Sang Chi and Misha Segal contributed substantially to this project, helping to develop the basic model and producing the tables and charts contained herein.

Support for this research was provided by The Commonwealth Fund. The views presented here are those of the author and should not be attributed to the Urban Institute or its trustees, or to The Commonwealth Fund or its directors, officers, or staff.
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EXECUTIVE SUMMARY

Early in the next century, the Medicare program must be revamped to respond to financing problems related to the aging of the baby boomers and climbing health care costs. Searching for ways to reduce growth in future taxpayers’ contributions to keep Medicare operating, many policymakers have argued for major structural reforms that combine attempts to slow health care spending with changes in the federal government’s financing obligations. This paper, the second in a series on Medicare reform, looks at two major restructuring options: defined contribution and premium support.

Defined contribution options would increase the predictability of the government’s financial obligation by tying per capita payment for beneficiaries to a set rate of growth—often keyed to a major indicator like the consumer price index (CPI) or gross domestic product (GDP). That amount would then be given to beneficiaries in voucher form to help pay for a private plan. Premium-support options would also stress private plans, but would tie the government’s obligation to some percentage of the average premium charged by private plans serving Medicare beneficiaries. Premium-support options also would replace Medicare as we know it today, although traditional (fee-for-service) Medicare might remain one of the plans vying to serve the beneficiary population.

These two options could be similar—or quite different—depending on the specific details. In theory, at least, one distinguishing feature is whether beneficiaries bear the full risks of rising health care costs (in a defined contribution framework) or whether the government shares some of that risk (under premium support). In practice, though, even this distinction may be blurry. For example, if premium-support levels are established using the lowest-priced plans as a base, that option (like defined contribution) would shift the risks of higher costs to beneficiaries.

Both restructuring schemes share a common feature, namely that competition among private plans will hold down cost increases better than the traditional Medicare program can. Such claims are only theoretical, however. To achieve savings without shifting major cost burdens to beneficiaries, either option must successfully moderate spending growth. Even then, the premium variation associated with new plans might be problematic, placing the more vulnerable beneficiaries at risk.

DEFINED CONTRIBUTION OPTION
The defined contribution approach modeled here is limited to certain basic assumptions. In our simulations, per capita amounts for the vouchers are tied to the total and per capita growth in GDP (where per capita refers to the entire U.S. population). Using the first growth rate, Medicare would expand as a share of GDP in response to growth in the number of beneficiaries participating in Medicare. The per capita GDP growth rate is the more stringent of the two. The impact on beneficiaries is the higher premiums they would face if the voucher did not grow fast
enough to cover increases in the costs of covered services over time. This “defined contribution gap” might be lower if health care costs increased more slowly because of the competition engendered by program restructuring. In that case, the gap would be the difference between the voucher amount and the new, lower rate of per capita spending for basic Medicare services. Estimates of the defined contribution gap modeled here assume both no change in health spending and reduced expenditures (per capita spending 0.5 percent lower each year).

The defined contribution approach places Medicare beneficiaries at risk. Under the stringent per capita GDP growth limit, the taxpayer share of Medicare in 2025 could be reduced by nearly 20 percent compared with the baseline figure (from 4.62 percent of GDP to 3.71 percent. Even if health care spending slowed, however, beneficiary liability would rise by $889 due to the addition of the defined contribution gap. Supporters of this approach suggest that baseline growth might slow, reducing the amount beneficiaries would have to pay (Table ES-1).

<table>
<thead>
<tr>
<th>Table ES-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects of Defined Contribution Options on Medicare and Its Beneficiaries, 2025</td>
</tr>
<tr>
<td>Growth Rate Limits on Contribution</td>
</tr>
<tr>
<td>Medicare Taxpayer Share as a Percentage of GDP</td>
</tr>
<tr>
<td>Baseline</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>4.62%</td>
</tr>
<tr>
<td>Per Capita Defined Contribution Gap</td>
</tr>
<tr>
<td>Assuming No Change in Spending</td>
</tr>
<tr>
<td>—</td>
</tr>
<tr>
<td>Assuming Spending Reduction</td>
</tr>
<tr>
<td>—</td>
</tr>
<tr>
<td>Projected Out-of-Pocket Costs as a Share of Income</td>
</tr>
<tr>
<td>Assuming No Change in Spending</td>
</tr>
<tr>
<td>28.6%</td>
</tr>
<tr>
<td>Assuming Spending Reduction</td>
</tr>
<tr>
<td>—</td>
</tr>
</tbody>
</table>

Source: Urban Institute analysis.

Moreover, if health care spending did not moderate by 2025, beneficiaries would be hit with a 65 percent increase in liability, from $3,074 to $5,085. Per capita out-of-pocket costs for acute-care services would rise from $4,855, the projected baseline amount, to as much as $6,866—a 41 percent increase (Charts ES-1 and ES-2). At that point, beneficiaries would be liable for more than one-third of the costs of Medicare spending.

* Beneficiary liability refers to the level of premiums and cost-sharing under Medicare.
PREMIUM-SUPPORT OPTION

The premium-support approach would likely achieve more modest savings and put beneficiaries less at risk than would a defined contribution approach. The basic idea behind premium support is that the government would pay a share of the premium costs charged by plans that participate in Medicare. As with the Federal Employees Health Benefits Program, this option would offer beneficiaries a range of plans but have them pay higher premiums for...
costlier plans. The details matter a great deal, though, because they help determine not only how much protection beneficiaries actually have, but also how those benefits are distributed. For example, setting Medicare’s contribution based on the lowest bidder would likely mean that most beneficiaries would have to pay higher premiums than implied by their share of the low-cost plan. If the guarantee were set at a premium level that few could secure, the premium-support approach would begin to look more like a defined contribution option. By contrast, tying the guarantee to a median-priced plan would provide beneficiaries with greater protections. Even in this case, however, there would likely be substantial variation in the costs of the plans and in what benefits beneficiaries would receive.

Two levels of premium support are estimated here: One would require a 15 percent contribution from beneficiaries, and the other, 20 percent. This would replace the Part B premium, which under current law is expected to reach nearly 14 percent of the total costs of Medicare. Since this analysis focuses on just one typical beneficiary, the simulation of premium support looks essentially like a straight premium increase.

Under this option, potential savings to the federal government depend on two variables: the level of the premium beneficiaries must pay, and whether there is a decline in the rate of health care spending over time. Since beneficiaries and the government would share the risks of health care spending, both would feel the effects if spending fell. For example, if beneficiaries were required to pay 20 percent of the median-priced plan, by 2025 the taxpayer share of GDP would drop to 4.45 percent from its baseline projection of 4.62 (Table ES-2). On the other hand, if growth in health care spending dropped by the same percentages assumed for the defined contribution approach, the taxpayer share of GDP would decline farther, to 3.98 percent by 2025.

**Table ES-2**

<table>
<thead>
<tr>
<th>Assumptions about Health Care Costs</th>
<th>Baseline</th>
<th>No Reduction</th>
<th>Reduction in Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare Taxpayer Share as a Percentage of GDP</td>
<td>4.62%</td>
<td>4.45%</td>
<td>3.98%</td>
</tr>
<tr>
<td>Increase in Beneficiary Liability for Person in Median-Priced Plan</td>
<td>—</td>
<td>$648</td>
<td>$433</td>
</tr>
<tr>
<td>Increase in Beneficiary Liability for Person in Traditional Medicare</td>
<td>—</td>
<td>$648</td>
<td>$1,657</td>
</tr>
<tr>
<td>Projected Out-of-Pocket Costs for Beneficiary in Traditional Medicare as a Share of Income</td>
<td>28.6%</td>
<td>33.3%</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

Source: Urban Institute analysis.

The impact on beneficiaries from premium-support options would depend upon how much variation would arise in premiums and which plan beneficiaries chose. For example, if
the dollar contribution rate is derived from the median-priced plan, but not all plans (including traditional Medicare) can hold the line on spending growth, many beneficiaries might face premiums over time that are substantially larger than the increases implied by looking at the median-priced plan. In the example here, for instance, by 2025 the premium for a high-cost plan could rise by as much as $1,657 in real (inflation-adjusted) terms, compared with an increase of $433 for the average-priced plan. This indicates the variation that would exist in what beneficiaries would have to pay (in addition to the $3,074 baseline contribution). These differences would carry over to the full out-of-pocket costs that individuals would pay: for the typical beneficiary, costs would rise from $4,855 to as much as $6,512, or 39.4 percent of income (Charts ES-3 and ES-4).

![Chart ES-3](chart-es3.png)

**Chart ES-3**
Projected Out-of-Pocket Costs for Typical Medicare Beneficiary in Traditional Medicare Under Premium-Support Options, 2025

- Baseline Projection: $4,855
- No Cost Advantage for Private Plans: $4,992
- 0.5% Reduction for Private Plans: $5,503
- Set Premium at 15% of Median-Priced Plan: $6,054
- Set Premium at 20% of Median-Priced Plan: $6,512

Source: Urban Institute analysis.
CONCLUSION

While restructuring options could reduce federal spending on Medicare over time, they also could boost beneficiary liabilities substantially. These results hold even if restructuring slows the rate of growth in health care spending. Further, the impact of higher cost burdens will vary across beneficiaries, depending on which plans are available to them or which ones they chose. The key question—whether this type of restructuring is necessary or desirable—can be answered only after a broader range of reform options is explored.
RESTRUCTURING MEDICARE: IMPACTS ON BENEFICIARIES

As the next century nears and baby boomers begin to approach retirement, the Medicare program, which serves the elderly and disabled, will need to be revamped. Various proposals to help solve Medicare’s future financing problems are being debated, ranging from major restructuring efforts to minor adjustments. This debate needs to move beyond rhetoric to study the implications and trade-offs associated with these options. Each one will have different consequences in terms of savings generated and effects on beneficiaries. Since much of the concern about Medicare centers on what will happen after the baby-boom generation becomes eligible, these consequences should be examined over time.

The first in this series of papers on Medicare’s future projected Medicare spending and beneficiary out-of-pocket costs, assuming that Medicare would continue under current law.\(^1\) Like the first paper, this one looks at how the various options now on the table will affect beneficiaries—a consequence that sometimes gets lost in discussions about potential savings to the federal government. It examines the effects of two major approaches to restructuring Medicare: defined contribution and premium-support options.

THE BASIC APPROACHES: AN OVERVIEW

Under a defined contribution approach, instead of offering a guaranteed insurance benefit for beneficiaries, Medicare would pay a fixed amount toward the cost of health insurance. This approach would replace both the traditional (fee-for-service) Medicare program and the new Medicare+Choice option. In its purest form, the contribution would not necessarily reflect the cost of the insurance; rather, it would be in the form of a voucher tied to some target level of Medicare spending. While the voucher amount could vary considerably across proposals, essentially the goal is the same: to shift the risks of higher health care spending from the federal government to beneficiaries.

By contrast, a premium-support approach would shift only some of these financing risks to beneficiaries.\(^2\) Here the idea is that both the government and the beneficiary would share the costs of insurance in ways designed to make individuals more responsible for the costs of their own care. As with a defined contribution approach, beneficiaries would be made more aware of the costs of various types of insurance plans in which they could choose to enroll. However, under a premium-support approach, the government contribution is more closely linked to the actual costs of care. The linkage implicitly allows for more controls over the system compared with a defined contribution approach. In that sense, the premium-support option is a more intermediate step between a defined contribution option and the current program. How close it is to either depends on design details.

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1 See Marilyn Moon, “Growth in Medicare Spending: What Will Beneficiaries Pay?,” for a description of the issues surrounding these projections and the basic sets of assumptions.
Central to both these options is variation in the premiums that beneficiaries pay. Under the current system, beneficiaries are guaranteed the basic insurance package for the Part B premium and any required cost-sharing. If they enroll in one of the private plan options available under Medicare, most plans are required to meet or exceed the same standard: that is, managed care plans and most of the new private plans under Medicare+Choice can charge a premium only for services beyond the basic Medicare package. That is the nature of a “defined benefit.”

Under both restructuring approaches, variation in premiums is not only allowed, it is an intended goal. In other words, if beneficiaries are liable for at least part of any insurance costs higher than those of the average plan, they will have incentives to seek lower-cost plans. Though plans can charge different premiums, this option explicitly penalizes beneficiaries who choose higher-cost plans, thus encouraging them to select less costly ones (often, presumably, managed care). Indeed, this is one rationale for claiming savings under these plans.

Individual premium payments are generally assumed to be higher under a defined contribution approach than under a premium-support approach. Under a defined contribution (voucher) scheme, the federal contribution is usually a fixed amount unrelated to the costs of care. Therefore, it is possible that all plans would charge beneficiaries an amount well in excess of the level of the Part B premium (even after adjusting for its projected growth under current law). A very tight limit on growth in the dollar amount of the government’s contribution over time likely would lead to such a result if, for example, health care spending grew substantially faster than the voucher amount. Further, if the voucher approach placed few controls on plan behavior, the costs of insurance policies offered to Medicare beneficiaries probably would vary considerably.

Premium-support options usually are described in terms of a contribution tied to a fixed percentage of the overall insurance premium, either set by the federal government or derived through negotiated rate setting or competitive bidding. Under a premium-support option that allows for multiple premiums, the amount guaranteed by the federal government could be tied, for example, to a percentage of the median plan’s premium or to that of the lowest-cost plan. If the contribution were set as a percentage of the median plan’s premium, people choosing lower-cost plans would pay a lower premium because the amount of the federal contribution would actually cover a larger percentage of the costs of that plan.

Alternatively, premium percentages could be set so that they vary across high- and low-cost plans. An early version of this model from the Bipartisan Commission on the Future of Medicare, for example, gradually reduced the federal government’s percentage as the premium.

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3 The exception is the private fee-for-service option that was explicitly exempted from this requirement and touted in the conference report on the Balanced Budget Act as the first step toward a defined contribution model. See Federal Register, July 29, 1997, p. H6177.
levels rose. Over time, if the government’s share stays constant, beneficiaries are better shielded against high health care costs than they would be under the defined contribution approach. That is, the share would remain constant under premium support, but could decline over time with the defined contribution option. However, policymakers could gradually reduce the percentage as a way to create additional savings for the federal government.

MODELING THE OPTIONS

Both of these options seek to reduce Medicare’s per capita costs, which are projected to grow over time due to higher prices of goods and services as measured by the consumer price index (CPI) and a combination of changes in the age distribution of the covered population, new technology, and medical care price growth above CPI (Chart 1). This baseline projection, from the Medicare Trustees’ report of 1998, shows a decline in growth net of the CPI toward the end of the period studied.

4 This model would, however, allow the dollar contributions from the federal government to rise with the premium price, potentially resulting in greater federal subsidies for those who could afford higher-priced plans and thereby reducing the progressivity of the Medicare benefit. See National Bipartisan Commission on the Future of Medicare, “Preliminary Staff Estimate: FEHB-Style System in Medicare,” November 11, 1998, memo, for details of this option.

5 Aaron and Reischauer, 1995.

6 Board of Trustees of the Federal Hospital Insurance Trust Fund, 1998 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund, Washington, D.C.: U.S. Government Printing Office, 1998. The Medicare Trustees’ intermediate projections assume that, over time, the rate of growth of per capita Medicare expenditures will gradually decline until it ultimately approaches the rate of GDP growth. A second baseline adopted by the National Bipartisan Commission on the Future of Medicare assumes instead that Medicare per capita spending will not slow over time but will continue to grow at rates experienced in recent years. All other factors are held constant.
These growth rates result in projected real (inflation-adjusted) per capita Medicare costs, which rise from $6,862 in 1998 to $11,910 in 2025. These costs can be divided into the federal government’s taxpayer share and beneficiary liability (Chart 2). Our measure of beneficiary liability captures what individuals must pay, on average, to participate in the program. Medicare requires payment of a Part B premium and cost-sharing contributions. In 2025, the taxpayers’ projected share is $8,836 per capita, while the beneficiary’s projected liability is $3,074.

Potential savings for Medicare from both these restructuring approaches could come from three sources: shifts in costs to beneficiaries due to the government’s contribution, changes in beneficiary behavior associated with greater numbers of people switching to lower-cost plans, and reductions in premium prices owing to more aggressive competition among private plans. The shifting of costs to beneficiaries is the easiest source of savings to model and predict. For each of the approaches, we consider a number of different levels of public commitment.

The claim for savings from changes in beneficiaries’ behavior is based on theoretical arguments about competition that have not been tested for this population group and for which there is only limited evidence. Thus, this is a more difficult estimate of savings to model. There is no strong evidence showing that private insurance has achieved lower costs over time when compared with Medicare. Indeed, most of the evidence cited favoring the private insurance
market is based on experience during the 1990s. In fact, across a longer time span, Medicare per capita spending has grown slower, cumulatively, than private sector spending.\(^7\)

A stronger candidate for making comparisons with Medicare is the Federal Employees Health Benefits Program (FEHBP). Over little more than a decade, FEHBP has had lower average rates of spending growth than Medicare.\(^8\) Because different population groups and benefit packages are being compared, however, a more detailed analysis would be needed before concluding that a system similar to FEHBP would generate comparable savings for Medicare. For example, one rationale for arguing that FEHBP is more efficient than Medicare is that it encourages individuals to shift to less expensive managed care arrangements. Yet ironically, at present both FEHBP and Medicare have about the same share of enrollees in managed care. Moreover, only 2 percent of FEHBP retirees shift coverage in any year. Many of these retirees are in plans that experts have criticized as undesirable—that is, the costs of the high-option plans are extraordinarily high not because of differences in benefits but because of the poor health status of enrollees.\(^9\) This “adverse risk selection” is another concern related to reliance on private plans. At best, modest savings might be achieved from making Medicare more like FEHBP.

Proponents of greater reliance on private plans also argue that insurers that would offer to cover Medicare beneficiaries would respond to these lower contribution rates by competing more aggressively on price. Doing so, they say, would lower beneficiaries’ cost burden. Advocates argue that in areas where multiple insurers offer coverage under Medicare, fear of losing business might motivate them to hold the line on health care costs. On the other hand, if insurers find competing in the Medicare market too difficult, they might instead target the under-65 population. In that case, insurers might decline to compete on price for a greater share of Medicare business. Indeed, the HMO industry’s negative response to even modest limits on Medicare payments over the past two years in response to Balanced Budget Act (BBA) changes suggests less pricing flexibility than advocates of managed care have claimed.

In practice, the specific details of any option will greatly influence what, if any, savings actually occur. For example, will traditional Medicare be retained as an option and, if so, how much would the federal government contribute? (This issue is more likely to arise under premium support, since many defined contribution plans would do away with traditional Medicare.) Unless traditional Medicare becomes too costly, most beneficiaries will probably continue to choose it for the foreseeable future. In that case, savings attributed to lower overall spending would depend largely on whether traditional Medicare is modified to achieve

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\(^{9}\) William Smith, presentation at Alliance for Health Reform, November 30, 1998.
savings.\textsuperscript{10} If Medicare is not retained as the “default” option, will some other plan serve that role? If so, will special protections be offered for those with health problems, since traditional Medicare is likely to attract an above-average share of high-risk patients?\textsuperscript{11}

Thus, it is hard to argue conclusively that these options would lead to substantial savings besides those from cost-shifting to beneficiaries. For both defined contribution and premium-support options, we assume one set of costs to the government and beneficiaries derived from cost-shifting only, and another set derived from reductions in Medicare per capita spending in response to the policy change.

For both restructuring options, we assume that any new system would be in place by 2002, when most current BBA changes expire. For simplicity, we assume immediate full implementation of rules affecting how voucher rates and premium-support levels are established.

Several important issues related to these proposals are beyond the scope of this analysis and will be modeled in later studies. If some beneficiaries do shift into lower-cost plans, for instance, identifying who stays in higher-cost plans—and in effect pays a penalty for doing so—will be important. If, as in Medicare’s current managed care option, older and sicker beneficiaries are reluctant to switch plans, they might be the ones left in traditional Medicare or in plans whose costs rise rapidly. Should that trend persist, the market mechanism will work to the disadvantage of the most vulnerable.\textsuperscript{12} Cost-shifting to beneficiaries will play a critical role in determining likely winners and losers under these approaches.\textsuperscript{13}

Another factor to be modeled later is the generosity of Medicare’s benefit package. Many approaches for restructuring Medicare, including the premium-support option, have assumed an expansion of the basic benefit package. That may be critical for issues of risk selection and whether managed care plans can remain competitive if fee-for-service options offer many of the same benefits. Further, since beneficiaries may incur higher premiums for a richer benefit package, considering how low-income beneficiaries will be protected is essential.

\textbf{DEFINED CONTRIBUTION OPTIONS}

\textsuperscript{10} For example, some of the savings from payment reforms and lower payment levels included in the BBA could be extended to obtain substantial savings.

\textsuperscript{11} One answer often given is that the risk adjustment mechanisms used to balance Medicare’s payments to private plans will be improved. At this time, however, there are no ideal risk adjusters that could fully offset a substantial concentration of high-risk patients in one plan.

\textsuperscript{12} This situation is analogous to that of the high-option Blue Cross plan in FEHBP where, despite very high premiums, many retirees are reluctant to risk moving to another plan. For more discussion of related issues, see Marilyn Moon, “Will the Care Be There? Vulnerable Beneficiaries and Medicare Reform,” \textit{Health Affairs} 18(January/February 1999):107–17.

\textsuperscript{13} Later analysis will allow us to look at a range of cases and hence to focus on this variability. To keep the model as simple as possible, we include two simple potential cases: one where the individual chooses to remain in traditional Medicare, and one where the individual participates in an average-priced plan.
A defined contribution approach can be designed in many ways. The practical details—whether traditional Medicare would remain in place, what benefits would be offered or required, and what geographic variations would be allowed—are crucial questions that must be addressed in evaluating any proposal. Nonetheless, some implications of this approach can be explored by focusing on the basic principle of restricting the government’s contribution to the costs of a health insurance package. The model used illustrates the size of the impacts under various options. Of necessity, it is limited to certain basic assumptions.

A key to savings under this option is the mechanism used to establish the annual rates of growth allowed for the vouchers. In turn, this mechanism will affect beneficiaries to the extent that it shifts costs to them by raising premiums or increasing out-of-pocket spending. To bound the estimates on beneficiary burdens, we assume a worst-case scenario in which beneficiaries bear the full costs of the difference between the limited federal contribution and the projected costs of providing Medicare services. A lower-bound estimate of beneficiary burdens assumes that only part of that “gap” is passed on to beneficiaries because of greater efficiency in the provision of health care over time.14

Under a defined contribution option, lower growth rates in health care costs would reduce the “premium gap”—the difference between the fixed federal contribution and what beneficiaries would have to pay. Thus, if the federal contribution grew slower than the cost of insurance, the premium would increase over time, shifting the cost burden from the government to beneficiaries.15

Assigning Growth Rates for the Voucher
Various growth rate targets for the per capita voucher amount were considered. Some proposals have suggested using the CPI. A rate above the CPI would ensure positive real growth in the federal government’s contribution. A growth rate of CPI+1, for example, would allow the voucher to grow annually at one percentage point above the CPI. The justification for a rate higher than the CPI is that health care prices rise faster than prices for other goods and services, and that new technologies dictate that real spending will likely increase over time. Nonetheless, CPI+1 would still achieve substantial savings in the long term, since the baseline projections for annual per capita spending average just over 2 percent above the CPI between 2002 and 2025 (Chart 1).

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14 This is a relatively modest figure in part because the Medicare baseline being used for this analysis assumes a slowdown in the rate of growth of health care spending after 2010. If we were using the higher, “no slowdown” Bipartisan Commission baseline, a larger assumption about the ability to obtain savings might be in order.
15 On the other hand, if, in practice, growth in insurance costs fell to a rate more in line with the federal contribution, the government would likely be more successful in maintaining low growth rates for the voucher payments. For purposes of this analysis, however, the impact of lower spending affects only costs to beneficiaries.
An alternative—and more frequently proposed approach—is to tie spending to GDP or a related measure. Many proponents of a defined contribution scheme see this as a way to link Medicare expenditures to society’s ability to absorb new health care spending. At its most stringent, the government’s contribution could be set so that it remains at a constant share of GDP. This is equivalent to setting the per capita growth rate of the voucher to growth in GDP divided by the projected Medicare enrollee population. That is, GDP growth would have to absorb increases in the number of enrollees as baby boomers become eligible for Medicare, before allowing any rise in spending on a per capita basis. The difficulty is that this limit would lead to a real decline in the government’s contribution for premiums: In inflation-adjusted dollars, the amount would fall from $5,649 per capita in 2002 to $4,629 in 2025—an 18 percent drop. Although this approach is simulated, it is treated here as illustrative rather than as a serious option.

More likely would be less restrictive—but more realistic—limits still linked to GDP growth and designed to achieve savings. This analysis looks at two alternatives: one tying the defined contribution to aggregate GDP growth, the other linking it to per capita GDP growth. The first alternative constrains the federal contribution so that it rises as a share of GDP only in response to growth in the Medicare beneficiary population; per capita contributions would not be allowed to outpace growth in the economy. This is not a very stringent limitation relative to projected rates of growth in Medicare spending. Nonetheless, it is logical that Medicare expenditures be allowed to grow as a share of the economy given that Medicare will serve an ever-larger percentage of the U.S. population. The second alternative, based on per capita GDP growth, would keep Medicare spending per enrollee from rising any faster than the growth in the GDP after controlling for general population increases. Per capita GDP growth is essentially a measure of what we are producing, on average, for each U.S. citizen. In that sense, it is a measure of average individual worth at any point in time. Although this is a more stringent limit on Medicare spending than the overall rate of GDP growth, it is not as restrictive as the option that freezes the share of GDP that Medicare is allowed to consume.

The potential impact of these defined contribution options on Medicare’s growth as a share of GDP are shown in Chart 3. The top line—the projected trend assuming no change in policy—is referred to as the baseline taxpayer share, because it nets out the premiums that beneficiaries now pay for Part B. The remaining amount is the federal contribution required each year to cover expenditures under both Parts A and B. Over time, with no change in policy, the taxpayer share would rise to 4.62 percent of GDP by 2025 from 2.45 percent in 1998. The bottom line reflects an alternative that keeps Medicare’s share of GDP constant after 2002; that is, it allows per capita spending to grow only by what is available after netting out the effects of growth in the beneficiary population. The other two options, GDP growth and per capita GDP growth, would limit taxpayer share to 4.35 percent and 3.71 percent, respectively,
in 2025.\textsuperscript{17} The first of these effectively indicates what Medicare’s share of GDP would have to be if Medicare were allowed to rise as a share of GDP as the number of enrollees grows.

**Chart 3**

Growth in Medicare’s Taxpayer Share of GDP Under Alternative Defined Contribution Growth Rates

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<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>GDP Growth</td>
<td>0.0%</td>
<td>0.5%</td>
<td>1.0%</td>
<td>1.5%</td>
<td>2.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Per Capita GDP Growth</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Constant GDP Growth</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

Source: Urban Institute analysis.

**Impacts on Beneficiaries from Defined Contribution Approaches**

The greater the savings to the federal government from a defined contribution approach, the potentially greater the costs that are passed onto beneficiaries. This relationship is evident when comparing the figures in Charts 4 and 5, which illustrate the full gap that would exist if total Medicare expenditures remained at their baseline projections but the federal contribution were limited to one of the two growth-rate assumptions shown in Chart 3. The less restrictive approach, which limits the voucher amount to the rate of aggregate GDP growth, would result in an $835 increase in beneficiary liability by 2025 (in 1998 dollars) (Chart 4). If the voucher were limited to per capita GDP growth, beneficiaries’ additional liabilities would soar to $2,011—a 65 percent increase compared with the baseline level of $3,074 (Chart 5). The total spending amounts remain the same as the baseline; there is merely a shift in who pays from the federal government to beneficiaries.

**Chart 4**

Per Capita Spending on Medicare in 1998 Dollars, Showing Taxpayer Share, Original Beneficiary Liability Amounts, and New Liability Amounts Assuming GDP Growth Alternative

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>2005</th>
<th>2015</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Liability</td>
<td>$6,862</td>
<td>$8,212</td>
<td>$10,639</td>
<td>$11,910</td>
</tr>
<tr>
<td>Original Beneficiary Liability</td>
<td>$1,472</td>
<td>$1,922</td>
<td>$2,733</td>
<td>$3,074</td>
</tr>
<tr>
<td>Taxpayer Share</td>
<td>$5,390</td>
<td>$6,065</td>
<td>$7,115</td>
<td>$8,001</td>
</tr>
</tbody>
</table>

16 The individual premium is indexed to the Medicare premium.
17 If the plan were implemented in 2020, which is the case for purposes of preparing this testimony.
Should the defined contribution approach curb Medicare spending growth, beneficiaries would face a smaller premium gap and lower cost-sharing as overall spending moderates. Assuming a 0.5 percentage point decline in baseline spending, per capita beneficiary liability would decrease by $324 by 2025 under the GDP growth option, with the constraint actually growing more rapidly than health care spending. (That policymakers would keep in place a constraint that rises faster than what it seeks to control is unlikely, however.) By contrast, the tighter per capita GDP limitation would increase beneficiary liability by $889, even with the optimistic assumptions about moderating growth in health care spending. Chart 6, below, shows per capita liability in 2025 under the different defined contribution approaches.

Another way of looking at this impact is to focus on beneficiary liability as a share of total Medicare spending in 2025. Beneficiary liability is projected to reach 25.8 percent of total Medicare spending, with a range of 23.7 percent to 42.7 percent, depending on the voucher’s
growth target and assumptions about how much Medicare spending would moderate over time (Chart 7).

Finally, Chart 8 depicts projected out-of-pocket costs as of 2025 for a typical beneficiary in traditional Medicare, while Chart 9 shows these costs a share of beneficiaries’

Source: Urban Institute analysis.
income. Under the voucher option, a typical beneficiary would pay more than 40 percent of his or her income for acute care. Even under the most optimistic projections, beneficiaries who remain in traditional Medicare would still have to devote an increasing share of their income to out-of-pocket health care spending.

In sum, the defined contribution approach puts beneficiaries at risk. If there are fairly stringent constraints on what the federal government will pay, the rate of growth of Medicare taxpayer share as a share of GDP could be reduced by nearly 20 percent, compared with the baseline figures (from 4.62 percent of GDP to 3.71 percent). Even if health care spending slowed substantially, however, beneficiary liability would rise. Further, if health care spending did not moderate as supporters of this option argue, beneficiaries would face a 65 percent increase in liability and as much as a 41 percent increase in the share of income they would have to spend on acute care services. Finally, the burdens on individuals would vary substantially, depending on the range and cost of choices offered.

**PREMIUM-SUPPORT OPTIONS**

The basic idea behind premium support is that the government would pay a share of premium costs charged by plans participating in Medicare. This share would likely be some percentage of the average cost of plans that compete for Medicare’s business. As with FEHBP, a premium-support approach gives people plan choices that vary in price and, probably, in delivery arrangements and benefit packages. Such an approach also provides beneficiaries with incentives to shop each year for plans with lower costs or more desirable characteristics because the federal government’s contribution would be fixed in dollar terms, with the
beneficiary having to make up any difference in premium costs. In so doing, the option represents a move away from Medicare’s standard Part B premium, which does not vary across individuals, toward a system with premiums that vary with each plan. The details here matter significantly because they help determine how much protection beneficiaries really have and how benefits are distributed.

If the premium were set using the lowest bidder as a benchmark, for example, there is no assurance that most beneficiaries would be able to find a plan at that premium. Assume the federal contribution is 80 percent of the low-cost plan, for which the bid is $5,000. The government contribution would be $4,000, but a $5,000 plan might be available only to a small number of beneficiaries. Consequently, most people might have to choose a $6,000 plan, meaning they would pay $2,000. This translates to only 67 percent premium support by the federal government. If most people cannot find a plan near the lowest price, the premium-support option begins to look more like a defined contribution approach, wherein beneficiaries have little protection against rising health care costs. Tying the guarantee instead to an average or median-priced plan would offer more protection to beneficiaries. Even so, the costs of plans and the benefit package would likely vary a great deal.\(^{18}\)

Under yet another variation, the premium share could be set at a fixed percentage across a range of plans. The drawback here is that the federal contribution would rise with the cost of plans, perhaps creating a regressive structure that reduces incentives to shift to low-cost plans.\(^ {19}\) Such options also tend to place an upper bound on the government contribution, limiting what it will pay for those in the highest-cost plans. However, this approach might place many poorer beneficiaries at a disadvantage, especially those who could afford only the lowest-cost plans.

A further complication is whether these rates would be based on a national or a regional figure. Either way, there are major drawbacks. Although using a national rate is consistent with the idea of Medicare as a universal social insurance program in which beneficiaries expect to be treated equally, it ignores the enormous geographic differences in the current distribution of Medicare costs—differences that go well beyond the costs of living or doing business.\(^ {20}\) With a national rate, beneficiaries in rural Midwestern states would heavily subsidize those in New York and Florida, for example. On the other hand, setting the premiums on a regional basis would mean that few private plans would want to do business in low-cost rural locales, thus perpetuating the lack of private plans participating in Medicare in these areas.

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\(^{18}\) In fact, for this option to achieve its goals, such variation is important. If plans clustered around the median, there would be less pressure on beneficiaries to shop around and less pressure on plans to hold down their premiums.

\(^{19}\) This is closer to the approach taken by the Bipartisan Commission in its example plan presented in December 1998.

Given this problem, setting rates regionally would pose a major stumbling block, since it would inevitably lead to highly visible winners and losers.

Another key issue under this scenario is what would happen to traditional Medicare. If fee-for-service Medicare remained an option, would its premium, for competitive purposes, be set at the national average or at regional rates? Further, if enrollment in traditional Medicare outpaces that of other plans—perhaps because it remains the default plan for many of the sickest beneficiaries—will it become increasingly unaffordable to the most vulnerable of Medicare’s enrollees?

**Defining the Premium-Support Options**
Since this analysis focuses on one typical beneficiary, the simulation of premium support looks essentially like a straight premium increase. While this simulation allows us to compare basic levels of savings, it makes it more difficult to present results of interest with respect to beneficiary burdens. Consequently, we provide here a few additional examples of how the variation in premiums could affect beneficiaries.

Although a premium-support option could be devised that does not generate savings solely from passing on higher costs to beneficiaries, it seems unlikely that a whole restructuring of the Medicare program would take place without using this mechanism to achieve at least some assured savings. Under current law, the Part B premium will rise gradually over time, reaching a maximum of about 14 percent of Medicare’s total costs. To achieve modest savings, we estimate an 85 percent premium-support option, which means a 15 percent contribution from beneficiaries—an amount only modestly above the 12 percent expected under current law in 2002 and close to the maximum scheduled.\(^{21}\) We treat this as a set percentage that would be applied to the median-priced plan under Medicare. We also consider a premium-support level of 80 percent, resulting in a 20 percent required beneficiary contribution.

As with a defined contribution option, assigning the potential savings that result from greater efficiency in the health care system induced by premium support is problematic. To make the analysis simpler and to facilitate a comparison of the two approaches, we used similar assumptions about savings. The mechanism for determining how savings would flow to beneficiaries and the federal government differ, however. Further, the options might have different effects on attempts to reduce spending. For instance, if traditional Medicare were retained under a premium-support option, would that mean smaller reductions in health care spending than under the more stringent voucher approach?

\(^{21}\) Aaron and Reischauer, for example, proposed an initial formulation that would have the federal contribution start at about 5 percent below its current level. They also suggested the government share could be lowered over time to achieve further savings.
Because premium support entails risk-sharing between the government and beneficiaries, the simulation differs markedly from the one for a defined contribution approach. With premium support, the federal government would share in any savings should private plans’ premiums grow more slowly than Medicare baseline spending. In that case, not only would the government pay a smaller share of Medicare’s costs, but those costs would be assessed against a lower base.

To illustrate potential federal savings under the premium-support option, assume that the government’s share is 80 percent and the beneficiary’s, 20 percent (Chart 10). By 2025, the taxpayer share of GDP would decline to 4.45 percent, compared with a baseline projection of 4.62 percent. If growth rates in Medicare spending declined by 0.5 percentage points annually, the taxpayer share of GDP would fall to 3.98 percent by 2025.

![Chart 10: Growth in Medicare's Taxpayer Share of GDP Under Alternative Savings Assumptions for 80 Percent Premium Support](source: Urban Institute analysis)

**Impacts on Beneficiaries from Premium-Support Options**

In the model here, an average beneficiary would experience a cost shift—basically the difference between today’s premium and whatever the beneficiary would pay under this option. Shares of beneficiary liability would stay constant, regardless of the assumptions about spending, varying only by how much the premium increased. For example, adopting a 20 percent premium would boost beneficiary liability, on average, by about 6 percentage points. However, the interesting part about how a premium-support option would affect beneficiaries is premium variation.
One can estimate how beneficiary liability might vary according to choice of plan by comparing liability for someone in a median-cost plan with that for someone in traditional Medicare. Assume, for instance, that spending levels for Medicare and a median-priced private plan are the same. Assume also that, over time, the median-priced private plan realizes savings from slower spending growth while its counterpart, a traditional Medicare plan, stays at the baseline spending level. In practice, beneficiary liability would go up not just in traditional Medicare, but in any plan whose spending did not grow as slowly as that in the median-priced plan. While this is oversimplified, it illustrates what could happen under premium support.

If baseline spending levels do not change, traditional Medicare would remain competitive, with spending rising at the same rate as that in private plans. Hence, its premiums would be similar (Table 1). If private plan spending grew slowly, enrollees in median-priced plans subject to the 15 percent requirement would actually see their premiums fall relative to the baseline. Even if such beneficiaries were required to pay 20 percent, their out-of-pocket spending would rise only modestly. By contrast, for beneficiaries in traditional Medicare, slower growth in premiums of median-priced plans would lead to a large hike in their premiums—as much as $1,657 by 2025. That increase results from setting the government’s contribution in fixed dollars based on a plan with lower rates of spending growth. Consequently, the federal government’s fixed contribution of $7,326 in 2025 would only cover 71.6 percent of the costs of traditional Medicare if growth rates in private plans slowed by 0.5 percent annually.

### Table 1
**Change in Annual Per Capita Beneficiary Liability Contributions in 2025 Under Premium-Support Options (in 1998 Dollars)**

<table>
<thead>
<tr>
<th>Assumptions about Sources of Savings</th>
<th>Person Choosing Median-Priced Plan</th>
<th>Person Remaining with Traditional Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Premium at 15% of Median-Priced Plan</td>
<td>$137</td>
<td>$137</td>
</tr>
<tr>
<td>No Cost Advantage for Private Plans</td>
<td>$137</td>
<td>$137</td>
</tr>
<tr>
<td>0.5% Reduction for Private Plans</td>
<td>-$25</td>
<td>$1,199</td>
</tr>
<tr>
<td>Set Premium at 20% of Median-Priced Plan</td>
<td>$648</td>
<td>$648</td>
</tr>
<tr>
<td>No Cost Advantage for Private Plans</td>
<td>$648</td>
<td>$648</td>
</tr>
<tr>
<td>0.5% Reduction for Private Plans</td>
<td>$433</td>
<td>$1,657</td>
</tr>
</tbody>
</table>

Source: Urban Institute analysis.

Total out-of-pocket costs for beneficiaries in traditional Medicare in 2025 are projected to be $4,855 (in real dollars). Under the premium-support option, these costs could rise to $4,992, if the premium were 15 percent of a median-priced plan and baseline spending did not change (Chart 11). This figure could climb to $6,512 if the beneficiary’s share of the premium was 20 percent and private plan spending grew slowly.
For beneficiaries in traditional Medicare (or in other high-priced plans), these numbers translate into a 39.4 percent share of income spent on health care (Chart 12). Thus, for beneficiaries able and willing to choose median-priced plans, out-of-pocket costs likely would increase only moderately. For others, the upside risks associated with this approach are substantial. For instance, would beneficiaries in high-cost plans be mainly those with higher incomes, or the very old, or people in ill health who are afraid to switch plans? The characteristics of those facing substantial premiums make a great deal of difference in how this option is viewed.

![Chart 11](Projected Out-of-Pocket Costs for Typical Medicare Beneficiary in Traditional Medicare Under Premium-Support Options, 2025)

Source: Urban Institute analysis.
CONCLUSIONS

In the search for ways to reduce what taxpayers will be expected to pay to keep the Medicare program operating, many policymakers have argued for major structural reforms, often to combine attempts to influence the rate of growth in health care spending and to change the financing obligations of the federal government. Two such options that have received considerable attention are the defined contribution and premium-support approaches. Defined contribution options would increase the predictability of the government’s contribution by tying it to a set rate of growth—often keyed to some major indicator such as the CPI or GDP—and turning over that amount to beneficiaries in the form of a voucher to apply to the purchase of a private health plan. Premium-support options would also stress private plans but would link the government’s obligation to a share of the actual premium charged by one or more of the private plans serving Medicare beneficiaries.

These two approaches to restructuring Medicare could begin to look alike or take on very different characteristics, depending on the details. In theory, one of the most important distinctions between the two is whether beneficiaries bear the full risks of rising health care costs (as in a defined contribution framework) or whether some risk is shared by government (as under premium support). In practice, even that distinction can be blurred: if premium support is set against the lowest-priced plans, or if the percentage of the costs of care guaranteed declines over time, then premium-support options, like defined contribution approaches, will shift the risk of higher care costs to beneficiaries.
These restructuring approaches also share a common feature, namely, that competition among private plans will enable them to outperform the traditional Medicare program in cost-control efforts. However, these claims are theoretical. Nonetheless, for either of these options to work well and achieve savings without placing undue burdens on beneficiaries, they must be successful at moderating cost growth. Even then, the variation in plan premiums might place many vulnerable beneficiaries at risk.

These simulations indicate that restructuring of Medicare could create a number of problems for beneficiaries. For example, a defined contribution plan set to grow at the same rate as per capita GDP could result in a 20 percent drop in the taxpayer share of Medicare and a 29 percent increase in beneficiary liability by 2025. At that point, beneficiaries would be liable for more than a third of Medicare spending—even if the full costs of Medicare grow at a slower rate than now projected.

Further, both restructuring options would result in differential burdens on beneficiaries, depending on the costs of the plans that were available to them and what they chose. Under a premium-support proposal that would raise the beneficiaries’ average contribution to 20 percent of the costs of an average premium, savings would come disproportionately at the expense of those who remained in traditional Medicare or chose a plan with above-average costs. This is because the premium-support approach would limit what the government could pay toward the cost of more expensive plans.

Whether the type of restructuring described in this paper is necessary or desirable can be addressed only after a broader range of reform options has been explored. The next paper in this series continues this dialog, looking at options that entail incremental change. At issue is whether, under these proposals, balancing downside risks for beneficiaries with potential savings for the federal government is the best that can be expected for Medicare’s future.