in the average quantity or intensity of medical services of the sort that have occurred in the past.

For overall spending caps, which would not provide additional funds automatically if Medicaid enrollment rose, the growth factor could include some measure of population growth (such as the Census Bureau's state population estimates) or changes in the unemployment rate to account for increases in enrollment. A growth factor also could be any legislated rate designed to produce a desired amount of savings.

In general, the lower the growth factor relative to CBO's projected growth rate for federal Medicaid spending under current law, the greater the projected federal budgetary savings would be. But the lower the growth factor, the greater the possibility that federal funding would not keep pace with increases in states' costs per Medicaid enrollee or, in the case of overall caps, with increases in Medicaid enrollment, thus raising the likelihood that states would not be able to maintain current services or coverage.

The Optional Expansion of Medicaid. Since January 2014, states have been permitted to extend eligibility for Medicaid to most people whose income is below 138 percent of the federal poverty guidelines. Under the terms of the ACA, the federal government currently covers a much larger share of the cost of providing Medicaid coverage to people made eligible by the expansion than it does for other Medicaid enrollees. That higher federal share was set at 100 percent through 2016 and is scheduled to decline gradually to 90 percent by 2020 and remain at that rate thereafter. The expansion of Medicaid would add complexity to the design of federal spending caps, particularly for states that chose to adopt the expansion after the base year.

For states that have not yet adopted the ACA expansion, data from an earlier base year would reflect spending only for groups of people who were eligible before expansion. Should any of those states subsequently adopt the expansion, the annual limits established by an overall spending cap would fail to account for the spending of expansion enrollees. For per-enrollee caps, the additional enrollment from the coverage expansion would generate additional federal spending, but average per capita spending for adults in the base year would not account for the higher federal payment for newly eligible people. In addition, the average would not reflect any differences in expected costs related to the health status of those new enrollees compared with costs for people who would have been eligible before the expansion.

In designing Medicaid caps, those issues could be addressed in one of several ways. Specifically, policymakers could:

- Select a base year far enough in the future to allow time for states that chose to do so to adopt the expansion and for enrollment to become fairly stable.
- Leave spending uncapped for people who enrolled as a result of the expansion, but cap spending only for nonexpansion enrollees.
- Allow the Secretary of Health and Human Services to add an estimate of future spending attributable to the expansion for states that chose to adopt the expansion after the base year.
- Base the caps on total combined federal and state spending to avoid the complexity of differing matching rates for expansion and pre-expansion adults.
- Make no adjustment to the caps to account for the costs of the expansion.

Another question related to the optional expansion concerns whether capping federal Medicaid spending might cause some states that would otherwise expand coverage to reject the expansion instead. Limits on federal Medicaid payments represent a potential shifting of costs to states, which in turn would affect states' budget processes and program decisions. States could reduce Medicaid costs and lessen financial risk by dropping the optional expansion or deciding to adopt it later. CBO anticipates that the more that caps reduced federal funding below the amounts projected under current law, the greater the likelihood that states would discontinue or reject the optional expansion-unless the cap's structure was designed so that participating in the expansion did not make complying with the cap more difficult.

## Option

CBO analyzed two alternatives to limit federal Medicaid spending: establishing overall spending caps and establishing per-enrollee caps. For both alternatives, CBO also analyzed limits on spending for all eligibility groups and limits on adults and children only (excluding the elderly and disabled). Further, to illustrate a range of savings, CBO used a pair of alternative growth factors for each type of cap: either the annual change in the

CPI-U or the change in the CPI-U plus 1 percentage point (referred to here as the CPI-U plus 1). Under each alternative-and its variants-states would retain their current-law authority concerning optional benefits, optional enrollees, and payment rates for providers and health plans.

CBO chose 2017 as the base year for all alternatives. Overall caps would take effect in October 2021; per-enrollee caps would take effect one year later. That additional year would be the minimum necessary to allow for the complex gathering of data needed to arrive at state-specific caps for each enrollee group (as discussed below in the section "Availability of Data"). For overall and per-enrollee caps alike, federal matching rates would continue as they are under current law. Medicaid's DSH, VFC, and administrative spending would be excluded, as would Medicaid assistance with Medicare cost sharing and premiums for those dually eligible for both programs.

For the per-enrollee spending caps, CBO assumed that separate spending limits would be set for five Medicaid eligibility groups in each state: the elderly; people with disabilities; children; nondisabled, nonelderly adults who would have been eligible before enactment of the ACA; and adults made eligible by the ACA (in states that have expanded coverage). States would be permitted to cross-subsidize groups. CBO also assumed that the Secretary of Health and Human Services would create a new data source to capture the necessary spending and enrollment information for the five groups. Those same specifications would apply to alternatives that capped spending only for adults and children.

For simplicity, CBO assumed that the Secretary would not adjust the caps to reflect estimated additional spending in any state that adopted the expansion after the base year. Per-enrollee caps would be established on combined federal and state spending (overall caps would not). By that method, if combined federal and state spending exceeded the caps, the percentage of the excess spending above the cap would be cut from the federal payment to states: If a state overspent its per-enrollee cap by 5 percent, for example, the federal payment to the state would be reduced by the same amount.

## Effects on the Budget From Caps on Overall Spending

Under the specifications listed here, CBO estimates that the overall caps affecting spending for all eligibility
groups would generate gross savings to Medicaid of $\$ 700$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 454$ billion using the CPI-U plus 1 growth factor. That translates into savings of about 15 percent and 10 percent, respectively, from the cur-rent-law projection of total federal Medicaid spending for the period. In 2028, gross savings from establishing overall caps on all eligibility groups would represent about 23 percent of projected federal Medicaid spending using the CPI-U growth factor and 16 percent using the CPI-U plus 1 growth factor.

CBO estimates that establishing caps on overall spending for only the adult and children eligibility groups would generate gross savings to Medicaid of $\$ 433$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 299$ billion using the CPI-U plus 1 growth factor. That translates into savings of about 9 percent and 6 percent, respectively, from the current-law projection of total federal Medicaid spending for the period. In 2028, gross savings from establishing caps on overall spending for only the adult and children eligibility groups would represent about 14 percent of projected federal Medicaid spending using the CPI-U growth factor and 10 percent using the CPI-U plus 1 growth factor.

The gross savings from establishing caps on overall spending-regardless of whether those caps applied to spending for all eligibility categories or only to those that consist of adults and children-would be partially offset. Reductions in federal Medicaid spending resulting from the overall caps would represent large reductions in state revenues. Therefore, in CBO's assessment, the states would take a variety of actions to reduce a portion of the additional costs that they would face, including restricting enrollment. CBO anticipates that, in response to the caps on spending, some states would discontinue coverage for enrollees made eligible by the ACA, and all states that would have adopted such coverage in the future would no longer choose to do so. (A reduction in the deficit would occur in 2020 because the caps would become law in 2019, and CBO expects that some of the states that would have opted to expand coverage would have done so in 2020.) For people who lost Medicaid coverage, some would gain access to subsidized health insurance coverage through the marketplaces established by the ACA. Specifically, some people who lost Medicaid eligibility would qualify for subsidies to buy coverage through the marketplaces if other eligibility criteria were met. The rest would enroll in other coverage, principally
through an employer, or become uninsured. Overall, CBO and the staff of the Joint Committee on Taxation (JCT) estimate that roughly 60 percent of people who lost Medicaid coverage would become uninsured; that increase in the uninsured would in turn increase Medicare's DSH payments to inpatient facilities that serve a higher percentage of low-income patients.

For the caps on overall spending that affect all eligibility groups, the agencies estimate-using the CPI-U growth factor-that the additional marketplace and employ-ment-based coverage, along with increased Medicare spending related to DSH payments, would increase outlays by $\$ 147$ billion and decrease revenues by $\$ 57$ billion from 2020 through 2028. Using the CPI-U plus 1 growth factor, the agencies estimate that the additional coverage and Medicare spending would increase outlays by $\$ 108$ billion and decrease revenues by $\$ 41$ billion over the same period. As a result, the net effect on the deficit would be savings of $\$ 496$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 305$ billion using the CPI-U plus 1 growth factor.

For caps affecting overall spending for only the adult and children eligibility groups, the agencies estimateusing the CPI-U growth factor-that the additional marketplace and employment-based coverage along with increased Medicare spending related to DSH payments would increase outlays by $\$ 129$ billion and decrease revenues by $\$ 50$ billion from 2020 through 2028. Using the CPI-U plus 1 growth factor, the agencies estimate that the additional coverage and Medicare spending would increase outlays by $\$ 100$ billion and decrease revenues by $\$ 38$ billion over the same period. As a result, the net effect on the deficit would be savings of $\$ 255$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 162$ billion using the CPI-U plus 1 growth factor.

## Effects on the Budget From Caps on Spending per Enrollee

CBO estimates that per-enrollee caps affecting spending for all eligibility groups would generate gross savings to Medicaid of $\$ 805$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 522$ billion using the CPI-U plus 1 growth factor, yielding savings of about 17 percent and 11 percent, respectively, relative to the current-law projection of total federal Medicaid spending for the period. The gross savings would represent about 29 percent and 19 percent, respectively, of projected federal Medicaid spending in 2028.

CBO estimates that per-enrollee caps affecting spending only for the adult and children eligibility groups would generate gross savings to Medicaid of $\$ 554$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 403$ billion using the CPI-U plus 1 growth factor. That translates into savings of about 12 percent and 8 percent, respectively, from the current-law projection of total federal Medicaid spending for the period. The gross savings would represent about 19 percent and 14 percent, respectively, of projected federal spending for Medicaid in 2028.

Some of the difference in gross savings to Medicaid is attributable to the caps' different implementation dates-specifically, the later implementation of per-enrollee caps. If the caps on overall spending also took effect in 2022, the gross savings from establishing those caps on all eligibility groups would be $\$ 678$ billion using the CPI-U growth factor and $\$ 445$ billion using the CPI-U plus 1 growth factor. The gross savings from implementing caps on overall spending for only the adult and children eligibility groups would be $\$ 422$ billion using the CPI-U growth factor and $\$ 295$ billion using the CPI-U plus 1 growth factor.

As with the caps on overall spending, the gross savings from per-enrollee caps would be partially offset. Although per-enrollee caps would provide additional federal payments for each enrollee, caps below projections of federal per-enrollee spending would create a loss of revenues to states for each enrollee relative to current law. Therefore, CBO anticipates that some states also would take action to restrict enrollment under per-enrollee caps. In addition, CBO and JCT estimate that roughly 60 percent of enrollees who lost Medicaid coverage would become uninsured, thereby increasing Medicare's DSH payments to inpatient facilities that serve a higher percentage of low-income patients. The remainder would instead either obtain subsidized health insurance through the marketplaces or enroll in an employment-based plan. For per-enrollee caps affecting all eligibility groups, the agencies estimate that the additional coverage and Medicare spending using the CPI-U growth factor would increase outlays by $\$ 74$ billion and decrease revenues by $\$ 28$ billion from 2020 through 2028. Using the CPI-U plus 1 growth factor, the agencies estimate that the additional coverage and Medicare spending would increase outlays by $\$ 62$ billion and decrease revenues by $\$ 22$ billion over the same period. As a result, the net effect on the deficit would be savings of $\$ 703$ billion
between 2020 and 2028 using the CPI-U growth factor and $\$ 438$ billion using the CPI-U plus 1 growth factor.

For per-enrollee caps affecting only the adult and children eligibility groups, the agencies estimate-using the CPI-U growth factor-that increases in marketplace and employment-based coverage along with increased Medicare spending related to DSH payments would increase outlays by $\$ 66$ billion and decrease revenues by $\$ 24$ billion from 2020 through 2028. Using the CPI-U plus 1 growth factor, the agencies estimate that those coverage changes would increase outlays by $\$ 58$ billion and decrease revenues by $\$ 21$ billion over the same period. As a result, the net effect on the deficit would be savings of $\$ 464$ billion between 2020 and 2028 using the CPI-U growth factor and $\$ 324$ billion using the CPI-U plus 1 growth factor.

Per-enrollee caps-whether they applied to spending for all eligibility groups or to spending for adults and children only-would save more than the caps on overall spending, using the same growth factor. For example, using the CPI-U growth factor, the net effect on the deficit of the per-enrollee caps would be $\$ 703$ billion in savings, and the net effect on the deficit of the caps on overall spending would be $\$ 496$ billion in savings. The per-enrollee caps would have a larger effect on the deficit because of the way federal spending would change in response to state eligibility restrictions. As explained above, CBO expects that states would respond both to the per-enrollee caps and to overall caps on spending by seeking to offset a portion of the additional costs they would face relative to current law, including by taking steps to restrict eligibility. However, the effects on federal spending would be greater under per-enrollee caps. If per-enrollee caps were established, states would respond by restricting eligibility, and enrollment would fall. As a result, states would receive less federal funding (because they would receive the per capita amount for each enrollee on the basis of those enrollees' eligibility category). By contrast, if the overall caps were established, lower enrollment would not change the amount of federal funding that would be available to states because the funding is not tied to enrollment. Were it not for the additional savings created by the way in which enrollment changes affected federal funding under the per-enrollee caps, those caps would have a smaller net effect on the deficit than the caps on overall spending, using the same growth factor.

## Uncertainty

There are two principal sources of uncertainty in the estimates of savings arising from this option. First, differences in the actual rate of growth in Medicaid spending under current law between 2019 and 2028, as compared with CBO's baseline projections of that growth, would affect the amount of savings achieved by the caps. If spending growth in the absence of the caps was substantially lower than CBO's projections, the savings realized by the caps on Medicaid spending would be significantly lower. In an extreme case, if spending growth under current law was less than the CPI-U in each year, then capping Medicaid growth by implementing either the overall caps or the per-enrollee caps would produce no savings. By contrast, if spending growth under current law was substantially higher than CBO's projections, then the savings would be significantly higher, as would the pressure on states to make adjustments to their programs. Moreover, small differences in the actual growth under current law as compared with CBO's projections earlier in the 2019-2028 period could significantly affect the savings from the establishment of caps. The significant difference in savings would occur because small differences between growth under current law and CBO's projections early in the period would compound over many years.

The second source of uncertainty pertains to how states would respond to the caps. Although the states' responses would generally have a smaller effect on savings than differences between the actual and estimated growth rate for Medicaid under current law, whether and how states chose to alter their Medicaid program in response to the caps is uncertain. If a state chose to leave its Medicaid programs unchanged and instead found other ways to offset the loss of federal funds, there would be little or no change in Medicaid enrollment or to the offsetting costs and revenue reductions associated with former Medicaid enrollees obtaining subsidized health insurance through the marketplaces or enrolling in an employment-based plan. By contrast, if states made more significant cuts to Medicaid enrollment than expected, more former Medicaid enrollees would obtain subsidized health insurance through the marketplaces, enroll in an employment-based plan, or become uninsured, which would increase the associated offsetting costs.

## Other Effects

From the federal government's perspective, capping Medicaid funding to states could confer several
advantages relative to current law. For example, setting spending limits by establishing caps would make federal costs for Medicaid more predictable. Federal spending caps also would curtail states' current ability to increase federal Medicaid funds-an ability created by the openended nature of federal financing for the program-and could reduce the relatively high proportion of program costs now covered by the federal government. Because the federal government matches states' Medicaid spending, an additional state dollar spent on Medicaid is worth more to a state than an additional state dollar spent outside the program. Therefore, states have considerable incentive to devote more of their budgets to Medicaid than they would otherwise and to shift other unmatched program expenditures into Medicaid. For example, states have sometimes chosen to reconfigure health programspreviously financed entirely with state funds-in order to qualify for federal Medicaid reimbursement. And most states finance a portion of their Medicaid spending through taxes collected from health care providers with the intention of returning the collected taxes to those providers in the form of higher Medicaid payments, thereby boosting federal Medicaid spending without a corresponding increase in state spending. Those incentives would be reduced under a capped program.

Caps on federal Medicaid spending also could present several disadvantages relative to current law. Capped federal spending would create uncertainty for states as they plan future budgets because it could be difficult to predict whether Medicaid spending would exceed the caps and thus require additional state spending. Moreover, depending on the structure of the caps, Medicaid might no longer serve as a countercyclical source of federal funds for states during economic downturns (under overall caps, the states might not automatically receive more federal funds if a downturn caused an increase in Medicaid enrollment). If the limits on federal payments were set low enough, additional costs-perhaps substantial costs-would be shifted to states. States then would need to decide whether to commit more of their own revenues to Medicaid or reduce spending by cutting payments to health care providers and health plans, eliminating optional services, restricting eligibility for enrollment, or (to the extent feasible) arriving at more efficient methods for delivering services. Under proposals that led to significant reductions in federal funding, many states would find it difficult to offset the reduced federal payments solely through improvements in program efficiency. If reductions in federal revenues were large
enough, states would probably resort to a combination of all approaches. All of those effects would be magnified in the long run beyond 2028 as the difference between the permissible level of federal spending under the caps and the spending that would have occurred under current law grew wider over time.

Enrollees would be affected in various ways if states reduced providers' payment rates or payments to managed care plans, cut covered services, or curtailed eligibility. If states reduced payment rates, fewer providers might be willing to accept Medicaid patients, especially given that, in many cases, Medicaid's rates are already significantly below those of Medicare or private insurance for some of the same services. If states reduced payments to Medicaid managed care plans, some plans might shrink their provider networks, curtail quality assurance, or drop out of the program altogether. If states reduced covered services, some enrollees might decide either to pay out of pocket or to forgo those services entirely. And if states narrowed their categories of eligibility (including the optional expansion under the ACA), some of those enrollees would lose access to Medicaid coverage, although some would become eligible for subsidies for private coverage or could choose to enroll in employment-based coverage, if available.

## Other Considerations

Because caps on federal Medicaid spending would represent a fundamental restructuring of Medicaid financing, several other considerations would need to be addressed. In addition to their consequences for the federal budget, the limits on federal spending would require new administrative mechanisms for full implementation. The Centers for Medicare \& Medicaid Services (CMS, the federal agency within the Department of Health and Human Services that administers Medicaid) would need to establish a mechanism for enforcing the caps to account for the delayed availability of the necessary data to calculate the final limits. Administrative data on Medicaid spending and enrollment do not currently provide enough information to establish per-enrollee caps such as those modeled for this option. Such data would need to be developed.

Enforcement. Before overall or per-enrollee caps could take effect, CMS would need to establish mechanisms to ensure state compliance. The nature of that enforcement would depend on legislative direction given to the Secretary for establishing the caps. If the growth factors
for either type of cap were based on the value of some specific measure of economic activity, such as the CPI-U (as opposed to a fixed growth factor that consisted of an annual increase of a certain percentage), CMS would not know the final spending limits until after the end of the fiscal year, when the measure would be finalized, unless growth from some earlier period was used instead. Per-enrollee caps would require additional delays because final enrollment data for any year would not be available for at least several months after the fiscal year's end. In addition, states usually make accounting adjustments to a prior year's spending long after the end of the fiscal year. Such delays would prevent CMS from determining the final limits on a current year's spending until well into the next fiscal year. Although states could attempt to forecast the limits and could update those forecasts over the course of a year, it would be difficult to precisely target spending to remain below the caps; states therefore could face reductions in funding triggered by spending above the caps.

Availability of Data. States currently report enough data for CMS to determine per-enrollee spending for only two groups of enrollees: those made eligible by the ACA and all other enrollees combined. To set per-enrollee caps on the basis of currently available data, lawmakers could establish either a single overall per-enrollee cap that represented average spending in all Medicaid eligibility categories or two caps-one for each of the groups of enrollees for which data were available. As stated above, broad categories for per-enrollee caps create incentives to favor the enrollment of people in eligibility categories with lower rather than higher costs. Therefore, to establish caps like those modeled in this option, the Secretary could rely on internal state data regarding enrollment among and spending for the groups considered under these alternatives. However, that might create an incentive for states to submit enrollment and spending data that would maximize the caps. Alternatively, the Secretary could make available a new uniform, state-reported data source for the relevant information, but such a data set would require additional time to design, develop, and implement.

RELATED OPTION: Mandatory Spending, "Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States" (page 89)

RELATED CBO PUBLICATIONS: Preliminary Analysis of Legislation That Would Replace Subsidies for Health Care With Block Grants (September 2017), www.cbo.gov/publication/53126; Federal Grants to State and Local Governments (March 2013), www.cbo.gov/ publication/43967

Limit States' Taxes on Health Care Providers

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Lower the safe-harbor threshold to 5 percent | 0 | 0 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -2 | -5 | -15 |
| Lower the safe-harbor threshold to 2.5 percent | 0 | 0 | -11 | -12 | -12 | -13 | -14 | -15 | -15 | -16 | -35 | -108 |
| Eliminate the safe-harbor threshold | 0 | 0 | -34 | -37 | -39 | -42 | -44 | -47 | -49 | -52 | -110 | -344 |

This option would take effect in October 2020.

## Background

Medicaid is a joint federal-state program that pays for health care services for low-income people in various demographic groups. State governments operate the program under federal statutory and regulatory oversight, and the federal government reimburses a portion of each state's costs at matching rates that generally range from 50 percent to 85 percent, depending on the per capita income of the state and on the share of enrollees (if any) in each state that became eligible for Medicaid as a result of the optional expansion of that program under the Affordable Care Act. The rest of the funding must come from state revenues, either from general funds or from another source. Most states finance at least a portion of their Medicaid spending through taxes collected from health care providers. In the early 1990s, the Congress required states that taxed health care providers to collect those taxes at uniform rates from all providers of the same type (hospitals, for example). Those rules were created because some states were taxing Medicaid providers either exclusively or at higher rates than other providers of the same type with the intention of returning the collected taxes to those providers in the form of higher Medicaid payments. Such "hold harmless" provisions were leading to large increases in federal Medicaid outlays but not to corresponding increases in states' Medicaid spending, despite what would have been expected under Medicaid's matching-rate formula. However, federal law grants a "safe harbor" exception to hold-harmless provisions when a state collects taxes that do not exceed 6 percent of a provider's net patient revenues. Any tax amounts collected from providers that exceed 6 percent of their revenues are deducted from a
state's total Medicaid expenditures before determining the amount of federal matching funds.

## Option

This option consists of three alternatives, all of which would take effect in October 2020 to allow states time to adjust their tax laws. Under the first alternative, the safe-harbor threshold would be lowered to 5 percent. Under the second alternative, the threshold would be lowered to 2.5 percent. And, under the third alternative, the threshold would be eliminated. Lowering or eliminating the safe-harbor threshold would reduce the amount of taxes that states could collect from providers to finance their share of Medicaid spending.

## Effects on the Budget

The Congressional Budget Office estimates that capping the threshold at 5 percent (the first alternative) would reduce mandatory spending by $\$ 15$ billion between 2021 and 2028 and that capping it at 2.5 percent (the second alternative) would reduce mandatory spending by $\$ 108$ billion over that period. Eliminating the safe-harbor threshold (the third alternative) would reduce mandatory spending by $\$ 344$ billion between 2021 and 2028. The growth in savings over that period is a result of CBO's expectation that collections of tax revenues would increase at the rate of growth of overall health care spending for the types of providers that are typically taxed.

The large difference in savings generated by the three alternatives is a result of the distribution of taxes that are imposed on providers by states. Those tax rates vary widely, from under 1 percent to 6 percent. Therefore, the
lower the threshold, the more that tax revenues collected from providers would be affected. Lowering the threshold to 5 percent would affect only the taxes collected above that rate, whereas lowering the threshold to 2.5 percent would affect the additional tax revenues collected above that rate. Eliminating the threshold would affect all tax revenues collected from providers.

The amount of savings generated by the option would depend entirely on the extent to which states chose to adjust their Medicaid programs in response to the lower thresholds. Under the new limits, states would need to decide whether to continue spending the same amount-and make up the difference out of other rev-enues-or to cut spending by the difference in revenues collected under the old and new thresholds. In the first case, states might replace lost revenues by raising additional general revenues or by reducing spending elsewhere in their budgets and transferring those amounts to Medicaid spending. In that case, the federal government would continue to match the same amount of state spending and there would be no change in federal spending. Alternatively, states could decide not to replace the lost revenues and instead cut their Medicaid spending. That choice would reduce federal spending because the matched amounts would be smaller.

CBO expects that different states would respond to a lower safe-harbor threshold in different ways. Most states would probably not replace all of the revenues lost as a
result of the lower threshold for the taxation of providers. The health care providers being taxed typically benefit directly from higher Medicaid payment rates, making the imposition of such taxes an easier choice for states than alternative choices for replacing such revenues. However, most states would probably not cut Medicaid spending by the full amount of the lost revenues because they deem other choices to be preferable. CBO anticipates that, on average, states would replace half of the lost revenues, but that estimate is highly uncertain. To the extent that the average state response would be to make larger cuts to Medicaid, the savings would be greater, and to the extent that the average state response would be to make smaller cuts to Medicaid, the savings would be smaller.

## Other Effects

One argument for implementing this option is that it would limit or eliminate a state financing mechanism that has inflated federal payments to states for Medicaid beyond the amount the federal government would have paid in the absence of such taxes. An argument against this option is that, to the extent that states cut back spending on Medicaid in response to the lost revenues, health care providers could face lower payment rates that might make some of them less willing to treat Medicaid patients. Moreover, some Medicaid enrollees could face a reduction in services or possibly lose their eligibility for the program if states restricted enrollment to curtail costs.

## Reduce Federal Medicaid Matching Rates

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Use the Same FMAP for All Categories of Administrative Services |  |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | 0 | -5 | -6 | -6 | -7 | -7 | -8 | -8 | -8 | -18 | -55 |
|  | Remove the FMAP Floor |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | 0 | -40 | -43 | -45 | -48 | -50 | -53 | -56 | -59 | -128 | -394 |
|  | Reduce the Matching Rate for Enrollees Made Eligible by the ACA |  |  |  |  |  |  |  |  |  |  |  |
| Change in Outlays | 0 | -1 | -28 | -40 | -43 | -47 | -50 | -54 | -57 | -60 | -113 | -381 |
| Change in Revenues ${ }^{\text {a }}$ | 0 | * | -2 | -3 | -4 | -4 | -5 | -5 | -6 | -6 | -9 | -36 |
| Decrease (-) in the Deficit | 0 | -1 | -26 | -36 | -39 | -43 | -46 | -48 | -51 | -54 | -103 | -345 |

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.
This option would take effect in October 2020, although in some cases changes to outlays and revenues would occur earlier.
ACA $=$ Affordable Care Act; FMAP $=$ federal medical assistance percentage; ${ }^{*}=$ between $-\$ 500$ million and zero.
a. Estimates include the effects on Social Security payroll tax receipts, which are classified as off-budget.

## Background

Medicaid is a joint federal-state program that pays for health care services for low-income people in various demographic groups. State governments operate the program under federal statutory and regulatory oversight, and both the federal and state governments share in the cost of the program, with the federal government's share varying by state, by the type of cost (that is, costs for administrative or medical services), and by eligibility category. For medical services used by most Medicaid enrollees-those who were not made eligible by the Affordable Care Act (ACA) - the share of Medicaid costs paid for by the federal government is determined according to the federal medical assistance percentage (FMAP). The FMAP is based on a formula that provides higher federal reimbursement to states with lower per capita incomes (and vice versa) relative to the national average. By law, states can receive an FMAP rate of no less than 50 percent and no more than 83 percent. The national average matching rate is 57 percent, with states contributing the remaining 43 percent.

The federal government's share of costs for medical services is considerably higher for enrollees who became eligible for Medicaid as a result of the optional expansion of that program under the ACA. For that eligibility
category, the federal government's share of Medicaid costs was initially set at 100 percent-a rate that was in effect from 2014 through 2016. As required by statute, that federal share began declining in 2017 and will reach 90 percent in 2020, where it will remain thereafter. The federal government's share for enrollees made eligible by the ACA does not vary by state.

The federal government's share of administrative expenses is also specified by statute and varies by the category of such costs, but not by state. The general administrative expenses of operating Medicaid are evenly divided between the federal and state governments, but 25 specified categories of administrative costs have rates that vary from about 70 percent to 100 percent. For example, the federal government pays 75 percent of the cost of employing skilled medical professionals for Medicaid administration, 75 percent of the cost of utilization review (the process of determining the appropriateness and medical necessity of various health care services), 90 percent of the cost of developing systems to manage claims and information, and 75 percent of the cost of operating such systems. The overall average federal share for administrative expenses was 64 percent in 2017.

## Option

This option consists of three alternatives, each of which would go into effect in October 2020.

- Under the first alternative, the federal government's share for all categories of administrative spending would be 50 percent.
- Under the second alternative, the 50 percent floor on the FMAP for medical services for enrollees not made eligible by the ACA would be removed, causing FMAP rates to fall below 50 percent for states with the highest per capita incomes.
- Under the third alternative, the federal share of medical expenditures for enrollees made eligible by the ACA would be based on the same FMAP formula that applies to all other enrollees.


## Effects on the Budget

The amount of savings resulting from each alternative would vary significantly. The Congressional Budget Office estimates that under the first alternative, setting all categories of administrative spending to 50 percent, would reduce mandatory spending by $\$ 55$ billion from 2021 through 2028. Under the second alternative, eliminating the 50 percent floor on the FMAP rate, mandatory spending would be reduced by $\$ 394$ billion between 2021 and 2028. For both of those alternatives, CBO estimates that the reductions in spending would increase over the period in line with the projected growth in Medicaid spending.

The third alternative, setting the federal share of medical expenditures for enrollees made eligible by the ACA so that it equals the rate used for other enrollees, would reduce Medicaid spending by $\$ 492$ billion between 2020 and 2028, CBO estimates. The savings arising from this alternative would be partially offset: Specifically, CBO anticipates that, in response to the reduced federal share for enrollees made eligible by the ACA, some states would discontinue coverage for that category of enrollees and all states that would have adopted such coverage in the future would no longer choose to do so. (A reduction in the deficit would occur in 2020 because this alternative would become law in 2019, and CBO expects that some of the states that would have opted to expand coverage would have done so in 2020.) As a result, CBO and the staff of the Joint Committee on Taxation estimate that outlays other than those for Medicaid would
increase by $\$ 98$ billion and revenues would decrease by $\$ 36$ billion because some people who did not receive Medicaid coverage would instead receive subsidies through the health insurance marketplaces established by the ACA or obtain employment-based coverage. In addition, CBO estimates that there would be an increase in outlays of $\$ 13$ billion for Medicare "disproportionate share hospital" payments to inpatient facilities that serve a higher percentage of low-income patients because such payments are determined on the basis of the uninsured rate, which would increase. On net, this alternative would reduce the deficit by $\$ 345$ billion from 2020 through 2028. The net reduction in the deficit would increase over time in line with projected increases in health care spending and with projected increases in the rate of additional state coverage expansions under current law.

For all three alternatives, reducing the share of total spending by the federal government would shift additional financial responsibility to states for the cost of Medicaid. Lower federal spending would require additional spending by states in order for them to maintain the same eligibility levels, covered services, and provider payment rates in their Medicaid programs. However, the amount of savings from these alternatives would also depend on the extent to which states chose to adjust their Medicaid programs in response to reduced federal spending. Under each alternative, states would need to decide whether to continue spending the same amount-and make up the difference out of other revenues-or to cut spending by the difference in the amount of lost federal spending. If states chose to spend the same amount, they might replace reduced federal spending by raising taxes or by reducing spending elsewhere in their budgets and transferring those amounts to Medicaid spending. In either of those cases, the federal government would save the amount that resulted from the change to the federal share. Alternatively, if states decided not to replace the lost federal spending, they could instead shrink their Medicaid programs sufficiently to keep their spending more consistent with prior levels. States could do so by limiting optional eligibility and services and by lowering provider payment rates, as long as minimum federal standards were met.

CBO expects that different states would respond to lower federal spending in different ways. Most states would probably not replace all of the lost federal spending with state spending because full replacement could place
substantial pressure on state budgets. However, most states would probably not cut Medicaid spending by the full amount of the lost federal spending because they would deem other choices to be preferable. CBO anticipates that, on average, states would replace half of the lost federal share, which would reduce federal spending even further because the federal government would be contributing its share, as lowered under the alternatives, on the basis of smaller programs.

For the first two alternatives, CBO anticipates that states would not limit eligibility. Under the first alternative, the loss in federal revenues would be modest when compared with total Medicaid spending and would be insufficient to induce states to restrict eligibility. Under the second alternative, most of the affected states would be unlikely to seek savings by reducing eligibility because they have a history of expanding Medicaid coverage. By contrast, under the third alternative, CBO anticipates reductions in the optional ACA expansion because states adopted the expansion expecting the higher matching rate, and a number of them expanded coverage on the basis of the enhanced FMAP. However, the expectations for all three alternatives are highly uncertain, and actual savings would vary on the basis of states' actions.

## Other Effects

There are different arguments for implementing the alternatives. One argument for the first alternative, setting the federal share for all administrative categories to 50 percent, is that the higher rates under current law were designed to encourage states to develop and support particular administrative activities that the federal
government considered important for the Medicaid program. Once those administrative systems were operational, however, there might be less reason to continue the higher subsidy. However, a reduced federal share might cause states to cut back on some activities that the federal government would still want to encourage.

An argument for the second alternative, removing the 50 percent floor on the FMAP, is that it would reduce payments to states with the greatest financial resources available to fund their programs. The floor of 50 percent raises a number of states' FMAP rates well above the rates they would receive in the absence of the floor, and removing the floor would require states with higher per capita income to pay a greater share of Medicaid costs. However, an argument against this alternative is that it would concentrate significant spending reductions among only 14 states.

An argument for the third alternative, applying the FMAP formula to the ACA eligibility category, is that the income of enrollees in that eligibility group does not differ substantially from that of adults in other nondisabled, nonelderly eligibility categories-both within states that have adopted the ACA and those that have not. Therefore, it could seem inequitable to pay more for the ACA eligibility group than other groups. However, lowering the federal share for that group would lead to significant reductions in federal spending for most of the 32 states that adopted the expansion as of 2018 and did so partly because they expected to receive the higher federal share.

Introduce Enrollment Fees Under TRICARE for Life

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| MERHCF | 0 | 0 | -1.0 | -1.7 | -2.1 | -2.3 | -2.4 | -2.6 | -2.7 | -2.8 | -4.8 | -17.6 |
| Medicare | 0 | 0 | 0.2 | 0.4 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 1.3 | 5.2 |
| Total | 0 | 0 | -0.8 | -1.3 | -1.4 | -1.6 | -1.7 | -1.8 | -1.9 | -1.9 | -3.5 | -12.4 |

This option would take effect in January 2021.
MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund.

## Background

TRICARE for Life (TFL) was introduced in 2002 as a supplement to Medicare for military retirees and their Medicare-eligible family members. It pays nearly all medical costs not covered by Medicare, and also provides a pharmacy benefit. Beneficiaries who are eligible for TRICARE are automatically enrolled in TFL and there are no enrollment fees (although beneficiaries must pay their premium for Medicare Part B, which covers physicians' and other outpatient services). In contrast, most public and private programs that cover health care costs require enrollees to pay a premium or an enrollment fee. In 2017, the Department of Defense spent $\$ 10$ billion for the care delivered to Medicare-eligible beneficiaries both by military treatment facilities and by civilian providers (in addition to the amount spent for those patients through Medicare).

## Option

Starting in calendar year 2021, this option would require most Medicare-eligible beneficiaries who choose to enroll in TFL to pay an annual fee of $\$ 485$ for individual coverage and $\$ 970$ for family coverage. Those amounts would equal the enrollment fees for the preferred-provider plan in TRICARE paid by retirees who are not yet eligible for Medicare and who entered service after 2017, the Congressional Budget Office estimates. (Members who received a disability retirement and survivors of members who died on active duty could enroll for free.) The new enrollment fees would be in addition to the Medicare Part B premium and would be indexed to growth in average Medicare costs in later years.

## Effects on the Budget

This option would reduce spending for TRICARE for Life in two ways: Specifically, it would reduce spending directly by the amount of the fees collected and indirectly by encouraging some beneficiaries to forgo TFL in favor of other Medicare supplemental benefits (or to go without supplemental coverage altogether). CBO estimates that the option would reduce mandatory outlays devoted to TFL-eligible beneficiaries by about $\$ 12$ billion between 2021 and 2028. This estimate includes the effects of beneficiaries switching to other Medicare supplemental plans, which would cause some costs currently paid by TFL, such as prescription drugs, to shift to Medicare. CBO estimates the costs that would shift from TFL to Medicare would be about $\$ 5$ billion between 2021 and 2028. Despite that shift, over time, the savings to the federal government from this option would increase by about 5 percent each year. About 75 percent of that annual increase would be related to the indexing of the fees to Medicare cost growth, and the rest would result from changes in the number of people eligible for the TFL benefit, which is expected to increase in future years.

The greatest source of uncertainty in the estimate is the extent to which beneficiaries would enroll in TFL (or not). The new fees would be significantly less than the costs associated with most Medicare supplemental plans that are available through civilian markets. Nevertheless, the requirement to enroll to receive the benefit could cause unanticipated shifts in the number of covered beneficiaries. About 80 percent of the reduction in mandatory spending would come directly from the collection of the enrollment fees, so if the enrollment fees were double
the amounts examined here, the reductions in spending stemming from the fees would approximately double. The rest of the reductions in spending would result from beneficiaries switching to other sources to close Medicare coverage gaps. Doubling the enrollment fees suggested by this option would increase the number of beneficiaries who would forgo TFL in favor of other coverage, but the decrease in enrollment-and the decrease in federal spending resulting from changes in enrollment-would be less than double. Although the introduction of an enrollment fee would cause the most price-sensitive beneficiaries to stop using TFL, the out-of-pocket cost of TFL would still be less than many other options for supplementing Medicare. Thus, CBO estimates that most beneficiaries would choose to keep using TFL unless the proposed fee was significantly higher.

## Other Effects

An advantage of this option is that the requirement to enroll to receive the benefit could increase TFL beneficiaries' awareness of the benefit, which could encourage those who enroll to use more services, which might improve their health.

A disadvantage of this option is that retirees (including those with lower income) would see their out-of-pocket costs for health care rise. In addition, the change could cause some patients to inadvertently lose coverage if they neglected to pay the fee, which might negatively affect their health.

RELATED OPTIONS: Mandatory Spending, "Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life" (page 59); Discretionary Spending, "Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees" (page 145)

RELATED CBO PUBLICATIONS: Approaches to Changing Military Health Care (October 2017), www.cbo.gov/publication/53137; Approaches to Reducing Federal Spending on Military Health Care (January 2014), www.cbo.gov/publication/44993

## Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| MERHCF | 0 | 0.1 | 0.1 | -1.4 | -2.3 | -2.6 | -2.7 | -2.9 | -3.1 | -3.3 | -3.5 | -18.0 |
| Medicare | 0 | 0 | 0 | -0.5 | -1.1 | -1.4 | -1.4 | -1.5 | -1.6 | -1.7 | -1.6 | -9.3 |
| Total | $\overline{0}$ | 0.1 | 0.1 | -1.9 | -3.5 | $\overline{-3.9}$ | -4.2 | -4.4 | -4.7 | -5.0 | -5.1 | -27.3 |

This option would take effect in January 2022, although some changes to outlays would occur earlier.
MERHCF = Department of Defense Medicare-Eligible Retiree Health Care Fund.

## Background

TRICARE for Life (TFL) was introduced in 2002 as a supplement to Medicare for military retirees and their Medicare-eligible family members. The program pays nearly all medical costs not covered by Medicare and requires few out-of-pocket fees. Because the Department of Defense ( DoD ) is a passive payer in the program-it neither manages care nor provides incentives for the cost-conscious use of services-it has virtually no means of controlling the program's costs. In contrast, most supplemental Medicare policies control spending by requiring enrollees to pay deductibles or copayments up to a specified threshold. In 2017, DoD spent $\$ 10$ billion for the care delivered to Medicare-eligible beneficiaries by military treatment facilities and by civilian providers (in addition to the amount spent for those patients through Medicare).

## Option

This option would introduce minimum out-of-pocket requirements for TFL beneficiaries. For calendar year 2022, TFL would not cover any of the first $\$ 750$ of an enrollee's cost-sharing payments under Medicare and would cover only 50 percent of the next $\$ 6,750$ in such payments. Because all further costs would be covered by TFL, enrollees would not be obligated to pay more than $\$ 4,125$ in 2022. Those dollar limits would be indexed to growth in average Medicare costs (excluding Part D drug benefits) for later years. Currently, military treatment facilities charge no copayments for hospital services provided to TFL beneficiaries. To reduce beneficiaries' incentives to avoid out-of-pocket costs by switching to military facilities, this option would require TFL beneficiaries seeking care from those facilities to make
payments that would be roughly comparable to the charges they would face at civilian facilities. DoD would need to establish procedures for collecting payments from TFL beneficiaries who received care from military treatment facilities.

## Effects on the Budget

This option would reduce spending for Medicare as well as for TFL because higher out-of-pocket costs would lead beneficiaries to use somewhat fewer medical services. Altogether, including some implementation costs in 2020 and 2021, the option would reduce federal spending devoted to TFL beneficiaries by $\$ 27$ billion between 2020 and 2028, the Congressional Budget Office estimates. About two-fifths of those savings would come from reduced spending for medical services—both by Medicare and from the fund that pays for TFL expenditures-because of reduced demand for those services. The rest would represent a shift in spending: The federal government would spend less, and military retirees and their families would spend more. The estimated savings could be altered by changing the amount of health care costs that people would need to pay out of pocket, but the relationship would not be proportional-that is, doubling out-of-pocket costs would not necessarily double the savings. One reason for that relationship is that the number of people using TFL under different cost-sharing scenarios would not change proportionally: Relatively healthy people, who do not spend the deductible under the current system, for example, would not change their demand for health care services if that deductible increased.

The greatest source of uncertainty in the estimate is the extent to which beneficiaries would reduce their spending on health care. CBO relies on studies that have shown that an increase in out-of-pocket costs leads to a decrease in the use of health care. The RAND Health Insurance Experiment conducted from 1974 to 1982, for example, examined a nonelderly population and showed that health care spending was about 45 percent higher for participants without any cost sharing than for those who effectively faced a high deductible; average spending for people with intermediate amounts of cost sharing fell between spending for those two groups (Newhouse and the Insurance Experiment Group 1993). More recent studies also concluded that higher cost sharing led to lower health care spending (for example, Swartz 2010). Nevertheless, the behavior of military retirees might be different from that of the studied populations, and changes in the cost and availability of other Medicare
supplemental insurance would affect the estimated amount of savings.

## Other Effects

An advantage of this option is that greater cost sharing would increase TFL beneficiaries' awareness of the cost of health care and promote a corresponding restraint in their use of medical services. Research has generally shown that introducing modest cost sharing can reduce medical expenditures without causing measurable increases in adverse health outcomes for most people.

A disadvantage is that the change could discourage some patients (particularly low-income patients) from seeking preventive medical care or from managing their chronic conditions under close medical supervision, which might negatively affect their health.

RELATED OPTIONS: Mandatory Spending, "Introduce Enrollment Fees Under TRICARE for Life" (page 57), "Change the Cost-Sharing Rules for Medicare and Restrict Medigap Insurance" (page 61); Discretionary Spending, "Modify TRICARE Enrollment Fees and Cost Sharing for Working-Age Military Retirees" (page 145)
RELATED CBO PUBLICATIONS: Approaches to Changing Military Health Care (October 2017), www.cbo.gov/publication/53137; Approaches to Reducing Federal Spending on Military Health Care (January 2014), www.cbo.gov/publication/44993
WORK CITED: Joseph P. Newhouse and the Insurance Experiment Group, Free for All?: Lessons From the RAND Health Insurance Experiment (RAND Corporation, 1993); Katherine Swartz, Cost-Sharing: Effects on Spending and Outcomes, Research Synthesis Report 20 (Robert Wood Johnson Foundation, December 2010), http://tinyurl.com/oyle4s8 (PDF, 369 KB)

Change the Cost-Sharing Rules for Medicare and Restrict Medigap Insurance

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Establish uniform cost sharing for Medicare | 0 | 0 | 0 | -4 | -5 | -6 | -6 | -6 | -7 | -10 | -9 | -44 |
| Restrict medigap plans | 0 | 0 | 0 | -7 | -9 | -10 | -10 | -11 | -12 | -13 | -16 | -72 |
| Both alternatives above | 0 | 0 | 0 | -11 | -15 | -15 | -16 | -17 | -19 | -22 | -25 | -116 |

This option would take effect in January 2022.

## Background

In the traditional fee-for-service (FFS) portion of the Medicare program, cost sharing-the payments for which enrollees are responsible when they receive health care-varies significantly depending on the type of service provided. Cost sharing in FFS Medicare can take the following forms: deductibles, coinsurance, or copayments. Deductibles are the amount of spending an enrollee incurs before coverage begins, and coinsurance (a specified percentage) and copayments (a specified amount) represent the portion of spending an enrollee pays at the time of service.

Under Part A, which primarily covers services provided by hospitals and other facilities, enrollees are liable for an initial copayment (sometimes called the Part A deductible) for each "spell of illness" that requires hospitalization. In 2019, that copayment will be $\$ 1,364$. In addition, enrollees are subject to substantial daily copayments for extended stays in hospitals and skilled nursing facilities. Under Part B, which mainly covers outpatient services (such as visits to a doctor), enrollees face an annual deductible that will be $\$ 185$ in 2019. Once their spending on Part B services has reached that deductible, enrollees generally pay 20 percent of allowable costs for most Part B services. Some services that Medicare covers under Parts A and B—such as preventive care, certain hospice services, home health visits, and laboratory tests-require no cost sharing. However, Medicare beneficiaries who incur extremely high medical costs may be obligated to pay significant amounts because the program does not have a catastrophic cap on cost sharing.

In 2013, about 80 percent of people who enrolled in fee-for-service Medicare had some form of supplemental insurance that reduced or eliminated their cost-sharing obligations and protected them from high medical costs. Approximately 25 percent of FFS enrollees had supplemental coverage that was subsidized by the federal government. That coverage was available through Medicaid, TRICARE (the civilian component of the Military Health System), or a retiree policy from the Federal Employees Health Benefits (FEHB) program. In addition, about 35 percent of FFS enrollees had supplemental coverage through nonfederal retiree policies, and about 20 percent purchased individual medigap policies. In recent years, roughly two-thirds of medigap enrollees chose a plan that offered "first dollar" coverage, which paid all Part A and Part B Medicare cost sharing and the Part B deductible. The plans chosen by the other medigap enrollees did not cover the Part B deductible but covered all or most other FFS cost sharing. Starting in 2020, new Medicare beneficiaries will be prohibited from purchasing medigap plans that cover the Part B deductible.

## Option

The option consists of three alternatives, each of which would take effect in January 2022:

- The first alternative would replace Medicare's current cost sharing with a single annual deductible of $\$ 750$ for all Part A and Part B services; a uniform coinsurance rate of 20 percent for all spending above that deductible; and an annual out-of-pocket cap of \$7,500.
- The second alternative would leave Medicare's costsharing rules unchanged but would restrict existing and new medigap policies. Specifically, it would bar those policies from paying any of the first $\$ 750$ of an enrollee's cost-sharing obligations for Part A and Part B services in calendar year 2022 and would limit coverage to 50 percent of the next $\$ 6,750$ of an enrollee's cost sharing. Medigap policies would cover all further cost sharing, so policyholders would not pay more than $\$ 4,125$ in cost sharing in 2022.
- The third alternative would combine the changes from the first and second alternatives. All medigap plans would be prohibited from covering any of the new $\$ 750$ combined deductible for Part A and Part B services, and, in 2022, the annual cap on an enrollee's out-of-pocket obligations (including payments by supplemental plans on an enrollee's behalf) would be $\$ 7,500$. For spending that occurred after the deductible was met but before the cap was reached, beneficiaries would be responsible for a uniform coinsurance rate of 20 percent for all services. Because medigap policies would cover 50 percent of that coinsurance, medigap policyholders would effectively face a 10 percent coinsurance rate. In 2022, those provisions would limit medigap enrollees' out-ofpocket spending (excluding medigap premiums) to \$4,125; Medicare enrollees without supplemental coverage would pay no more than $\$ 7,500$ out of pocket.

After 2022, dollar amounts in all three alternatives, such as the combined deductible and cap (the first and third alternatives), along with the medigap thresholds (the second and third alternatives), would be indexed by the rate of growth of average FFS Medicare spending per enrollee.

## Effects on the Budget

All three alternatives would decrease mandatory outlays between 2022 and 2028. Those effects would largely be driven by lower FFS Medicare spending but also would reflect interactions between FFS Medicare and other parts of Medicare as well as other federal programs. All three alternatives would shift spending from Medicare to beneficiaries in part by reducing the amount of services used by enrollees in response to higher out-of-pocket costs. The Congressional Budget Office obtained its estimates using a microsimulation model the agency developed to analyze proposals that would change cost-sharing
rules for Medicare and restrict medigap insurance. Estimates of changes in utilization are based on research that concludes that people reduce their use of health care in response to higher out-of-pocket costs and, conversely, increase their use of health care in response to lower out-of-pocket costs.

Under the first alternative, establishing uniform cost sharing, mandatory outlays would decrease by $\$ 44$ billion, on net, from 2022 through 2028. Outlays for FFS Medicare would decrease by $\$ 22$ billion. Although spending on Part B would increase under this alternative, that effect would be more than offset by a decrease in spending on Part A services. Decreased outlays for FFS Medicare would reduce other mandatory spending over the same period because of the net effect of four factors, three of which would reduce spending and one of which would increase spending:

- First, the reduction in FFS Medicare spending would reduce the benchmarks used to set payments to Medicare Advantage plans, reducing federal payments to those plans. (Medicare Advantage plans are offered by private health insurers, which assume the responsibility for, and the financial risk of, providing Medicare benefits.)
- Second, receipts from Part B premiums would increase, partially offsetting the increase in spending on Part B services. (Part B premiums increase when Part B spending increases because standard premiums are set to cover about 25 percent of Part B costs annually.)
- Third, federal spending on Medicaid would decrease for people, known as dual-eligible beneficiaries, who are enrolled in both Medicare and Medicaid. Medicaid pays cost sharing and Part B premiums for most of those beneficiaries. Under this alternative, the reduction in Medicaid payments for cost sharing above the catastrophic cap would more than offset the increase in spending from higher Part B premiums.
- Fourth, those reductions in spending would be partially offset by increases in federal spending on the FEHB program and TRICARE stemming from increases in cost sharing for Medicare beneficiaries covered by those programs. Changes in cost sharing would affect federal spending on Medicaid differently than spending on FEHB and TRICARE because
dual-eligible beneficiaries have more spending that exceeds the catastrophic cap.

On net, the interactions between changes in outlays for FFS Medicare and lower federal payments to Medicare Advantage plans, higher Part B premiums, lower federal spending on Medicaid, and higher spending through the FEHB and TRICARE programs would decrease other mandatory outlays by $\$ 22$ billion.

The budgetary effects of changing Medicare's cost-sharing rules would depend to a large extent on the dollar amounts at which the deductible and catastrophic cap were set. To illustrate that variability, CBO estimated the effects on federal spending of making several types of changes to the deductible and the catastrophic cap. Raising the deductible by an additional $\$ 100$ in 2022 (from $\$ 750$ to $\$ 850$ ) while keeping the catastrophic cap at $\$ 7,500$ would increase CBO's estimate of federal savings from about $\$ 44$ billion to $\$ 65$ billion between 2022 and 2028. If the deductible was instead lowered by $\$ 100$ to $\$ 650$, CBO's estimate of the savings during those years would be reduced by about $\$ 21$ billion to $\$ 22$ billion. If, instead, the deductible remained unchanged at $\$ 750$ but the catastrophic cap was raised by an additional $\$ 500$ in 2022 (from \$7,500 to \$8,000), the estimated savings would increase by about $\$ 25$ billion to $\$ 69$ billion. Reducing the catastrophic cap by $\$ 500$ to $\$ 7,000$ would reduce the estimated savings by about $\$ 27$ billion to $\$ 17$ billion over the period.

Under the second alternative, restricting medigap plans, mandatory outlays would decrease by $\$ 72$ billion. Outlays for FFS Medicare (Parts A and B) would decrease by $\$ 60$ billion because medigap enrollees would face a larger fraction of their Medicare cost sharing out of pocket and would therefore use fewer services, resulting in less Medicare spending. As a result of lower FFS Medicare spending, payments to Medicare Advantage plans and Part B premium receipts would both decrease. In addition, Medicaid spending would decrease as a result of the decrease in the Part B premium. Altogether, the interactions would further decrease spending by about $\$ 12$ billion. Federal spending on the FEHB program and TRICARE would not change under the second alternative.

Under the third alternative, which entails simultaneously changing Medicare's cost sharing and restricting medigap plans, mandatory outlays would decrease
by $\$ 116$ billion. Outlays for FFS Medicare (Parts A and $B$ ) would decrease by $\$ 81$ billion. The remaining $\$ 35$ billion in savings would result from the effects of interactions between FFS Medicare and other parts of Medicare as well as other federal programs. Although the total savings from this alternative would approximate the sum of the savings from the first two alternatives, that relationship might not apply using different dollar amounts for the deductible and catastrophic cap.

For all three alternatives, the estimates reflect impacts on the entire FFS Medicare population; however, the effects on individual beneficiaries would differ depending on their spending for particular health care services. For example, under the third alternative, out-of-pocket costs would rise in 2026 for more than 55 percent of enrollees (by about $\$ 900$, on average) and would stay the same for another 43 percent. For the remaining 2 percent of enrollees, out-of-pocket costs would fall by an average of about $\$ 5,800$.

CBO's analysis of the effects of the three alternatives is subject to uncertainty. One source of uncertainty is the extent to which future changes in enrollment in FFS Medicare and supplemental insurance and spending by category align with CBO's baseline projections. A second source stems from the use in this analysis of a 5 percent sample of Medicare beneficiaries from 2013, with the sample adjusted to reflect differences in Medicare FFS enrollment and spending in CBO's baseline by category of medical service between 2013 and each year between 2022 and 2028. Patterns of medical spending and utilization among Medicare FFS beneficiaries could differ between 2013 and the 2022-2028 period in important ways in addition to those related to the baseline projections.

Another important source of uncertainty is how beneficiaries would change their use of Medicare services in response to changes in cost sharing or restrictions to medigap insurance. CBO relied on published research to estimate that response, but those research findings can only approximate how Medicare FFS beneficiaries would respond in the future. To what extent the alternatives would affect enrollment in medigap or Medicare Advantage plans is another source of uncertainty because such a response is likely, but there is little evidence to inform CBO's analysis. CBO did not incorporate the effects of any change in medigap or Medicare Advantage enrollment into its estimates.

## Other Effects

An argument in favor of this option is that it would increase incentives for enrollees to use medical services prudently. The third alternative would provide the strongest incentives because it would expose beneficiaries to the highest out-of-pocket costs. Higher deductibles and coinsurance rates expose enrollees to some of the financial consequences of their decisions about health care utilization and are aimed at ensuring that services are used only when an enrollee's benefits exceed those costs.

An advantage of introducing uniform cost sharing with a catastrophic cap and a combined deductible (the first and third alternatives) is that the catastrophic cap would reduce cost sharing for enrollees whose total spending exceeded the cap. Capping enrollees' out-of-pocket expenses would especially help people who developed serious illnesses, required extended care, or underwent repeated hospitalizations but lacked supplemental coverage for their cost sharing. Also, the combined deductible would be lower than the current initial copayment for inpatient hospital services, potentially decreasing Part A cost sharing for some beneficiaries. The uniform coinsurance rate across services could also encourage enrollees to compare the costs of different treatments in a more consistent way.

An argument in favor of restricting the level of cost sharing covered by medigap plans (the second alternative) is that the decline in Part B spending would in turn reduce Part B premiums. Lower Part B premiums would benefit all beneficiaries who pay them (including Medicare Advantage enrollees). State Medicaid spending would also decrease because Medicaid pays the Part B premiums for dual-eligible beneficiaries.

An argument against the option is that in any given year, some enrollees would see their combined payments for premiums and cost sharing rise, which could cause some people to forgo needed health care services and could adversely affect their health. Studies have shown that people who are subject to higher cost sharing reduce
not only their use of less effective care but also their use of effective care (for example, Swartz 2010). In the RAND Health Insurance Experiment, researchers found that cost sharing had no substantial effect on health in general. However, among the poorest and sickest participants, those with no cost sharing were healthier by some measures than those who faced some cost sharing (Manning and others 1987).

Two other arguments against the introduction of uniform cost sharing (the first and third alternatives) are higher supplemental insurance premiums for some plans and increased administrative burdens. To begin with, premiums would increase for supplemental retiree policies. Next, the first and third alternatives would increase administrative burdens for both the federal government and some types of health care providers because some services would be newly subject to cost sharing and because the administrative structures supporting Part A and Part B services would need to be integrated.

An argument against the change to medigap cost sharing (the second and third alternatives) is that changing the terms of current medigap policies could be considered unfair or unduly burdensome. Under current law, Medicare enrollees who do not buy medigap insurance when they turn 65 may be charged much higher premiums for such insurance if they delay the purchase until they develop health problems. Thus, many Medicare enrollees might pay medigap premiums for years to ensure access to the financial protection of supplemental insurance if their health deteriorates. In addition, current and future policyholders would face more uncertainty about their out-of-pocket costs. For those reasons, some policyholders might object to being prevented from having coverage for all of their cost sharing above the deductible, even if they would be better off financially in most years under this option. (In recent years, most medigap policyholders have purchased coverage for the Part B deductible; high-deductible medigap policies have attracted only limited enrollment despite their lower premiums.)

RELATED OPTION: Mandatory Spending, "Introduce Minimum Out-of-Pocket Requirements Under TRICARE for Life" (page 59)
RELATED CBO PUBLICATION: Noelia Duchovny and others, CBO's Medicare Beneficiary Cost-Sharing Model: A Technical Description, Working Paper (forthcoming)

WORK CITED: Willard G. Manning and others, "Health Insurance and the Demand for Medical Care: Evidence From a Randomized Experiment," American Economic Review, vol. 77, no. 3 (June 1987), pp. 251-277, www.jstor.org/stable/1804094; Katherine Swartz, Cost-Sharing: Effects on Spending and Outcomes, Research Synthesis Report 20 (Robert Wood Johnson Foundation, December 2010), http://tinyurl.com/oyle4s8 (PDF, 369 KB)

Increase Premiums for Parts B and D of Medicare

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Increase basic premiums | 0 | -7 | -16 | -27 | -38 | -52 | -55 | -60 | -64 | -69 | -89 | -389 |
| Freeze income thresholds for income-related premiums | 0 | * | -1 | -2 | -3 | -4 | -5 | -7 | -8 | -11 | -5 | -40 |
| Both alternatives above ${ }^{\text {a }}$ | 0 | -8 | -17 | -28 | -40 | -54 | -59 | -64 | -70 | -77 | -93 | -418 |

This option would take effect in January 2020.

* $=$ between - $\$ 500$ million and zero.
a. If both alternatives were enacted together, the total of their effects would be less than the sum of the effects for each alternative because of interactions between the approaches.


## Background

All enrollees in Medicare Part B (which covers physicians' and other outpatient services) and Part D (the outpatient prescription drug benefit, which is delivered through private-sector companies) are charged basic premiums for that coverage. Under current law, the Part B premium in 2019 is scheduled to be $\$ 135.50$ per month, or about 25 percent of the average cost per enrollee age 65 or older. (Premiums can be higher or lower for enrollees who receive Part B benefits through Medicare Advantage, the private insurance option for Medicare beneficiaries.) The monthly premium for someone choosing a standard Part D plan with average projected costs in 2019 is scheduled to be $\$ 33.19$, which is expected to cover 25.5 percent of the average per capita cost of the basic benefit. Low-income enrollees and those with few assets receive subsidies through the low-income subsidy (LIS) program to cover some or all of their premiums.

Enrollees with relatively high income pay an income-related premium (IRP) that is determined on the basis of the beneficiary's modified adjusted gross income, or MAGI (adjusted gross income plus tax-exempt interest). For enrollees who pay an IRP for Part B, the combined premium for 2019 ranges from $\$ 190$ per month to $\$ 461$ per month under current law. For Part D, enrollees are scheduled to pay between $\$ 46$ and $\$ 111$ in monthly premiums for a standard plan that is projected to have average costs per enrollee in 2019. The amounts are set so that the basic premium and the IRP together are
expected to cover between 35 percent and 85 percent of an enrollee's costs.

Under current law, the income thresholds for the higher premiums for Parts B and D are divided among five brackets. The highest (or fifth) income bracket is frozen until 2028 whereas the rest are frozen through 2019. The Bipartisan Budget Act of 2018 added a fifth income bracket for the IRPs so that individual filers with income greater than or equal to $\$ 500,000$ or married couples who file joint returns and have combined incomes greater than or equal to $\$ 750,000$ pay a higher premium percentage. The lowest bracket is set at $\$ 85,000$ for single beneficiaries or $\$ 170,000$ for married couples filing joint tax returns. The thresholds are scheduled to increase by about 2 percent in 2020 and after that to be indexed by the consumer price index for all urban consumers.

The share of Part B enrollees subject to income-related premiums is projected to increase from about 10 percent in 2019 to about 12 percent in 2028 as growth in income for affected enrollees slightly outpaces indexing of the thresholds. Everyone subject to the IRP for Part D is also subject to it for Part B.

## Option

This option would raise the premiums for Parts B and D under one of three alternative approaches. Each alternative would take effect in January 2020:

- The first alternative would increase basic premiums from 25 percent of Part B costs per enrollee and 25.5 percent of Part $D$ costs per enrollee to 35 percent of each program's costs. That increase would take effect over five years. For Part B, the share of costs per enrollee covered by the basic premium would rise by 2 percentage points each year through 2024 and then remain at 35 percent. For Part D, that share would increase by 1.5 percentage points in the first year and by 2 percentage points each year from 2021 through 2024 and then remain at 35 percent. By 2028, basic premiums would reach $\$ 281$ per month for Part B and $\$ 77$ per month for Part D. Those changes would not affect the total premiums of enrollees paying the IRP because the premiums are already expected to cover at least 35 percent of costs.
- The second alternative would extend the current freeze on income thresholds through 2028.
- The third alternative would combine the first two. It would increase basic premiums for Parts B and D to 35 percent of costs per enrollee and freeze the income thresholds for income-related premiums.


## Effects on the Budget

The Congressional Budget Office estimates that the first alternative would decrease net Medicare spending (total Medicare spending minus beneficiaries' premiums and other offsetting receipts) by $\$ 389$ billion between 2020 and 2028. This alternative would not affect the total premiums of enrollees paying the IRP. For the second alternative, CBO estimates that net Medicare spending would be reduced by $\$ 40$ billion between 2020 and 2028 and that the share of enrollees paying an IRP would rise by 0.4 percentage points in 2020 and by 5.5 percentage points in 2028. The third alternative would reduce net Medicare spending by $\$ 418$ billion between 2020 and 2028. (That amount is slightly less than the sum of the savings from the other two alternatives-if implemented separately-because of interactions between the two approaches.) All estimates are derived from the following: CBO's analysis of the distribution of income for all people age 65 or older (the agency estimates that Medicare enrollees under the age of 65 would not satisfy the criteria to be subject to an IRP); and CBO's expectation regarding those who would delay enrollment in Medicare Parts B and D or drop coverage altogether.

CBO's analysis of the first and third alternatives accounts for the fact that federal savings from the higher basic premiums for Parts B and D would be partially offset by higher federal payments to states for Part B premiums for dual-eligible beneficiaries (people who are enrolled in both Medicare and Medicaid) and by higher subsidies for LIS enrollees in Part D. CBO anticipates that, if implemented, all of the alternatives would result in an increase in the number of people who would delay enrollment in Medicare Parts B and D. The savings would be higher if the increase in the basic premiums was larger or if the income thresholds were frozen. The savings would be smaller if the proposed increase in the basic premiums was smaller, the income thresholds were not frozen (for the highest income bracket), or those thresholds were indexed to grow at a slower rate than that in effect under current law (for all other income brackets).

A large source of uncertainty in the estimate over the next 10 years is the unpredictability of basic premiums because, in part, they are directly linked to CBO's baseline projections of enrollment and total spending for Parts B and D. Those projections are used to establish costs per beneficiary, a key part of determining premium amounts. Another large source of uncertainty is the income distribution for Medicare enrollees. It is hard to project changes in the distribution of income-and therefore in how much of Medicare enrollees' income falls within each income bracket.

Additionally, there is uncertainty surrounding the percentage of people age 65 or older who would choose to delay enrollment in Medicare. When premiums (basic or income-related) increase, current enrollees might choose to stay in, disenroll from, or go on and off of ("churn through") the program, whereas potential new enrollees might choose to delay their enrollment in the program. CBO expects that Medicare basic premiums would be lower than most private insurance premiums under current law and the option. As a result, CBO anticipates that an increase in the basic premiums for Parts B and D would have minimal effects on the number of beneficiaries who would choose to disenroll from those programs. However, CBO expects that if income-related premiums increased, the small percentage of people between the ages of 64 and 70 who continued to work, maintain creditable coverage through their employer, and delay enrollment in the Medicare program to avoid paying the IRP would increase. Because both Parts B and D of the Medicare program assess a permanent penalty for delayed
(late) enrollment in the absence of other creditable health care coverage, CBO does not expect an increase in the percentage of people who would disenroll from Parts B and D ; also, those penalties make it unlikely that higher income-related premiums would increase the number of people who would churn through the Medicare program.

## Other Effects

One argument in favor of this option is that it would reduce the pressure on the working-age population to pay for benefits being received by older groups. (Because of demographic changes, the number of Medicare beneficiaries per worker has been increasing substantially as members of the baby-boom generation retire, thus increasing that pressure.) Another argument is that by absorbing a larger share of enrollees' income, higher Part D premiums would increase competitive pressure in the market for prescription drug plans, thus giving enrollees a stronger incentive to choose less expensive plans. Such pressure could cause prescription drug plans to reduce their bids slightly, generally leading to lower
premiums for those plans along with reducing the federal government's costs and lowering the total cost of drugs for Medicare beneficiaries. Similar effects on costs for hospital care or outpatient services could accrue if enrollees sought out lower-cost Medicare Advantage plans, although such effects are not included in the estimates shown here.

A disadvantage of this option is that it would reduce many enrollees' disposable income by increasing basic premiums and freezing all of the income thresholds. A growing share of enrollees would become subject to the IRP in later years because people's nominal income tends to rise over time (although their purchasing power might not increase). Another disadvantage of this option: Even though the disposable income of low-income enrollees whose Medicare premiums are paid by Medicaid might not decrease, state Medicaid programs would face higher costs for some enrollees, such as certain Part B enrollees who have low income and limited assets.

Raise the Age of Eligibility for Medicare to 67


|  | Raise the Age of Eligibility for Medicare to 67 by Two Months Each Year |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Medicare | 0 | 0 | 0 | 0 | -1.3 | -3.3 | -5.5 | -7.7 | -10.4 | -13.7 | -1.3 | -42.0 |
| Social Security ${ }^{\text {a }}$ | 0 | 0 | 0 | 0 | -0.2 | -0.4 | -0.5 | -0.7 | -0.9 | -1.1 | -0.2 | -3.8 |
| Medicaid and subsidies through health insurance marketplaces | 0 | 0 | 0 | 0 | 0.8 | 2.1 | 3.6 | 5.2 | 7.0 | 9.0 | 0.8 | 27.8 |
| Total | 0 | 0 | 0 | 0 | -0.7 | -1.6 | -2.4 | -3.2 | -4.3 | -5.7 | -0.7 | -18.0 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | 0 | 0 | 0 | -0.1 | -0.2 | -0.3 | -0.5 | -0.7 | -0.9 | -0.1 | -2.6 |
| Decrease (-) in the Deficit | 0 | 0 | 0 | 0 | -0.7 | -1.4 | -2.1 | -2.8 | -3.6 | -4.8 | -0.7 | -15.4 |

## Raise the Age of Eligibility for Medicare to 67 by Three Months Each Year

| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medicare | 0 | 0 | 0 | 0 | -1.9 | -4.5 | -7.5 | -11.2 | -15.0 | -19.7 | -1.9 | -59.9 |
| Social Security ${ }^{\text {a }}$ | 0 | 0 | 0 | 0 | -0.2 | -0.5 | -0.7 | -1.0 | -1.3 | -1.5 | -0.2 | -5.2 |
| Medicaid and subsidies through health insurance marketplaces | $\underline{0}$ | 0 | ${ }^{0}$ | $\underline{0}$ | 1.1 | 2.9 | 5.0 | 7.5 |  | $\underline{12.9}$ | 1.1 | 39.6 |
| Total | 0 | 0 | 0 | 0 | -0.9 | -2.1 | -3.3 | -4.7 | -6.1 | -8.4 | -0.9 | -25.5 |
| Change in Revenues ${ }^{\text {b }}$ | 0 | 0 | 0 | 0 | -0.1 | -0.3 | -0.4 | -0.7 | -1.0 | -1.3 | -0.1 | -3.7 |
| Decrease (-) in the Deficit | 0 | 0 | 0 | 0 | -0.8 | -1.8 | -2.8 | -4.0 | -5.2 | -7.1 | -0.8 | -21.8 |

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.
This option would take effect in January 2023.
a. Estimates include the effects on Social Security outlays, which are classified as off-budget.
b. Estimates include the effects on Social Security payroll tax receipts, which are classified as off-budget.

## Background

Under current law, the usual age of eligibility to receive Medicare benefits is 65 , although younger people generally may enroll after they have been eligible for Social Security disability benefits for two years. The average number of years that people are covered under Medicare has increased significantly since the program's creation because of a rise in life expectancy. In 1965, when Medicare was established, a 65 -year-old man could expect to live another 12.9 years, on average, and a 65 -year-old woman another 16.3 years. Since then, life expectancy for 65 -year-olds has risen by more than four years-to 18.2 years for men and 20.7 years for women. That trend, which results in higher program costs, is projected to continue.

## Option

This option, which consists of two alternatives, would raise Medicare's eligibility age (MEA) to 67.

- Under the first alternative, the MEA would rise by two months each year, beginning in 2023 (when people born in 1958 will turn 65). It would continue to increase until it reached 67 for people born in 1969. (That cohort will become eligible for Medicare benefits in 2036.) The MEA would remain at 67 thereafter.
- Under the second alternative, the MEA would increase by three months each year, beginning in 2023, until it reached 67 for people born in 1965. (That cohort will become eligible for Medicare benefits in 2032.) It would remain at 67 thereafter.

Under the two alternatives, the MEA would rise to match Social Security's full retirement age (FRA), the age at which workers become eligible for full retirement benefits. (People can claim reduced retirement benefits-but not Medicare benefits-starting at age 62, which is the most common age to do so.) The FRA has already been increased from 65 to 66 and is scheduled to rise further during the coming decade, reaching 67 for people born in 1960 (who will turn 67 in 2027). The MEA would remain below the FRA until 2036 under the first alternative and until 2032 under the second alternative.

In addition, under the Affordable Care Act (ACA), states are permitted to expand eligibility for Medicaid to adults under the age of 65 whose income is no more than 138 percent of the federal poverty guidelines. The estimates in this option reflect the assumption that the age limit for people made eligible for Medicaid by the ACA would increase in tandem with the MEA.

## Effects on the Budget

Implementing either of the two alternatives would reduce federal budget deficits between 2023 and 2028, according to estimates by the Congressional Budget Office and the staff of the Joint Committee on Taxation (JCT). The net reduction in deficits would result from the combined effect of changes to outlays and revenues, both of which would decrease over that period. The reduction in outlays would stem from decreases in spending for Medicare and Social Security (although it would be partially offset by increases in federal subsidies for insurance purchased through the marketplaces established under the ACA and related spending for Medicaid). The reduction in revenues would largely stem from increases in federal subsidies for insurance purchased through the marketplaces, a portion of which is provided in the form of reductions in recipients' tax payments.

CBO and JCT estimate that under the first alternative, deficits would decrease by $\$ 15$ billion between 2023 and 2028; that reduction comprises an $\$ 18$ billion decrease in outlays and a $\$ 3$ billion decrease in revenues. The agencies estimate that under the second alternative, deficits would decline by an additional $\$ 7$ billion over the same period because the decrease in outlays and the partially offsetting decrease in revenues would be $\$ 8$ billion and $\$ 1$ billion greater, respectively. The estimated reduction in deficits between 2023 and 2028 would be greater under the second alternative because of a larger reduction in Medicare enrollment over that period.

Effects on Medicare. Raising the MEA would lower Medicare outlays by reducing the number of people enrolled in the program at any given time when compared with enrollment under current law. In calendar year 2023, when this option would take effect, about 3.6 million people will become eligible for Medicare coverage on the basis of their age under current law. That group would see its benefits delayed by two months under the first alternative and by three months under the second alternative. In calendar year 2028, under current law, about 3.7 million people will turn 65 and enroll in Medicare; their benefits would be delayed by a year under the first alternative and by 18 months under the second alternative. As a result, total spending on Medicare between 2023 and 2028 would be lower than under current law by $\$ 42$ billion under the first alternative and by $\$ 60$ billion under the second alternative.

Effects on Social Security. Raising the MEA also would reduce outlays for Social Security retirement benefits over the 2023-2028 period because, in CBO's estimation, some people would delay claiming retirement benefits. The reduction over that period would be $\$ 4$ billion under the first alternative and $\$ 5$ billion under the second alternative. Under both alternatives, expenditures would be higher in later years because delayed claiming would lead to higher monthly benefits.

CBO anticipates that the reduction in Social Security spending would be fairly small because raising the MEA would have little effect on people's decisions about when to claim retirement benefits. Historical evidence indicates that people are more likely to wait until reaching the FRA to claim retirement benefits than they are to claim when they reach the MEA (Manchester and Song 2011).

CBO also expects future decisions about claiming retirement benefits to be less linked to the MEA than has historically been the case because of greater access to health insurance through Medicaid and through the nongroup market (insurance purchased directly either in the health insurance marketplaces or from insurers outside the marketplaces). Increased access through Medicaid stems from a provision of the ACA that permits, but does not require, states to expand eligibility to include low-income adults under age 65 . In the nongroup market, that increased access stems from subsidies for plans purchased through the marketplaces and from the provision that prevents insurers from denying coverage or varying premiums on the basis of an enrollee's health status. (Insurers are, however, permitted to vary
premiums on the basis of enrollees' age, tobacco use, and geographic location.) As a result, it is now easier for some people who give up employment-based insurance upon retirement to qualify for Medicaid or to purchase health insurance in the nongroup market, in some cases with a federal subsidy.

## Effects on Federal Subsidies for Health Insurance

Outside of Medicare. Although raising the MEA would generate savings for Medicare and Social Security, those savings would be offset substantially by increases in federal spending and by decreases in revenues. That is because, in CBO's estimation, a sizable share of people who, under current law, would enroll in Medicare upon turning 65 would enroll instead in federally subsidized health insurance-such as Medicaid, insurance through the nongroup market, or employment-based insurancebetween age 65 and the new MEA.

CBO estimates that in 2028, about 45 percent of the people affected by this option would obtain insurance from their own or a spouse's employer or former employer, about 20 percent would purchase insurance through the nongroup market, about 20 percent would receive coverage through Medicaid, and about 15 percent would become uninsured. (To develop those estimates, CBO examined data on the patterns of health insurance coverage among people a few years younger than the MEA. The figures were then adjusted to account for changes in sources of health insurance and in participation in the labor force as people age.)

Raising the MEA would increase federal outlays for Medicaid for two groups of people between the age of 65 and the new MEA: "full duals" (Medicare beneficiaries who are also enrolled in Medicaid with full benefits) and Medicaid enrollees who were made eligible for that program by the ACA but who, under current law, would lose that eligibility once they qualified for Medicare at age 65. Because CBO assumed that the age limit for Medicaid would increase in tandem with the MEA under this option, Medicaid would remain the primary source of coverage for members of both groups until they reached the new MEA. As a result, federal outlays for Medicaid between 2023 and 2028 would be higher by $\$ 15$ billion under the first alternative and by $\$ 20$ billion under the second alternative, CBO projects.

Raising the MEA also would increase outlays for subsidies for health insurance coverage purchased through the marketplaces because some people, instead of obtaining

Medicare coverage at age 65 , would continue to receive or would obtain subsidized health insurance through the marketplaces when they were between age 65 and the new MEA. (Those federal subsidies cover a portion of participants' health insurance premiums.) In addition, the resulting increase in the average age of people purchasing health insurance coverage through the nongroup market would slightly increase premiums for all people enrolled in that market, which would in turn increase spending on subsidies for people purchasing subsidized coverage through the marketplaces. CBO and JCT estimate that, between 2023 and 2028, raising the MEA would increase outlays for subsidies for coverage through the marketplaces by $\$ 13$ billion under the first alternative and by $\$ 19$ billion under the second alternative.

Raising the MEA would lower revenues because a portion of the increase in marketplace subsidies for health insurance premiums would be provided in the form of reductions in recipients' tax payments. (The subsidies for health insurance premiums are structured as refundable tax credits; the portions of such credits that exceed taxpayers' other income tax liabilities are classified as outlays, whereas the portions that reduce tax payments are classified as reductions in revenues.) Revenues also would decline because of a small net increase in employers' spending on nontaxable health insurance benefits, which in turn would reduce collections of income taxes and payroll taxes. Raising the MEA would reduce revenues between 2023 and 2028 by $\$ 3$ billion under the first alternative and by $\$ 4$ billion under the second alternative, CBO and JCT estimate.

Uncertainty. The largest source of uncertainty in the estimate of savings over the next 10 years is CBO's estimate of the number of people between age 65 and the new MEA who would be enrolled in Medicaid or subsidized coverage through the marketplaces. CBO estimates that the majority of individuals affected by this policy change would not change their decision to work. If more individuals chose to delay retirement, however, more people between the age of 65 and the MEA would remain in employment-based insurance. That would reduce the number of people projected to enroll in nongroup insurance or Medicaid under both alternatives, which would reduce federal outlays. The net budgetary effects of those decisions, however, would depend on the income of the people who decided to keep working and whether or not they would qualify for alternative forms of subsidized coverage. Additionally, over time, fewer employers have been offering early-retiree health insurance to their
employees. CBO estimates that this trend would continue, but it could accelerate or decelerate. Projecting a number of offers of such coverage that is too low would cause CBO to overestimate the number of people who would be enrolled in subsidized coverage through the marketplaces or Medicaid and therefore underestimate the savings from the option. Alternatively, projecting a number of offers that is too high would cause CBO to overestimate the savings from the option.

Longer-Term Effects. Over the longer term, deficits would continue to be lower under this option than they would be under current law. CBO estimates that, by 2048, spending on Medicare (net of offsetting receipts) would be about 2.5 percent less under this option than it would be under current law, amounting to 5.7 percent of gross domestic product rather than 5.9 percent under current law. In 2048, that effect would be almost identical under the two alternatives because the MEA would be identical in 2036 and subsequent years. On the basis of its estimates for 2023 through 2028, CBO projects that, under either alternative, roughly three-fifths of the long-term savings from Medicare would be offset by changes in federal outlays for Social Security, Medicaid, and subsidies for coverage through the marketplaces as well as by reductions in revenues.

## Other Effects

An argument in favor of raising the MEA is that, as life expectancy increases, the increase in the MEA would help Medicare return its focus to the population it originally served-people in their last years of life-and support the services most needed by that group. CBO projects that by 2048 , life expectancy for 65 -year-olds will be 20.4 years for men and 22.8 years for women, compared with 12.9 years and 16.3 years in 1965 . There is some evidence that, for many people, the increase in life expectancy has been accompanied by better health
in old age (Chernew and others 2016). Those findings suggest that raising the MEA would not diminish the program's ability to provide health benefits to people near the end of life. However, individuals of lower socioeconomic status could be disproportionally affected by the higher MEA because the gains in life expectancy have not been uniform: In recent decades, life expectancy has generally increased more quickly for individuals with higher lifetime earnings (Waldron 2008).

An argument against raising the MEA is that it would shift costs that are now paid by Medicare to individual people, to employers that offer health insurance to their retirees, and to other government health insurance programs. In 2028, more people would be uninsured under this option-about 450,000 under the first alternative and about 600,000 under the second alternative, CBO estimates-and they thus might receive lower-quality care or none at all. Others would end up with a different source of insurance and might pay more for care than they would have as Medicare beneficiaries. Employers' costs of providing group plans for their retirees would increase because those plans would remain the primary source of coverage until the retirees reached the new MEA. In addition, states' spending on Medicaid and the federal costs of subsidies for health insurance purchased through the marketplaces would increase.

The net effect of raising the MEA on national health care spending is unclear because of the potential difference in costs borne by different payers to provide coverage for people between age 65 and the new MEA. One study showed that spending on some procedures declined when people switched from private health insurance to Medicare at age 65; that decline was driven mostly by price differences between private health insurance and Medicare (Wallace and Song 2016).

RELATED OPTION: Mandatory Spending, "Raise the Full Retirement Age for Social Security" (page 101)
RELATED CBO PUBLICATION: Raising the Ages of Eligibility for Medicare and Social Security (January 2012), www.cbo.gov/ publication/42683

WORK CITED: Michael Chernew and others, Understanding the Improvement in Disability Free Life Expectancy in the U.S. Elderly Population, Working Paper 22306 (National Bureau of Economic Research, June 2016), www.nber.org/papers/w22306; Joyce Manchester and Jae G. Song, "What Can We Learn From Analyzing Historical Data on Social Security Entitlements?" Social Security Bulletin, vol. 71, no. 4 (November 2011), pp. 1-13, www.ssa.gov/policy/docs/ssb/v71n4/index.html; Hilary Waldron, "Trends in Mortality Differentials and Life Expectancy for Male Social Security-Covered Workers, by Socioeconomic Status," Social Security Bulletin, vol. 67, no. 3 (April 2008), pp. 1-28, https://www.ssa.gov/policy/docs/ssb/v67n3/index.html; Jacob Wallace and Zirui Song, "Traditional Medicare Versus Private Insurance: How Spending, Volume, and Price Change at Age Sixty-Five," Health Affairs, vol. 35, no. 5 (May 2016), pp. 864-872, http://dx.doi.org/10.1377/hlthaff.2015.1195

Reduce Medicare's Coverage of Bad Debt

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Reduce the percentage of allowable bad debt to 45 percent | 0 | -0.2 | -0.6 | -1.1 | -1.4 | -1.5 | -1.6 | -1.7 | -1.8 | -2.0 | -3.4 | -12.1 |
| Reduce the percentage of allowable bad debt to 25 percent | 0 | -0.4 | -1.3 | -2.2 | -2.8 | -3.0 | -3.2 | -3.5 | -3.7 | -4.0 | -6.8 | -24.1 |
| Eliminate the coverage of allowable bad debt | 0 | -0.7 | -2.1 | -3.6 | -4.6 | -4.9 | -5.3 | -5.6 | -6.0 | -6.4 | -11.0 | -39.2 |

This option would take effect in October 2019.

## Background

When hospitals and other providers of health care are unable to collect out-of-pocket payments from their patients, those uncollected funds are called bad debt. Historically, Medicare has paid some of the bad debt owed by its beneficiaries on the grounds that doing so prevents those costs from being shifted to others (that is, private insurance plans and people who are not Medicare beneficiaries). The unpaid and uncollectible deductible and coinsurance amounts for covered services furnished to Medicare beneficiaries are referred to as allowable bad debt. In the case of dual-eligible beneficiaries-Medicare beneficiaries who also are enrolled in Medicaid-out-of-pocket obligations that remain unpaid by Medicaid are uncollectible and therefore are included in allowable bad debt. Under current law, Medicare reimburses eligible facilities-hospitals, skilled nursing facilities, various types of health care centers, and facilities treating end-stage renal disease-for 65 percent of allowable bad debt. The Congressional Budget Office estimates that Medicare's spending on allowable bad debt was $\$ 3.5$ billion in 2017.

## Option

This option consists of three alternatives that would decrease the share of allowable bad debt that the program reimburses to eligible facilities. Under the first and second alternatives, the percentage of allowable bad debt that Medicare reimburses to participating facilities would be reduced from 65 percent to 45 percent and 25 percent, respectively. Under the third alternative, Medicare's coverage of allowable bad debt would be eliminated. The reductions would start to take effect in 2020 and would
be phased in evenly until becoming fully implemented in 2022.

## Effects on the Budget

The first alternative-reducing the percentage of allowable bad debt that Medicare reimburses to participating facilities by 20 percentage points (that is, from 65 percent to 45 percent) by 2022-would reduce outlays by $\$ 12$ billion from 2020 through 2028, CBO estimates. The second alternative, in which the reduction would be doubled from 20 to 40 percentage points (that is, from 65 percent to 25 percent), would reduce outlays over that period by twice as much- $\$ 24$ billion. The third alternative, eliminating coverage of bad debt, would save $\$ 39$ billion over that period. The estimated savings associated with other percentage-point reductions would be roughly proportional to the magnitude of the reduction. For each of these alternatives, CBO estimates that the reductions in spending would increase over the period in line with the projected growth in Medicare spending.

Because hospitals account for most of the reimbursement for spending on bad debt (about 70 percent), the largest source of uncertainty in this estimate is whether private prices for hospital services would change in response to hospitals' loss of revenue from Medicare's reduced reimbursements for bad debt-and if so, whether private prices would increase or decrease. Some observers expect that reducing federal payments for bad debt would lead hospitals to increase prices for private insurers to make up for lost Medicare revenues-a phenomenon often referred to as cost shifting. If private prices increased, on average, then federal subsidies for private insurance
would also increase, which would raise federal costs. Some studies have found no evidence of cost shifting or have found limited evidence of cost shifting that depends on factors such as local market power and contracting arrangements with insurers (Frakt 2011). Further, another study has found that private prices have fallen in response to Medicare's price reductions, which, in turn, suggests that federal subsidies could fall in response to Medicare's payment reductions (White 2013). Although that result might seem counterintuitive, there is evidence that hospitals respond to Medicare's payment reductions by lowering long-run operating expenses, which would allow for lower profit-maximizing private prices (White and Wu 2014). Because the direction of the impact on private prices stemming from changes in Medicare's payments is unknown, CBO's estimate of this policy does not include any changes in the prices charged to private insurers. However, any changes in federal spending related to changes in those prices are likely to be negligible.

Another source of uncertainty is whether facilities (including hospitals) would respond to the lost revenue by increasing their efforts to collect allowable bad debt (that is, unpaid deductible and coinsurance amounts) from Medicare patients. However, facilities are required to demonstrate a reasonable collection effort before debt can be classified as allowable bad debt. For example, the Centers for Medicare \& Medicaid Services requires facilities to use the same strategies for collecting medical debt from Medicare patients as they do for private-pay patients. Because of that requirement and because facilities are not reimbursed by Medicare for debt incurred by private-pay patients, it is likely that facilities are already exerting significant effort to collect this debt, and the ability of facilities to collect further on Medicare debt would probably be small. Therefore, changes to Medicare's reimbursements of bad debt are
unlikely to substantially change overall strategies for collecting medical debt. In addition, CBO estimates that facilities cannot collect about two-thirds of allowable bad debt because it is attributable to dual-eligible beneficiaries. (Currently, Medicaid programs are frequently not required to pay all out-of-pocket expenses for dual-eligible enrollees.) To the extent that increased collection efforts by facilities led to a reduction in allowable bad debt, any reduction in the coverage of that debt-other than elimination-would be associated with an additional reduction in outlays.

## Other Effects

One argument for implementing this option is that Medicare currently reimburses facilities for allowable bad debt but does not reimburse doctors or other noninstitutional providers, so this option would reduce that disparity. Also, the reimbursement of bad debt was originally intended to reduce the incentive for cost shifting-but, as previously noted, the evidence for cost shifting is mixed, possibly meaning that the need for such reimbursement is smaller than originally thought.

An argument against this option is that facilities might have difficulty collecting additional payments from enrollees or other sources-especially in the case of dual-eligible beneficiaries and enrollees without other supplemental coverage, such as private medigap plans or coverage from former employers. The option would therefore lead to an effective cut in Medicare's payments to institutional providers. Also, those providers might try to mitigate the impact of this option by limiting their treatment of dual-eligible Medicare beneficiaries and those without other supplemental coverage. Consequently, the option could place additional financial pressure on institutional providers that treat a disproportionate share of those enrollees, potentially reducing their access to care or quality of care.

WORK CITED: Austin B. Frakt, "How Much Do Hospitals Cost Shift? A Review of the Evidence," The Milbank Quarterly, vol. 89, no. 1 (March 2011), pp. 90-130, http://dx.doi.org/10.1111/j.1468-0009.2011.00621.x; Chapin White, "Contrary to Cost-Shift Theory, Lower Medicare Hospital Payment Rates for Inpatient Care Lead to Lower Private Payment Rates," Health Affairs, vol. 32, no. 5 (May 2013), pp. 935-943, http://dx.doi.org/10.1377/hlthaff.2012.0332; Chapin White and Vivian Yaling Wu, "How Do Hospitals Cope With Sustained Slow Growth in Medicare Prices?" Health Services Research, vol. 49, no. 1 (February 2014), pp. 11-31, http://dx.doi.org/10.1111/ 1475-6773.12101

## Require Manufacturers to Pay a Minimum Rebate on Drugs Covered Under Part D of Medicare for Low-Income Beneficiaries

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019 | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | 0 | -4 | -21 | -25 | -26 | -22 | -22 | -19 | -15 | -50 | -154 |

This option would take effect in January 2021.

## Background

Medicare Part D is a voluntary, federally subsidized prescription drug benefit delivered to beneficiaries by private-sector plans. Federal subsidies for Part D drug benefits, net of the premiums paid by enrollees, totaled about $\$ 77$ billion in calendar year 2015. (That amount includes payments to stand-alone prescription drug plans and Medicare Advantage plans; it excludes subsidies to employers for providing prescription drug coverage to retirees outside of Part D.) Private drug plans can limit the costs they incur for providing benefits to Part D enrollees by negotiating to receive rebates from manufacturers of brand-name drugs in return for charging enrollees smaller copayments for those drugs. The negotiation of rebate amounts is a business strategy for a Part D plan that is most effective when a few manufacturers' drugs are competing for market share in the treatment of a particular medical condition. The Congressional Budget Office estimates that in 2015, manufacturers' rebates paid to Part D plans amounted to about 22 percent of gross spending on all brand-name drugs under Part D.

Before Part D took effect in 2006, most dual-eligible beneficiaries-Medicare beneficiaries who were also enrolled in Medicaid—received drug coverage through Medicaid. Under federal law, drug manufacturers that participate in Medicaid (which is a joint federal-state program) must pay a portion of their revenues to the federal and state governments through rebates. In 2010, those rebates increased from 15.1 percent to 23.1 percent of the average manufacturer price (AMP) for a drug. (The AMP is the amount, on average, that manufacturers receive for sales to retail pharmacies.) If some purchasers in the private sector obtain a price lower than 23.1 percent off of the AMP, then Medicaid's basic rebate is increased to match the lowest price paid by private-sector purchasers. If a drug's price rises faster than overall
inflation, the drug manufacturer pays a larger rebate. And those inflation-based rebates can be significant: In 2015, for example, the average inflation rebate under Medicaid, weighted by the dollar amount of brand-name drug purchases, was 37 percent of the AMP.

When Medicare Part D was established, dual-eligible beneficiaries were automatically enrolled in its LowIncome Subsidy (LIS) program, which typically covers premiums and most cost sharing required under the basic Part D benefit. LIS enrollees-most of whom are dual-eligible beneficiaries-accounted for about 30 percent of Part D enrollment in 2015, and their drug costs represented about 50 percent of total spending for Part D enrollees' drugs in that year. Currently, the rebates on drug sales to LIS enrollees and to other Part D enrollees are set through negotiations between the Part D plans and the drug manufacturers.

## Option

Starting in 2021, this option would require manufacturers to pay a rebate to the federal government for brandname drugs sold to LIS enrollees. The rebate would be 23.1 percent of the drug's AMP plus an additional, inflation-based amount, if warranted. (This option does not include the provision in the Medicaid program that would increase the rebate to match the lowest price paid by private-sector purchasers.) In many cases, a manufacturer might already have negotiated discounts or rebates that applied to all Part D enrollees equally. In those instances, any difference between the negotiated amount across all beneficiaries and the amount of the total rebate owed by the manufacturer would be paid to the federal government. If, however, the average Part D rebate for the drug was already more than 23.1 percent of the AMP plus the inflation-based rebate, the federal government would receive no rebate. Participation in the
program would be mandatory for manufacturers who wanted their drugs to be covered by Part B (Medical Insurance) and Part D of Medicare, by Medicaid, and by the Veterans Health Administration.

## Effects on the Budget

CBO estimates that implementing this option would reduce federal spending by $\$ 154$ billion between 2021 and 2028 because, on average, the rebates negotiated for brand-name drugs are smaller than the statutory discounts obtained by Medicaid. (CBO projects, on the basis of historical data, that the effect in 2021 would be smaller than in other years because it would take some time to collect the rebates after the assessment date.) However, drug manufacturers would be expected to set higher "launch" prices for new drugs as a way to limit the effect of the new rebate, particularly for new drugs that do not have close substitutes. Over time, that response would reduce the savings to Medicare from this option. However, the size of that response is uncertain for two reasons: First, the amount of spending on new drugs that would be subject to higher prices is unclear. Second, the amount of the rebate that would be offset is uncertain because it would depend on the extent to which purchases of drugs subject to the inflation rebate were replaced by drugs with higher launch prices as a result of competition in the market. The higher launch prices also would affect other drug purchasers. Employmentbased health insurance plans would probably negotiate larger rebates to offset a portion of the higher prices, but state Medicaid programs would pay more for new drugs, which in turn would tend to increase federal spending. (Those effects on federal spending for the Medicaid program are included in this estimate.)

In addition, this option could change manufacturers' incentives to offer rebates to Part D plans for existing drugs. However, because the pressures on those rebates would push in both directions, CBO expects that the average rebates would not change appreciably. In general, manufacturers offer rebates in exchange for preferred coverage of their drugs in order to increase sales and market share. A key provision of the option is that the amount of a rebate that a manufacturer paid to a Part D plan would count toward the total rebate that manufacturer owed the federal government. On the one hand, that provision would make it less costly for manufacturers to increase their rebates as a way to
boost sales to non-LIS enrollees. On the other hand, the higher required rebate for sales of drugs to LIS enrollees would reduce the benefit to manufacturers of increasing those sales. The net effects of the reductions-in terms of both the costs and benefits of offering rebates-are unclear and would vary by drug. But the overall effects on rebates for existing drugs would probably be negligible, in CBO's estimation. If this option was expanded to include most of the Part D population, there could be adverse effects on the incentive for plans to use other tools such as formula tiers, prior authorization, and step therapy to hold down costs. However, if the option included a subset of the LIS population, the savings would be smaller and the incentives would remain unchanged.

## Other Effects

An argument in favor of this option is that the Part D benefit could provide the same amount of drugs to Medicare beneficiaries at lower total cost, particularly for brand-name drugs that have no close substitutes and whose prices are less subject to market competition. An argument against the option is that the lower revenues that manufacturers receive for drugs under Part D could cause them to reduce their investments in research and development.

The development of "breakthrough" drugs would be least affected by any decline in investment, CBO expects, because purchasers of those drugs tend to be willing to pay more for them. Manufacturers initially can set a higher price for a breakthrough drug, which can offset a portion of the new rebate without substantially affecting sales. Consequently, Medicare's savings under this option would be limited for new drugs because of their higher launch prices, and, eventually, the savings on existing brand-name drugs would dissipate as those drugs lost patent protection and were replaced by less expensive generic versions.

The effects of the option on rebates and investment incentives would be larger than when rebates were required in the past. Before 2006, manufacturers were already paying rebates to Medicaid for drugs purchased by the dual-eligible population (who were then enrolled under Medicaid's drug benefit). However, the new rules also would apply to drugs purchased by LIS enrollees who are not dual-eligible beneficiaries, and therefore (all
else being equal) the total required rebate would be larger than it was when dual-eligible beneficiaries received drug coverage through Medicaid. In addition, because of the 2010 increase in the rebate required for the sale of drugs
covered by Medicaid, the reduction in manufacturers' incentives to invest in research and development would probably be greater under this option than under the earlier system.

RELATED CBO PUBLICATIONS: Competition and the Cost of Medicare's Prescription Drug Program (July 2014), www.cbo.gov/publication/ 45552; Spending Patterns for Prescription Drugs Under Medicare Part D (December 2011), www.cbo.gov/publication/42692

## Modify Payments to Medicare Advantage Plans for Health Risk

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Increase the minimum risk reduction from 5.9 percent to 8 percent | 0 | 0 | -3.3 | -5.2 | -5.2 | -5.2 | -6.1 | -6.6 | -7.1 | -8.4 | -8.6 | -47.0 |
| Increase the minimum risk reduction from 5.9 percent to 8 percent scaled by insurer and region | 0 | 0 | -3.3 | -5.2 | -5.2 | -5.2 | -6.1 | -6.6 | -7.1 | -8.4 | -8.6 | -47.0 |
| Modify how risk scores are constructed | 0 | 0 | -4.8 | -7.4 | -7.5 | -7.4 | -8.7 | -9.4 | -10.1 | -11.9 | -12.2 | -67.2 |

This option would take effect in January 2021.

## Background

Roughly a third of Medicare beneficiaries are enrolled in the Medicare Advantage program. Through that program, private health insurers receive a payment for each beneficiary they enroll and then take financial responsibility for covering that beneficiary's care. Almost all other Medicare beneficiaries receive care in the Medicare fee-for-service (FFS) program, which pays providers directly for each service or set of services covered by Part A (Hospital Insurance) or Part B (Medical Insurance). Payments to Medicare Advantage plans depend on three components: bids that plans submit to the Centers for Medicare \& Medicaid Services (CMS), predetermined benchmarks that CMS sets on a county-level basis, and risk scores that reflect variation in beneficiaries' expected spending because of health conditions and other characteristics.

Plans' bids and Medicare's benchmarks together determine a base payment-or a per capita payment from CMS to the plan for an enrollee with average expected health costs. CMS determines base payments by comparing area-specific benchmarks to a plan's standardized bid—or a bid that reflects the plan's estimated cost for providing Medicare benefits in a given area to an enrollee in average health. If a plan's bid is above the benchmark, then CMS pays plans the benchmark. Plans must then charge enrollees a premium (which the enrollee pays in addition to the Part B premium) equal to the difference between the bid and the benchmark. If the plan's bid is less than the benchmark, then the base payment from CMS is the bid plus a rebate. That rebate is a percentage
of the difference between the bid and the benchmark, which plans are required to devote primarily to reducing premiums for Part B or Part D (the prescription drug benefit), reducing cost sharing, or covering additional benefits that Medicare does not cover, such as vision or dental care. Both the benchmark and the rebate percentage are also modified to reflect a plan's average quality score. (Quality scores are discussed in detail in the option "Reduce Quality Bonus Payments to Medicare Advantage Plans" on page 82.)

CMS further adjusts payments to plans to reduce insurers' incentives to selectively enroll beneficiaries on the basis of their expected spending. Specifically, CMS scales total payments to plans upward or downward by the risk scores of a plan's enrollees. Risk scores are constructed to reflect variation in enrollees' expected health care costs and are calculated for all Medicare beneficiaries on the basis of their diagnoses and other characteristics. Those scores are standardized so that a score of 1.0 reflects the health care spending of the average beneficiary in Medicare FFS—a type of calculation that is generally referred to as normalization. Higher risk scores indicate higher expected health care spending, and a plan is paid more for an enrollee with a higher risk score. Conversely, a plan is paid less for enrollees with lower expected health care spending.

More thorough documentation of beneficiaries' diagnoses increases their risk scores, and thus, plans have a financial incentive to record all diagnoses for their enrollees. In contrast, providers serving Medicare FFS patients
have more limited financial incentives to code a beneficiary's diagnoses because their payments are not tied to risk scores. Recent research has, in fact, shown that Medicare Advantage enrollees have higher average risk scores than otherwise similar FFS beneficiaries and that the difference has increased over time. Therefore, that divergence in risk scores appears to reflect more thorough diagnostic coding by Medicare Advantage plans, rather than differences in enrollees' health (Hayford and Burns 2018; Medicare Payment Advisory Commission 2018).

To adjust for differences in coding, federal law currently requires CMS to apply an across-the-board reduction to Medicare Advantage plan payments that is intended to reflect the difference in coding intensity across the two populations. However, some research has found that the increase in payments that is attributable to coding intensity exceeds the current reduction being applied in the program (Medicare Payment Advisory Commission 2018; Kronick and Welch 2014). Additionally, evidence suggests that some plans code more intensively than others. For instance, health maintenance organizations (HMOs) are thought to be able to code diagnoses more completely than preferred provider organizations (PPOs) or private fee-for-service (PFFS) plans, which have broader provider networks and exercise less control over providers' practice patterns (Geruso and Layton 2018; Hayford and Burns 2018). Thus, an across-the-board reduction in payments to offset coding intensity penalizes plans that do not code as intensively and maintains incentives for plans to increase coding intensity.

## Option

This option-which would affect risk-adjustment pol-icy-consists of three alternatives, all of which would take effect in 2021. Under current law, CMS must reduce payments to all plans by a minimum of 5.9 percent to reflect differences in coding across populations. The first alternative would require CMS to reduce payments to all plans by at least 8 percent instead. Eight percent is the Medicare Payment Advisory Commission's most recent estimate of the average difference between Medicare Advantage and FFS risk scores for otherwise similar beneficiaries.

The second alternative would also require CMS to reduce average plan payments by a minimum of 8 percent, rather than 5.9 percent. However, it would further require CMS to scale that 8 percent reduction-that is, increase or decrease the reduction-on the basis of
differences in coding intensity for each insurer in a given region. CMS would calculate that adjustment using the change in risk scores for beneficiaries who switched from Medicare FFS to an insurer's plan in a given region and then place plans into quartiles according to growth in those enrollees' average annual coding intensity since switching to Medicare Advantage. To simplify implementation, plans within the same quartile would have their risk scores adjusted by the same percentage so that the average reduction across all plans, weighted by enrollment, would be a minimum of 8 percent.

Changes in risk scores for beneficiaries who switch from FFS to Medicare Advantage capture differences in coding intensity because those beneficiaries' initial risk scores are based on coding patterns in Medicare FFS, whereas the change in risk scores reflects the increase in coding attributable to joining Medicare Advantage. Examining changes in risk scores for beneficiaries on an insurer-level basis allows CMS to determine how coding intensity varies across insurers, and applying adjustments that are specific to each insurer ensures that plans that code more intensively face larger payment reductions. Likewise, allowing those adjustments to vary across regions addresses the fact that plans in different parts of the country may have different relationships with providers or different coding practices. Under this second alternative, insurers that have operated in the market for fewer than three years would have the standard 8 percent reduction applied to their payments.

The third alternative would make two changes to risk-adjustment policy. First, CMS would be required to use two years of diagnostic data to calculate risk scores rather than one. Under the current system, risk scores are generated on the basis of a beneficiary's diagnoses from the previous calendar year. Empirically, using two years of diagnoses to generate risk scores rather than one would result in more diagnoses being captured among FFS beneficiaries-and would have minimal effects on the number of diagnoses captured among Medicare Advantage beneficiaries. Accounting for additional diagnoses among FFS beneficiaries therefore would reduce the gap between average Medicare Advantage risk scores and average FFS risk scores. (The 21st Century Cures Act gave CMS the authority to use two years of diagnostic data beginning in 2019; the agency did not use that authority in 2019 but may in future years.)

Second, risk scores would no longer reflect diagnoses captured from health risk assessments. Health risk assessments are visits by providers that can help determine a beneficiary's health needs and set a course for treatment. However, health risk assessments in Medicare Advantage are more likely than those in FFS to record a diagnosis for which a beneficiary receives no subsequent care. Excluding diagnoses recorded only during health risk assessments-rather than during other visits to providers-would therefore further reduce the disparity between FFS and Medicare Advantage risk scores.

## Effects on the Budget

All three alternatives would reduce mandatory spending between 2021 and 2028, according to estimates by the Congressional Budget Office.

CBO estimates that changing the reduction in risk scores from the current 5.9 percent to 8 percent to better reflect coding differences-the first alternative-would lower mandatory spending by $\$ 47$ billion between 2021 and 2028. Those savings would be the result of direct cuts to plan payments, but they include an offset that stems from the expectation that plans would adjust their bidding behavior in response to the payment reduction. (Because of shifts in the timing of payments between fiscal years, savings under all three alternatives would change minimally between 2022 and 2024 and increase in 2028.)

Under the second alternative-which would also change the reduction in risk scores from 5.9 percent to 8 percent but scale that reduction by insurer and region-CBO estimates that mandatory spending would be reduced by $\$ 47$ billion, the same amount of savings resulting from the first alternative. Compared with the first alternative, plans could face larger or smaller reductions under the second alternative; however net savings would be equivalent to those resulting from the first alternative because reductions in risk scores would, on average, be the same. As in the first alternative, CBO anticipates that plans would adjust their bidding behavior to partially offset the effect of payment cuts. CBO also expects that changes in bids would, on average, be the same as in the first alternative because adjustments by plans facing larger cuts would be offset by adjustments from plans facing smaller cuts.

Under the third alternative-modifying how risk scores are constructed-mandatory spending would
be reduced by $\$ 67$ billion (including the timing shifts noted above), CBO estimates. That reduction would be driven by lower payments to plans resulting from a 3 percent reduction in average normalized risk scores. Those reductions would arise in two ways: First, excluding diagnoses that are solely recorded in health risk assessments generally would result in a greater reduction in risk scores for Medicare Advantage enrollees than for FFS beneficiaries. Second, basing risk scores on two years of diagnoses would result in a greater average increase in risk scores for FFS beneficiaries than in risk scores for Medicare Advantage enrollees. Risk scores are normalized around the average health of beneficiaries in FFS. Thus, if FFS risk scores increased without a corresponding increase in Medicare Advantage risk scores, average normalized risk scores for Medicare Advantage enrollees would be reduced. That reduction, in turn, would reduce payments. As with the first two alternatives, CBO anticipates that plans would adjust bids in response to those payment reductions. Those adjustments would be slightly larger than in the first and second alternatives because the average reduction in plan payments would be larger. However, on net, this alternative would result in larger reductions in mandatory spending than the previous two alternatives.

CBO anticipates that the amount of savings in the first two alternatives would increase or decrease proportionately with the reduction applied to risk scores. That is, if the reduction to risk scores was smaller than 8 percent, savings would be proportionately reduced, and if that reduction was greater, savings would increase-although there is likely a limit on how much risk scores could be reduced before plans would exit the program. In contrast, the third alternative represents a onetime change in the calculation of risk scores and therefore could not be increased or decreased without additional modifications to the risk-adjustment model.

The largest source of uncertainty in the estimate of savings over the next 10 years under all three alternatives is CBO's estimate of how much plans would adjust their bids in response to reduced payments. CBO projects that plans would adjust their bids to partially offset that payment reduction. However, those adjustments could be larger or smaller than CBO anticipates. Additionally, enrollment in Medicare Advantage could be more responsive to changes in payments than the agency expects. CBO anticipates that plans would adapt to payment changes in ways that would preserve the benefits
that enrollees value most; thus, in the agency's estimation, enrollment in Medicare Advantage would continue to grow as estimated under current law. Recent evidence suggests that, even when benchmarks have decreased, new and existing Medicare beneficiaries have continued to enroll in Medicare Advantage plans. However, if plans increased premiums or reduced the generosity of benefits in response to lower plan payments by more than CBO anticipates, then enrollment growth in Medicare Advantage could decrease over time. Whether changes in enrollment would increase or decrease savings depends on which beneficiaries disenrolled from or chose not to enroll in Medicare Advantage. If those beneficiaries, on average, cost more in Medicare FFS than they would in Medicare Advantage, then savings would be reduced. Conversely, if those beneficiaries cost more in Medicare Advantage than in Medicare FFS, then savings would increase.

There is an additional source of uncertainty associated with all three alternatives because spending reductions would be affected by the way in which risk scores changed under current law. If, under current law, plans increased the intensity with which they code diagnoses by more than anticipated, savings might grow over time. Conversely, other improvements in risk adjustment, such as changes in the data sources that CMS uses to calculate Medicare Advantage risk scores or improvements in coding accuracy for FFS beneficiaries, could decrease those savings over time by narrowing the gap between the risk scores of Medicare Advantage enrollees and otherwise similar FFS beneficiaries under current law. Estimates for the third alternative would be particularly affected by this source of uncertainty.

## Other Effects

The main advantage of all three alternatives is that, in addition to reducing direct federal spending on plan payments, they would bring per capita payments for similar Medicare Advantage and FFS beneficiaries closer to parity. That is, reducing payments to Medicare Advantage plans would increase the likelihood that Medicare would make the same per capita payment for a beneficiary, regardless of whether that person was enrolled in Medicare FFS or Medicare Advantage. A disadvantage of all three alternatives is that insurers might reduce the generosity of the additional benefits that are funded by those additional payments, and some plans might either begin charging a premium or increase their premiums.

An advantage of the first alternative is that it would be easy to implement because it would reduce payments to all plans by the same amount. However, research has shown that coding intensity differs across plans: For instance, plans that have a more direct relationship with providers, such as HMOs, or plans that employ providers directly-that is, vertically integrated insurers-may exert more influence on diagnostic coding patterns. Other types of plans, such as PPOs and PFFS plans, have less influence over providers and therefore may have less influence on diagnostic coding patterns (Geruso and Layton 2018; Hayford and Burns 2018). Additionally, plans that conduct more health risk assessments, have better integrated electronic health records, or offer incentives to providers to code more diagnoses may all have higher risk scores than those that do not. Therefore, a uniform reduction to payments that reflects the average difference between Medicare Advantage and FFS beneficiaries' risk scores might exacerbate inequities in plan payments.

An advantage of the second alternative is that, unlike the first alternative, payment reductions would be scaled to reflect the degree to which plans in a given region coded more aggressively. Scaled reductions would have the benefit of applying lower payment reductions to plans that did not or could not code diagnoses as completely.

A disadvantage of the second alternative is that it would be more complicated for CMS to administer. Further, many of the activities that lead to more comprehensive coding of diagnoses could be desirable in other ways. For instance, diagnoses might be coded more comprehensively in plans that have better electronic health records and more integration with providers. Better integration with providers and more complete use of electronic health records might also improve patients' experiences and streamline the delivery of care. Thus, applying insurer-specific adjustments to risk scores might penalize plans that are engaged in behavior that otherwise would improve patient satisfaction or quality of care. Additionally, the alternative might give insurers incentives to change coding practices for beneficiaries who had recently switched from FFS to Medicare Advantagethat is, insurers might be inclined to delay documenting additional diagnoses until after the first three years of a beneficiary's enrollment.

An advantage of the third alternative is that it would work in part by improving the construction of risk scores
rather than simply cutting payments. Using two years of diagnoses would result in conditions being coded more consistently for all Medicare beneficiaries, and thus should more accurately measure health risk among Medicare Advantage enrollees relative to FFS. Further, unlike the first two alternatives, this alternative would specifically discourage the use of health risk assessments
primarily to uncover new diagnoses, rather than to define a plan of care for a beneficiary.

A disadvantage of the third alternative is that it would reduce plans' incentives to provide health risk assessments. If plans provided fewer health risk assessments, then they might also fail to detect conditions that might require additional care.

RELATED OPTION: Mandatory Spending, "Reduce Quality Bonus Payments to Medicare Advantage Plans" (page 82)
RELATED CBO PUBLICATIONS: Alice Burns and Tamara Hayford, Effects of Medicare Advantage Enrollment on Beneficiary Risk Scores, Working Paper 2017-08 (November 2017), www.cbo.gov/publication/53270; A Premium Support System for Medicare: Updated Analysis of Illustrative Options (October 2017), www.cbo.gov/publication/53077

WORK CITED: Michael Geruso and Timothy Layton, Upcoding: Evidence From Medicare on Squishy Risk Adjustment, Working Paper 21222 (National Bureau of Economic Research, revised April 2018), www.nber.org/papers/w21222; Tamara Beth Hayford and Alice Levy Burns, "Medicare Advantage Enrollment and Beneficiary Risk Scores: Difference-in-Differences Analyses Show Increases for All Enrollees on Account of Market-Wide Changes," Inquiry, vol. 55 (July 2018), http://journals.sagepub.com/doi/full/10.1177/0046958018788640; Richard Kronick and W. Pete Welch, "Measuring Coding Intensity in the Medicare Advantage Program," Medicare and Medicaid Research Review, vol. 4, no. 2 (2014), pp. E1-E19, http://dx.doi.org/10.5600/mmrr.004.02.a06; Medicare Payment Advisory Commission, The Medicare Advantage Program: Status Report (March 2018), Chapter 13, https://go.usa.gov/xPVPD

Reduce Quality Bonus Payments to Medicare Advantage Plans

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Eliminate Medicare Advantage benchmark increases that are tied to quality scores | 0 | 0 | -6.7 | -10.4 | -10.5 | -10.3 | -12.2 | -13.1 | -14.2 | -16.7 | -27.6 | -94.2 |
| Eliminate double bonuses from Medicare Advantage benchmarks | 0 | 0 | -1.3 | -2.0 | -2.0 | -2.0 | -2.4 | -2.5 | -2.7 | -3.2 | -5.3 | -18.2 |

This option would take effect in January 2021.

## Background

Roughly one-third of all Medicare beneficiaries are enrolled in the Medicare Advantage program under which private health insurers assume the responsibility for, and the financial risk of, providing Medicare benefits. Almost all other Medicare beneficiaries receive care in the traditional fee-for-service (FFS) program, which pays providers a separate amount for each service or related set of services covered by Part A (Hospital Insurance) or Part B (Medical Insurance). Payments to Medicare Advantage plans depend in part on bids that the plans submit-indicating the per capita payment they will accept for providing the benefits covered by Parts A and B —and in part on how those bids compare with predetermined benchmarks. Plans that bid below the benchmark receive a portion of the difference between the benchmark and their bid in the form of a rebate, which must be primarily devoted to the following: decreasing premiums for Medicare Part B or Part D (prescription drug coverage); reducing beneficiary cost sharing; or providing additional covered benefits, such as vision or dental coverage. Those additional benefits and reduced cost sharing can make Medicare Advantage plans more attractive to beneficiaries than FFS Medicare. Plans that bid above the benchmark must collect an additional premium from enrollees that reflects the difference between the bid and the benchmark. Payments are further adjusted to reflect differences in expected health care spending that are associated with beneficiaries' health conditions and other characteristics.

Plans also receive additional payments—referred to as quality bonuses-that are tied to their average quality score. Those quality scores are determined on the basis
of a weighted average of ratings that reflect consumer satisfaction and the performance of plans' providers on a range of measures related to clinical processes and health outcomes. The Centers for Medicare \& Medicaid Services (CMS) pays higher-rated plans more in two ways. First, plans that have composite quality scores with at least 4 out of 5 stars are paid on the basis of a benchmark that is 5 percent higher than the standard benchmark. (New plans or plans with low enrollment lack sufficient data for quality scores to be accurately calculated, so they are paid on the basis of a benchmark that is 3.5 percent higher.) Certain urban counties with both low FFS spending and historically high Medicare Advantage enrollment are designated as "double-bonus counties." The quality bonuses applied to benchmarks in those counties are twice as high as in other counties.

The second way that quality scores impact plan payments is through the size of the rebate that a plan receives when it bids below the benchmark. Plans with 4.5 stars or more retain 70 percent of the difference between the bid and the quality-adjusted benchmark, plans with 3.5 to 4.0 stars retain 65 percent of that difference, and plans with 3 stars or less retain 50 percent of that difference. Recent evidence suggests that quality bonuses have increased Medicare's payments to plans by 3 percent (Medicare Payment Advisory Commission 2018).

In addition to encouraging plans to improve their quality directly through increased payments, the quality program also encourages consumers to enroll in plans with higher ratings. That is accomplished in two ways: First, CMS publishes plans' quality scores to assist consumers in identifying higher-quality plans. Second, because
higher-rated plans receive higher rebates, those plans can offer enhanced benefits, which further increase the attractiveness of those plans relative to plans with lower quality ratings. Therefore, the quality-bonus program encourages plans to improve their quality scores both to garner higher payments and to increase their market share.

Quality bonuses in Medicare Advantage have been criticized for several reasons. The bonus structure may exacerbate geographic inequities across plans, both because quality bonuses are tied to benchmarks-which vary by county-and because of double-bonus designations. Differences in benchmarks and double-bonus designations may not reflect variations in the costs that plans incur for providing better quality. Additionally, because Medicare Part B premiums fund about 25 percent of all spending for Medicare Part B services, quality bonuses increase Part B premiums for all Medicare enrollees (including beneficiaries in Medicare FFS) despite enhancing benefits only for enrollees in higher-quality plans.

Quality scores may also be an imperfect indicator of a plan's overall quality. For example, some plans may be better able to record their processes and patient outcomes because they have more comprehensive electronic health records or closer relationships with providers. In addition, quality scores may be correlated with beneficiaries' characteristics, such as geographic location and income, leading to worse quality scores for plans that operate in poorer or more rural areas. Quality scores may also emphasize investment in areas of quality that are measured at the expense of components of quality that are not captured by the composite scores. Finally, there is evidence that plans have engaged in activities that increase quality scores without increasing underlying quality. Before the Bipartisan Budget Act of 2018 (Public Law 115-123) was enacted, some insurers consolidated plans in different counties into the same contract so that average quality scores increased. Because quality scores are calculated at the contract level, lower-quality plans in those consolidated contracts received higher payments, and enrollees in those lower-quality plans were shown quality scores that were inflated relative to local plans' performance. As a result of the new legislation, quality scores will reflect an enrollment-weighted average of quality in consolidated plans, which should reduce insurers' incentives to consolidate plans to increase quality scores. However, insurers will still have an incentive to engage in other activities that increase quality scores without necessarily increasing quality.

## Option

This option consists of two different alternatives. The first alternative would eliminate benchmark increases that are tied to quality scores starting in 2021. The second alternative would eliminate double bonuses from Medicare Advantage benchmarks. Higher-quality plans in those counties would still be paid bonuses under the second alternative, but the maximum increase to the benchmark would be 5 percent rather than 10 percent. (Five percent is the increase to benchmarks under current law for plans with 4 or more stars that are not operating in double-bonus counties.) Under both alternatives, the effect of a plan's quality score on rebates would continue as under current law, and CMS would continue to publish quality information for the benefit of consumers.

## Effects on the Budget

Implementing either of the two alternatives would reduce mandatory spending between 2021 and 2028, according to estimates by the Congressional Budget Office. CBO projects that the first alternativeeliminating benchmark increases on the basis of quality bonuses-would reduce mandatory spending by $\$ 94$ billion between 2021 and 2028. That reduction would come primarily from direct reductions in benchmarks. In addition, on the basis of prior research, CBO anticipates that, for every additional dollar in reduced benchmarks, plans would reduce their bids by 50 cents to partially shield beneficiaries from cuts to benefits (Song, Landrum, and Chernew 2012).

Reductions to the quality bonuses of different magnitudes would not result in proportional savings. For instance, if increases to benchmarks that are based on quality bonuses were cut in half rather than being eliminated, CBO projects that those savings would be slightly less than half of the savings from eliminating those bonuses. The percentage reduction in savings would not be equal to the percentage reduction in bonuses because, under the Affordable Care Act, benchmarks are not allowed to exceed their local FFS per capita spending or their 2010 benchmark levels, after adjusting for growth. As a result of those caps on benchmarks, some plans that would otherwise receive a bonus of 5 percent or 3.5 percent receive a smaller bonus under current law. Thus, for those plans, a proposal that reduced the statutory bonus percentage by half would reduce the bonuses they receive by less than half.

Under the second alternative-eliminating double bonuses-CBO estimates that mandatory spending
would be reduced by $\$ 18$ billion over the same time frame. CBO anticipates that, if the second alternative was implemented, individual plans in affected counties would reduce bids in response to those reductions in bonuses.

Under both alternatives, CBO estimates that changes in enrollment in Medicare Advantage would have minimal budgetary effects. Recent evidence suggests that plans have largely shielded beneficiaries from reductions in benefits by reducing their bids in response to cuts in benchmarks. Additionally, enrollment in Medicare Advantage has grown across all counties at similar rates, suggesting that factors external to Medicare Advantage may drive increases in the program's share of Medicare enrollment.

CBO also anticipates that the budgetary effects of plans' exiting the market would be minimal. Medicare Advantage insurers have canceled plans in some markets in response to past policy changes. However, the majority of enrollees in canceled plans have been able to enroll in another Medicare Advantage plan.

The largest sources of uncertainty in the estimates are whether plans would change the amount of effort they invest in maintaining or improving quality and whether plans would further change the generosity of supplemental benefits in response to changes in quality-related payments. If plans reduced investment in quality or benefits by more than CBO anticipates, those effects could result in lower enrollment in the Medicare Advantage program than the agency projects. In general, enrolling a beneficiary in Medicare Advantage costs the Medicare program slightly more than enrolling the same beneficiary in Medicare FFS; thus, if reductions in enrollment were larger than anticipated, budgetary savings could be larger than projected.

Another source of uncertainty in the estimates is whether the savings would change over the budget window. CBO projects that the savings under both alternatives would grow at the same rate that spending on the Medicare Advantage program would grow under current law. (Projected savings would change minimally from 2022 through 2024 and would increase in 2028 because of shifts in the timing of payments between fiscal years.) That projection depends on how quality bonuses would grow under current law. If quality scores were to grow more quickly than expected under current law, then the
spending reductions associated with the two alternatives would also grow over time. Likewise, if quality scores were to grow more slowly than expected, then the spending reductions would fall. Quality scores under current law could grow more quickly than expected if insurers became more adept at improving their quality scores or at encouraging providers to meet certain quality targets. On the other hand, quality scores could grow more slowly under current law because many quality measures are defined relative to other plans, and as plans invested more in quality improvements, the threshold for a plan's being designated as "high quality" might become harder to attain.

## Other Effects

An advantage of the first alternative is that it would address some of the criticisms of quality bonuses that are highlighted above. Specifically, reducing Medicare's spending on payments to plans would reduce the degree to which Part B premiums paid by Medicare FFS beneficiaries financed supplemental benefits for Medicare Advantage enrollees. A second advantage of the alternative is that it would substantially reduce the financial incentives for insurers to invest in activities that improve quality scores without improving quality. For instance, insurers would have less incentive to increase lower-quality plans' scores by consolidating lower- and higher-quality plans, which would improve the transparency of quality scores for consumers and reduce unnecessary payments to plans. A third advantage of the alternative is that it would reduce disparities in payments that might stem from differences in beneficiaries' characteristics, geographic characteristics, or plan characteristics-such as the ability of insurers to document improvements in patient outcomes or the percentage of beneficiaries who live in a rural area. Finally, eliminating the benchmark bonuses for specific quality measures would reduce the incentive for insurers to devote more resources to improving those dimensions of quality, relative to other aspects of quality that are not included in quality scores.

A disadvantage of the first alternative is that it would reduce the financial incentives for insurers to devote resources to improving quality. Insurers might also devote less energy to documenting quality if financial incentives to do so were reduced-which might reduce the accuracy of information provided to consumers when choosing a plan.

The primary argument for the second alternative is that it would reduce geographic differences in plan payments that might be unrelated to the costs of improving the quality of plans. A disadvantage of the second alternative is that, as in the first alternative, it would not entirely address some of the criticisms of quality scores that are highlighted above. For example, plans might still have an
incentive to focus on improving dimensions of quality that are included in quality-bonus scores at the expense of dimensions of quality that are not included in those scores. This alternative also would maintain the incentive for plans to engage in activities that increase quality scores without necessarily improving the underlying quality of care.

RELATED OPTION: Mandatory Spending, "Modify Payments to Medicare Advantage Plans for Health Risk" (page 77)
RELATED CBO PUBLICATION: Tamara Hayford and Jared Maeda, Issues and Challenges in Measuring and Improving the Quality of Health Care, Working Paper 2017-10 (December 2017), www.cbo.gov/publication/53387

WORK CITED: Medicare Payment Advisory Commission, The Medicare Advantage Program: Status Report (March 2018), Chapter 13, p. 355, https://go.usa.gov/xPVPD. Zirui Song, Mary Beth Landrum, and Michael E. Chernew, "Competitive Bidding in Medicare: Who Benefits From Competition?" American Journal of Managed Care, vol. 18, no. 9 (September 2012), pp. 546-552

## Consolidate and Reduce Federal Payments for Graduate Medical Education at Teaching Hospitals

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Billions of Dollars |  |  |  |  |  |  |  |  |  |  |

This option would take effect in October 2019.
CPI-U = consumer price index for all urban consumers.

## Background

Under certain circumstances, hospitals with teaching programs can receive funds from Medicare and Medicaid for costs related to graduate medical education (GME). Medicare's payments cover two types of costs: those for direct graduate medical education (DGME) and those for indirect medical education (IME). DGME costs are for the compensation of medical residents and institutional overhead. IME costs are other teaching-related costs-for instance, those associated with the added demands placed on staff as a result of teaching activities and the greater number of tests and procedures ordered by residents as part of the educational process. As for funding provided by Medicaid, the federal government matches a portion of what state Medicaid programs pay for GME. The Congressional Budget Office estimates that total mandatory federal spending for hospital-based GME in 2018 was more than $\$ 15$ billion, of which roughly 80 percent was financed by Medicare and the remainder by Medicaid. That spending is projected to grow at an average annual rate of 5.5 percent from 2020 through 2028 (about 3 percentage points faster than the average annual growth rate of the consumer price index for all urban consumers, or CPI-U). Teaching hospitals also receive funding from other federal agencies-which is discretionary rather than mandatory spending-as well as funding from private sources.

Medicare's payments for DGME are based on three factors: a hospital's costs per resident in a base year, indexed for subsequent inflation; the hospital's number of residents, which is subject to a cap that was first enacted in the Balanced Budget Act of 1997; and the share of total inpatient days at the hospital that is accounted for by Medicare beneficiaries. Payments for IME are made
under Medicare's hospital inpatient prospective payment system as a percentage add-on to the base payment and reflect a hospital's teaching intensity (such as its ratio of full-time equivalent residents to the number of beds). In the Medicaid program, GME payments are considered to be a part of supplemental payments and states are allowed, but not required, to make Medicaid payments for GME. Each state determines its own level of Medicaid payments for GME and how those payments will be made. For example, some states base their GME payments on Medicare's methodology or on a modified form of that methodology, whereas other states provide lump-sum payments for GME. Those payments are subject to the same federal matching rates as other Medicaid spending and are subject to upper payment limits for Medicaid spending.

## Option

Beginning in October 2019, this option would consolidate all mandatory federal spending for GME into a grant program for teaching hospitals. Payments would be apportioned among hospitals according to the number of residents at a hospital (up to its existing cap) and the share of the hospital's inpatient days accounted for by Medicare and Medicaid patients. Total funds available for distribution in 2020 would be fixed at an amount equaling the sum of Medicare's 2018 payments for DGME and IME and the federal share of Medicaid's 2018 payments for GME. Total funding for the grant program would then grow at the rate of inflation. CBO examined two alternative measures of inflation. Under the first alternative, funding for the grant program would grow with the CPI-U; and under the second alternative, funding for the grant program would grow with the CPI-U minus 1 percentage point per year.

## Effects on the Budget

In CBO's estimation, the first alternative would reduce mandatory spending by $\$ 34$ billion between 2020 and 2028. Using the amount of federal funding for GME in 2018 to establish the total funding available in 2020 would cause a downward shift in the funding streamrelative to CBO's projection of federal spending on GME under current law-that would reduce federal spending by $\$ 17.5$ billion between 2020 and 2028. Increasing GME funding at the rate of the CPI-U, rather than at the rate of growth CBO projects under current law, would yield an additional $\$ 21.4$ billion reduction in federal spending over that period. However, CBO expects that those savings would be partially offset by a $\$ 4.8$ billion increase in federal Medicaid spending. Many states make supplemental payments to hospitals that serve as safety-net hospitals (medical facilities that provide care regardless of a person's ability to pay) and to those that provide charity care or other types of community benefits. Those supplemental payments are eligible for the same federal matching payments as other types of Medicaid-covered services. CBO anticipates that some states would make separate supplemental payments to replace a portion of lost hospital revenue for some or all of their teaching hospitals, which would partially offset the reduction in federal spending for Medicaid.

CBO estimates that the second alternative would reduce spending by $\$ 40$ billion between 2020 and 2028. Under that alternative, the reduction in spending associated with the downward shift in the funding stream would be the same as under the first alternative, $\$ 17.5$ billion. Increasing federal GME funding at the rate of the CPI-U minus 1 percentage point per year would yield a greater reduction in spending than would the first alternative, or $\$ 27.6$ billion between 2020 and 2028. The offsetting increase in federal Medicaid spending over that period would also be larger than under the first alternative and is estimated to be $\$ 5.4$ billion.

By 2028, the savings associated with the first alternative would represent about 16 percent of projected federal spending for GME under current law, whereas savings associated with the second alternative would represent about 19 percent. By consolidating federal funding for medical education, this option could reduce the federal government's costs of administering the program. Any such administrative efficiencies would accrue to discretionary spending and therefore are not included in the
estimate of changes to mandatory spending described above.

The option would not change the existing caps on the number of subsidized slots for residents. Altering those caps would not change the budgetary effects because total federal payments for GME under this option would not depend on the number of residents. Removing those caps might allow the existing slots to be allocated more efficiently among hospitals, but it also would create an incentive for hospitals to expand their residency programs in an attempt to receive a larger share of the total. The net effects on hospitals' residency programs would be difficult to predict.

Two sources of uncertainty in the estimates relate to the projected payment amounts for GME and the projected growth in the CPI-U from 2019 through 2028. In the event that the actual growth rates for either DGME or IME were higher or lower than the projected rates, the estimated savings would be greater or lesser than those using CBO's current baseline projections. Also, to the extent that the difference between actual growth in the CPI-U and the growth in projected payments for GME occurring under current law turned out to be greater than CBO has estimated, the savings under the option would be larger, and vice versa. A third source of uncertainty is anticipating and projecting the extent to which states would offset the reductions to GME payments, for example, by making separate supplemental payments to teaching hospitals that experience reductions in GME funding.

## Other Effects

An argument for reducing the overall subsidy for GME is that federal payments under current law exceed hospitals' actual teaching costs. The Medicare Payment Advisory Commission (MedPAC) has consistently found that the IME adjustment is greater than hospitals' estimated indirect costs of providing medical education. In a 2016 analysis, MedPAC estimated that an IME adjustment about one-third the size of the current one would reflect the indirect costs that teaching hospitals actually incur (MedPAC 2016). That analysis suggested that a smaller subsidy would not unduly affect hospitals' teaching activities. A smaller subsidy also would reduce the incentive for hospitals to hire a greater number of residents than necessary. Another argument in favor of consolidating GME funding to hospitals is that unifying the funding
for GME could allow for a broader policy discussion about the ways in which medical education is funded.

An argument against the option is that reducing the federal subsidy for GME could lead teaching hospitals to shift the composition of their residency programs toward specialists and away from primary care residents. Hospitals made such a shift after the caps on Medicarefunded residency slots were enacted because employing specialists tends to be more profitable. If hospitals responded to further reductions in federal GME subsidies in the same way, they could exacerbate concerns about a shortage of primary care physicians in the future. Alternatively, hospitals might respond to the reduced subsidy by lowering residents' compensation and making them responsible for more of the cost of their medical training.

Another argument against the option is that some teaching hospitals might use part of their GME payments to fund care for uninsured people. The option could therefore disproportionately affect teaching hospitals that treat a larger number of uninsured patients. Furthermore, states could lose some discretion to direct Medicaid GME payments to hospitals because the federal government would be administering the grant program. Under those circumstances, states would no longer receive federal matching for those funds and might choose to reduce their GME payments to hospitals. However, that reduction would be mitigated if states instead shifted their GME payments to other types of supplemental payments (which are subject to federal matching). Finally, if hospitals' costs grew faster than GME payments, hospitals and residents might bear an increasing share of the costs of operating a residency program over time.

WORK CITED: Medicare Payment Advisory Commission, Report to Congress: Medicare Payment Policy (March 2016), p. 75, https://go.usa. gov/xPvSn (PDF, 5.61 MB)

## Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- 2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Mandatory Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Convert SNAP to block grant | 0 | -21 | -20 | -18 | -17 | -17 | -16 | -16 | -17 | -17 | -76 | -160 |
| Convert child nutrition programs to block grants | 0 | -6 | -8 | -8 | -9 | -10 | -10 | -11 | -12 | -13 | -31 | -88 |
| Total | 0 | -27 | -27 | -27 | -26 | -27 | -27 | -28 | -29 | -30 | -107 | -247 |

This option would take effect in October 2019.
SNAP = Supplemental Nutrition Assistance Program.

## Background

There are sizable federal programs to assist people who have relatively low income. Those programs include the Supplemental Nutrition Assistance Program (SNAP) and a collection of child nutrition programs. Federal spending for SNAP and child nutrition programs in 2018 was $\$ 91$ billion.

SNAP provides benefits to help low-income households buy food. Federal outlays for the program were $\$ 68$ billion in 2018. Child nutrition programs subsidize meals provided to children at school, at child care centers, in after-school programs, and in other settings. In 2018, spending for those programs was $\$ 23$ billion, most of it for the National School Lunch Program and the School Breakfast Program.

## Option

This option would convert SNAP and the child nutrition programs to separate, smaller block grants to the states beginning in October 2019. The block grants would provide a set amount of funding to states each year, and states would be allowed to make significant changes to the structure of the programs.

The option would provide annual funding equal to federal outlays for each program in 2007 (the last full year before the most recent recession), increased to account for inflation in the cost of food since then. (The starting amounts would include outlays for both benefits and administrative costs and, for child nutrition programs, would represent total mandatory spending for that set of programs. Outlays for SNAP would be increased to
account for inflation in the cost of food at home, and outlays for child nutrition would be increased to account for inflation in the cost of food away from home.)

Another alternative would convert SNAP and the child nutrition programs to block grants through which the federal government would provide funding to match state spending on those programs. The Congressional Budget Office has not analyzed that alternative here because its effects would depend on the amounts and conditions of the grants and on decisions by state governments, which are very difficult to predict.

## Effects on the Budget

CBO's estimates of the budgetary effects of legislative proposals are measured relative to its baseline budget projections. As the rules governing those projections specify, CBO's baseline projections for SNAP reflect the assumption that the program will continue to be extended beyond its expiration at the end of 2018. Though most of the child nutrition programs are permanently authorized, authorization for some spending expired at the end of 2015 (including the authorizations for the Summer Food Service Program and state administrative expenses); that spending has been extended through annual appropriations. As with SNAP, CBO's baseline projections for the child nutrition programs reflect the assumption that the programs will continue to be extended.

In CBO's baseline projections, outlays for SNAP are projected to decline through 2022. Spending is projected to then increase between 2023 and 2028, reaching
$\$ 70$ billion in 2028, slightly higher than spending was in 2018. CBO projects that spending on SNAP would decline over the 2019-2022 period because the number of people receiving benefits would decrease as the economy improves. Despite a continued decline in the number of people receiving benefits between 2023 and 2028, CBO projects that spending would increase over that period because the increase in per-person benefits would more than offset the decline in the number of participants. In contrast, outlays for child nutrition programs are projected to increase through 2028, reaching $\$ 36$ billion in that year, over 50 percent more than spending in 2018.

By CBO's estimates, setting annual funding amounts to equal the federal outlays for each program in 2007 (adjusted for inflation) would reduce spending on SNAP by $\$ 160$ billion from 2020 through 2028-or by about a quarter of the spending projected in the baseline. For child nutrition programs, the reduction would be $\$ 88$ billion, or about a third.

The budgetary effects of switching SNAP and child nutrition programs to block grants would depend heavily on the formulas used to set the amounts of the grants. If, instead of setting the inflation-adjusted value of the grants at the 2007 amounts, the grants were fixed in nominal dollars (as is, for example, the block grant for Temporary Assistance for Needy Families), savings would grow each year. By contrast, if the grants were indexed for both inflation and population growth-that is, if they were allowed to grow faster than specified in this option-savings would decline each year. Total savings would be less than those projected for this option if the change was phased in gradually instead of having spending immediately revert to the 2007 amounts (adjusted for inflation).

Although the formula used to set the amount of each separate block grant in this option is the same, the effects on spending would differ for each program. For SNAP, the estimated reduction in federal spending from converting to a block grant would decline through 2026, both in dollar terms and as a share of projected spending. In 2027 and 2028, the estimated savings would increase.

Those results occur because, under the option, spending on SNAP would increase throughout the 10 -year period, whereas spending in the baseline declines through 2022; hence, the difference between the two would narrow
during those first few years. From 2023 to 2026, when both spending in the baseline and projected spending under the option increase, the latter grows more rapidly than the former. That is because, in the baseline, participation is projected to continue to decline during those years, causing overall spending to increase more slowly than the rate of inflation (for the price of food at home) used to increase the grant funding under the option. As a result, savings under the option would continue to decline through 2026. After 2026, the projected savings would rise as the year-over-year decrease in participation in the baseline slowed.

For child nutrition programs, the reduction in federal spending from converting to the specified block grant would increase over time, both in dollar terms and as a share of projected spending under assumptions governing the baseline. The savings would be greater in later years because CBO expects participation in the programs toincrease. As a result, spending in the baseline grows faster than would spending under the option, in CBO's estimation.

Among the largest sources of uncertainty in the estimate of savings over the next 10 years are CBO's estimates of changes in the price of food at home (which is relevant for SNAP) and changes in the price of food away from home (which is relevant for the child nutrition programs). CBO's baseline projections of participation in SNAP and of the number of meals served through child nutrition programs are additional sources of uncertainty. Under the option, federal spending would not depend on participation in the programs. But because of the uncertainty regarding participation and the numbers of meals in CBO's baseline and the uncertainty regarding inflation in CBO's baseline and under the option, the savings from the option could be larger or smaller than those shown here.

The budgetary effects of a second alternative-which would convert SNAP and the child nutrition programs to block grants in which the federal government matched the amount states spent on those programs-would depend on how the block grants were specified. States would probably have substantial flexibility under such an alternative, and the budgetary effects would depend in large part on how states responded to that flexibility.

## Other Effects

An argument for converting SNAP and the child nutrition programs to block grants is that state programs might better suit local needs and might be more innovative. States could define eligibility and administer benefits in ways that might better serve their populations. Moreover, allowing states to design their own programs would result in more experimentation, and some states could adopt approaches that had worked elsewhere.

Another argument for the option is that it would make spending by the federal government more predictable. The programs that this option affects must, under current law, make payments to eligible people. Therefore, spending automatically increases or decreases without any legislative action. For example, outlays for SNAP benefits more than doubled between 2007 and 2011, primarily because participation in the program increased (mainly because of deteriorating labor market conditions). And even if the number of participants in a program does not change, the benefits paid per person can change if the income of participants changes.

An argument against this option is that it would reduce federal support for lower-income people. Whom the cut
in spending affected-and how it affected them-would depend on how states structured their programs and how state spending changed. But such a cut-amounting to about 30 percent of the projected mandatory spending on SNAP and child nutrition programs during those years-would almost certainly eliminate benefits for some people who would otherwise have received them, as well as significantly reduce the benefits of some people who remained in the programs.

Another argument against this option is that block grants would be less responsive to economic conditions than the current federal programs. The automatic changes in spending on benefits under current law help stabilize the economy, reducing the depth of recessions during economic downturns. Those stabilizing effects would no longer exist under the option. Furthermore, if federal spending did not increase during a future economic downturn and more people became eligible for benefits, states that could not increase their spending (at a time when their own revenues were probably declining) would have to reduce per-person benefits or tighten eligibility, perhaps adding to the hardship for families just when their need was greatest.

RELATED OPTIONS: Mandatory Spending, "Eliminate Subsidies for Certain Meals in the National School Lunch, School Breakfast, and Child and Adult Care Food Programs" (page 92); Appendix, Mandatory Spending, "Tighten Eligibility for the Supplemental Nutrition Assistance Program" (page 309)

RELATED CBO PUBLICATIONS: Child Nutrition Programs: Spending and Policy Options (September 2015), www.cbo.gov/publication/ 50737; The Effects of Potential Cuts in SNAP Spending on Households With Different Amounts of Income (March 2015), www.cbo.gov/ publication/49978; The Supplemental Nutrition Assistance Program (April 2012), www.cbo.gov/publication/43173

Eliminate Subsidies for Certain Meals in the National School Lunch, School Breakfast, and Child and Adult Care Food Programs

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | -0.1 | -0.8 | -1.0 | -1.1 | -1.2 | -1.2 | -1.2 | -1.3 | -1.3 | -1.4 | -4.2 | -10.7 |

This option would take effect in July 2019.

## Background

The National School Lunch Program, the School Breakfast Program, and the Child and Adult Care Food Program provide funds that enable public schools, nonprofit private schools, child and adult care centers, and residential child care institutions to offer subsidized meals and snacks to participants. In the 20182019 school year, federal subsidies are generally 61 cents for each lunch, 31 cents for each breakfast, and 8 cents for each snack for participants in households with income above 185 percent of the federal poverty guidelines (commonly known as the federal poverty level, or FPL). The programs provide larger subsidies for meals served to participants from households with income at or below 185 percent of the FPL and above 130 percent of the FPL, and still larger subsidies to participants from households with income at or below 130 percent of the FPL. As a result of the subsidies, participants from households with income at or below 130 percent of the FPL pay nothing for their meals.

Under current law, federal subsidies for meals served to participants from households with income greater than 185 percent of the FPL can include base cash subsidies; certain commodities; and, for those schools participating in the school lunch program that comply with federal nutrition guidelines, an additional cash subsidy. In the 2018-2019 school year, the base cash subsidies for meals served to participants from households with income greater than 185 percent of the FPL are 31 cents per lunch and 31 cents per breakfast; for after-school snacks provided to such participants, the amount is 8 cents. All participating schools and centers also receive com-modities-food from the Department of Agriculture, such as fruit and meat-with a value of 23.5 cents per lunch. Schools that offer meals that are certified by state authorities as complying with federal nutrition guidelines receive an additional cash subsidy of 6 cents per lunch
in the 2018-2019 school year. (Additional subsidies are available for schools and centers in Alaska and Hawaii, schools in Puerto Rico, and participating schools that serve a certain number of meals to students from households with income at or below 185 percent of the FPL.)

## Option

Beginning in July 2019, this option would eliminate the subsidies for meals and snacks served through the National School Lunch Program, the School Breakfast Program, and a portion of the Child and Adult Care Food Program to participants from households with income greater than 185 percent of the FPL. The Child and Adult Care Food Program provides funds for meals and snacks served in child and adult care centers as well as in day care homes. Reimbursement rates for meals served through participating child and adult care centers are equal to the reimbursement rates for meals served through the National School Lunch Program and the School Breakfast Program. Because reimbursement rates for meals served in day care homes are set differently, this option does not affect day care homes.

## Effects on the Budget

The Congressional Budget Office estimates that the option would reduce federal spending by $\$ 10.7$ billion through 2028. Reductions in the number of meals served under the option account for most of savings. In 2028, CBO's projection of $\$ 1.4$ billion in savings that year reflects:

- About 1.4 billion fewer lunches and snacks through the school lunch program, at an average subsidy of about 63 cents;
- About 450 million fewer breakfasts served through the School Breakfast Program, at an average subsidy of about 43 cents;
- About 425 million fewer meals and snacks served in the child and adult food program, at an average subsidy of about 30 cents; and
- Additional savings of about $\$ 200$ million from reduced spending on commodities and program administration.

Those estimates are based on historical trends, projected school enrollment, and other factors.

Most of the outlay savings are from the elimination of the subsidy for paid meals in the lunch and breakfast programs, but CBO also estimates that some schools and centers where a small share of meals are served to participants for free or at reduced price levels would drop out of the programs. About 15 percent of the total savings are from the loss of free and reduced price meals and snacks at schools that would exit the programs without the subsidy for meals served to participants from higher-income households.

There are several sources of uncertainty in this estimate, including, for example, CBO's projections under current law of the number of meals and snacks served and the reimbursement rates for those meals and snacks, which partly depend on inflation. Additionally, there is uncertainty about how many schools and centers with low
levels of free and reduced price meal reimbursements would drop out of the programs under the option.

## Other Effects

The primary argument for this option is that it would target federal subsidies to those most in need. Because the subsidies for meals served to participants from households with income greater than 185 percent of the FPL are small, the effect of the option on those participants and the members of their households would probably be minimal.

An argument against this option is that schools and centers would probably offset part or all of the loss of the subsidies by charging participants from higher-income households higher prices for meals, and some of those participants might stop buying meals. In addition, schools and centers might leave the programs if they incur meal program costs that exceed the subsidies they receive for meals served to participants from households with income at or below 185 percent of the FPL; about one-third of school food authorities surveyed claimed that expenses exceeded revenues in the previous year (Food and Nutrition Service 2016). Individuals at such institutions who would be eligible for free or reducedprice meals would no longer receive subsidized meals, and the meals served at those institutions would no longer have to meet any other requirements of the programs (including the nutrition guidelines).

RELATED OPTIONS: Mandatory Spending, "Convert Multiple Assistance Programs for Lower-Income People Into Smaller Block Grants to States" (page 89), Appendix, Mandatory Spending, "Tighten Eligibility for the Supplemental Nutrition Assistance Program" (page 309)

RELATED CBO PUBLICATION: Child Nutrition Programs: Spending and Policy Options (September 2015), www.cbo.gov/ publication/50737
WORK CITED: Food and Nutrition Service, Special Nutrition Program Operations Study, Nutrition Assistance Program Report (prepared by 2M Research Services LLC, October 2016), p. 165, https://go.usa.gov/xkSeh

Reduce TANF's State Family Assistance Grant by 10 Percent

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | -0.9 | -1.4 | -1.5 | -1.6 | -1.6 | -1.6 | -1.6 | -1.6 | -1.6 | -5.4 | -13.4 |

This option would take effect in October 2019.

## Background

Temporary Assistance for Needy Families (TANF) provides cash assistance, work support (such as subsidized child care), and other services to some low-income families with children. Almost all of the federal government's TANF funding is provided through a block grant called the State Family Assistance Grant (SFAG), which totals $\$ 16$ billion annually. The states administer TANF and have considerable latitude in determining the mix of cash assistance, work support, and other services that the program provides. The states also determine the requirements for participation in work-related activities that some recipients must meet to avoid a reduction in the amount of cash assistance they receive through the program.

## Option

Beginning in October 2019, this option would reduce the SFAG by 10 percent.

## Effects on the Budget

Reducing the amount of the SFAG would decrease federal spending by about $\$ 13$ billion through 2028, the Congressional Budget Office estimates. Initially, the option would save less than $\$ 1.6$ billion per year because some states do not spend all of their funding in the year that they receive it. Thus, some of the funding that would be eliminated by this option would not have been spent until later years under current law. CBO estimates that states spend the vast majority of funding within two years of receipt, but some states take eight years to exhaust it. Thus, the reduction in spending will not equal the reduction in funding until 2028. However, the average difference between spending and funding from 2020 through 2028 is only about 10 percent. The speed with which states spend their funding is the main source of uncertainty for this option.

Gauging the savings for alternatives that would reduce the SFAG by other percentages is fairly straightforward. For example, cutting the SFAG by half as much (that is, 5 percent) would reduce spending by about half the amount. If cuts were much larger than 10 percent, states might spend the remaining funding more quickly, which could slightly reduce the savings over the next decade.

## Other Effects

One argument for this option is that it might prevent some families from becoming dependent on federal aid, if states responded to the reduction in SFAG funding by making their work requirements more stringent to reduce their spending on cash assistance. The more stringent work requirements would probably result in shorter periods of cash assistance for some families. And, in some cases, family members might find work more quickly, either to compensate for the loss of cash assistance or to comply with the work requirements. However, some states might respond to the reduction in funding by decreasing their spending on work support, which could make finding and keeping jobs harder.

An argument against this option is that it would reduce the amount of assistance available to low-income families with children. Because federal spending on TANF has stayed about the same since 1998, the program's first full year, the purchasing power of that funding has fallen by 28 percent. As real (inflation-adjusted) spending on TANF has decreased, so has the number of families who get cash assistance from the program-from 3.2 million families in 1998 to 1.1 million in 2017. In comparison, roughly 5.5 million families had income below the poverty threshold in 2017. Reducing real spending on the program by an additional 10 percent would further reduce the number of families that TANF served or the amount of assistance that it provided.

RELATED CBO PUBLICATION: Temporary Assistance for Needy Families: Spending and Policy Options (January 2015), www.cbo.gov/ publication/49887

Eliminate Supplemental Security Income Benefits for Disabled Children

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Mandatory Outlays | 0 | -10 | -10 | -11 | -11 | -10 | -11 | -12 | -12 | -14 | -41 | -100 |
| Change in Discretionary Outlays | 0 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -4 | -9 |

This option would take effect in October 2019.

## Background

The Supplemental Security Income (SSI) program provides cash assistance to people who are disabled, aged, or both and who have low income and few assets. In 2018, 15 percent of SSI recipients, or 1.2 million people, are projected to be disabled children under age 18 , receiving an average monthly benefit of $\$ 686$. To receive benefits, those children must have marked, severe functional limitations and usually must live in a household with low income and few assets.

## Option

This option would eliminate SSI benefits for disabled children.

## Effects on the Budget

The Congressional Budget Office estimates that eliminating disabled children's benefits would reduce mandatory spending by $\$ 100$ billion through 2028. That estimate is based on CBO's projection of the total number of SSI recipients who are disabled children and on their average projected benefits in the 10 -year period. Because the number of disabled children and their average benefits are projected to increase over time, the annual savings from this option would also generally increase. However, both the projected number of disabled children and their average projected benefits are inherently uncertain.

Because annual discretionary appropriations cover SSI's administrative costs, this option would generate an extra $\$ 9$ billion in discretionary savings over the same period. CBO arrived at that estimate using the projected total cost of administering SSI and the percentage reduction in the program's mandatory outlays due to this option, both of which are uncertain.

## Other Effects

Eliminating SSI benefits for children may encourage their parents to increase work and thereby increase earnings. (Research has not shown that parents reduce work in anticipation of receiving SSI benefits for their child; however, in one study, parents who stopped receiving their child's SSI benefit significantly increased their work hours and fully offset the loss of the benefit [Deshpande 2016].) Currently, the program's traits create a disincentive for parents to increase work. Unlike another program that aims to help families achieve self-sufficiency, Temporary Assistance for Needy Families, SSI imposes no work requirements on parents and does not explicitly limit how long their child may receive benefits as long as the child remains medically and financially eligible. Furthermore, SSI benefits decrease by 50 cents with each additional dollar of parental earnings above a certain threshold, depending on household size and other factors. (For example, in calendar year 2018, for a single parent with one child who is disabled and with no other income, the SSI benefit is generally reduced after the parent earns more than $\$ 1,625$ per month.) Although increased work by those parents would support financial self-sufficiency, such a change might have negative effects on the outcomes of disabled children.

Another argument for this option is that, rather than provide a cash benefit to the children's parents without ensuring that they spend the money on disabled children, policymakers could choose to support those children in other ways. For example, states could receive grants to make an integrated suite of educational, medical, and social services available to disabled children and their families. To the extent that funds that would have been used to provide SSI benefits for children were instead used for a new program or to increase the resources of other existing programs, federal savings from this option would be correspondingly reduced.

An argument against the option is that this program serves a disadvantaged group. SSI is the only federal income support program geared toward families with disabled children, and SSI benefits reduce child poverty rates. Families with disabled children are typically more susceptible to economic hardship than other families
because of both direct and indirect costs associated with children's disabilities. (Direct costs can include additional out-of-pocket health care expenses, spending on adaptive equipment, and behavioral and educational services. Indirect costs for the parents of disabled children can include lost productivity and negative health effects.)

RELATED CBO PUBLICATION: Supplemental Security Income: An Overview (December 2012), www.cbo.gov/publication/43759
WORK CITED: Manasi Deshpande, "The Effect of Disability Payments on Household Earnings and Income: Evidence From the SSI Children's Program," Review of Economics and Statistics, vol. 98, no. 4 (October 2016), pp. 638-654, https://dx.doi.org/10.1162/REST_a_00609

## Link Initial Social Security Benefits to Average Prices Instead of Average Earnings

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Apply pure price indexing | 0 | * | -1 | -3 | -5 | -9 | -15 | -21 | -30 | -37 | -9 | -121 |
| Apply progressive price indexing | 0 | * | -1 | -2 | -3 | -6 | -9 | -14 | -19 | -24 | -6 | -77 |

This option would take effect in January 2020.

* $=$ between $-\$ 500$ million and zero.


## Background

Social Security benefits for retired and disabled workers are based on their average lifetime earnings. The Social Security Administration uses a statutory formula to compute a worker's initial benefits, and through a process known as wage indexing, the benefit calculation in each year accounts for economywide growth of wages. Average initial benefits for Social Security recipients therefore tend to grow at the same rate as do average wages. (After people become eligible to receive benefits, their monthly benefits are adjusted annually to account for increases in the cost of living but not for further increases in average wages.)

## Option

This option consists of two alternatives to constrain the growth of Social Security benefits. The first alternative would change the computation of initial benefits so that the real (inflation-adjusted) value of average initial benefits did not rise. That alternative, often called "pure" price indexing, would allow increases in average real wages to result in higher real Social Security payroll taxes but not in higher real benefits. Beginning with participants who became eligible for benefits in 2020, pure price indexing would link the growth of initial benefits to the growth of prices (as measured by changes in the consumer price index) rather than to the growth of average wages. (Benefit growth would be cut by reducing three factors that determine the primary insurance amount. The factors would be reduced by the real wage growth in each year. Those three factors are now 90 percent, 32 percent, and 15 percent; the earnings levels at which the factors change are called bend points. For example, with real wage growth of 1 percent, the three factors would be reduced by 1 percent, so in 2020 they
would be 89.1 percent, 31.68 percent, and 14.85 percent, respectively.)

Under pure price indexing, benefits for each successive cohort of beneficiaries would be smaller than the benefits scheduled under current law, with the extent of the reduction being determined by the growth of average real wages. For example, if real wages grew by 1 percent annually, workers newly eligible for benefits in the first year the pure price indexing was in effect would receive 1 percent less than they would have received under the current rules; those becoming eligible in the second year would receive about 2 percent less; and so on. The actual incremental reduction would vary from year to year, depending on the growth of real wages.

The second alternative for constraining the growth of initial Social Security benefits, called progressive price indexing, would keep the current benefit formula for workers who had lower earnings and would reduce the growth of initial benefits for workers who had higher earnings.

Under this alternative, initial benefits for the 30 percent of workers with the lowest lifetime earnings would increase with average wages, as they are scheduled to do, but initial benefits for other workers would increase more slowly, at a rate that depended on their position in the distribution of earnings. For example, for workers whose earnings put them at the 31st percentile of the distribution, benefits would rise only slightly more slowly than average wages, whereas for the highest earners-workers with 35 years of earnings at or above the taxable maximum-benefits would rise with prices, as they would under pure price indexing. Thus, under
progressive price indexing, the initial benefits for most workers would increase more quickly than prices but more slowly than average wages. As a result, the benefit structure would gradually become flatter, and ultimately, all newly eligible workers in the top 70 percent of earners would receive the same monthly benefit.

## Effects on the Budget

Pure price indexing would reduce federal outlays by $\$ 121$ billion through 2028, the Congressional Budget Office estimates. By 2048, pure price indexing would reduce scheduled Social Security outlays by 16 percent from what would occur under current law; when measured as a percentage of total economic output, the reduction would be 1.1 percentage point because outlays would decline from 6.3 percent to 5.2 percent of gross domestic product. People newly eligible for benefits in 2048, CBO estimates, would experience a reduction in benefits of about one-third from the benefits scheduled under current law.

Progressive price indexing would reduce federal outlays by $\$ 77$ billion through 2028, CBO estimates. By 2048, progressive price indexing would reduce the outlays for Social Security by 9 percent; when measured as a percentage of total economic output, the reduction would be 0.6 percentage points because outlays would fall from 6.3 percent to 5.7 percent of gross domestic product.

CBO's estimates are based on its projections of the growth in average real wages, which determine the extent of the aggregate benefit reduction that results from each alternative. CBO applies those aggregate benefit reduction rates to the Social Security benefit payments scheduled under current law to arrive at the estimated budgetary savings. For progressive price indexing, the projected distribution of earnings for the top 70 percent of earners also affects the estimated savings.

Because the benefit reductions would increase for each successive cohort of beneficiaries, the projected budgetary savings would increase over time. The realized savings could be higher or lower than shown due to uncertainty in projections of real wage growth.

## Other Effects

Under both approaches, the people most affected by the option are those who would become eligible for benefits in the distant future. Those beneficiaries, however, would have had higher real earnings during their working years and thus a greater ability to save for retirement on their own to offset those reductions.

Progressive price indexing would reduce scheduled Social Security benefits less than would pure price indexing, and beneficiaries with lower earnings would not be affected. Real annual average benefits would still increase for all but the highest-earning beneficiaries. Benefits would replace less of affected workers' earnings than under current law but would replace more earnings than they would under pure price indexing.

An argument for both alternatives in this option is that average inflation-adjusted benefits in the program would not decline over time. If lawmakers adopted pure price indexing, future beneficiaries would generally receive the same real monthly benefit paid to current beneficiaries, and as average longevity increased, they would receive benefits for more years.

But because benefits would not be as closely linked to average wages, an argument against both alternatives is that affected beneficiaries would not share in overall economic growth to the same extent as they do under current law. As a result, benefits would replace less of the affected beneficiaries' earnings than they do today.

RELATED OPTIONS: Mandatory Spending, "Make Social Security's Benefit Structure More Progressive" (page 99), "Raise the Full Retirement Age for Social Security" (page 101)

RELATED CBO PUBLICATIONS: Social Security Policy Options, 2015 (December 2015), www.cbo.gov/publication/51011; letter to the Honorable Paul Ryan providing CBO's analysis of the Roadmap for America's Future Act of 2010 (January 27, 2010), www.cbo.gov/ publication/41860; Long-Term Analysis of S. 2427, the Sustainable Solvency First for Social Security Act of 2006 (attachment to a letter to the Honorable Robert F. Bennett, April 5, 2006), www.cbo.gov/publication/17701

Make Social Security's Benefit Structure More Progressive

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Use 90/32/5 PIA factors | 0 | 0 | * | -0.2 | -0.3 | -0.5 | -0.9 | -1.4 | -1.8 | -2.3 | -0.5 | -7.4 |
| Use 100/25/5 PIA factors | 0 | 0 | -0.3 | -0.7 | -1.5 | -2.5 | -4.2 | -6.3 | -8.8 | -11.2 | -2.5 | -35.5 |

This option would take effect in January 2020.
PIA = primary insurance amount; ${ }^{*}=$ between $-\$ 50$ million and zero.

## Background

The amount of the Social Security benefit paid to a disabled worker or to a retired worker who claims benefits at the full retirement age is called the primary insurance amount (PIA). The Social Security Administration (SSA) calculates that amount using a formula applied to a worker's average indexed monthly earnings (AIME), a measure of average taxable earnings over that worker's lifetime. The benefit formula is progressive, meaning that the benefit is larger as a share of lifetime earnings for someone with a lower AIME than it is for a person with a higher AIME. To compute the PIA, the SSA separates AIME into three brackets by using two bend points (or dollar threshold amounts). In calendar year 2018, the first bend point is $\$ 895$, and the second bend point is $\$ 5,397$. Average indexed earnings in each of the three brackets are multiplied by three corresponding factors to determine the PIA: 90 percent, 32 percent, and 15 percent. (Bend points rise each year with average wages, whereas the factors remain constant.)

For example, a worker with an AIME of $\$ 1,000$ would have a PIA of $\$ 839$ because the 90 percent PIA factor would apply to the first $\$ 895$, and the 32 percent factor would apply to the remaining $\$ 105$. A worker with an AIME of $\$ 6,000$ would have a PIA of $\$ 2,337$ because the 90 percent factor would apply to the first $\$ 895$, the 32 percent factor would apply to the next $\$ 4,502$ ( $\$ 5,397$ minus $\$ 895$ ), and the 15 percent factor would apply to the remaining $\$ 603$ ( $\$ 6,000$ minus $\$ 5,397$ ). Because the formula is progressive, for an AIME of $\$ 1,000$, the PIA amounts to 84 percent of the AIME; for $\$ 6,000$, the PIA amounts to 39 percent of the AIME.

## Option

This option would make the Social Security benefit structure more progressive by cutting benefits for people with higher average earnings while either preserving or expanding benefits for people with lower earnings. Starting with people newly eligible in 2020, the first alternative in this option would affect only beneficiaries with an AIME above the second bend point. That approach would reduce the 15 percent PIA factor by 1 percentage point per year until it reached 5 percent in 2029.

The more progressive second alternative in this option would reduce benefits for a larger fraction of beneficiaries with higher lifetime earnings while increasing benefits for people with lower lifetime earnings. The second approach would lower both the 15 percent and 32 percent factors and would increase the 90 percent factor. The factors would change gradually over 10 years until they reached 5 percent, 25 percent, and 100 percent, respectively. (The 15 percent and 90 percent factors would change by 1 percentage point per year, whereas the 32 percent factor would change by 0.7 percentage points per year.)

## Effects on the Budget

The first alternative would reduce total federal outlays for Social Security over the 10 -year period by about $\$ 7$ billion, the Congressional Budget Office estimates. That estimate is based on CBO's projections of the share of newly eligible beneficiaries who would be affected by that approach and the average reduction in their benefits. By 2028, based on data provided by the Social Security Administration, CBO estimates that about 2.5 million people, or 13 percent of all newly eligible beneficiaries,
would be affected. For people who become eligible in 2028, the average decline in monthly benefits for those affected would amount to 4 percent, or about $\$ 150$ dollars, relative to amounts under current law.

The second alternative would achieve total federal savings of $\$ 36$ billion over the 10 -year period. CBO estimates that about 45 percent of new beneficiaries would receive benefits that are higher than under current law, while 55 percent of new beneficiaries would receive benefits that are lower. People who become eligible in 2028 and would get increased benefits would, on average, receive 6 percent, or about $\$ 70$ dollars per month, more than under current law; the average decrease for people whose benefits would be reduced would amount to about 8 percent, or $\$ 220$ dollars per month.

Annual savings from both alternatives would grow over time as the new benefit structure applied to more beneficiaries. In 2048, the first and second alternatives would reduce Social Security outlays from what would occur under current law by 2 percent and 6 percent, respectively. When measured as a percentage of total economic output, the reduction in Social Security outlays under the two alternatives would be 0.2 percentage points and 0.4 percentage points, as the outlays fell from 6.3 percent of gross domestic product to 6.1 percent and to 5.9 percent, respectively.

To achieve greater budgetary savings, larger reductions in the 15 percent and the 32 percent PIA factors could be implemented. (Conversely, smaller reductions would result in less savings.) In addition, to target benefit reductions more narrowly, one or more additional bend points could be added to the formula.

The overall savings from the alternatives in this option could be higher or lower than shown because the projected distribution of earnings and the resulting benefits are uncertain. For example, if earnings were more equally distributed than CBO has projected, resulting in more people with an AIME above the second bend point, the savings from both approaches would be slightly higher than shown because the reduction in benefits would apply to more people.

## Other Effects

An argument in favor of this option is that it would better target Social Security benefits toward people who need them more-protecting or expanding benefits for people with low average earnings while reducing payments to people with higher average earnings. This option would help make the Social Security system more progressive at a time when growing disparities in life expectancy by income level are making the system less progressive. (Beneficiaries with higher income typically live longer and experience larger improvements in their life expectancy than lower-income beneficiaries. As a result, higher-income groups receive benefits for more years, on average, than lower-income beneficiaries.) The second approach in this option would increase progressivity more than the first approach by boosting benefits to lower-income people.

An argument against this option is that it would weaken the Social Security system's link between earnings and benefits. In addition, the second approach would reduce benefits for beneficiaries with an AIME above the 45th percentile, some of whom do not have high lifetime earnings. In particular, CBO projects that in 2028 the second approach would reduce benefits for people with an AIME higher than about $\$ 3,100$, or approximately $\$ 37,000$ in annual indexed earnings.

RELATED OPTIONS: Mandatory Spending, "Raise the Full Retirement Age for Social Security" (page 101), "Link Initial Social Security Benefits to Average Prices Instead of Average Earnings" (page 97)

RELATED CBO PUBLICATIONS: CBO's 2016 Long-Term Projections for Social Security: Additional Information (December 2016), www.cbo.gov/publication/52298; Social Security Policy Options, 2015 (December 2015), www.cbo.gov/publication/51011

## Raise the Full Retirement Age for Social Security

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | 0 | 0 | 0 | -0.2 | -0.9 | -2.2 | -4.5 | -7.6 | -12.8 | -0.2 | -28.2 |

This option would take effect in January 2023.

## Background

The age at which workers become eligible for full retirement benefits from Social Security-the full retirement age (FRA), also called the normal retirement age-depends on their year of birth. For workers born in 1937 or earlier, the FRA was 65. It increased in twomonth increments for each successive birth year until it reached 66 for workers born in 1943. For workers born between 1944 and 1954, the FRA holds at 66, but it then increases again in two-month increments and reaches age 67 for workers born in 1960 or later. As a result, the FRA is 67 for workers who turn 62 in 2022 or later. The earliest age at which workers may start to receive reduced retirement benefits will remain 62 ; however, benefit reductions at that age will be larger for workers whose FRA is higher. For example, workers born in 1954 (whose FRA is 66) will receive a permanent 25 percent reduction in their monthly benefit amount if they claim benefits at age 62 rather than at their FRA, whereas workers born in 1960 (whose FRA is 67) will receive a 30 percent reduction if they claim benefits at 62 .

## Option

Under this option, the FRA would continue to increase from age 67 by two months per birth year beginning with workers turning 62 in 2023, until it reached age 70 for workers born in 1978 or later (who will turn 62 beginning in 2040). As under current law, workers could still choose to begin receiving reduced benefits at age 62, but the reduction in their initial monthly benefit would be larger, reaching 45 percent when the FRA is 70. This option would not reduce the benefits for workers who qualify for Social Security Disability Insurance (DI).

An increase in the FRA would reduce lifetime benefits for every affected Social Security recipient, regardless of the age at which a person claims benefits. Workers could maintain the same monthly benefit by claiming benefits at a later age, but then they would receive benefits for fewer years.

## Effects on the Budget

This option would shrink federal outlays by $\$ 28$ billion through 2028, the Congressional Budget Office estimates. By 2048, the option would reduce Social Security outlays from what would occur under current law by 8 percent; when measured as a percentage of total economic output, the reduction would be about 0.5 percentage points because outlays would fall from 6.3 percent to 5.8 percent of gross domestic product.

CBO's estimates reflect the projected age distribution of future beneficiaries and the benefit reductions that would occur at each claim age under this option. Savings would increase each year both because more beneficiaries would be subject to the higher FRA and because the reduction would be greater for each additional birth cohort of beneficiaries up to the 1978 cohort. However, overall savings could differ from the estimates shown here because of unexpected changes in the timing of benefit claiming.

Because many workers retire at the FRA, CBO estimates that increasing that age would result in some beneficiaries' working longer and claiming Social Security benefits later than they would under current law. The magnitude of that estimated effect is consistent with the change in claiming behavior that occurred after the FRA had increased from age 65 to age 66. (However, the estimates shown here do not include the budgetary effects of an increase in the overall supply of labor.) As the FRA increased to age 70 under this option, it is uncertain whether workers would continue to respond by working as many additional months as they did when the FRA increased to age 66 .

Because the reduced benefits would create an incentive for workers to apply for DI benefits, which would not be affected by this option, the estimates shown here reflect the higher resulting applications and awards for the DI program. For example, under current law, workers who retire at age 62 in 2048 will receive 70 percent of their
primary insurance amount (what they would have received had they claimed benefits at their FRA); if they qualify for DI benefits, however, they will receive the full amount. Under this option, workers who retired at 62 in 2048 would receive only 55 percent of their primary insurance amount, but they would still receive 100 percent if they qualified for DI benefits. As a result, CBO estimates, the total benefits for the DI program in 2048 would be slightly higher under this option relative to the total benefits under current law.

To achieve additional savings, the FRA could be increased more quickly or could continue beyond age 70. A one-year increase in the FRA would be equivalent to a reduction in the monthly benefit of about 6 percent to 8 percent, depending on the age at which a recipient chose to claim benefits and the recipient's FRA. For claims before the FRA, benefits would be reduced 5/9 of a percent for each of the first 36 months before the FRA. For example, if workers claimed benefits three years before the FRA, their benefits would be reduced by 20 percent. For claims more than three years before the FRA, benefits would be further reduced by $5 / 12$ of a percent for each additional month, or 5 percent per year. For example, if workers claimed benefits five years before the FRA, their benefits would be reduced by 30 percent. (Conversely, for workers who claimed benefits after their FRA, the benefits ould be increased by $8 / 12$ of a percent per month because of delayed retirement credits.)

Some proposals to increase the FRA also would increase the earliest eligibility age (EEA)—when participants may first claim retirement benefits-from 62. Increasing the EEA together with the FRA would cause federal spending to be lower in the first few decades fter implementation and higher in later decades than if only the FRA was increased. A higher EEA would prevent some people from claiming any Social Security benefits in the year in which they would first become eligible under current law; however, those people's monthly benefits would be
higher when they ultimately became eligible for benefits under the higher EEA.

## Other Effects

An argument for this option is that people who turn 65 today will, on average, live significantly longer and collect Social Security benefits for more years than retirees did in the past, increasing their average lifetime Social Security benefits. In 1940, life expectancy at 65-the number of additional years a person was expected to live after reaching that age-was 11.9 years for men and 13.4 years for women. Since that time, life expectancy at 65 has risen by more than six years, to 18.2 years for men and 20.7 years for women. Therefore, a commitment to provide retired workers with a certain monthly benefit beginning at age 65 today is significantly more costly than that same commitment made to recipients in 1940. However, the gains in life expectancy have not been uniform: In recent decades, life expectancy has generally increased more quickly for beneficiaries with higher lifetime earnings, who receive higher Social Security benefits.

An argument against this option is that it would increase the incentive for workers nearing retirement to stop working and apply for DI benefits. To eliminate that added incentive to apply for disability benefits, policymakers could narrow the difference in benefit amounts by also reducing scheduled disability payments.

In addition, increasing only the FRA would increase the risk of poverty at older ages for people who did not respond to the increase in the FRA by delaying the age at which they claimed benefits or by applying for DI benefits. If the option was accompanied by an increase in the EEA, poverty at older ages would be reduced. However, for people who depended on retirement benefits at age 62, increasing the EEA would cause financial hardship, even if the total lifetime value of their benefits would be generally unchanged.

RELATED OPTIONS: Mandatory Spending, "Raise the Age of Eligibility for Medicare to 67" (page 68), "Link Initial Social Security Benefits to Average Prices Instead of Average Earnings" (page 97), "Make Social Security's Benefit Structure More Progressive" (page 99), "Eliminate Eligibility for Starting Social Security Disability Benefits at Age 62 or Later" (page 105)

RELATED CBO PUBLICATIONS: Social Security Policy Options, 2015 (December 2015), www.cbo.gov/publication/51011; Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/43421; Raising the Ages of Eligibility for Medicare and Social Security (January 2012), www.cbo.gov/publication/42683; "Raise the Earliest Eligibility Age for Social Security," in Reducing the Deficit: Spending and Revenue Options (March 2011), www.cbo.gov/publication/22043; Jae Song and Joyce Manchester, Have People Delayed Claiming Retirement Benefits? Responses to Changes in Social Security Rules, Working Paper 2008-04
(May 2008), www.cbo.gov/publication/19575

## Require Social Security Disability Insurance Applicants to Have Worked More in Recent Years

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | -0.7 | -1.8 | -3.0 | -4.3 | -5.5 | -6.8 | -8.1 | -9.3 | -10.5 | -9.7 | -50.0 |

This option would take effect in January 2020.

## Background

To be eligible for benefits under Social Security Disability Insurance (DI), disabled workers must generally have worked 5 of the past 10 years. Specifically, workers over age 30 must have earned at least 20 quarters of coverage in the past 10 years. (In this option, the 10 -year time frame is referred to as the look-back period.) In calendar year 2018, a worker receives one quarter of coverage, the basic unit for determining coverage under Social Security, for each $\$ 1,320$ earned during the year, up to four quarters; the amount of earnings required for a quarter of coverage generally increases annually with average wages in the economy.

## Option

This option would raise the share of recent years that disabled workers must have worked while shortening the look-back period. It would require disabled workers older than 30 to have earned 16 quarters of coverage in the past 6 years-usually equivalent to working 4 of the past 6 years. That change in policy would apply to people seeking benefits in 2020 and later and would not affect blind applicants, who are exempt from the recency-ofwork requirement.

## Effects on the Budget

The Congressional Budget Office estimates that the option would lower federal outlays for Social Security by $\$ 50$ billion from 2020 through 2028. Based on administrative data from the Social Security Administration, CBO estimates that about 13 percent of those who would receive new disability awards each year under current law would not meet the work requirement under this option. CBO estimates that a quarter of those affected by the option would be able to earn enough additional quarters of coverage to later qualify for DI benefits under the new standard. Incorporating that effect, this option would reduce the number of workers who received DI benefits by 6 percent, or about 600,000 people, in 2028, CBO estimates.

Most of the people affected by the option would eventually claim retirement benefits at age 62 , but at a reduced rate, because they would be claiming benefits earlier than their full retirement age. (Benefits for retired workers who claim benefits before their full retirement age are reduced by up to 30 percent depending on their birth cohort and the age at which they claim benefits.) CBO's estimates of budgetary savings from the option over a 10 -year period reflect the net result of a $\$ 57$ billion reduction in DI outlays and a $\$ 7$ billion increase in Social Security retirement benefits relative to amounts under current law.

Budgetary savings from this option would increase as a share of total Social Security benefits for several decades as fewer workers received DI benefits each year. However, the overall savings would remain small, and, in 2048, outlays for Social Security would be about 1 percent lower than under current law.

Several sources of uncertainty could affect the overall savings from this option. The share of affected workers who would be able to work longer and still qualify for DI benefits under the option could be higher or lower than anticipated, as could the difference between those workers' benefits and the average DI benefit. For example, if those affected workers had benefits that were higher than the average, the budgetary savings from this option would be lower.

In addition, it is uncertain how the option would affect spending for other federal programs-such as Medicare, Medicaid, and Supplemental Security Income (SSI)—or spending on subsidies for health insurance purchased through marketplaces. Through 2028, those effects would reduce the savings slightly. On one hand, disabled workers who would no longer qualify for DI under this option would lose their eligibility for Medicare until age 65 , thus reducing spending for Medicare. On the other hand, some disabled workers who lose DI and Medicare
benefits under this option would become eligible for SSI, Medicaid, or health insurance subsidies, increasing spending for those programs. Uncertainty about those effects grows over time, in part because of growing uncertainty about health care costs under different federal programs. The estimates presented here do not account for changes in spending for those other federal programs.

An alternative approach could raise the number of recent years that disabled workers must have worked while lengthening the look-back period by requiring workers to have worked 8 of the past 12 years. That approach would result in similar budgetary effects. Such an adjustment would help people who had worked consistently in the past but who had been unable to find work in the years immediately before they became disabled.

## Other Effects

An argument in favor of this option is that it would better target benefits toward people who do not work
because of a recent disability; however, whether that is actually the case is difficult to determine. Under current law, people who have not been in the labor force for five years can qualify for disability benefits. By comparison, this option would only allow people who were out of the labor force for two years or less to qualify for benefits.

A reason to keep the existing work provision is that the option could penalize some people who would have been working were they not disabled. For example, some people might leave the workforce for more than two years to care for children or pursue additional education and then become disabled while out of the workforce or shortly after returning to work. Those people could qualify for disability benefits under current law but would not qualify under this option. Similarly, some people who were in the labor force but unable to find work for over two years before becoming disabled would become ineligible for benefits under the option.

RELATED OPTION: Mandatory Spending, "Eliminate Eligibility for Starting Social Security Disability Benefits at Age 62 or Later" (page 105)
RELATED CBO PUBLICATIONS: Social Security Disability Insurance: Participation and Spending (June 2016), www.cbo.gov/ publication/51443; Social Security Policy Options, 2015 (December 2015), www.cbo.gov/publication/51011; Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/43421

Eliminate Eligibility for Starting Social Security Disability Benefits at Age 62 or Later

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019- | 2019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | -0.2 | -0.5 | -1.0 | -1.5 | -2.1 | -2.7 | -3.3 | -4.0 | -4.7 | -3.1 | -19.9 |

This option would take effect in January 2020.

## Background

Under current law, people are eligible for Social Security Disability Insurance (DI) until they reach full retirement age-currently 66 years and 4 months for workers who turn 62 in 2018. The full retirement age is scheduled to rise gradually, starting at 66 years and 6 months for workers born in 1957 (who will turn 62 in 2019) and eventually reaching 67 for people born in 1960 or later (the oldest of whom will turn 62 in 2022). Workers who claim retirement benefits after turning 62 and before their full retirement age receive lower benefits for as long as they live. By contrast, workers who claim DI benefits before their full retirement age are not subject to a reduction in DI benefits. When those workers reach their full retirement age, their DI benefits are automatically converted to full retirement benefits, and the benefit amount remains the same.

That difference in benefits encourages some people between age 62 and their full retirement age to apply for DI when they apply for Social Security retirement benefits. If their DI application is approved, they receive higher benefits for the rest of their life than if they had applied only for retirement benefits. (Some people claim retirement benefits during the five-month waiting period that the DI program imposes on applicants. If they receive retirement benefits during the waiting period and then are approved for the DI program, their monthly DI benefits and future retirement benefits are reduced a little. For example, if they receive retirement benefits for the full five months, their future DI and retirement benefits are generally reduced by 2 percent.)

## Option

Under this option, workers would not be allowed to apply for DI benefits after their 62nd birthday nor to receive DI benefits for a qualifying disability that begins after that date. Under such a policy, individuals who would have become eligible for DI benefits at age 62 or
later under current law would instead have to claim retirement benefits if they wanted to receive Social Security benefits based on their own earnings. Benefits for those people over their lifetime would be as much as 30 percent lower than the DI and retirement benefits they are scheduled to receive under current law. (The actual reduction in lifetime benefits would depend on their year of birth and the age at which they claimed retirement benefits.) Workers who would have become eligible for DI benefits based on a disability that began before age 62 would not be affected by this option.

## Effects on the Budget

The option would reduce federal outlays for Social Security by $\$ 20$ billion between 2020 and 2028, the Congressional Budget Office estimates. Based on data from the Social Security Administration, CBO estimates that, under current law, about 11 percent of new disability awards each year would be made to people who, after their 62nd birthday, applied for DI or experienced the onset of a qualifying disability. CBO estimates that in 2028 this option would affect about 730,000 people who would have received disability benefits under current law. Under the option, those people are projected to instead collect retirement benefits, which would be up to 30 percent lower than the disability benefits because they would be claiming benefits earlier than their full retirement age. CBO's estimates of the budgetary savings from the option reflect the net result of an $\$ 85$ billion reduction in DI outlays and a $\$ 65$ billion increase in Social Security retirement benefits as people shifted from the DI program to the retirement program. The estimate accounts for factors such as the distribution of average benefits by age, which depends on projected earnings, as well as the delay between disability onset and benefit receipt.

Budgetary savings from this option increase over time as more workers become affected by the new eligibility
rules; however, the overall savings remain relatively small. By 2048, Social Security outlays (including both DI and retirement benefits) would be reduced by less than 1 percent from what they would be under current law.

Uncertainty about the effects of the option on other federal spending and on people's behavior could cause the savings from the option to be higher or lower than estimated. First, it is uncertain how the option would affect spending for other federal programs-such as Medicare, Medicaid, and Supplemental Security Income (SSI) -as well as spending on subsidies for health insurance purchased through marketplaces. Through 2028, those effects would reduce the savings slightly. On the one hand, disabled workers older than 62 would lose their eligibility for Medicare until age 65 , thus reducing spending for Medicare. On the other hand, some disabled workers who lose DI and Medicare benefits under this option would become eligible for SSI, Medicaid, or health insurance subsidies, increasing spending for those programs. Uncertainty about those effects grows over time, in particular because of growing uncertainty about health care costs under different federal programs. The estimates presented here do not account for changes in spending for those other federal programs.

The second important source of uncertainty is how older people's participation in the labor force and the timing of benefit claiming would change in response to this option. On the one hand, the option would induce some people to work longer than they would under current law: Although DI benefits are available only to people judged unable to perform substantial work, some people could find employment that would accommodate their disabilities. If DI benefits were not available,
those people would work longer and claim benefits later than they would under current law. On the other hand, the option would induce some people planning to work until age 62 or later to leave the labor force at age 61 so that they could apply for DI benefits. The estimates presented here do not include the effects of those factors, whose magnitudes are uncertain.

## Other Effects

An argument for this option is that it eliminates the incentive for people applying for retirement benefits to apply for disability benefits at the same time in hopes of securing a financial advantage. Moreover, workers who became disabled between age 62 and the full retirement age would still have access to Social Security retirement benefits, although those benefits would be smaller than the disability benefits available under current law.

An argument against this option is that it would substantially reduce the support available to older people who, under current law, would be judged too disabled to perform substantial work. Those people would have received significantly lower benefits from Social Security if they had been ineligible for DI and had applied for retirement benefits before reaching the full retirement age. In addition, some people would have lost coverage through Medicare because that program's benefits are generally not available to people under age 65 , whereas most recipients of DI become entitled to Medicare benefits 24 months after their DI benefits begin. In addition, DI beneficiaries typically have lower life expectancy than non-DI beneficiaries, resulting in their receiving benefits for fewer years. This option would further reduce the amount of benefits they receive over a lifetime.

RELATED OPTIONS: Mandatory Spending, "Raise the Full Retirement Age for Social Security" (page 101), "Require Social Security Disability Insurance Applicants to Have Worked More in Recent Years" (page 103)

RELATED CBO PUBLICATIONS: Social Security Disability Insurance: Participation and Spending (June 2016), www.cbo.gov/publication/ 51443; Policy Options for the Social Security Disability Insurance Program (July 2012), www.cbo.gov/publication/43421; Supplemental Security Income: An Overview (December 2012), www.cbo.gov/publication/43759

## Narrow Eligibility for Veterans' Disability Compensation by Excluding Certain Disabilities Unrelated to Military Duties

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Exclude certain disabilities from veterans' disability compensation | 0 | -2.4 | -3.3 | -3.5 | -3.6 | -3.7 | -3.9 | -4.0 | -4.2 | -4.4 | -12.7 | -33.0 |
| Exclude certain disabilities from veterans' disability compensation for new applicants | 0 | * | -0.1 | -0.2 | -0.3 | -0.4 | -0.5 | -0.6 | -0.7 | -0.8 | -0.7 | -3. 6 |

This option would take effect in January 2020.

* $=$ between - $\$ 50$ million and zero


## Background

Veterans may receive disability compensation from the Department of Veterans Affairs (VA) for medical conditions or injuries that occurred or worsened during activeduty military service. Such service-connected disabilities range widely in severity and type, from migraines and treatable hypertension to the loss of limbs. VA also provides dependency and indemnity compensation (DIC) payments to surviving spouses or children of a veteran who died from a service-related injury or disease. The Department of Defense (DoD) has a separate compensation system for service members who can no longer fulfill their military duties because of a disability.

Not all service-connected medical conditions and injuries are incurred or exacerbated in the performance of military duties. For example, a qualifying injury could occur when a service member was at home or on leave, and a qualifying medical condition, such as Parkinson's disease, could develop independently of a service member's military duties. In 2017, VA paid a total of $\$ 2.7$ billion, the Congressional Budget Office (CBO) estimates, to compensate for seven medical conditions that, according to the Government Accountability Office (GAO), military service is unlikely to cause or aggravate. Those conditions are arteriosclerotic heart disease, chronic obstructive pulmonary disease, Crohn's disease, hemorrhoids, multiple sclerosis, osteoarthritis, and uterine fibroids. There were 758,085 instances of those conditions in 2017.

## Option

Beginning in January 2020, this option would cease veterans' disability compensation for the seven medical conditions GAO identified. Under the option's first alternative, veterans now receiving compensation for those conditions would have their compensation reduced or eliminated, and veterans who applied for compensation for those conditions in the future would not be eligible for it. The second alternative would affect only new applicants for disability compensation. The option would not alter DoD's disability compensation system.

## Effects on the Budget

By CBO's estimates, the savings from the first alternative, in which VA would no longer make payments to all veterans for the seven medical conditions, would be $\$ 33$ billion between 2020 and 2028. Most of the savings would result from curtailing payments to current recipients of disability compensation. In 2020, VA would no longer provide compensation for about 846,000 cases of those seven conditions, CBO estimates. That number would rise to 976,000 cases in 2028. (The number of veterans affected by the option would be fewer than the number of cases because some veterans would have more than one of the seven conditions.) In addition, CBO estimates that veterans' loss of eligibility for the seven conditions would result in fewer cases of DIC. The option would result in about 1,200 fewer of those cases in 2028, CBO estimates.

Savings from the second alternative, in which only new applicants for disability compensation would be ineligible to receive payments for the seven conditions, would be about $\$ 4$ billion over the 2020-2028 period, CBO estimates. The number of cases for which VA would not provide compensation would increase from 15,000 in 2020 to approximately 225,000 by 2028.

The largest source of uncertainty in estimating the savings from this option is the estimate of the population receiving benefit payments for each of the seven conditions. CBO projects the number of veterans receiving payments for those conditions on the basis of historical information on the number of veterans receiving a disability rating for such conditions, the growth of the overall disability compensation program, the mortality rate of the disability compensation population, and other factors. Savings per veteran are estimated by calculating
the average rating and payment for each of the seven conditions and reducing the veteran's payment by a corresponding amount.

## Other Effects

An argument in support of this option is that it would make the disability compensation system for military veterans more comparable to civilian systems. Few civilian employers offer long-term disability benefits, and among those that do, benefits do not typically compensate individuals for all medical problems that developed during employment.

An argument against this option is that veterans' compensation could be viewed as a lifetime indemnification the federal government owes to people who become disabled to any degree during service in the armed forces.

RELATED OPTION: Mandatory Spending, "End VA's Individual Unemployability Payments to Disabled Veterans at the Full Retirement Age for Social Security" (page 109)

RELATED CBO PUBLICATION: Veterans' Disability Compensation: Trends and Policy Options (August 2014), www.cbo.gov/ publication/45615

## End VA's Individual Unemployability Payments to Disabled Veterans at the Full Retirement Age for Social Security

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| End IU payments to all veterans age 67 or older | 0 | -2.8 | -4.0 | -4.4 | -4.9 | -5.4 | -5.8 | -6.3 | -6.8 | -7.2 | -16.1 | -47.6 |
| End IU payments to all veterans age 67 or older who would begin receiving IU after December 2019 | 0 | -0.1 | -0.2 | -0.4 | -0.5 | -0.7 | -0.9 | -1.1 | -1.3 | -1.5 | -1.2 | -6.7 |

This option would take effect in January 2020.
IU = Individual Unemployability.

## Background

In 2017, 4.5 million veterans with medical conditions or injuries that were incurred or that worsened during active-duty service received disability compensation from the Department of Veterans Affairs (VA). The amount of compensation such veterans receive depends on the severity of their disabilities (which are rated between zero and 100 percent in increments of 10), the number of their dependents, and other factors-but not on their income or civilian employment history.

In addition, VA may increase certain veterans' disability compensation to the 100 percent level, even though VA has not rated their service-connected disabilities at that level. To receive the supplement, termed an Individual Unemployability (IU) payment, disabled veterans must apply for the benefit and meet two criteria. First, veterans generally must be rated between 60 percent and 90 percent disabled. Second, VA must determine that veterans' disabilities prevent them from maintaining substantially gainful employment-for instance, if their employment earnings would keep them below the poverty threshold for one person. In 2017, for veterans who received the supplement, it boosted their monthly VA disability payment by an average of about $\$ 1,200$. In September 2017, about 380,000 veterans received IU payments. Of those veterans, the Congressional Budget Office estimates, about 180,000 were age 67 or older. That age group has been the largest driver of growth in the program.

VA's regulations require that IU benefits be based on a veteran's inability to maintain substantially gainful employment because of the severity of a service-connected disability and not because of age, voluntary withdrawal from work, or other factors. About 48 percent of veterans receiving the IU supplement were 67 or older in September 2017, up from about 40 percent in September 2010. That rise is attributed largely to the aging of Vietnam War veterans.

## Option

This option consists of two alternatives, both beginning in January 2020. Under the first alternative, VA would stop making IU payments to veterans age 67 or older (the full retirement age for Social Security benefits for those born after 1959). That restriction would apply to both current and prospective recipients. Therefore, at age 67, VA disability payments would revert to the amount associated with the rated disability level.

Under the second alternative, veterans who begin receiving the IU supplement after January 2020 would no longer receive those payments once they reach age 67. In addition, no new applicants who are age 67 or older would be eligible for IU benefits after that date. Unlike under the first alternative, veterans who are already receiving IU payments and are age 67 or older after the effective date of the option would continue to collect the IU supplement.

## Effects on the Budget

By CBO's estimates, the savings from the first alternative, in which veterans age 67 or older may no longer collect the IU supplement, would be $\$ 48$ billion between 2020 and 2028. That reduction in spending is the result of a decrease in the number of veterans who would qualify for the supplement. CBO estimates that the number of veterans who would no longer receive or qualify for the IU supplement would total nearly 235,000 in 2020. That number would increase to 382,000 veterans in 2028, with savings totaling $\$ 7$ billion in that year. Disability payments for those who lost eligibility would be reduced by an average of $\$ 1,300$ per month in 2020, increasing to $\$ 1,600$ by 2028.

The savings from the second alternative, which would end IU payments to new recipients and bar applications from veterans who are age 67 or older after the effective date of the option, would total $\$ 7$ billion between 2020 and 2028. The number of veterans who would not collect IU payments under this alternative grows from 8,300 in 2020 to 83,000 in 2028. The savings from this alternative equal $\$ 2$ billion in that final year of the projection period.

CBO projects the number of veterans receiving the IU supplement on the basis of past growth in the number of new recipients (by age) and adjusts that number to account for the morbidity of beneficiaries and other factors, such as the backlog of disability cases to be decided. For IU recipients who would no longer receive the supplement under this option, CBO determines per-veteran savings by reducing the payment amount to a level that corresponds to the veteran's overall disability rating. CBO estimates that rating on the basis of historical data on IU recipients and anticipated changes in the distribution of their ratings. The largest sources of uncertainty in
the estimate of savings over the next 10 years are CBO's estimates of the number of participants who would be affected by the option and of the disability ratings of those affected. Changes in policy, such as increased efforts by VA and private organizations to inform veterans about this benefit or the level of assistance given by those entities in developing a claim, may affect the number of applicants with fully developed claims, and consequently contribute to uncertainty regarding the savings from this option.

## Other Effects

One argument for this option is that most veterans older than Social Security's full retirement age would not be in the labor force because of their age, so their lack of earnings would probably not be attributable to service-connected disabilities. In 2017, about 35 percent of men ages 65 to 69 were in the labor force; for men age 75 or older, that number dropped to about 10 percent. In addition, most recipients of IU payments who are older than 65 would have other sources of income: They would continue to receive regular VA disability payments and might also collect Social Security benefits. (Recipients of the IU supplement typically begin collecting it in their 60s and probably have worked enough in prior years to earn Social Security benefits.)

An argument for retaining the current policy is that IU payments should be determined solely on the basis of a veteran's ability to work due to his or her disabilities and that age should not be a factor in deciding a claim. In addition, replacing the income from the IU supplement would be hard or impossible for some disabled veterans. If they had been out of the workforce for a long time, their Social Security benefits might be small, and they might not have accumulated much in personal savings.

RELATED OPTIONS: Mandatory Spending, "Narrow Eligibility for Veterans' Disability Compensation by Excluding Certain Disabilities Unrelated to Military Duties" (page 107), "Narrow Eligibility for VA's Disability Compensation by Excluding Veterans With Low Disability Ratings" (page 113)

RELATED CBO PUBLICATION: Veterans' Disability Compensation: Trends and Policy Options (August 2014), www.cbo.gov/ publication/45615

Reduce VA's Disability Benefits to Veterans Who Are Older Than the Full Retirement Age for Social Security

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019 | 019- |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays | 0 | -0.2 | -0.4 | -0.7 | -0.9 | -1.1 | -1.4 | -1.7 | -1.9 | -2.2 | -2.2 | -10.5 |

This option would take effect in January 2020.

## Background

In 2017, 4.5 million veterans with medical conditions or injuries that occurred or worsened during activeduty service received disability compensation from the Department of Veterans Affairs (VA). Service-connected disabilities vary widely in severity and type: Some examples are the loss of a limb, migraines, and hypertension. The amount of base compensation veterans receive depends on the severity of their disabilities (which are rated between zero and 100 percent in increments of 10). In calendar year 2018, base compensation rates generally ranged from $\$ 135$ to $\$ 2,975$ per month. Additional compensation may be awarded to veterans based on the number of their dependents and other factors. By law, VA's disability payments are intended to offset the average earnings that veterans would be expected to lose given the severity of their service-connected medical conditions or injuries, whether or not a particular veteran's condition actually reduced his or her earnings. Disability compensation is not means-tested: Veterans who work are eligible for benefits, and, in fact, most working-age veterans who receive such compensation are employed. (In contrast, Social Security Disability Insurance pays cash benefits to adults who are judged to be unable to perform "substantial" work because of a disability, and they eventually lose the benefits if they return to work and earn more than the program's limit on earnings-for most beneficiaries, $\$ 1,180$ a month in calendar year 2018. Those Social Security disability benefits are based on previous earnings and usually replace wages and salaries on less than a one-to-one basis.)

Even after veterans reach full retirement age, VA's disability payments continue at the same level. By contrast, the income that people receive after they retire (from Social Security or private pensions) usually is less than their earnings from wages and salary before retirement. For instance, the ratio of benefits from Social Security to average lifetime earnings is usually much less than 1
to 1 . For workers who have earned relatively low wages over their career, the ratio is around one-half; for high-er-income workers, it is around one-quarter or less. As a consequence, once veterans reach retirement age, the combination of their VA disability payments and Social Security benefits may be more than the income of comparable veterans without a service-connected disability. In 2016, about 87 percent of veterans who received VA's disability compensation and who were age 67 or older were out of the labor market.

## Option

Under this option, VA would reduce disability compensation payments to veterans by 30 percent at age 67 for all veterans who begin receiving those benefits after January 2020. (Social Security's full retirement age varies depending on beneficiaries' birth year; this option uses age 67, which is the full retirement age for people born after 1959.) Social Security and pension benefits would be unaffected by this option. Veterans who are already collecting disability compensation as of January 2020 would see no reduction in their VA disability benefits when they reach age 67 .

## Effects on the Budget

By the Congressional Budget Office's estimates, the savings from this option would be about $\$ 11$ billion between 2020 and 2028. CBO estimates that the number of veterans age 67 and older who would no longer receive their full preretirement disability compensation from VA would increase from 60,000 in 2020 to about 470,000 in 2028. On average, veterans' benefit would be reduced by about $\$ 320$ per month in 2020, increasing to a reduction of $\$ 385$ per month in 2028.

The largest source of uncertainty in the estimate of savings over the next 10 years involves determining the number of new disability beneficiaries who will be 67 after January 2020. The number of veterans age

67 and older who receive disability compensation has increased in the past decade as Vietnam veterans have aged. CBO projects that the number of new recipients age 67 and older will decline in the coming years as the share of the veterans' population in that age group falls. However, the health of the veteran population also affects the number of older veterans on the rolls, as do outreach efforts by VA and others to inform veterans about the benefit and other factors.

## Other Effects

Because earnings from wages and salaries typically decline when people retire, this option would better align veterans' benefits with the loss in income after retirement that is typical of the general population.

An argument against this option is that it would reduce the support available to disabled veterans. If they had
been out of the workforce for a long time, their Social Security benefits might be small, and they might not have accumulated much personal savings. In addition, VA's disability payments may be considered compensation owed to veterans-particularly combat veteransbecause they faced special risks and became disabled in the course of their military service.

The reduction in VA's disability benefit could affect older veterans' participation in the labor force and the age at which they would begin claiming Social Security benefits. This option might induce some older veterans with disabilities to remain in the labor force longer or work more hours than they would have under the current system in order to preserve their income; some veterans, however, would not be able to maintain employment that would accommodate their disabilities as they age.

RELATED OPTION: Mandatory Spending, "End VA's Individual Unemployability Payments to Disabled Veterans at the Full Retirement Age for Social Security" (page 109)

RELATED CBO PUBLICATION: Veterans' Disability Compensation: Trends and Policy Options (August 2014), www.cbo.gov/ publication/45615

## Narrow Eligibility for VA's Disability Compensation by Excluding Veterans With Low Disability Ratings

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Provide disability compensation only for veterans with disability ratings of 30 percent or higher | 0 | -2.5 | -3.6 | -3.9 | -4.1 | -4.3 | -4.5 | -4.5 | -5.0 | -5.2 | -14.1 | -37.9 |
| Provide disability compensation only for new applicants with disability ratings of 30 percent or higher | 0 | -0.6 | -0.2 | -0.4 | -0.5 | -0.7 | -0.8 | -1.0 | -1.1 | -1.3 | -1.2 | -6.2 |

This option would take effect in January 2020.

## Background

In 2017, 4.5 million veterans with medical conditions or injuries that were incurred or that worsened during active-duty service received disability compensation from the Department of Veterans Affairs (VA). Such service-connected disabilities range widely in severity and type, from migraines and treatable hypertension to the loss of limbs. The base amount of compensation veterans receive depends on the severity of their disabilities, which are rated between zero and 100 percent in increments of 10 ; a 100 percent rating means that veterans are considered totally disabled and probably unable to support themselves financially. The most common rating is 10 percent. In 2018, base compensation rates generally ranged from about $\$ 140$ to $\$ 3,000$ per month. Additional compensation may be awarded based on the presence of dependents and other factors. The amount of compensation is intended to offset the average amount of income veterans lose as a result of the severity of their service-connected medical conditions or injuries.

## Option

Under this option's first alternative, VA would narrow eligibility for compensation to veterans with disability ratings of 30 percent or higher. The second alternative would impose the same limits on eligibility, but it would only affect new applicants for disability compensation.

## Effects on the Budget

By the Congressional Budget Office's estimates, the savings from the first alternative, in which current and future recipients would be ineligible for payments for disability ratings of less than 30 percent, would be
$\$ 38$ billion over the 2020-2028 period. In 2017, about 1.3 million veterans received compensation for a rating of less than 30 percent. Under current law, that number is projected to rise to 1.5 million in 2020 and then to 1.9 million by 2028. Under the first alternative, VA would discontinue compensation for those veterans.

Savings from the second alternative, in which VA would no longer make payments for future cases in which veterans' disability rating was less than 30 percent, would be $\$ 6$ billion between 2020 and 2028. The number of veterans who would no longer qualify for compensation under this alternative would be small at first but would rise to 500,000 by 2028 .

Additional savings would be possible if eligibility was further limited to veterans with disability ratings higher than 30 percent. However, the amount saved would not be proportional to the level of the disability rating, because neither payment amounts nor the beneficiary population increase at the same rate as their associated disability ratings.

The largest source of uncertainty in estimating the savings from this option is the future size of the population with disability ratings of less than 30 percent. CBO projects that number based on the number of veterans who received such disability ratings in the past, the growth of the overall disability compensation program, the mortality rate of veterans receiving disability compensation, and other factors.

## Other Effects

One argument for this change is that it would permit VA to concentrate spending on veterans with the greatest impairments. Furthermore, there may be less need than in the past to compensate veterans with milder impairments. Many civilian jobs now depend less on physical labor than was the case in 1917, when the disability-rating system was first devised; the rating system that is the basis for current payments has not undergone major revisions since 1945. In addition,
medical care and rehabilitation technologies have made great progress. Thus, a physical limitation rated below 30 percent might not substantively reduce a veteran's earning capability, because it would not preclude work in many modern occupations.

An argument against this option is that veterans' compensation could be viewed as a lifetime indemnification the federal government owes to people who become disabled to any degree during service in the armed forces.

RELATED OPTION: Mandatory Spending, "Narrow Eligibility for Veterans' Disability Compensation by Excluding Certain Disabilities Unrelated to Military Duties" (page 107)

## Use an Alternative Measure of Inflation to Index Social Security and Other Mandatory Programs

| Billions of Dollars | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | 2019-2019- |  |
|  |  |  |  |  |  |  |  |  |  |  | 2023 | 2028 |
| Change in Outlays |  |  |  |  |  |  |  |  |  |  |  |  |
| Social Security | 0 | -2.0 | -4.8 | -7.9 | -11.2 | -14.6 | -18.1 | -21.6 | -25.1 | -28.8 | -25.9 | -134.1 |
| Other benefit programs with COLAs ${ }^{\text {a }}$ | 0 | -0.5 | -1.3 | -2.2 | -2.9 | -3.4 | -4.4 | -5.2 | -6.1 | -7.2 | -6.9 | -33.3 |
| Effects on SNAP from interactions with COLA programs ${ }^{\text {b }}$ | 0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 2.2 |
| Health programs | 0 | -0.3 | -1.2 | -2.0 | -2.7 | -3.6 | -4.6 | -5.5 | -6.6 | -7.8 | -6.3 | -34.3 |
| Other federal spending ${ }^{\text {c }}$ | 0 | * | -0.1 | -0.2 | -0.2 | -0.3 | -0.4 | -0.5 | -0.6 | -0.8 | -0.5 | -3.2 |
| Total | 0 | -2.9 | -7.3 | -12.1 | -16.8 | -21.7 | -27.2 | -32.6 | -38.0 | -44.1 | -39.1 | -202.7 |
| Change in Revenues ${ }^{\text {d }}$ | 0 | * | * | * | * | * | * | * | * | * | -0.1 | -0.2 |
| Decrease (-) in the Deficit | 0 | -2.9 | -7.2 | -12.1 | -16.8 | -21.6 | -27.2 | -32.6 | -38.0 | -44.0 | -39.1 | -202.4 |

Sources: Congressional Budget Office; staff of the Joint Committee on Taxation.
This option would take effect in January 2020.
COLA = cost-of-living adjustment; SNAP = Supplemental Nutrition Assistance Program; * = between - $\$ 50$ million and $\$ 50$ million.
a. Other benefit programs with COLAs include civil service retirement, military retirement, Supplemental Security Income, veterans' pensions and compensation, and other retirement programs whose COLAs are linked directly to those for Social Security or civil service retirement.
b. The policy change would reduce payments from other federal programs to people who also receive benefits from SNAP. Because SNAP benefits are based on a formula that considers such income, a decrease in those other payments would lead to an increase in SNAP benefits.
c. Other federal spending includes changes to benefits and various aspects (eligibility thresholds, funding levels, and payment rates, for instance) of other federal programs, such as those providing Pell grants and student loans, SNAP, child nutrition programs, and programs (other than health programs) linked to the federal poverty guidelines. (The changes in spending on SNAP included here are those besides the changes in benefits that result from interactions with COLA programs.)
d. The effects on revenues reflect the reduction in marketplace subsidies for health insurance premiums and slightly higher enrollment in employmentbased coverage under the option.

## Background

Cost-of-living adjustments for Social Security (COLAs) and many other parameters of federal programs are indexed to increases in traditional measures of the consumer price index (CPI). The CPI measures overall inflation and is calculated by the Bureau of Labor Statistics (BLS). In addition to the traditional measures of the CPI, that agency computes another measure of inflation-the chained CPI-designed to account for changes in spending patterns and to eliminate several types of statistical biases that exist in the traditional CPI measures. (Nonetheless, the chained CPI does not resolve all statistical issues with traditional CPI measures.) Under current law, beginning in 2018, the chained CPI
would be used for indexing most parameters of the tax system, including the individual income tax brackets.

## Option

Beginning in 2020, this option would use the chained CPI for indexing COLAs for Social Security and for indexing parameters of other programs. The chained CPI has grown an average of about 0.25 percentage points more slowly per year since 2001 than the traditional CPI measures have, and the Congressional Budget Office expects that gap to persist. Therefore, the option would reduce federal spending, and savings would grow each year as the effects of the change compounded.

## Effects on the Budget

Outlays would be reduced by $\$ 203$ billion through 2028, CBO estimates, and the net effect on the deficit would be about the same. The budgetary effects of this option would stem from a reduction in the average benefits that eligible people receive through a number of federal programs, and, to a lesser extent, from a reduction in eligibility for certain programs. (The small revenue effects estimated here are the net result of two largely offsetting factors. First, the option would reduce marketplace subsidies for health insurance premiums. Because those subsidies are structured as refundable tax credits, a portion of the reduction in subsidies translates into higher tax liabilities for recipients, meaning higher revenues. Second, slightly higher enrollment in employment-based coverage under the option would mean that a larger share of compensation would be made in the form of nontaxable health benefits, which would result in less taxable compensation for employees, and, therefore, less revenues.)

The CPI affects COLAs for Social Security and the pensions that the government pays to retired federal civilian employees and military personnel, as well as veterans' pensions and veterans' disability compensation. In most of those programs, the policy change would not alter benefits when people are first eligible to receive them, either now or in the future, but it would reduce their benefits in later years because the annual COLAs would be smaller, on average. The effect would be greater the longer people received benefits (that is, the more years of reduced COLAs they experienced). Therefore, the effect would ultimately be especially large for the oldest beneficiaries as well as for some disabled beneficiaries and military retirees, who generally become eligible for annuities before age 62 and thus can receive COLAs for a longer period.

To obtain the estimates for the effects of the option on COLAs, CBO reduced payments for beneficiaries after the first year of receipt by the difference between the traditional CPI and the chained CPI in each year. For example, in the case of COLAs for Social Security, CBO estimates that about 63 million people would be affected by the benefit reductions in 2020, experiencing an average benefit reduction of about 0.25 percent relative to current law. By 2028, the average reduction in monthly benefits for those people is projected to be 2.2 percent relative to current law.

By affecting program parameters, growth in the CPI also affects spending for Supplemental Security Income, Medicare, Medicaid, the health insurance marketplaces established under the Affordable Care Act, Pell grants, student loans, the Supplemental Nutrition Assistance Program (SNAP), child nutrition programs, and other programs. The index is used to calculate various eligibility thresholds, payment rates, and other factors that could affect the number of people eligible for those programs and the benefits people receive. For some programs, such as Medicaid, budgetary savings stem from the reduction in the number of people eligible for those programs and from the reduction in the average federal spending on each eligible person. For other programs, such as Medicare, savings from this option stem largely from reductions in the updates to prices that the federal government would pay.

For SNAP, the option would lead to higher spending as a result of two opposing effects. On the one hand, the policy change would lead to a reduction in SNAP benefits. The amount of those benefits is based on beneficiaries' total income minus allowable deductions, such as costs associated with housing and child care, and the value of some of those deductions in each year is linked to the CPI. Lower deductions would lead to lower SNAP benefits. On the other hand, a reduction in payments from other federal programs as a result of the option would reduce beneficiaries' income, leading to higher SNAP benefits. Because that second effect is larger, the option would increase SNAP benefits, on net.

The uncertainty in the estimate of budgetary savings from this option stems from differences between the projected traditional CPI and chained CPI. Historically, that gap has varied widely. For example, in calendar year 2005, the chained CPI growth was 0.51 percentage points slower than the CPI for all urban consumers, and in calendar year 2008, growth was 0.12 percentage points faster.

## Other Effects

One argument for switching to the chained CPI in Social Security and other federal programs is that the chained CPI is generally viewed as a more accurate measure of overall inflation than the traditional CPI measures, for two main reasons. First, the chained CPI more fully accounts for how people tend to respond to price changes. Consumers often lessen the effect of inflation on their standard of living by buying fewer
goods or services that have risen in price and by buying more goods or services that have not risen in price or have risen less. Measures of inflation that do not account for such substitution overstate growth in the cost of living-a problem known as substitution bias. BLS's procedures for calculating the traditional CPI measures account for some types of substitution, but the chained CPI more fully incorporates the effects of changing buying patterns.

A second reason to believe that the chained CPI is a better measure of inflation is that it is largely free of a problem known as small-sample bias. That bias, which is significant in the traditional CPI measures, occurs when certain statistical methods are applied to price data for only a limited number of items in the economy.

One argument against using the chained CPI, and thereby reducing COLAs in Social Security and other federal retirement programs, is that the chained CPI might not accurately measure the growth in prices that Social Security beneficiaries and other retirees face. The elderly tend to spend a larger percentage of their income on items whose prices can rise especially quickly, such as health care. (However, determining how rising health care prices affect the cost of living is problematic because accurately accounting for changes in the quality of health care is challenging.) The possibility that the cost
of living may grow faster for the elderly than for the rest of the population is of particular concern because Social Security and pension benefits are the main source of income for many retirees.

Another argument against this option is that a reduction in COLAs would ultimately have larger effects on the oldest beneficiaries and on the disabled beneficiaries who received benefits for a longer period. For example, if benefits were adjusted every year by 0.25 percentage points less than the increase in the traditional CPI measures, Social Security beneficiaries who claimed benefits at age 62 would face a reduction in retirement benefits at age 75 of about 3 percent compared with what they would receive under current law, and a reduction at age 95 of about 8 percent. To protect vulnerable people, lawmakers might choose to reduce COLAs only for beneficiaries whose income or benefits were greater than specified amounts. Doing so, however, would reduce the budgetary savings from the option.

Finally, policymakers might prefer to maintain current law because they want benefits to grow faster than the cost of living so that beneficiaries would share in overall economic growth. An alternative approach would be to link benefits to wages or gross domestic product. Because those measures generally grow faster than inflation, such a change would increase outlays.

RELATED CBO PUBLICATIONS: Testimony of Jeffrey Kling, Associate Director for Economic Analysis, before the Subcommittee on Social Security, Committee on Ways and Means, U.S. House of Representatives, Using the Chained CPI to Index Social Security, Other Federal Programs, and the Tax Code for Inflation (April 18, 2013), www.cbo.gov/publication/44083; Using a Different Measure of Inflation for Indexing Federal Programs and the Tax Code (February 2010), www.cbo.gov/publication/21228


[^0]:    1. Unlike revenues, which the government collects through exercising its sovereign powers (for example, in levying income taxes), offsetting collections and receipts are generally collected from other government accounts or from members of the public through businesslike transactions (for example, in assessing Medicare premiums or rental payments and royalties for extracting oil or gas from public lands).
    2. Tax credits reduce a taxpayer's overall tax liability (the amount owed), and when a refundable credit exceeds the liability apart from the credit, the excess may be refunded to the taxpayer; that refund is recorded in the budget as an outlay.
[^1]:    3. CBO's projections of mandatory spending underlie the projections in Congressional Budget Office, An Analysis of the President's 2019 Budget (May 2018, revised August 2018), www. cbo.gov/publication/53884.
[^2]:    4. For information on that baseline, see Congressional Budget Office, An Analysis of the President's 2019 Budget (May 2018), www.cbo.gov/publication/53884.
[^3]:    5. See Congressional Budget Office, A Premium Support System for Medicare: Updated Analysis of Illustrative Options (October 2017), www.cbo.gov/publication/53077.
