



OFFICE OF THE ACTUARY

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DATE: August 31, 2021

FROM: John D. Shatto  
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SUBJECT: Projected Medicare Expenditures under an Illustrative Scenario with  
Alternative Payment Updates to Medicare Providers

In the *2021 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*, the Board warns that there is “substantial uncertainty regarding the adequacy of future Medicare payment rates under current law.” The Trustees Report is based on current law; as a result of questions regarding the operations of certain Medicare provisions, however, the projections shown in the report under current law may well understate expenditures for most categories of health care providers. The purpose of this memorandum is to present a Medicare projection under a hypothetical alternative to these provisions to help illustrate and quantify the magnitude of the potential cost understatement under current law.

This analysis is for comparison purposes only and should not be interpreted or construed as advocating any particular legislative change. In particular, no endorsement of this alternative by OACT, CMS, or the Medicare Board of Trustees should be inferred. Similarly, this memorandum’s description of the problems that would likely result from the legislated physician payment updates and/or the long-term application of the productivity adjustments should not be interpreted as a criticism of the statutory policy. OACT’s intent is to help inform Congress and the public at large that an evaluation of the financial status of Medicare that is based on the provisions of current law is likely to portray an overly optimistic outcome. This paper is also an attempt to promote awareness of these issues, to illustrate and quantify the amount by which the Medicare projections are potentially understated, and to help inform discussions of potential policy reactions to the situation.

**Overview**

Among the most important factors in projecting Medicare expenditures are the annual payment updates to Medicare providers. The estimates shown in the 2021 Trustees Report are complicated

substantially by specified low physician payment updates and reductions in payment updates for most other Medicare services by economy-wide productivity.<sup>1</sup>

As described in more detail below, in our view there is a strong likelihood that the scheduled physician payment updates and the productivity adjustments will not be achievable in the long range. It is reasonable to expect that Congress would find it necessary to legislatively override or otherwise modify the reductions in the future to ensure that Medicare beneficiaries continue to have access to health care services.

Because of the concerns regarding the viability of the Medicare payment rates, the 2021 Trustees Report incorporates a chart that compares the current-law projections to an illustrative alternative projection. The alternative includes adjustments to (i) the scheduled physician payment updates and bonuses, and (ii) the reductions in payment updates by the increase in economy-wide productivity for most other provider categories.

### *(1) Physician Payments*

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) specified physician payment updates for every future year. Prior to enactment of the Consolidated Appropriations Act, 2021, the update for 2021 through 2025 was statutorily set at 0 percent. However, this legislation put a 3.75-percent update in place for 2021 and further stipulated that the update for 2022 be determined as if the 3.75-percent update had not occurred; therefore, the update for 2022 will be -3.61 percent. For 2023 through 2025, the updates continue to be 0 percent. For 2026 and later, there will be two payment rates: for qualified providers paid through an advanced alternative payment model (advanced APM), payment rates will be increased by 0.75 percent each year, while payment rates for all other providers will be increased each year by 0.25 percent.

Although the physician payment updates and new incentives put in place by MACRA are likely viable in the short range, important long-range concerns exist. In particular, additional payments of \$500 million per year for one group of physicians and 5-percent annual bonuses for another group are scheduled to expire in 2025, resulting in a significant one-time payment reduction for most physicians. In addition, the law specifies the physician payment update amounts for all years in the future, and these amounts do not vary based on underlying economic conditions, nor are they expected to keep pace with the average rate of physician cost increases. The specified rate updates could be an issue in years when levels of inflation are high and would be problematic when the cumulative gap between the price updates and physician costs becomes large. Absent a change in the delivery system or level of update by subsequent legislation, we expect access to Medicare-participating physicians to become a significant issue in the long term under current law.

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<sup>1</sup> The law specifies that payment updates for most non-physician services be reduced in all future years by the 10-year moving average increase in economy-wide private nonfarm business multifactor productivity, which is a measure of real output per combined unit of labor and capital and which reflects the contributions of all factors of production. For convenience, the term *economy-wide private nonfarm business multifactor productivity* will henceforth be referred to as *economy-wide productivity*.

## (2) Productivity Adjustments

Most of the services covered by the Medicare fee-for-service program (including inpatient and outpatient hospital services, skilled nursing facility services, and home health care) receive annual payment increases based on statutory input price indices. These price indices, or *market baskets*, measure the increase in prices that each category of provider must pay for the goods and services they purchase to enable them to care for patients. Such inputs include wages and other compensation for their employees, medical and other equipment, and such overhead expenses as heating, utilities, and rent. Other Medicare services, including ambulance services, care at ambulatory surgical centers, certain durable medical equipment, and prosthetics, have their payments updated annually by the increase in the Consumer Price Index (CPI). These payment updates have been reduced by the percentage increase in the 10-year moving average of economy-wide productivity since 2011.<sup>2</sup>

Because most Medicare payment updates, by law, are based on *input* price indices, it makes sense to apply a productivity offset and thereby approximate the increase in *output* prices that providers must charge to maintain a constant margin level. Medicare could reasonably reduce payments by such an adjustment, if it were based on attainable health sector productivity gains, and thus share in the financial benefit achieved through improved productivity. Additionally, to the extent that there is currently excess cost or waste in the health care system, providers should be able to withstand slower payment updates for a period until such excess or waste is eliminated. Medicare can create a strong incentive for the removal of excess cost and waste by reducing these payment updates.

In the 2021 Trustees Report, economy-wide productivity is estimated to increase by about 1.0 percent per year in the long range, an amount that is roughly its long-run historical average. This assumption reflects the expectation of continuing relatively high rates of productivity in the manufacturing sector and much lower rates in the service sector, as have occurred historically.<sup>3</sup> The theory of these findings is consistent with Baumol's cost disease, which suggests that sustained productivity gains in service industries is difficult to achieve as long as the services remain labor-intensive.<sup>4</sup>

For the health sector, measured productivity gains have generally been quite small, given the labor-intensive nature of health services and the individual customization of treatments required in many instances. Hospital productivity has increased in recent years by about 0.4 percent per year (and by negligible levels, on average, over longer periods).<sup>5</sup>

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<sup>2</sup> Note that these payment updates affect all of the services covered under Part A and many of the services covered under Part B. The Medicare Part D payments to drug plans and qualifying employers are not affected by the productivity adjustments.

<sup>3</sup> Service sector productivity—and health sector productivity in particular—is notoriously hard to measure. While overall private nonfarm business productivity is estimated to have increased by 0.8 percent per year from 1987 through 2018, manufacturing multifactor productivity grew 0.9 percent compared to 0.1 percent for services. See <https://www.bls.gov/mfp/>.

<sup>4</sup> Baumol, William J. "Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis," *American Economic Review*, 57, no. 3 (1967): pp. 415-26.

<sup>5</sup> See <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/ProductivityMemo2016.pdf> and Cylus *et al.*, "Hospital Multifactor Productivity: A

For skilled nursing facilities and home health agencies, productivity gains are believed to be close to zero.<sup>6</sup> As noted earlier, some Medicare payment systems are updated by the CPI, which is already an output price index. These updates will also be reduced by economy-wide productivity gains, essentially requiring that these providers and suppliers achieve twice the rate of economy-wide productivity increases to break even.

Based on the historical evidence of health sector productivity gains, the labor-intensive nature of health care services, and presumed limits on the current excess costs and waste that could be removed from the system, actual health provider productivity is very unlikely to achieve improvements equal to the economy as a whole over sustained periods. Despite this conclusion, the payment update reductions are scheduled to occur under current law and are therefore included in the 2021 Medicare Trustees Report. As a result of the update reductions, affected providers will certainly have an even stronger financial incentive to reduce unnecessary aspects of care and to eliminate wasteful costs. Moreover, it is possible that providers will find new ways to take advantage of technology and otherwise improve their productivity to a greater extent than they appear to have been able to do in the past. Finally, new approaches to health care service delivery and payment may lead to more cost-effective care, with the potential to help reduce cost growth to rates compatible with the lower Medicare price updates. These outcomes, while highly desirable, are far from certain. Until such gains can be demonstrated, it is more reasonable to expect that provider costs per service will continue to increase in the long range more in line with long-term past input price growth.

### *(3) Implications of Payment Reductions*

To illustrate the implications of the productivity adjustments and the physician payment updates, simulated future Medicare price levels under current law were compared to private health insurance and Medicaid. For several categories of service, including inpatient and outpatient hospital services, nursing facility care, and clinic services, Medicaid payments are subject to certain upper payment limits (UPLs). For these services, total payments for all services in each category by a State Medicaid program cannot exceed the amount that Medicare would have paid for the same care.<sup>7</sup> Medicaid payments for other categories, notably physician services, are not subject to UPLs.<sup>8</sup> The payment rates paid by private health insurers are assumed to be unaffected by the reductions in the Medicare payment rates for this illustration.

For inpatient hospital services, Medicare payment rates in 2011 were about 68 percent, and Medicaid payment rates were about 71 percent, of private health insurance payment rates

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Presentation and Analysis of Two Methodologies,” available at <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/Downloads/07-08Winterpg49.pdf>.

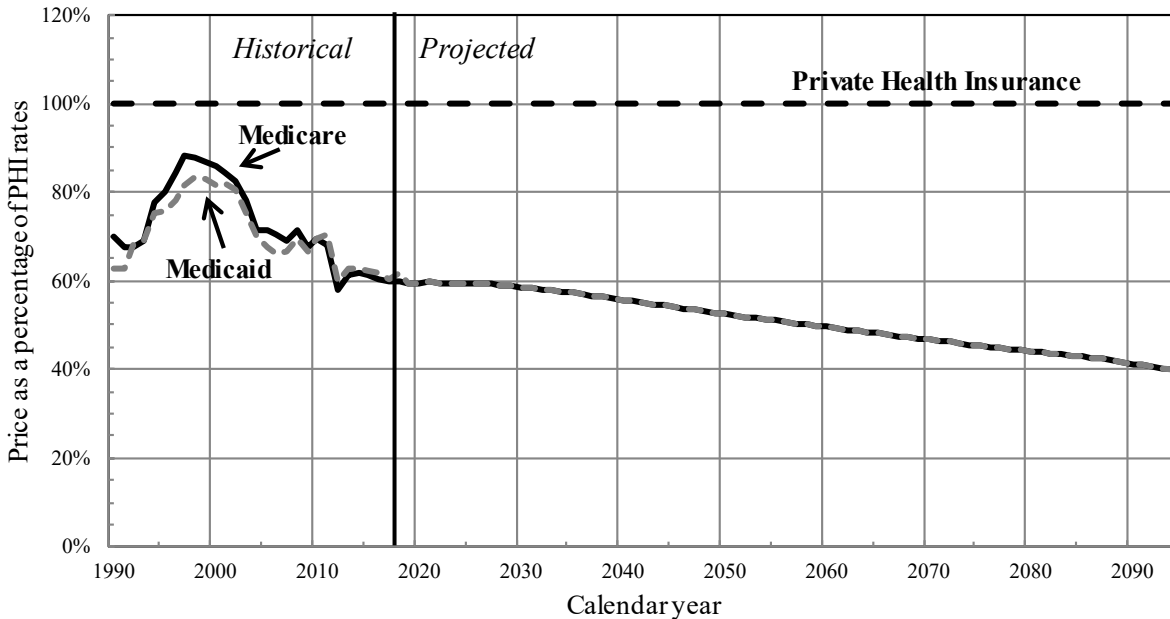
<sup>6</sup> Multifactor productivity in ambulatory health care services averaged a 0.3-percent decline per year from 1987 through 2018, and hospitals and nursing and residential care facilities averaged a 0.6-percent decline over the same period. See <https://www.bls.gov/mfp/>.

<sup>7</sup> The UPL is set as a reasonable estimate of the amount that Medicare would have paid for those services and is not a precise calculation of exactly what Medicare would have paid for all Medicaid claims. For the purpose of this analysis, it is assumed that (i) UPLs are equal to what Medicare would have paid for Medicaid services, and (ii) Medicaid programs could make total payments that would precisely match UPLs. In actuality, there may be small differences between UPLs and what Medicare would have paid for the same care, and between Medicaid payments and UPLs.

<sup>8</sup> There is a physician UPL in Medicaid, but it is not a binding limit, as is the case for the other services listed above.

(including Medicaid disproportionate share hospital, or DSH, payments).<sup>9</sup> As shown in figure 1, Medicare and Medicaid payment rates fell to roughly 60 percent, and 62 percent of private health insurance rates in 2019, respectively, in part due to the productivity adjustments that started in 2012. Payment rates for the two programs decline in tandem over the next 75 years (because of the UPLs), and, by the end of the long-range projection period, Medicare and Medicaid payment rates for inpatient hospital services would each represent roughly 40 percent of the average level for private health insurance.

**Figure 1. Illustrative comparison of relative Medicare, Medicaid, and private health insurance prices for inpatient hospital services under current law**



For other services subject to UPLs, future Medicaid payment rate changes would tend to follow a pattern similar to that shown above for inpatient hospital services; however, the initial Medicare and Medicaid payment rates relative to private health insurance rates, and the corresponding projected updates, would be somewhat different for these other services.

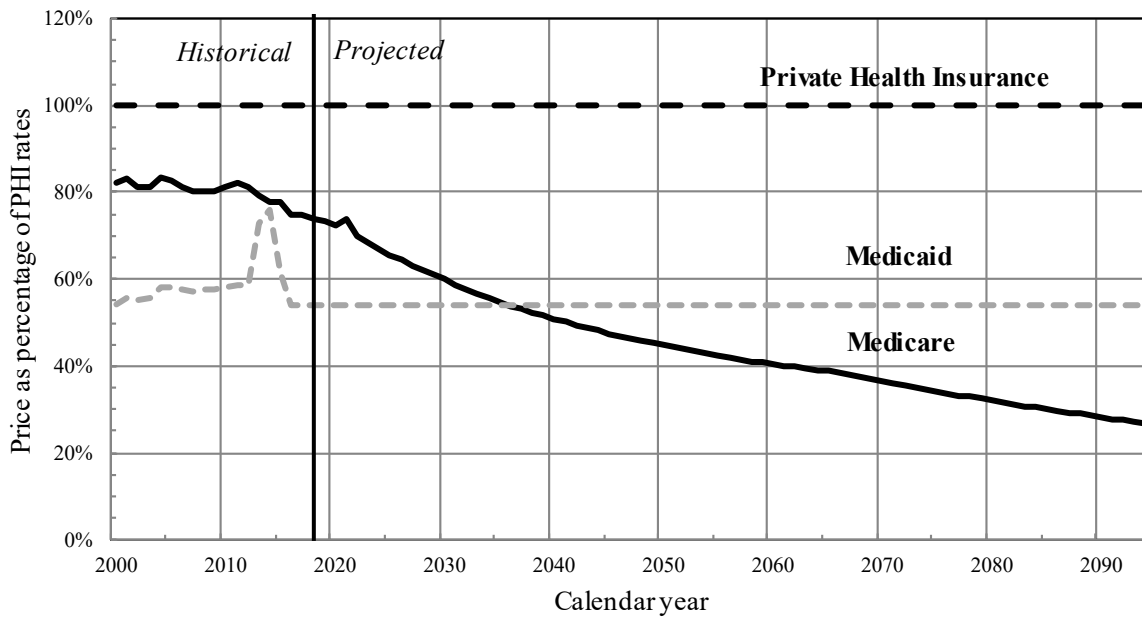
For physician services, Medicare payment rates are updated according to the current-law provisions. Medicaid payment rates are not directly related to Medicare physician fees and thus may grow at different rates over time (and can exceed corresponding Medicare payment rates). As before, illustrative future Medicare and Medicaid payment levels for physician services have been calculated relative to private health insurance payment rates. For Medicaid and private health insurance, payment rates are assumed to increase annually at the rate of increase of the Medicare Economic Index (MEI).<sup>10</sup> Medicaid payment rates were adjusted in 2013 and 2014 to account for temporary increases in Medicaid payments for primary care physicians.

<sup>9</sup> American Hospital Association, *2018 TrendWatch Chartbook*.

<sup>10</sup> The MEI is a price index reflecting the weighted-average price change for various inputs needed to furnish physician services, adjusted by the change in economy-wide productivity. Medicaid payments for physician services have generally not kept pace with the MEI in recent years. At today's levels, Medicaid payment rates have contributed to problems with access to such services. Because further below-MEI growth would likely exacerbate

Figure 2 shows the resulting comparison of future Medicare and Medicaid payment rates for physician services relative to private health insurance payment rates. Medicare payment levels represented about 74 percent of private health insurance payment rates in 2019; these levels decline steadily throughout the projection period relative to the private rates. For Medicaid, payment rates in 2019 constituted about 54 percent of private health insurance payment rates, and they remain at that level for the rest of the projection period.<sup>11</sup> Under current law, the Medicare rates would eventually fall to 27 percent of private health insurance levels by 2095 and to less than half of the projected Medicaid rates. The continuing slower growth would occur as a result of update factors required by MACRA.

**Figure 2. Illustrative comparison of relative Medicare, Medicaid, and private health insurance prices for physician services under current law**



OACT’s simulations, which take into account the lower Medicare payment rates, other payment provisions, sequestration, changes to Medicare and Medicaid DSH payments, and coverage expansions, collectively suggest a deterioration of facility margins for hospitals, skilled nursing facilities, and home health agencies, particularly over the long range. According to the simulations, up to 3 percent more hospitals would experience negative total facility and Medicare margins from 2019 to 2027. The latest cost report data indicate that more than two-thirds of hospitals are losing money on Medicare inpatient services and that the average overall Medicare

these problems, especially in the long range, it is reasonable to illustrate future Medicaid physician payment rates based on assumed growth equal to the MEI increase.

<sup>11</sup> Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy*, March 2019, and S. Zuckerman *et al.*, “Medicaid Physician Fees after the ACA Primary Care Fee Bump,” *Urban Institute*, March 2017. Medicaid physician payment rates relative to those of private health insurance are derived by multiplying the ratio of Medicare rates to private health insurance (0.75, MedPAC) by the ratio of Medicaid rates to Medicare (0.72, Zuckerman).

margin for IPPS hospitals was –8.7 percent in 2019.<sup>12</sup> By 2040, the simulations suggest that approximately one-third of hospitals and approximately 60 percent of skilled nursing facilities and home health agencies would have negative total facility margins, raising the possibility of access and quality-of-care issues for Medicare beneficiaries.<sup>13</sup>

Over time, unless providers could alter their use of inputs to reduce their cost per service correspondingly, Medicare’s payments for health services would fall increasingly below providers’ costs. Providers could not sustain continuing negative margins and would have to withdraw from serving Medicare beneficiaries or (if total facility margins remained positive) shift substantial portions of Medicare costs to their non-Medicare, non-Medicaid payers. Under such circumstances, lawmakers might feel substantial pressure to override the productivity adjustments, much as they did to prevent reductions in physician payment rates while the sustainable growth rate (SGR) was in effect.

On behalf of OACT and the Medicare Board of Trustees, the 2010-2011 and 2016-2017 Medicare Technical Review Panels considered the potential effects of sustained slower payment increases on provider participation, beneficiary access to care, quality of services, and other factors. These issues were considered both in the context of the current health care system and in conjunction with possible future changes in payment mechanisms, delivery systems, and other aspects of health care that could arise in response to the Affordable Care Act-supported research program for innovations in health care. The 2010-2011 Panel’s final report contains an extensive discussion of alternative long-term scenarios with different possible behavioral reactions by providers and with varying implications for the financial viability of providers and the availability and quality of health care services for beneficiaries.<sup>14</sup> The 2016-2017 Panel recommended continued research regarding the long-range financial, quality, and access implications of current-law payment updates, bonuses, and provider compensation (Recommendation 2-5).<sup>15,16</sup>

## Estimation Methodology

Since there is substantial uncertainty regarding the adequacy of future Medicare payment rates under current law, OACT prepared a set of alternative projections to illustrate the level of Medicare expenditures that could result should these current-law provisions not be sustained in

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<sup>12</sup> CMS analysis of Medicare Cost Reports, available at <https://www.cms.gov/files/document/simulations-affordable-care-act-medicare-payment-update-provisions-part-provider-financial-margins.pdf>, and MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2021, available at [http://medpac.gov/docs/default-source/default-document-library/mar21\\_medpac\\_report\\_to\\_the\\_congress\\_secv2.pdf?sfvrsn=0](http://medpac.gov/docs/default-source/default-document-library/mar21_medpac_report_to_the_congress_secv2.pdf?sfvrsn=0).

<sup>13</sup> See <https://www.cms.gov/files/document/simulations-affordable-care-act-medicare-payment-update-provisions-part-provider-financial-margins.pdf>.

<sup>14</sup> The 2010-2011 Medicare Technical Review Panel’s *Review of Assumptions and Methods of the Medicare Trustees’ Financial Projections* is available at <https://aspe.hhs.gov/pdf-report/review-assumptions-and-methods-medicare-trustees-financial-projections>.

<sup>15</sup> The 2016-2017 Medicare Technical Review Panel’s *Review of Assumptions and Methods of the Medicare Trustees’ Financial Projections* is available at <https://aspe.hhs.gov/pdf-report/review-assumptions-and-methods-medicare-trustees-financial-projections>.

<sup>16</sup> The 2016-2017 Panel also recommended that the Trustees consider later start dates for the transition to the ultimate assumptions for the illustrative alternative scenario (Recommendation 2-4). We adopted this recommendation.

all future years. There are multiple ways in which the law could be changed if these provider updates were to prove unsustainable. The illustrative scenario presented in this memorandum is just one possibility among many that demonstrates the degree to which the current-law projections may be understated. The following describes the methodology used to determine the projections for the alternative scenario that is shown in the 2021 Trustees Report.

While a particular set of illustrative alternative update assumptions for specific years is used, the transition from current law to the illustrative alternative ultimate assumptions over time is intended to reflect an increasing likelihood of modifications to current law rather than a specific forecast of when current law will cease to be fully implemented. This illustrative alternative assumes that (i) starting in 2028, the economy-wide productivity adjustments gradually phase down to 0.4 percent until the Medicare price updates equal those assumed for private health plans in 2042; (ii) physician payments transition from current-law updates to the MEI increase of 2.05 percent from 2028 to 2042; and (iii) the 5-percent bonuses for qualifying physicians in advanced APMs and the \$500 million in additional payments for physicians in the merit-based incentive payment system (MIPS) will continue for 2025 and later. On average under this alternative, the long-range per beneficiary growth rate for all Medicare services would be similar to the long-range growth rate assumed for the overall health sector.

## **Comparison of Results**

The illustrative alternative projections are shown for Parts A and B and for Medicare in total. The Part D projections under current law are not affected by the payment-update issues.

### *(1) Part A*

The alternative scenario phases down the productivity adjustments prescribed in the Affordable Care Act beginning in 2028. The resulting alternative expenditure projections for Part A are therefore slightly higher than the current-law projections in the early years and ultimately become substantially higher by the end of the 75-year period. Under the alternative scenario projections, the Part A trust fund is estimated to be depleted in 2026, the same year as under current law, because the differences in assumptions do not start until 2028.

Figure 3 shows the projected Hospital Insurance (HI) income and cost rates for the illustrative alternative compared to the current-law results shown in the 2021 Trustees Report. Since the alternative projections vary only the payment rates to providers, the income rate is virtually unchanged from current law.

HI expenditures are projected under current law to rise from about 3.5 percent of taxable payroll in 2021 to 4.9 percent in 2045 and to remain at about 4.8 percent through 2095. Under the illustrative alternative scenario, costs would continue increasing as a percentage of taxable payroll throughout the long-range period, reaching 7.2 percent in 2095—or 2.4 percentage points higher than under current law. This comparison shows the strong impact of the statutory productivity adjustments; as the slower payment rate updates compounded over time, their impact on HI costs as a percentage of taxable payroll would offset much of the combined effects of the aging of the beneficiary population, excess medical price inflation, and growth in the



volume and intensity of services. As noted, however, there is considerable doubt as to the long-range feasibility of the lower HI payment rates.

**Figure 3. Projected HI income and costs as a percentage of taxable payroll under the illustrative alternative projection compared to current law**

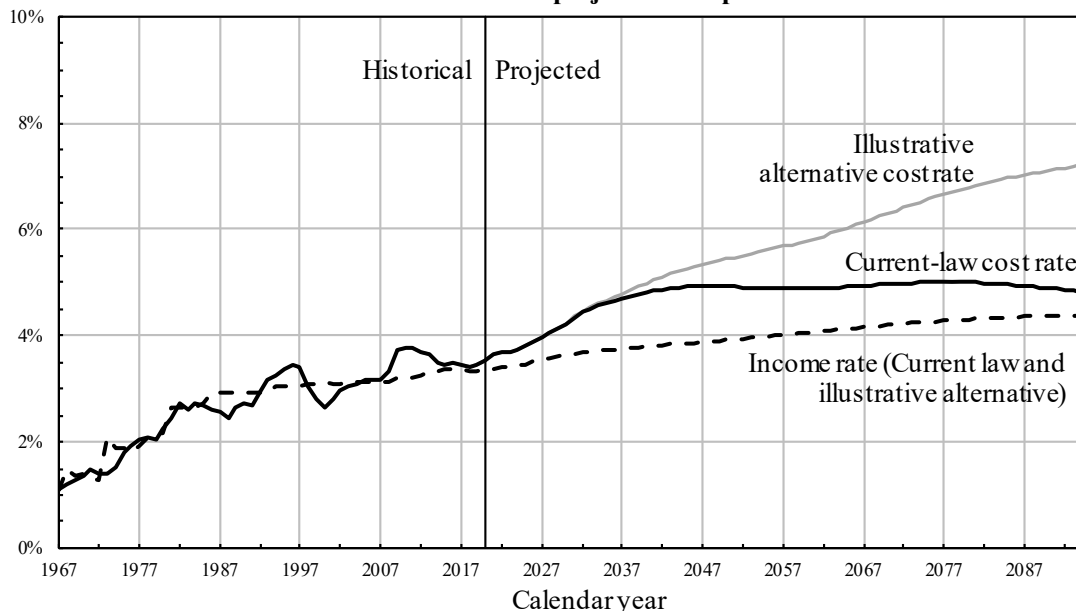


Table 1 shows the HI actuarial balances, for the next 25, 50, and 75 years, from the 2021 Trustees Report under current law and the illustrative alternative. For the 75-year projection period, the HI actuarial deficit is projected to be 0.77 percent of taxable payroll in this year's report. If the productivity adjustments were gradually phased down, then the long-range HI deficit would be 1.61 percent of taxable payroll, as indicated by the alternative projection.

**Table 1. HI actuarial balances under the illustrative alternative scenario compared to the 2021 Trustees Report**  
(as a percentage of taxable payroll)

	2021 Report (current law)	Alternative projection
Valuation periods:		
25 years, 2021-2045:		
Summarized income rate <sup>1</sup>	3.73%	3.73%
Summarized cost rate <sup>1</sup>	4.54	4.63
Actuarial balance	-0.81	-0.90
50 years, 2021-2070:		
Summarized income rate <sup>1</sup>	3.86	3.87
Summarized cost rate <sup>1</sup>	4.70	5.13
Actuarial balance	-0.83	-1.27
75 years, 2021-2095:		
Summarized income rate <sup>1</sup>	3.99	4.00
Summarized cost rate <sup>1</sup>	4.76	5.61
Actuarial balance	-0.77	-1.61

<sup>1</sup>Income rates include beginning trust fund balances, and cost rates include the cost of attaining a trust fund balance at the end of the period equal to 100 percent of the following year's estimated expenditures.

Note: Totals do not necessarily equal the sums of rounded components.

Another way to compare the expenditures in the alternative scenario to the current-law amounts in the 2021 Trustees Report is to examine HI expenditures as a percent of Gross Domestic Product (GDP) over the next 75 years. Table 2 shows that, under current law, HI costs are projected to increase to 2.01 percent of GDP in 2095, a level that is 37 percent greater than in 2020. Under the illustrative alternative to current law, costs would be 3.02 percent of GDP in 2095, or more than 137 percent greater than their 2020 level.

**Table 2. Projected HI expenditures as a percentage of GDP under the illustrative alternative compared to current law, selected calendar years 2020-2095**

Calendar year	HI expenditures as a percentage of GDP	
	Current law	Alternative projection
2020	1.63%	1.63%
2030	1.91	1.91
2040	2.14	2.22
2050	2.15	2.38
2060	2.11	2.50
2070	2.12	2.69
2080	2.12	2.87
2090	2.05	2.98
2095	2.01	3.02

The 2021 Trustees Report notes that the HI trust fund still fails both the short-range test of financial adequacy and the long-range test of close actuarial balance, indicating a need for further reforms to bring the program into financial balance. As illustrated by the alternative projections, if the annual productivity adjustments were to become unworkable over time and were overridden, the financial challenges would be much more severe.

*(2) Part B*

The illustrative alternative scenario for Part B assumes that (i) the physician payment update will transition from current law to the MEI increase of 2.05 percent from 2028 to 2042; (ii) the 5-percent bonuses for physicians in advanced APMs and the \$500 million in additional payments to MIPS physicians will continue for 2025 and later; and (iii) the productivity adjustments for most other Part B providers will be phased down beginning in 2028 until they reach the estimated level of achievable health provider productivity (0.4 percent) in 2042.

Table 3 shows the long-range Part B expenditure projections from the 2021 Trustees Report under current law and under the illustrative alternative. It is customary to express long-range Part B costs as a percentage of GDP to facilitate interpretation and comparison of costs over such distant periods. As shown in table 3, under current law Part B spending is projected to increase from 1.83 percent of GDP in 2020 to 2.63 percent by 2030 and to 3.57 percent of GDP by 2095. For the alternative scenario, Part B spending grows to 4.64 percent of GDP by 2095. Under the illustrative alternative, the Part B cost in 2095 would be 30 percent larger than the current-law projection.

**Table 3. Projected Part B expenditures as a percentage of GDP under current law and the illustrative alternative, selected years 2020-2095**

Calendar year	Part B expenditures as a percentage of GDP	
	Current law	Alternative projection
2020	1.83%	1.83%
2030	2.63	2.65
2040	3.28	3.39
2050	3.35	3.63
2060	3.46	3.90
2070	3.57	4.19
2080	3.63	4.44
2090	3.59	4.58
2095	3.57	4.64

*(3) Total Medicare*

Total Medicare spending under the illustrative alternative scenario includes (i) the increased costs for Part B, which are caused by the transition to updates equal to the MEI and by the continuation of the physician bonuses for 2025 and later, and (ii) the higher costs for Parts A and B, which result from the phase-down of the productivity adjustments. The Medicare payments to Part D plans and qualifying employers are not affected by the productivity adjustments and are therefore equal to the current-law projections in the 2021 Medicare Trustees Report.

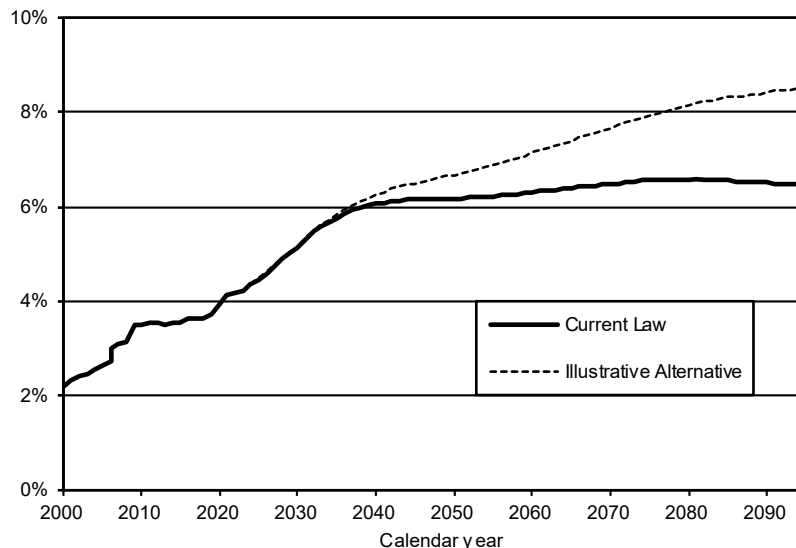
Table 4 indicates the magnitude of the difference relative to the current-law projections by showing total Medicare expenditures as a percent of GDP. Under the alternative scenario, Medicare spending is projected to constitute 3.97 percent of GDP in 2020 and to grow to 8.53 percent by 2095. Under current law, such spending would represent 3.97 percent of GDP in 2020 and would increase to only 6.46 percent in 2095. In other words, if these elements of current law are not sustained in all future years, then Medicare expenditures in 2095 could be more than 32 percent greater than projected under current law.

**Table 4. Projected total Medicare expenditures as a percentage of GDP under current law and the illustrative alternative, selected years 2020-2095**

Calendar year	Total Medicare expenditures as a percentage of GDP	
	Current law	Alternative projection
2020	3.97%	3.97%
2030	5.12	5.14
2040	6.06	6.25
2050	6.17	6.68
2060	6.30	7.13
2070	6.48	7.67
2080	6.58	8.15
2090	6.50	8.42
2095	6.46	8.53

Figure 4 illustrates the very large impact on Medicare expenditures in the long range from the steadily compounding effect of the current-law productivity adjustments to most provider payment updates and the payment updates to physicians.

**Figure 4. Medicare expenditures as a percentage of GDP under current law and the illustrative alternative**



Under current law, Medicare expenditures as a percentage of GDP are projected to increase rapidly as the baby boom generation continues to reach eligibility age. After about 2040, however, the effects of the productivity adjustments and physician updates would largely offset the growth that would otherwise occur due to the aging of the beneficiary population, excess medical price inflation, and increases in the volume and intensity of Medicare services. In the absence of these reductions in payment rate updates, Medicare costs would continue to grow steadily as a percentage of GDP throughout the long-range period.

## Conclusion

As the substantial differences between current-law and illustrative alternative projections demonstrate, Medicare’s actual future costs are highly uncertain for reasons apart from the inherent difficulty in projecting health care cost growth over time. The current-law projections reflect substantial, but very uncertain, cost reductions that lower increases in Medicare payment rates to most categories of health care providers. Without fundamental change in the current delivery system, these adjustments would probably not be viable indefinitely. Given the anticipated challenges in achieving such a transformation, particularly over the long run, actual Medicare expenditures are likely to exceed the projections shown in the 2021 Trustees Report for current law, possibly by considerable amounts.

In practice, of course, lawmakers may enact any number of changes to the Medicare program in coming years. While some of these are likely to address the adequacy of provider payment rates, others may be designed to reduce expenditure levels or growth rates in other ways that may be more sustainable over time. In view of the very substantial uncertainty associated with possible changes to Medicare, readers should interpret the current-law Medicare projections cautiously.

Thus, the current-law projections should not be interpreted as the most likely expectation of actual Medicare financial operations in the future. Rather, these projections illustrate the very favorable impact of permanently slower growth in health care costs, if such slower growth can be achieved, while the illustrative alternative projections help to quantify and underscore the potential understatement of the current-law projections in the 2021 Trustees Report. The sizable differences in projected Medicare cost levels between current law and the illustrative alternative scenario highlight the critical importance of finding ways to bring Medicare costs—and health care costs in the U.S. generally—more in line with society’s ability to afford them.

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