

# **HealthAffairs**

# At the Intersection of Health, Health Care and Policy

Cite this article as: Christine Eibner, Dana P. Goldman, Jeffrey Sullivan and Alan M. Garber Three Large-Scale Changes To The Medicare Program Could Curb Its Costs But Also Reduce Enrollment Health Affairs, 32, no.5 (2013):891-899

doi: 10.1377/hlthaff.2012.0147

The online version of this article, along with updated information and services, is available at: http://content.healthaffairs.org/content/32/5/891.full.html

For Reprints, Links & Permissions: http://healthaffairs.org/1340\_reprints.php E-mail Alerts : http://content.healthaffairs.org/subscriptions/etoc.dtl To Subscribe: http://content.healthaffairs.org/subscriptions/online.shtml

*Health Affairs* is published monthly by Project HOPE at 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133. Copyright © 2013 by Project HOPE - The People-to-People Health Foundation. As provided by United States copyright law (Title 17, U.S. Code), no part of *Health Affairs* may be reproduced, displayed, or transmitted in any form or by any means, electronic or mechanical, including photocopying or by information storage or retrieval systems, without prior written permission from the Publisher. All rights reserved.

Not for commercial use or unauthorized distribution

By Christine Eibner, Dana P. Goldman, Jeffrey Sullivan, and Alan M. Garber

# Three Large-Scale Changes To The Medicare Program Could Curb Its Costs But Also Reduce Enrollment

DOI: 10.1377/hlthaff.2012.0147 HEALTH AFFAIRS 32, NO. 5 (2013): 891-899 ©2013 Project HOPE— The People-to-People Health Foundation, Inc.

Christine Eibner (eibner@rand

.org) is a senior economist at the RAND Corporation in

Dana P. Goldman is founding

Schaeffer Center for Health

Policy and Economics and the Norman Topping Chair in

Medicine and Public Policy at the University of Southern

Jeffrey Sullivan is director of

Health, and Kennedy School of Government, in Boston.

California, in Los Angeles.

director of the Leonard D.

Arlington, Virginia.

ABSTRACT With Medicare spending projected to increase to 24 percent of all federal spending and to equal 6 percent of the gross domestic product by 2037, policy makers are again considering ways to curb the program's spending growth. We used a microsimulation approach to estimate three scenarios: imposing a means-tested premium for Part A hospital insurance, introducing a premium support credit to purchase health insurance, and increasing the eligibility age to sixty-seven. We found that the scenarios would lead to reductions in cumulative Medicare spending in 2012–36 of 2.4–24.0 percent. However, the scenarios also would increase out-of-pocket spending for enrollees and, in some cases, cause millions of seniors not to enroll in the program and to be left without coverage. To achieve substantial cost savings without causing substantial lack of coverage among seniors, policy makers should consider benefit changes in combination with other options, such as some of those now being contemplated by the Obama administration and Congress.

analytic services at Precision
 Health Economics, in Boston,
 Massachusetts.
 Alan M. Garber is provost of
 Harvard University and a
 professor at Harvard Medical
 School, School of Public

he Congressional Budget Office projects that—absent any changes in existing law and policies— Medicare will account for 24 percent of all federal spending and 6 percent of the US gross domestic product by 2037.<sup>1</sup> The increase in Medicare spending, which now accounts for 16 percent of federal outlays, is a major factor in the projected growth of the national debt.<sup>1</sup>

The Affordable Care Act introduced a number of policy changes to reduce Medicare costs. The largest expected savings stem from reductions in payments to Medicare Advantage plans—private plans that have historically received more funding per enrollee than traditional fee-for-service Medicare—and from reductions in annual payment increases for certain types of providers, including hospitals. However, some studies suggest that lower provider fees increase the volume of services provided, reducing the efficacy of these policies as a way of containing costs.<sup>2</sup> Various analysts have argued that without policies that fundamentally change Medicare's cost structure, Congress may face irresistible pressure to reverse the features of the Affordable Care Act that are intended to limit Medicare's expenditure growth.<sup>3</sup>

The Independent Payment Advisory Board, created by the Affordable Care Act to advise Congress on additional ways to reduce Medicare spending, by law cannot consider most changes that would increase costs to Medicare beneficiaries. These changes include altering Part B premiums, which cover physician visits, lab services, and equipment such as wheelchairs; adding premiums for Part A, whose beneficiaries historically have not paid premiums because they paid payroll taxes into the Hospital Insurance Trust Fund to support the program during their years of employment; and increasing deductibles or copayments. The board is also prohibited from considering policies that would modify eligibility requirements, such as increasing the age of eligibility.

Despite these restrictions, from 2015 through 2019 the Independent Payment Advisory Board is charged with making recommendations to keep annual Medicare cost growth at a level between the average inflation rate for all goods (measured using the Consumer Price Index) and the average inflation rate for medical services. After 2019 the board's recommendations must constrain Medicare growth to be less than the rate of growth in the gross domestic product plus one percentage point.

Because the board is limited in the policies that it may consider, many stakeholders fear that its primary tool to address cost increases will be further reductions to provider payments. The Centers for Medicare and Medicaid Services Office of the Actuary has cautioned that the board's requirement to reduce costs, given its constrained set of options, represents an "exceedingly difficult challenge."<sup>4</sup>

Reluctance to consider policies that directly affect beneficiaries' demand for care is not a new phenomenon for Medicare. The Medicare eligibility age, for example, has remained constant at sixty-five since the program began nearly fifty years ago, although life expectancy at birth in the United States increased by eight years between 1965 and 2010.<sup>5</sup> Furthermore, as noted above, Medicare Part A has never required a premium.

One policy lever that has been used frequently over the years to affect government Medicare spending is the Part B premium. Single people with annual incomes of less than \$85,000 now pay a monthly premium of 25 percent of Part B costs (\$104.90 in 2013). This amount increases with beneficiary income on a sliding scale, reaching 80 percent of costs for people with incomes above \$214,000. Thresholds for couples are twice the individual amounts—for example, \$170,000 instead of \$85,000.

In this article we evaluate the long-term spending and enrollment effects of three large-scale changes to the Medicare program that would go beyond the policies allowed under the Affordable Care Act. Specifically, we consider imposing means-tested premiums for Medicare Part A; converting Parts A, B, and C to a premium-support plan; and increasing the eligibility age to sixty-seven.

The policies we consider reflect a range of strategies that address the fundamental tradeoff of whether to provide a rich benefit for a few individuals or a limited benefit for many. At one extreme, increasing the eligibility age would preserve the current structure of the Medicare benefit but provide it to fewer people. At the other extreme, premium-support credits would provide a defined contribution amount to all beneficiaries and require them to shoulder the costs of health care, including inflation, above that amount. Because the Part A premiums we considered are means tested, they fall in the middle of the spectrum, providing a richer benefit for those with lower incomes.

As noted above, the Independent Payment Advisory Board is prohibited from considering these policies. However, one or more of them may be necessary in the long run to contain costs.

### **Policy Scenarios**

**MEANS TESTING PART A** Funded primarily through payroll taxes, which are paid by employers and employees to the Hospital Insurance Trust Fund, Medicare Part A has never required a premium contribution from enrollees. The possibility of adding a means-tested premium for Part A was originally suggested in the mid-1990s by the bipartisan Kerrey-Danforth commission on entitlement reform.<sup>6</sup> Although the Kerrey-Danforth proposals were never adopted, means testing was recently suggested in the context of averting the so-called fiscal cliff.<sup>7</sup>

In our main scenario we imposed a Part A premium that rose with income on a sliding scale. We assumed that people with incomes below \$85,000 would pay premium contributions of 5 percent of expected Part A spending. We further assumed that the percentage of Part A spending paid as premiums would increase as follows: to 10 percent for incomes of \$85,001-\$107,000, 15 percent for \$107,001-\$160,000, 20 percent for \$160,001-\$214,000, and 25 percent for incomes higher than \$214,000. Income limits were double for couples, and no contribution was required from people who were dually eligible for Medicare and Medicaid because of their low incomes.

We also considered a means-tested Part A premium that tracked the Part B schedule, with premiums starting at 25 percent of expected spending for people with incomes below \$85,000 and rising to 80 percent of expected spending for people with incomes of more than \$214,000. In addition, we considered an alternative scenario in which the Part A premium equaled 10 percent of expected Part A spending, regardless of income.

Hospital Insurance (Part A) tax payments currently consist of a 1.45 percent tax on wages paid by both the employer and employee on employee earnings of less than \$200,000 (\$250,000 for couples) and a 2.35 percent tax on earnings above these threshold amounts. In all three of our scenarios, we assumed that those payments would be required regardless of beneficiaries' Part A take-up. In effect, the tax payments provide guaranteed access to Hospital Insurance at a subsidized price, with the amount of the subsidy varying according to the individual's income.

There are at least two arguments for requiring a premium as opposed to increasing payroll taxes. First, because current payroll taxes are used to fund current Medicare spending, the payroll tax transfers resources from younger to older generations. Imposing a Part A premium would ensure that those currently receiving the benefit shared at least part of the growing burden of financing the Medicare program.

In addition, although all workers are required to contribute payroll taxes, not all workers will receive the same benefit, because some disproportionately, minorities and people with low incomes—will die earlier than others. Imposing a modest premium, as opposed to increasing payroll taxes, would avoid further widening socioeconomic disparities in the amount of taxes paid relative to benefits received.

**PREMIUM-SUPPORT CREDITS** In our second scenario we assumed that Medicare enrollees received a premium-support credit that compensated them for current Parts A and B spending, less the Part B premium. For example, in 2014 a person whose income was less than \$85,000 would receive a credit of \$8,900, which would cover approximately 85 percent of the estimated per capita expenditure for hospital and medical services. The credit could be used only to purchase health insurance.

Although we did not model the details of new enrollment options, we assumed that the credit could be used to purchase private health insurance or to buy in to a Medicare-like plan. The credit would be indexed to the growth of the gross domestic product.

**RAISING THE ELIGIBILITY AGE** In our third scenario we considered increasing the Medicare eligibility age to sixty-seven from the current sixty-five. Such a change would mirror current Social Security eligibility, and it has been proposed on numerous occasions.<sup>8</sup>

We assumed that all of the hypothetical options would take effect in 2014. Furthermore, we assumed that the policies would be rolled out all at once, rather than being phased in over time.

## **Study Data And Methods**

We projected spending using the Future Elderly Model,<sup>9</sup> a simulation model described in the online Appendix,<sup>10</sup> which tracks cohorts older than age fifty to project the health status and economic outcomes of their members. The model uses data from the Health and Retirement Study,<sup>11</sup> the Medical Expenditure Panel Survey,<sup>12</sup> and the Medicare Current Beneficiary Survey.<sup>13</sup> Medicare enrollment in the model reflects currently observed patterns. Because Part A has no premium, virtually all Americans older than sixty-five are enrolled in it. Enrollment is slightly lower for Part B. People who are not enrolled in Part B tend to have low incomes but not to be eligible for Medicaid.

Medicare enrollment and total health spending were projected using regressions that accounted for age, health conditions, disability, and other characteristics. We report all spending estimates in net present value, using a discount rate of 3 percent.

In our baseline scenario we constrained the rate of Medicare cost growth to reflect targets set out in the Affordable Care Act, which are to be achieved through the policy levers described above—notably, reductions in provider payment rates and the recommendations of the Independent Payment Advisory Board. Medicare spending policies related to the Affordable Care Act play a role complementary to the strategies we considered, since these policies focus largely on providers instead of consumers' demand for services.

The Part A premiums that we modeled had two effects on enrollment. First, the initial imposition of the premium caused a one-time drop in enrollment, which we set at 3 percent. We based this percentage on prior work showing an increase in the probability of dropping coverage when premiums are imposed<sup>14</sup> and a sensitivity analysis conducted within the Future Elderly Model.<sup>15</sup>

Second, as premiums rose with medical inflation, there was a gradual decrease in enrollment. We set this elasticity at -0.1 based on the literature<sup>16</sup> and because this number accurately predicted Medicare Part B take-up under policies in place before the implementation of the Affordable Care Act.

We assumed that premium-support credits could be used only for health insurance and that enrollees would pay any difference between the credit amount and the price of health insurance and attendant costs. We assumed that health insurance costs would track the target growth rate that must be achieved by the Independent Payment Advisory Board, even after the premium-support program is imposed. Because this growth rate is pegged at gross domestic product plus one percentage point after 2019, while the premium-support credit would increase only at the rate of growth of the gross domestic product, the value of the credit would decline over time.

We treated the difference between predicted

Medicare cost growth and the credit amount as a health insurance premium. In sensitivity analyses we considered an alternative policy in which credits were indexed to the Consumer Price Index.

# **Study Results**

Exhibit 1 shows the predicted savings for the three policies considered, relative to using only the savings policies in the Affordable Care Act to constrain costs. With only those policies, total Medicare spending between 2012 and 2036 is projected to be \$16.7 trillion on a net present value basis.

Imposing a Part A premium in addition to the act's policies resulted in lower government spending on Medicare, but by the smallest amount of the three options considered, achieving a 2.4 percent reduction in spending growth through 2036. In contrast, increasing the Medicare eligibility age to sixty-seven reduced cumulative spending by 7.2 percent over the same period.

The premium-support plan provided relatively small savings through 2019, the time period during which the Independent Payment Advisory Board is required to maintain strict limits on spending growth. However, after 2019 savings began to increase, and by 2029 the premiumsupport plan achieved savings that outpaced those achieved by increasing the Medicare eligibility age.

Exhibit 2 shows the effect on Part A enrollment

#### EXHIBIT 1



**SOURCE** Authors' estimates using the Future Elderly Model (see Note 8 in text). **NOTES** "ACA only" is projected spending with the policy changes included in the Affordable Care Act. "Part A premiums" is "ACA only" and imposing means-tested premiums for Medicare Part A. "Premium support" is "ACA only" and converting the entire Medicare program to a premium support plan. "Eligibility 67" is "ACA only" and raising eligibility for Medicare from age sixty-five to age sixty-seven.

of each of the three policies considered, relative to the Affordable Care Act baseline. Because our analysis was intended to show who is at risk for being uninsured, we considered enrollment among people ages sixty-five and older even when we were evaluating a change in the Medicare eligibility age.

Imposing a Part A premium on all beneficiaries using the main premium scenario described above reduced projected enrollment in 2020 from 57.7 to 56.6 million-a decline of just under 2 percent. Premium-support credits also led to a modest decline in Part A enrollment, with projected enrollment falling to 55.4 million in 2020. The projected disenrollment under the premium-support program stemmed from the fact that enrollee contributions would be required to cover the difference between the credit amount and the actual enrollment premium. Increasing the Medicare eligibility age to sixty-seven led to a larger decrease in enrollment, leaving almost eight million sixty-five- and sixty-six-year olds without hospital insurance coverage in 2020.

Part B enrollment is, by definition, unaffected by Part A premiums. However, increasing the Medicare eligibility age reduced Part B enrollment from a projected fifty-two million people in 2020 to forty-five million (Exhibit 3). The premium-support program had little effect on Part B enrollment before 2020, mostly because of the Independent Payment Advisory Board's strict spending targets. However, by 2036 the program reduced Part B enrollment from seventy-two million people to sixty-eight million because, as health care costs continue to rise, the value of the credit is reduced, and enrollees must pay an increasing amount out of pocket to obtain comparable coverage. We did not model the possibility that peope could use premium-support credits to obtain partial coverage.

COMPARISON TO CONGRESSIONAL BUDGET **OFFICE ESTIMATES** The Congressional Budget Office has estimated that increasing the Medicare eligibility age to sixty-seven would lead to \$148 billion in savings between 2012 and 2021. In contrast, we estimated that there would be \$405 billion in savings—a figure we derived by taking the cumulative difference in costs between the "Affordable Care Act only" and the "Eligibility 67" scenarios in Exhibit 1 for the period 2012–21.<sup>17</sup> The difference is explained primarily by the fact that we assumed the policy would take full effect in 2014, while the Congressional Budget Office assumed that it would begin to take effect in 2014 but not be fully phased in until 2027. The office's projected cumulative savings for 2012-35 was 5 percent, whereas we estimated a 7.2 percent cumulative reduction for 2012-36.

MAY 2013 32:5 Downloaded from content.healthaffairs.org by Health Affairs on May 14, 2013 at BIBLIOGRAPHIC SVCS Although the Congressional Budget Office has analyzed the effects of a Medicare premiumsupport plan, these estimates are not directly comparable to ours. The office's estimate included larger policy changes, such as the proposal by Rep. Paul Ryan (R-WI) to cut \$6.2 trillion in total federal spending during 2012–21, with additional reductions over time.<sup>18</sup> Moreover, the premium-support program proposed by Congressman Ryan and analyzed by the Congressional Budget Office would take effect only after 2021, whereas we assumed that it would be implemented in 2014.

The Congressional Budget Office has not considered the effects of imposing Part A premiums.

**SENSITIVITY ANALYSES** Exhibit 4 summarizes the results of our sensitivity analyses. If the savings provisions in the Affordable Care Act failed to constrain costs, cumulative Medicare spending in 2012–36 would increase by 14 percent. This difference points to the importance of the assumptions in our estimates that Medicare payment level adjustments will be maintained and that the Independent Payment Advisory Board will achieve its target spending reductions.

If a means-tested premium were implemented for Part A, spending in 2012–36 would decline by 2.4 percent, compared to the savings achieved through the provisions of the Affordable Care Act alone. Part A enrollment would also decline, since some people would opt not to pay the premium and not to enroll in Part A.

Imposing steeper premiums, based on the current schedule for Medicare Part B, would cause cumulative spending in 2012–36 to decline by 17 percent. But such a step would also prompt fewer potential Medicare beneficiaries to enroll in Part A, leaving only 46.2 million seniors with coverage in 2020. That amount would represent a 20 percent reduction in enrollment relative to the estimated number covered if the Affordable Care Act provisions alone were implemented. That large decline in coverage might make such steep premiums untenable, especially because most beneficiaries have paid taxes with the expectation of receiving coverage later in life.

We also estimated the effects of a flat premium—that is, not means tested (Exhibit 4). Relative to the means-tested scenarios, this approach would be simpler and would not create "cliffs," in which a small increase in a person's income could lead to a large change in his or her premium. This scenario produced an additional \$300 billion in cumulative savings relative to the first means-tested scenario, but it left an additional 500,000 people without coverage because of a doubling of premiums for single people with incomes below \$85,000 and for couples with incomes below \$170,000.

#### EXHIBIT 2

#### Projected Medicare Part A Enrollment, 2012-36



**SOURCE** Authors' estimates using the Future Elderly Model (see Note 8 in text). **NOTES** "ACA only" is projected spending with the policy changes included in the Affordable Care Act. "Part A premiums" is "ACA only" and imposing means-tested premiums for Medicare Part A. "Premium support" is "ACA only" and converting the entire Medicare program to a premium support plan. "Eligibility 67" is "ACA only" and raising eligibility for Medicare from age sixty-five to age sixty-seven.

Relative to the original premium-support scenario, in which the credits people received were indexed to growth in the gross domestic product, indexing credits to growth in the Consumer Price Index saved considerably more money, since the index grows more slowly than the gross domestic product (Exhibit 4).

Compared to the Affordable Care Act baseline scenario, consumer-price-indexed credits led to

#### EXHIBIT 3

#### Projected Medicare Part B Enrollment, 2012-36



**SOURCE** Authors' estimates using the Future Elderly Model (see Note 8 in text). **NOTES** "ACA only" is projected spending with the policy changes included in the Affordable Care Act (because imposing means-tested premiums for Part A would make no difference in Part B enrollment, in this exhibit—unlike in Exhibits 1 and 2—there is no separate line for "Part A premiums"). "Premium support" is "ACA only" and converting the entire Medicare program to a premium support plan. "Eligibility 67" is "ACA only" and raising eligibility for Medicare from age sixty-five to age sixty-seven.

#### EXHIBIT 4

#### Results Of Sensitivity Analyses, Medicare Spending (2012-36) And Enrollment (2020)

	Cumulative Medicare spending (\$ trillions)		Medicare enrollment (millions), 2020	
<b>Scenario</b>	<b>2012-21</b>	<b>2012-36</b>	<b>Part A</b>	<b>Part B</b>
ACA only	5.8	16.7	57.7	52.4
No ACA	6.4	19.0	50.0	51.4
PART A PREMIUMS				
Means-tested, main	5.7	16.3	56.6	52.4
Means-tested, Part B	5.1	13.8	46.2	52.4
10% premium	5.6	16.0	56.1	52.4
PREMIUM SUPPORT				
GDP indexed	5.7	15.8	55.4	52.4
CPI indexed	5.0	12.7	50.4	49.0
ELIGIBILITY				
Age 67	5.4	15.5	50.1	45.3
Age 70	4.7	13.4	40.2	35.8

source Authors' estimates using the Future Elderly Model (see Note 8 in text). NOTES Spending is in trillions of US dollars, net present value. Enrollment is in millions of people. "ACA only" is projected spending with the policy changes included in the Affordable Care Act. "No ACA" is spending if the Independent Payment Advisory Board created by the act fails to constrain spending and if other Medicare savings policies in the act do not take effect. "Part A premiums" is "ACA only" and imposing premiums for Medicare Part A. The "means-tested, main" scenario assumes that people not eligible for both Medicare and Medicaid pay premiums of 5-25 percent of expected costs depending on income. The "means-tested, Part B" scenario assumes that Part A premiums mirror those of Part B: Most people pay premiums of 25 percent of expected costs, but those with high incomes (see the text) pay up to 80 percent. The "10% premium" scenario assumes that everyone, regardless of income, pays a premium equal to 10 percent of expected costs. "Premium support" is "ACA only" and converting the entire Medicare program to a premium support plan. The "GDP indexed" scenario assumes that credits are indexed to the projected rate of gross domestic product (GDP) growth. The "CPI indexed" scenario assumes credits are indexed to the Consumer Price Index (CPI). "Eligibility" refers to the age at which people become eligible for Medicare, now sixty-five; the scenarios assume the age is increased to either sixty-seven or seventy.

> a 24 percent decline in spending—the largest reduction of any policy considered. But again, the additional savings were accompanied by a reduction in the number of people with coverage—in this case, because the value of the credit relative to the expected cost of health services was reduced.

> Finally, increasing the Medicare eligibility age to seventy reduced cumulative spending in 2012–36 by approximately 20 percent (Exhibit 4). However, this option led to a larger decline in enrollment than any of the other scenarios, reducing enrollment in both Parts A and B by approximately 30 percent, compared to the estimated number covered if the Affordable Care Act provisions alone were implemented. The reduction in spending was smaller than the reduction in enrollment because younger Medicare enrollees (those ages 65–70) tend to have lower average spending than older enrollees.

## Discussion

Despite their likely effectiveness at reducing costs, all of the policy changes considered have

both advantages and disadvantages. Importantly, the policies would impose a burden on enrollees by increasing the out-of-pocket spending amounts required to obtain health insurance. Increasing the eligibility age would lead to a loss of coverage among people just over sixty-five, but it would preserve the current generosity of the Medicare benefit for the oldest Americans.

Because of provisions in the Affordable Care Act, people losing Medicare coverage in this scenario might have access to affordable insurance through either a health insurance exchange or the Medicaid program. However, particularly in states that do not expand their Medicaid programs, some low-income seniors might fall through the cracks.

There would also be secondary effects on federal spending (not included in this analysis) if seniors shifted from Medicare to the exchanges or Medicaid. For example, the Kaiser Family Foundation estimates that exchange premiums would increase by approximately 3 percent if people ages sixty-five and sixty-six became ineligible for Medicare and if many opted instead to enroll in private coverage offered through exchanges.<sup>19</sup>

Instituting Part A premiums or a premiumsupport plan would preserve at least the offer of Medicare coverage to everyone who is eligible today. However, because of the new cost-sharing requirements that would be associated with these options, some people would not enroll.

When we assumed a premium contribution generally smaller than what would be required for employer-sponsored coverage—our main means-tested premium—spending decreased by about 2.4 percent between 2012 and 2036, and Part A enrollment declined by about the same amount. A "back-of-the-envelope calculation" suggests that to achieve the same saving with a payroll tax increase, taxes would need to be increased by approximately \$60 per worker per year on a net present value basis.

Instituting a Part A premium based on the current Part B premium would lead to larger savings. However, Part B premiums are 25-80 percent of expected health spending for Part B services (\$1,259-\$4,028 annually in 2013). We estimate that requiring enrollees to pay a comparable share of Part A expenditures would cause Part A enrollment to decline by 20 percent, leaving 11.5 million seniors without hospital insurance, compared to the baseline Affordable Care Act scenario (Exhibit 4). Such a massive reduction in enrollment could lead to considerable problems, such as a large number of seniors' forgoing necessary treatment or receiving uncompensated care. Imposing a flat

10 percent premium on all Medicare Part A enrollees would lead to spending declines of 4 percent in 2012–36, while Part A enrollment would fall by just under 3 percent.

A premium-support program indexed to growth in the gross domestic product reduced estimated spending by approximately 5.4 percent in 2012–36. However, this effect varied over time, with most of the savings coming after 2019. A program indexed to growth in the Consumer Price Index would lead to greater savings but would also increase the share of the population without coverage. Both of these policies would have greater effects if Medicare expenditures grew more rapidly than expected—as would be the case, for example, if the Independent Payment Advisory Board did not achieve its goals.

# Conclusion

The anticipated growth in Medicare spending is a major burden on the federal budget. We project that cumulative Medicare spending between 2012 and 2036 will amount to \$16.7 trillion on a net present value basis. Without the cost-saving provisions included in the Affordable Care Act, which require reductions in Medicare payment levels and assume that the Independent Payment Advisory Board can contain health care cost growth, cumulative Medicare spending between 2012 and 2036 could be as high as \$19 trillion.

The policies considered in this analysis would lead to substantial savings, with a reduction in cumulative spending between 2012 and 2036 of 2.4–24.0 percent. Yet each policy would require sacrifices in terms of eligibility and the burden imposed on enrollees, and policy makers must weigh the costs and benefits of the alternatives.

The most effective policies in terms of reducing spending—imposing a premium support program indexed to growth in the Consumer Price Index or raising the Medicare eligibility age to seventy—would lead to enrollment reductions of 13 percent and 30 percent, respectively. If such a decline in enrollment were to occur, there could be serious consequences for population health.

Many of those who would opt to disenroll

would be people with low incomes and without good alternative health care or coverage options. These uninsured elderly Americans would put a strain on hospital emergency departments, and some people would go without needed care. The Affordable Care Act's required reductions in disproportionate-share hospital payments, which compensate hospitals for serving lowincome patients, would add to the problem by making it even more difficult for hospitals to shoulder this unfunded burden.

The consequences for Medicare enrollment are less extreme in scenarios with premiumsupport credits indexed to growth in the gross domestic product or with more modest Part A premiums. However, because these policies are also less effective at constraining costs, they represent at best a partial solution to the challenge of rising Medicare costs. Thus, they would need to be imposed together with other cost containment approaches if they were to substantially change the Medicare cost trajectory. For example, the Medicare Payment Advisory Commission has suggested,<sup>20</sup> and the Obama administration is reportedly considering,<sup>21</sup> combining Parts A and B into a single policy with a uniform deductible. The proposed alignment would probably raise out-of-pocket costs for the physician services covered under Part B, while simultaneously lowering out-of-pocket costs for Part A (hospital) services.

The potential reduction in the effective deductible for Part A, along with the Medicare Payment Advisory Commission's related suggestion to cap enrollees' maximum out-of-pocket expenditure, could make premium increases more palatable. Moreover, because Part B now requires a meanstested premium, combining Parts A and B would provide an opportunity to adjust this premium to reflect the combined costs of Parts A and B.

Optimal policy decisions in the face of limited resources depend on broad societal goals—such as whether it is preferable to provide a generous benefit to a few or a small benefit to many. Although no analysis can make these difficult choices for us, projections like the ones we have presented here are essential to making informed policy decisions.

The authors are grateful to the National Institute on Aging for its support through the Roybal Center for Health Policy Simulation, P30AG024968, and Grant No. RC4AG039036; and to the MacArthur Foundation Research Network on an Aging Society.

#### NOTES

- Congressional Budget Office. The 2012 long-term budget outlook [Internet]. Washington (DC): CBO; 2012 Jun [cited 2013 Mar 20]. (Publication No. 4507). Available from: http://www.cbo.gov/sites/ default/files/cbofiles/attachments/ 06-05-Long-Term\_Budget\_ Outlook\_2.pdf
- **2** Nguyen NX, Derrick FW. Physician behavioral response to a Medicare price reduction. Health Serv Res. 1997;32(3):283–98.
- **3** Holtz-Eakin D, Ramlet MJ. Health reform is likely to widen federal budget deficits, not reduce them. Health Aff. (Millwood). 2010; 29(6):1136–41.
- 4 Foster RS. Estimated financial effects of the Patient Protection and Affordable Care Act, as amended. Washington (DC): Centers for Medicare and Medicaid Services; 2010 Apr 22.
- **5** Life expectancy figures were extracted from a World Bank database.
- 6 Kerrey JR, Danforth JC. Bipartisan commission on entitlement and tax reform: final report to the president [Internet]. Washington (DC): The Commission; 1995 Jan [cited 2013 Mar 13]. Available from: http:// www.ssa.gov/history/reports/ KerreyDanforth/Kerrey Danforth.htm
- **7** See, for example, Levin Y. Old and rich? Less help for you. New York Times. 2013 Feb 19.
- 8 Galston B, MacGuineas M. The future is now: a balanced plan to stabilize public debt and promote economic growth [Internet].
   Washington (DC): Committee for a Responsible Federal Budget; 2010
   Sep 30 [cited 2013 Mar 13]. Available from: http://crfb.org/document/

future-now-plan-stabilize-publicdebt-and-promote-economic-growth

- **9** Goldman DP, Shang B, Bhattacharya J, Garber AM, Hurd M, Joyce GF, et al. Consequences of health trends and medical innovation for the future elderly. Health Aff (Millwood). 2005;24:w5-r5-17. DOI: 10.1377/ hlthaff.w5.r5.
- **10** To access the Appendix, click on the Appendix link in the box to the right of the article online.
- University of Michigan. Health and Retirement Study [home page on the Internet]. Ann Arbor (MI): University of Michigan; [cited 2013 Mar 13]. Available from: http:// hrsonline.isr.umich.edu/
- 12 Agency for Healthcare Research and Quality. Medical Expenditure Panel Survey [home page on the Internet]. Rockville (MD): AHRQ; [cited 2013 Mar 13]. Available from: http:// meps.ahrq.gov/mepsweb/
- 13 CMS.gov. Medicare Current Beneficiary Survey (MCBS) [home page on the Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; [last modified 2013 Feb 20; cited 2013 Mar 13]. Available from: http://www.cms .gov/Research-Statistics-Data-and-Systems/Research/MCBS/ index.html
- **14** Buchmueller T. Price and the health plan choices of retirees. J Health Econ. 2006;25:81–101.
- **15** In sensitivity analyses conducted by the authors, varying this parameter in ranges below 5 percent had little effect on the results.
- **16** Atherly A, Dowd B, Feldman R. The effects of benefits, premiums, and health risk on health plan choice in the Medicare program. Health Serv Res. 2004;39(4):847–64.

- 17 Congressional Budget Office.
   Raising the ages of eligibility for Medicare and Social Security [Internet]. Washington (DC): CBO; 2012 Jan [cited 2013 Mar 14]. (Issue Brief). Available from: http:// www.cbo.gov/sites/default/files/ cbofiles/attachments/01-10-2012-Medicare\_SS\_EligibilityAges Brief.pdf
- House Committee on the Budget. The path to prosperity: restoring America's promise [Internet].
  Washington (DC): The Committee; 2011 Apr 5 [cited 2013 Mar 14].
  Available from: http://paulryan .house.gov/uploadedfiles/ pathtoprosperityfy2012.pdf
- 19 Neuman T, Cubanski J, Waldo D, Eppig F, Mays J. Raising the age of Medicare eligibility: a fresh look following implementation of health reform [Internet]. Menlo Park (CA): Kaiser Family Foundation; 2011 Jul [cited 2013 Mar 14]. (Report No. 8169). Available from: http:// www.kff.org/medicare/upload/ 8169.pdf
- 20 Medicare Payment Advisory Commission. Report to the Congress: Medicare and the health care delivery system [Internet]. Washington (DC): MedPAC; 2012 Jun [cited 2013 Apr 5]. Available from: http://www.medpac.gov/ documents/Jun12\_EntireReport.pdf
- 21 Calmes J, Pear R. Talk of Medicare changes could open way to budget pact. New York Times [serial on the Internet]. 2013 Mar 28 [cited 2013 Apr 5]. Available from: http:// www.nytimes.com/2013/03/29/us/ politics/common-ground-inwashington-for-medicare-changes .html?pagewanted=allT

# ABOUT THE AUTHORS: CHRISTINE EIBNER, DANA P. GOLDMAN, JEFFREY SULLIVAN & ALAN M. GARBER



**Christine Eibner** is a senior economist at the RAND Corporation.

In this month's Health Affairs, Christine Eibner and coauthors report on their simulation of three different approaches for curbing Medicare spending growth: imposing a means-tested premium for Part A hospital insurance, introducing a premium support credit to purchase health insurance, and increasing the eligibility age to sixty-seven. They found that the different scenarios would lead to reductions in cumulative Medicare spending in 2012-36 of between 2.4 percent and 24.0 percent—but that they would also increase out-of-pocket spending for enrollees and, in some cases, would cause millions of seniors not to enroll in the program and to be left without coverage.

Eibner is a senior economist at the RAND Corporation and director of the RAND Comprehensive Assessment of Reform Efforts (COMPARE) initiative, a project that uses economic modeling to predict how individuals and employers will respond to major health care policy changes. She is currently leading several projects related to the Affordable Care Act, including a study for the Department of Health and Human Services that will assist state Medicaid programs with income counting and calculating federal

matching assistance percentages, given changes set forth in the act. Eibner earned a doctorate in economics from the University of Maryland, College Park.



**Dana P. Goldman** is the Norman Topping Chair in Medicine and Public Policy at the University of Southern California.

Dana Goldman is founding director of the Leonard D. Schaeffer Center for Health Policy and Economics and the Norman Topping Chair in Medicine and Public Policy at the University of Southern California. He serves on the editorial boards of Health Affairs and several other journals and is editor-in-chief of the Forum for Health Economics and Policy. He is a research associate with the National Bureau of Economic Research and a member of the Institute of Medicine. Goldman holds a doctorate in economics from Stanford University.



Jeffrey Sullivan is director of analytic services at Precision Health Economics.

Jeffrey Sullivan is director of analytic services at Precision Health Economics, a health care consulting company that provides sophisticated quantitative analysis. He oversees a staff of statisticians, epidemiologists, analysts, statistical programmers, and data specialists who help design and execute studies on a variety of health economics projects. Sullivan was previously a senior project associate in health policy at the RAND Corporation. He earned a master's degree in mechanical and aerospace engineering from Cornell University.



**Alan M. Garber** is provost of Harvard University.

Alan Garber is provost of Harvard University, the Mallinckrodt Professor of Health Care Policy at Harvard Medical School, a professor of economics in Harvard's Faculty of Arts and Sciences, a professor of public policy at the Kennedy School of Government, and a professor in the Department of Health Policy and Management at the Harvard School of Public Health. He also serves as associate editor for the Journal of Health Economics and is a member of the Board on Science, Technology, and Economic Policy at the National Academies. Garber earned a doctorate in economics from Harvard University and a medical degree from Stanford University.