



## Office of the Actuary

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**SUBJECT:** Projected Medicare Part B Expenditures under Two Illustrative Scenarios with Alternative Physician Payment Updates

In the *2009 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*, the Board warns that their projections of Medicare Part B expenditures under current law are “likely understated and should be interpreted cautiously.” The purpose of this memorandum is to help illustrate and quantify this potential understatement.

### *Overview*

Medicare payments for physicians’ services are based on a fee schedule, which reflects the relative level of time and effort required for each service and the relative complexity of each. These relative amounts per service are translated into dollars through a conversion factor, which is updated each calendar year based on the sustainable growth rate (SGR) mechanism specified in law. The SGR system compares the accumulated amount of actual physician-related spending to a specified target level. If actual cumulative spending exceeds the target cumulative spending level, then one or more future physician payment updates per service will be reduced so that future actual expenditures will be lower and ultimately reach the target amount allowed under the law. Similarly, if the actual spending is below the target level, then future physician updates will be increased. The update adjustments are subject to limits on both the increase and the decrease.<sup>1</sup> The intent of the SGR system is to limit growth in spending on physician services to a sustainable rate, roughly in line with the rate of overall economic growth.

Because actual physician-related spending has exceeded the target spending levels by progressively larger annual amounts since 2001, cumulative actual spending is greater than the cumulative target amount by about \$64 billion after 2008, and by a projected \$70 billion after 2009. As a result, under the current-law SGR system, the physician payment updates

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<sup>1</sup> For more information on the sustainable growth rate system, see [http://www.cms.hhs.gov/SustainableGRatesConFact/01\\_Overview.asp](http://www.cms.hhs.gov/SustainableGRatesConFact/01_Overview.asp).

per service are projected to be negative for every year from 2010 through 2015. A physician update of -4.8 percent was required and was allowed to take effect in 2002—the only historical year in which a negative physician update was implemented under the SGR. For each of the most recent 7 years (2003-2009), a scheduled negative update of at least -5 percent was overridden by new legislation, which provided updates ranging from 0 percent to 1.7 percent. For 2004 through 2006, these legislative acts not only provided replacement updates and increased the actual physician spending, but they also specified that the target level of spending would not be increased to match.<sup>2</sup> Thus, the cumulative difference between actual and target spending has increased substantially. The legislative changes to the physician updates for 2007, 2008, and 2009 increased both actual and target spending, but required that the 2010 update be determined as if the updates for 2007, 2008, and 2009 had not been changed.

Based on this history and legislation affecting the SGR system, the current-law physician updates are projected to be about -21.5 percent for 2010, about -5.5 percent for each year 2011-2014, and about -0.2 percent for 2015.

Multiple consecutive years of large negative updates are extremely unlikely to occur. In fact, Congress has overridden them in 7 of the past 8 years, and the scheduled -21.5-percent update for 2010 is four times the size of nearly all of those previously avoided under the SGR. Despite their improbability, the negative physician updates are scheduled to occur under current law and are therefore included in the Part B estimates shown in the 2009 Medicare Trustees Report.<sup>3</sup>

It is important to note that the current-law estimates shown in the 2009 Medicare Trustees Report include only the direct impacts of the negative physician updates. Not included are possible secondary impacts, such as reduced beneficiary access to physician services, increased emergency room visits, increased mortality rates, increased enrollment in Medicare managed care plans, and/or increased hospital utilization. In other words, the Part B cost estimates only include the reduction in the price paid per service, but not behavioral or healthcare system responses to these physician payment reductions.<sup>4</sup>

For example, the negative physician payment updates have the potential to result in physicians reducing the number of traditional fee-for-service (FFS) Medicare patients that they would see each day (reduced access). As MedPAC has noted, Medicare Advantage plans receive higher reimbursement per enrollee, on average, than paid in traditional FFS

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<sup>2</sup> For these legislative acts, increasing the actual physician spending, but not changing the target spending, resulted in a lower 10-year cost estimate than would have occurred if target spending had been adjusted to accommodate the higher costs resulting from the higher payment updates. Each such action, however, contributed to a significant increase in the difference between accumulated actual and target spending, requiring additional physician payment reductions in the future under the current-law SGR system.

<sup>3</sup> The 2009 Medicare Trustees Report was released on May 6, 2009. It is available at [http://www.cms.hhs.gov/ReportsTrustFunds/01\\_Overview.asp](http://www.cms.hhs.gov/ReportsTrustFunds/01_Overview.asp)

<sup>4</sup> A physician volume and intensity growth response to price changes is assumed through 2010. The physician response study can be found at [http://www.cms.hhs.gov/ActuarialStudies/08\\_PhysicianResponse.asp](http://www.cms.hhs.gov/ActuarialStudies/08_PhysicianResponse.asp).

Medicare.<sup>5</sup> Therefore, these plans could pay physicians more than Medicare FFS pays, thereby permitting better access to physician services in Medicare Advantage plans. Medicare enrollees would then be more likely to choose to shift their enrollment from traditional FFS Medicare to Medicare Advantage in order to maintain access to physician care.

Regardless of which combination of these secondary impacts might be assumed to occur, including them in the current-law baseline would lead to an increasingly improbable result and only reduce the usefulness of the estimates across all other Medicare expenditure categories. However, by excluding the secondary impacts of the negative physician updates, the current-law baseline does not reflect the full scope of what would eventually result under the SGR system in the absence of legislative changes. In this respect, the projections do not represent the “best estimates” of Medicare expenditures; due to the speculative nature and extremely low likelihood of such an outcome, the “best estimate” would not be especially useful.

### *Comparison of Results*

The purpose of this document is to provide a comparison of the Part B projections under current law with those under two illustrative scenarios with alternative physician updates. The alternative physician update scenarios are for comparison purposes only and should not be interpreted or construed as advocating any particular legislative change. In particular, no endorsement of these alternatives by the Office of the Actuary, CMS, or the Medicare Board of Trustees should be inferred. This paper is an attempt to illustrate and loosely quantify the amount by which the Part B projections are understated, and to help inform discussions regarding potential legislation for resolving the current-law physician update situation. Again, this paper does not advocate any particular legislative change to current law.

The current-law Part B projections are compared with those that include physician updates, for 2010 through 2018, of (i) 0.0 percent, and (ii) the projected increase in the Medicare economic index (MEI), which is estimated to be roughly 2 percent per year.<sup>6</sup> Table 1 shows the Part B calendar-year cash expenditures and growth rates under current law and the two alternative scenarios. Expenditures under the 0-percent update scenario are 8.1 percent higher than under current law in 2010 and grow to be 12.2 percent higher by 2018. The MEI update scenario is higher by 8.3 percent in 2010 and by 17.2 percent in 2018. The average annual expenditure growth rate for each scenario over the 10 years is 6.8 percent under current law, 8.01 percent for the 0-percent update scenario, and 8.49 percent for the MEI scenario.

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<sup>5</sup> MedPAC’s March 2008 Report to Congress is available at [http://www.medpac.gov/documents/Mar08\\_EntireReport.pdf](http://www.medpac.gov/documents/Mar08_EntireReport.pdf)

<sup>6</sup> In practice, Congress could legislatively change additional Medicare provisions to help offset the cost of any legislated increase in physician updates. The two illustrative scenarios assume that only the physician updates are changed.

Table 1. Estimated Part B Expenditures under Current Law  
and Two Alternative Physician Payment Update Scenarios (0 Percent and MEI),  
Calendar Years 2008-2018

Calendar year	Current law		0-percent physician payment updates			MEI physician payment updates		
	Expenditures (billions)	Growth rate	Expenditures (billions)	Growth rate	Percent of current law expenditures	Expenditures (billions)	Growth rate	Percent of current law expenditures
2008	\$183.3	2.4%	\$183.3	2.4%	100.0%	\$183.3	2.4%	100.0%
2009	202.6	10.5	202.6	10.5	100.0	202.3	10.5	100.0
2010	201.4	-0.6	217.7	7.5	108.1	218.2	7.7	108.3
2011	206.9	2.7	229.7	5.5	111.0	231.1	5.9	111.7
2012	222.8	7.7	252.6	9.9	113.3	255.5	10.6	114.7
2013	239.1	7.3	277.5	9.9	116.1	281.9	10.3	117.9
2014	260.7	9.0	305.3	10.0	117.1	311.4	10.5	119.4
2015	268.6	3.0	316.1	3.5	117.7	324.2	4.1	120.7
2016	293.4	9.2	339.4	7.4	115.7	350.1	8.0	119.3
2017	321.0	9.4	365.6	7.7	113.9	379.5	8.4	118.2
2018	352.5	9.8	395.4	8.2	112.2	413.1	8.9	117.2

Like the Part B expenditures, the associated Part B premiums and general revenue income would also increase under the two scenarios, as shown in Table 2.<sup>7</sup> The financing for Part B automatically adjusts each year to match estimated costs and is thus projected to be adequate under current law and both alternative scenarios. It is important to note, however, that several of the past legislative overrides to the scheduled negative physician updates have occurred *after* the financing had been determined for the year. As a result, assets in the Part B account were drawn down during the year to cover the higher physician payments, and future financing rates were increased to restore the assets in the following years. Unlike recent historical experience, the projections assume that the physician updates are known when the financing rates are set.

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<sup>7</sup> The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) requires an examination of the difference between Medicare’s total outlays less its dedicated financing sources as a percent of the total outlays. In the 2009 Medicare Trustees Report, this ratio is estimated to reach 45 percent within the first 7 years of the projection and to continue to be above 45 percent in all subsequent years. Consequently, the MMA requires the Board of Trustees to deliver a determination of “excess general revenue Medicare funding” this year, as they did in the last 3 years’ reports. Further, the MMA states that two consecutive “excess general revenue funding” determinations trigger a “Medicare funding warning,” which requires a response by the President and the Congress. This ratio (of total Medicare outlays less dedicated financing sources to total outlays) would be higher under either of the two alternative physician update scenarios and would not change the determination of “excess general revenue Medicare funding” or the “Medicare funding warning” in this year’s report.

Table 2. Estimated Part B Account Income and Expenditures under Current Law and Two Alternative Physician Payment Update Scenarios (0 Percent and MEI), Calendar Years 2008-2018 (in billions)

Scenario	2008	2009 <sup>1</sup>	2010 <sup>1</sup>	2011	2012	2013	2014	2015 <sup>1</sup>	2016 <sup>1</sup>	2017	2018
<i>Current law</i>											
Income:											
Premiums	\$50.2	\$56.7	\$49.8	\$58.1	\$64.3	\$66.2	\$68.0	\$76.0	\$67.4	\$81.1	\$89.5
General revenue	146.8	163.8	142.6	166.3	189.3	194.0	198.7	220.4	195.5	233.4	256.6
Other	3.6	3.1	3.4	4.3	5.9	7.8	9.3	10.3	10.9	11.3	11.8
Total income	200.6	223.6	195.9	228.7	259.4	268.0	276.1	306.8	273.9	325.8	357.8
Expenditures	183.3	202.6	201.4	206.9	222.8	239.1	260.7	268.6	293.4	321.0	352.5
Part B account Balance (EOY) <sup>2</sup>	59.4	80.3	74.7	96.5	133.1	162.0	177.4	215.5	196.0	200.8	206.2
<i>0-percent update scenario</i>											
Income:											
Premiums	50.2	56.7	49.8	58.1	64.3	70.5	77.9	88.2	80.2	95.1	103.4
General revenue	146.8	163.8	142.6	166.3	190.0	208.9	228.2	257.2	231.9	272.8	295.4
Other	3.6	3.1	3.0	2.8	2.9	3.3	3.7	4.0	4.3	4.7	5.3
Total income	200.6	223.6	195.4	227.2	257.2	282.6	309.8	349.3	316.4	372.6	404.0
Expenditures	183.3	202.6	217.7	229.7	252.6	277.5	305.3	316.1	339.4	365.6	395.4
Part B account Balance (EOY)	59.4	80.3	58.1	55.6	60.2	65.4	69.9	103.1	80.1	87.1	95.7
<i>MEI update scenario</i>											
Income:											
Premiums	50.2	56.7	49.9	58.8	65.1	71.8	79.5	90.7	83.1	99.2	108.2
General revenue	146.8	163.8	142.7	167.9	192.3	212.4	232.7	263.9	239.8	283.8	308.5
Other	3.6	3.1	3.0	2.8	3.0	3.4	3.8	4.1	4.5	5.0	5.6
Total income	200.6	223.6	195.6	229.5	260.4	287.6	316.1	358.7	327.5	388.0	422.3
Expenditures	183.3	202.6	218.2	231.1	255.5	281.9	311.4	324.2	350.1	379.5	413.1
Part B account Balance (EOY)	59.4	80.4	57.8	56.2	61.1	66.9	71.6	106.1	83.4	91.9	101.0

<sup>1</sup>January 3, 2010 falls on a Sunday; therefore, Part B premium income and associated general revenues will be received on December 31, 2009. Similarly, January 3, 2016 falls on a Sunday; therefore, Part B premium income and associated general revenues will be received on December 31, 2015.

<sup>2</sup>The current law asset balance reflects expenditures that include the physician payment reductions, and income with margins to account for likely changes in legislation for 2010 through 2012. Therefore, the current law asset balances shown are significantly larger than would occur in practice. As the current law physician updates are implemented or overridden by legislation, the Part B financing would be altered to balance financial adequacy with premium increase stability.

The increased financing rates under the two alternative scenarios would affect beneficiary out-of-pocket spending for Part B, as well. As shown in Table 3, the Part B monthly premiums and annual deductibles paid by Part B enrollees would increase significantly.<sup>8</sup> For

<sup>8</sup> Current law Part B financing for 2010 through 2012 is projected with a margin that includes the likelihood of higher-than-expected costs due to subsequent legislation overriding the current law physician updates. In practice, the Part B financing will include such margins, but will also reflect any actual legislative changes that ensue and the resulting physician updates that are implemented.

example, the projected monthly Part B premium for 2018 is \$131.40 under current law, but \$151.80 and \$158.80, respectively, under the 0-percent and MEI scenarios. The difference would increase over time in proportion to the higher per beneficiary expenditure levels resulting from the alternative physician payment updates. In 2018, the monthly Part B premium is projected to be 16 percent higher than the current-law projection under the 0-percent scenario and 21 percent higher under the MEI scenario.

Table 3. Estimated Part B Monthly Premium and Annual Deductible under Current Law and Two Alternative Physician Payment Update Scenarios (0 Percent and MEI), Calendar Years 2008-2018

Calendar year	Current law		0-percent update scenario		MEI update scenario	
	Monthly Part B premium <sup>1</sup>	Annual Part B deductible	Monthly Part B premium <sup>1</sup>	Annual Part B deductible	Monthly Part B premium <sup>1</sup>	Annual Part B deductible
2008 <sup>2</sup>	\$96.40	\$135.00	\$96.40	\$135.00	\$96.40	\$135.00
2009 <sup>2</sup>	96.40	135.00	96.40	135.00	96.40	135.00
2010	104.20	146.00	104.20	146.00	104.50	146.00
2011	120.20	168.00	120.20	168.00	124.80	174.00
2012	111.50	156.00	111.50	156.00	112.90	157.00
2013	111.50	156.00	118.80	166.00	121.10	168.00
2014	111.50	156.00	127.80	179.00	130.40	181.00
2015	111.50	156.00	129.10	181.00	132.60	184.00
2016	114.20	160.00	135.80	190.00	140.80	195.00
2017	122.50	172.00	143.60	201.00	149.80	207.00
2018	131.40	184.00	151.80	212.00	158.80	220.00

<sup>1</sup>The amount shown for each year is the standard monthly Part B premium paid by, or on behalf of, every Part B enrollee and does not include other Part B premium amounts such as the income-related Part B premium monthly adjustment amount, the late enrollment penalty, or the hold-harmless Part B premium reduction.

<sup>2</sup>Monthly Part B premium and annual deductible are actual values for this year.

To illustrate the impact of continuing rapid growth in Part B and total Medicare relative to the economy as a whole, it is customary to express Part B and Medicare expenditures over the 75-year projection period as a percentage of the gross domestic product (GDP). Through 2015, projected Part B expenditure growth is faster for both alternative scenarios than under the current-law projections. As shown in Table 4, Part B spending is projected to increase from 1.28 percent of GDP in 2008 to 1.76 percent by 2020, and 4.43 percent of GDP by 2080 under current law. For the alternative scenarios, Part B is expected to increase more rapidly initially—reaching, by 2020, 1.92 percent of GDP under the 0-percent update scenario and 2.03 percent of GDP under the MEI update scenario.

In later years of the long-range projection, however, the differences between the current-law and alternative scenarios are less than would normally be expected. This counterintuitive result is largely due to the “cyclical” nature of the SGR process and its interaction with the long-range projection methodology. Specifically, the physician payment update in 2018 is projected to be 4.9 percent under current law, but only 2.3 percent under the MEI scenario, and 0 percent under the 0-percent scenario. By 2018, under current law, the existing imbalance between actual and allowed expenditures would have been erased by the major

payment rate reductions in 2010-2015. In 2018 projected expenditures under current law would be *below* the target amounts, resulting in a performance bonus of 2.5 percent on top of an MEI increase of 2.3 percent. Thus, the current-law projection would temporarily result in higher payment updates than under the alternative scenarios. This example also illustrates the cyclical and somewhat unstable nature of the SGR mechanism if it were allowed to operate unchanged.

In the long-range projections, the impact of the performance bonus is magnified. For the 10th and 25th years of the projection, the projected growth rates are interpolated between the 10th year growth rate and a long-range growth rate. Because the current law 10th year physician and total growth rates are higher than the growth rates for the alternative scenarios, the current law projected expenditures increase more rapidly during the 10th through 25th years than under the alternative scenarios. By 2030, Part B current law expenditures are estimated to be 2.60 percent of GDP, or nearly the same as the 0-percent estimate of 2.63 percent of GDP, but lower than the MEI estimate of 2.88 percent of GDP. This relative difference between the three scenarios is maintained throughout the balance of the long-range projection.

In practice, the current-law SGR system would result in a cyclical pattern of update penalties and bonuses, but the average payment update would be lower than either the 0-percent or MEI update scenarios. The timing of the cyclical pattern in the 2009 Medicare Trustees Report results in a higher Part B cost projection than might otherwise occur, thereby reducing, but not eliminating, the normal understatement in the projection.<sup>9</sup>

Table 4. Projected Part B and Total Medicare Expenditures as a Percentage of Gross Domestic Product (GDP) under Current Law and Two Alternative Physician Payment Update Scenarios (0 Percent and MEI), Selected Calendar Years 2008-2080

Calendar year	Part B expenditures as a percentage of GDP			Medicare expenditures as a percentage of GDP		
	Current law	0-percent update	MEI update	Current law	0-percent update	MEI update
		scenario	scenario		scenario	scenario
2008	1.28%	1.28%	1.28%	3.24%	3.24%	3.24%
2009	1.44	1.44	1.44	3.59	3.59	3.59
2010	1.38	1.49	1.50	3.55	3.66	3.67
2020	1.76	1.92	2.03	4.54	4.70	4.81
2030	2.60	2.63	2.88	6.46	6.49	6.73
2040	3.15	3.18	3.48	7.89	7.92	8.21
2050	3.47	3.50	3.83	8.77	8.80	9.13
2060	3.82	3.85	4.21	9.64	9.67	10.03
2070	4.16	4.19	4.59	10.51	10.54	10.93
2080	4.43	4.46	4.88	11.23	11.27	11.68

<sup>9</sup> On behalf of the Board of Trustees, we are investigating projection methods that would reduce the sensitivity of the long-range Part B projections to the timing pattern of update penalties and bonuses that would occur under present law.

## *Conclusion*

The sustainable growth rate (SGR) system was intended by policy makers to restrain Medicare Part B physician spending growth by linking future physician payment updates to the difference between past physician-related spending and a target level of such spending. The SGR payment mechanism, however, has not been allowed to operate as originally designed—in view of the substantial payment reductions that would have been required to keep actual physician expenditures in line with the allowed target amounts, Congress has repeatedly overridden the statutory formula. As a consequence, a very large imbalance has accumulated between the accumulated actual and target spending levels. Thus, the SGR system, under current law, would require many years of large negative physician payment updates—the first of which, in 2010, would be about –21.5 percent. The size of the current-law negative updates and the number of consecutive years of these payment reductions, together with the historical unwillingness of Congress to allow them, strongly suggest that the projected reductions are unlikely to occur in practice. Consequently, as the Medicare Trustees have warned, estimates of Part B expenditures under current law are very likely to understate actual future costs to a substantial degree.

An examination of two illustrative alternative physician payment update scenarios provides some insight into the magnitude of the possible understatement of Part B expenditures as projected under current law. The scenarios shown here should not be seen as recommended legislative replacements for the current SGR system. While it is reasonable to conclude that Congress will take action to address the physician payment reductions that would otherwise be required under current law, the nature of their efforts could differ substantially from the illustrative alternatives shown in this memorandum. Consequently, actual Part B expenditures, premiums, deductibles, and general revenue financing in the future will differ from the illustrations presented here, but are likely to be higher than estimated under current law.

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