

Estimated Sustainable Growth Rate and Conversion Factor, for Medicare Payments to Physicians in 2009

Section 1848(d)(1)(E) of the Social Security Act (the Act) requires the Secretary to make available to the Medicare Payment Advisory Commission (MedPAC) and the public, by March 1, an estimate of the Sustainable Growth Rate (SGR) and conversion factor applicable to Medicare payments for physicians' services for the following year and the data underlying these estimates. We are providing the estimates and information applicable to physician fee schedule payments in calendar year 2009. It is important to note that the SGR and conversion factor shown here are *estimated* – the actual values used to compute physician payments for 2009 will be based on later data and are scheduled to be published by November 1, 2008 in the *Federal Register* as part of the final rule for 2009.

Medicare Sustainable Growth Rate

Section 1848(f) of the Act, as amended by section 4503 of the Balanced Budget Act of 1997 (BBA) (Pub. L. 105-33), enacted on August 5, 1997, replaced the Medicare Volume Performance Standard (MVPS) with a Sustainable Growth Rate (SGR) provision. Section 1848(f)(2) of the Act specifies the formula for establishing yearly SGR targets for physicians' services under Medicare. The use of SGR targets is intended to control the growth in aggregate Medicare expenditures for physicians' services.

The SGR targets are not direct limits on expenditures. Payments for services are not withheld if the SGR target is exceeded by actual expenditures. Rather, the fee schedule update, as specified in section 1848(d)(4) of the Act, is adjusted to reflect the comparison of actual expenditures to target expenditures. If expenditures exceed the target, the update is reduced. If expenditures are less than the target, the update is increased. Under the statute, the update for a year is determined by comparing cumulative actual expenditures to cumulative target expenditures (referred to as "allowed expenditures" in the statute) from April 1, 1996 through the end of the year preceding the year at issue. For instance, the 2009 update will reflect a comparison of cumulative actual to cumulative target expenditures from April 1, 1996 through December 31, 2008. Target expenditures for each year are equal to target expenditures from the previous year increased by the SGR (which is a percentage figure computed by combining four factors specified below).

The statute specifies a formula to calculate the SGR based on our estimate of the change in each of four factors. The four factors for calculating the SGR are as follows:

- (1) The estimated percentage change in fees for physicians' services.
- (2) The estimated percentage change in the average number of Medicare fee-for-service beneficiaries.
- (3) The estimated 10-year average annual percentage change in real gross domestic product (GDP) per capita.
- (4) The estimated percentage change in expenditures due to changes in law or regulations.

Prior to enactment of the Medicare Prescription Drug, Improvement and Modernization Act (also known as the Medicare Modernization Act, or MMA), the statute required the SGR to be calculated using estimated projected growth in real GDP per capita. That is, the Secretary was required to use an estimate of a single year's real GDP per capita to determine the SGR. However, section 1848(f)(2)(c) of the Act, as amended by section 601(b) of the MMA, requires the Secretary to calculate the SGR using the 10-year annual average growth in real gross domestic product per capita.

Section 1848(d)(1)(E) of the Act requires publication in the *Federal Register* no later than November 1 of each year (beginning with 2000) of the actual conversion factor, update and allowed expenditures that will apply to physicians' services for the succeeding year. Another section of the law (section 1848(f)(1)) requires that we publish in the *Federal Register* no later than November 1 of each year, using the best available data as of September 1, the SGR for the following year, the contemporaneous year, and the preceding year. By November 1, 2008, we are required to publish, based on the best data available to us as of September 1, 2008, the SGRs for CY 2007, CY 2008, and CY 2009. We plan to implement these provisions as part of the physician fee schedule final rule for 2009. Thus, in this document, we are providing (i) our current estimates (as of March 1, 2008) of the SGRs for CY 2007, CY 2008, and CY 2009, (ii) our current estimate of allowed expenditures under the SGR system through the end of 2009, and (iii) our current estimate of the physician fee schedule update and conversion factor for 2009. We will be providing updates of all this information using more recent data in the physician fee schedule final rule for 2009. The updated

values scheduled to be published in the final rule by November 1, 2008 will be used to determine the actual update for physician payments in CY 2009.

Table 1 shows our current estimates of the aforementioned SGRs.

Table 1. Current Estimates of SGRs for CY 2007, CY 2008, and CY 2009

	CY 2007	CY 2008	CY 2009
Factor 1: Increase in Fees	1.9%	1.9%	2.1%
Factor 2: Increase in Enrollment	-2.5%	-2.1%	-0.2%
Factor 3: Increase in 10-year moving average Real Per Capita GDP	1.9%	1.7%	1.8%
Factor 4: Increase due to changes in Law or Regulations	1.9%	0.4%	-2.9%
Total Sustainable Growth Rate	3.2%	1.9%	0.7%

Our March 1 estimates of the SGRs provided in Table 1 are early estimates only and may change based on later information. The later figures will be included in the physician fee schedule final rule that is scheduled to be published in the *Federal Register* by November 1. While the current figures are our best estimates at this time, the figures we specify later in the year are likely to differ from our current estimates for several reasons, particularly with respect to the SGR estimates for the following year.

When we publish the physician fee schedule final rule, we will have more complete data on the four factors that comprise the SGR formula (as of September 1 of a year) than are available by March 1. For example, for the 2009 SGR estimate made as of March 2008, we must estimate the percent change in fee-for-service enrollment for 2009 although we have little information on the change in fee-for-service enrollment for 2008. Similarly, an estimate of the percent change in real GDP per capita for 2008 made by November 1, 2008 is likely to be better than an estimate made by March 1, 2008. Estimates of real per capita GDP for 2009 will remain forecasted and based on no actual information measuring economic performance from 2009, both now and in November. However, since we are using a 10-year moving average of real per capita GDP in place of a single year figure, we expect this factor to vary less than it would have if the MMA had not been enacted. In addition, an estimate of the changes in law and regulation affecting expenditures for physicians' services for 2009 requires an estimate of the financial impact of any policy changes several months before the physician fee schedule proposed rule is published. For these reasons, readers should carefully consider the inherent limitations of these estimates and be aware that the subsequent values scheduled to be announced in November will likely be at least somewhat different.

We also point out that there may be differences between an SGR for a year specified in the physician fee schedule final rule and the SGR for the same year as subsequently revised based on later data. Section 1848(f)(3) of the statute, as amended by section 211 of the Balanced Budget Refinement Act of 1999 (BBRA), requires the adjustment of prior years' SGR component factors, to reflect later data, beginning with the SGR for FY 2000. The two SGR elements that have exhibited the most volatility have been the fee-for-service enrollment numbers and real gross domestic product per capita.¹

Table 2 shows the historical values of the SGR as well as its predecessor, the Medicare Volume Performance Standard (MVPS). The MVPS applied for FY 1990 through FY 1997. Figures reflect a weighted average MVPS for FY 1991 through FY 1993 when there were two different MVPSs (one for surgical services, and one for all other services) and for FY 1994 through FY 1997 when there were three different MVPSs (for surgical services, primary care services, and all other services).

¹ We note that more recent data on these two elements are available during a year on several web sites. The latest measurements of real GDP for a quarter are available from the home page for the Bureau of Economic Analysis of the Department of Commerce (www.bea.gov). Population figures are available from the home page for the Census Bureau (www.census.gov). Real GDP per capita can be calculated from these figures. In April of each year, when our Office of the Actuary puts the Trustees Report on the CMS Home page, we will also post the projections of total Medicare Part B enrollment and of Medicare managed care enrollment for the current and subsequent calendar years, as well as for the preceding calendar year, consistent with the Trustees Report. Thus, Medicare fee-for-service enrollment could be determined from these figures.

Table 2 Physician MVPS / SGR

Year	Physician MVPS / SGR
FY 1990	9.1%
FY 1991	7.3%
FY 1992	10.0%
FY 1993	10.0%
FY 1994	9.4%
FY 1995	7.5%
FY 1996	1.8%
FY 1997	-0.3%
FY 1998	3.2%
FY 1999	4.2%
FY 2000	6.9%
CY 2000	7.3%
CY 2001	4.5%
CY 2002	8.3%
CY 2003	7.3%
CY 2004	6.6%
CY 2005	4.2%
CY 2006	1.5%

Allowed Expenditures for Physicians' Services

Section 1848(d)(3)(C) of the Act defines allowed expenditures for the period April 1, 1996 through March 31, 1997 to be equal to actual expenditures for physicians' services during that period as estimated by the Secretary. Annual allowed expenditures for subsequent periods are equal to annual allowed expenditures for the previous year increased by the SGR. The BBRA provided for a transition from a fiscal year to a calendar year SGR system. Beginning with CY 2000, the SGR is determined on a calendar year basis. We have described this transition in a notice that appeared in the *Federal Register* on April 10, 2000.

Table 3 shows quarterly allowed expenditures and cumulative allowed expenditures for the period from April 1, 1996 through December 31, 2009. (The table shows quarterly allowed expenditures for physicians' services to reflect any seasonality, which may occur in expenditures for physicians' services over a year.) We provide more information below on how quarterly figures are combined to determine allowed expenditures for a year.

Table 3. Summary of Allowed Expenditures for Physicians' Services¹

Quarter	Applicable SGR	Quarterly Allowed Expenditures ² [in billions]	Cumulative Allowed Expenditures ³ [in billions]
2Q1996		\$12.4	\$12.4
3Q1996		\$12.0	\$24.3
4Q1996		\$12.2	\$36.6
1Q1997		\$12.3	\$48.9
2Q1997	3.2%	\$12.7	\$61.7
3Q1997	3.2%	\$12.4	\$74.0
4Q1997	3.2%	\$12.6	\$86.7
1Q1998	3.2%	\$12.7	\$99.4
2Q1998	4.2%	\$13.3	\$112.7
3Q1998	4.2%	\$12.9	\$125.6
4Q1998	4.2%	\$13.2	\$138.7
1Q1999	4.2%	\$13.3	\$152.0
2Q1999	6.9%	\$14.2	\$166.2
3Q1999	6.9%	\$13.8	\$180.0
4Q1999	6.9%	\$14.1	\$194.0
1Q2000	7.3%	\$14.2	\$208.3
2Q2000	7.3%	\$15.2	\$223.5
3Q2000	7.3%	\$14.8	\$238.3
4Q2000	7.3%	\$15.1	\$253.4
1Q2001	4.5%	\$14.9	\$268.3
2Q2001	4.5%	\$15.9	\$284.2
3Q2001	4.5%	\$15.4	\$299.6
4Q2001	4.5%	\$15.8	\$315.4
1Q2002	8.3%	\$16.1	\$331.5
2Q2002	8.3%	\$17.2	\$348.8
3Q2002	8.3%	\$16.7	\$365.5
4Q2002	8.3%	\$17.1	\$382.6
1Q2003	7.3%	\$17.3	\$399.9
2Q2003	7.3%	\$18.5	\$418.4
3Q2003	7.3%	\$17.9	\$436.3
4Q2003	7.3%	\$18.3	\$454.6
1Q2004	6.6%	\$18.4	\$473.1
2Q2004	6.6%	\$19.7	\$492.8
3Q2004	6.6%	\$19.1	\$511.9
4Q2004	6.6%	\$19.5	\$531.5
1Q2005	4.2%	\$19.2	\$550.7
2Q2005	4.2%	\$20.6	\$571.2
3Q2005	4.2%	\$19.9	\$591.2
4Q2005	4.2%	\$20.4	\$611.5
1Q2006	1.5%	\$19.5	\$631.0
2Q2006	1.5%	\$20.9	\$651.9
3Q2006	1.5%	\$20.2	\$672.1
4Q2006	1.5%	\$20.7	\$692.8
1Q2007	3.2%	\$20.1	\$712.9
2Q2007	3.2%	\$21.5	\$734.4
3Q2007	3.2%	\$20.9	\$755.3
4Q2007	3.2%	\$21.3	\$776.6
1Q2008	1.9%	\$20.5	\$797.1
2Q2008	1.9%	\$21.9	\$819.1
3Q2008	1.9%	\$21.3	\$840.4
4Q2008	1.9%	\$21.7	\$862.1
1Q2009	0.7%	\$20.6	\$882.7
2Q2009	0.7%	\$22.1	\$904.8
3Q2009	0.7%	\$21.4	\$926.2
4Q2009	0.7%	\$21.9	\$948.1

¹As explained above, pursuant to the BBRA, the SGRs for FY2000, CY 2000, and all subsequent years are estimated and subsequently revised twice, based on later data. The 2007 figures (based on the CY 2007 SGR), the 2008 figures (based on the 2008 SGR), and the 2009 figures (based on the 2009 SGR) are estimated and may change based on more recent information which affects these SGRs.

²Allowed expenditures for a quarter (such as 4Q2009) are equal to allowed expenditures for the same quarter in the previous year (4Q2008 in this example) increased by the SGR for the year in which that quarter occurs (in this case, 0.7 percent). For example, quarterly allowed expenditures of \$21.9 billion in 4Q2009 are equal to quarterly allowed expenditures of roughly \$21.7 billion (4Q2008) increased by the SGR of 0.7 percent (\$21.9 billion = \$21.7 billion x 1.007).

³Cumulative allowed expenditures for a quarter (such as 4Q 2009) are equal to the sum of cumulative allowed expenditures from the previous quarter for the same year (3Q2009) and quarterly allowed expenditures for that quarter. For example, cumulative allowed expenditures in 4Q2009 of \$948.1 billion are equal to the sum of cumulative allowed expenditures through 3Q2009 of \$926.2 billion and estimated allowed expenditures in 4Q2009 of \$21.9 billion (\$948.1 billion = \$926.2 billion + \$21.9 billion).

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

Actual Expenditures for Physicians' Services

Table 4 shows, on a quarterly basis from April 1, 1996 through December 31, 2007, actual expenditures and cumulative actual expenditures for the period. These expenditures represent allowed charges tabulated by the quarter in which the service was furnished. Since there is a lag between the date that the service is furnished and the date that the payment is made, the most recent quarters depict incomplete data. The total allowed charges for these quarters are estimated by approximating the level of completeness of the data. This approximation is determined using historical trends. We will update these amounts periodically when we have reasonably complete data (approximately 6 months after the end of a quarter). As we have described above, we are showing actual expenditures on a quarterly basis to reflect any seasonal variation in expenditures that occurs over the year.

Table 4. Summary of Actual Expenditures under the SGR

Calendar Quarter	Benefits Processed thru 12/31/07 [in billions]	Approximate Completeness	Estimated Total Expenditures ¹ [in billions]	Cumulative Total Expenditures ¹ [in billions]
2Q1996	\$12.4	100.0%	\$12.4	\$12.4
3Q1996	\$12.0	100.0%	\$12.0	\$24.3
4Q1996	\$12.2	100.0%	\$12.2	\$36.6
1Q1997	\$12.3	100.0%	\$12.3	\$48.9
2Q1997	\$12.6	100.0%	\$12.6	\$61.5
3Q1997	\$12.2	100.0%	\$12.2	\$73.6
4Q1997	\$12.2	100.0%	\$12.2	\$85.8
1Q1998	\$12.5	100.0%	\$12.5	\$98.4
2Q1998	\$12.6	100.0%	\$12.6	\$111.0
3Q1998	\$12.3	100.0%	\$12.3	\$123.3
4Q1998	\$12.5	100.0%	\$12.5	\$135.8
1Q1999	\$13.1	100.0%	\$13.1	\$148.9
2Q1999	\$13.3	100.0%	\$13.3	\$162.2
3Q1999	\$13.0	100.0%	\$13.0	\$175.2
4Q1999	\$13.2	100.0%	\$13.2	\$188.4
1Q2000	\$14.5	100.0%	\$14.5	\$202.9
2Q2000	\$14.6	100.0%	\$14.6	\$217.5
3Q2000	\$14.4	100.0%	\$14.4	\$232.0
4Q2000	\$14.5	100.0%	\$14.5	\$246.5
1Q2001	\$16.3	100.0%	\$16.3	\$262.8
2Q2001	\$16.7	100.0%	\$16.7	\$279.5
3Q2001	\$16.4	100.0%	\$16.4	\$295.9
4Q2001	\$16.9	100.0%	\$16.9	\$312.8
1Q2002	\$17.2	100.0%	\$17.2	\$330.0
2Q2002	\$17.9	100.0%	\$17.9	\$347.9
3Q2002	\$17.8	100.0%	\$17.8	\$365.7
4Q2002	\$18.0	100.0%	\$18.0	\$383.7
1Q2003	\$18.7	100.0%	\$18.7	\$402.4
2Q2003	\$19.8	100.0%	\$19.8	\$422.2
3Q2003	\$19.8	100.0%	\$19.8	\$442.0
4Q2003	\$19.9	100.0%	\$19.9	\$461.9
1Q2004	\$21.3	100.0%	\$21.3	\$483.2
2Q2004	\$21.9	100.0%	\$21.9	\$505.0
3Q2004	\$21.9	100.0%	\$21.9	\$526.9
4Q2004	\$22.0	100.0%	\$22.0	\$549.0
1Q2005	\$22.8	100.0%	\$22.8	\$571.8
2Q2005	\$23.5	100.0%	\$23.5	\$595.3
3Q2005	\$22.9	100.0%	\$22.9	\$618.2
4Q2005	\$22.6	100.0%	\$22.6	\$640.7
1Q2006	\$23.4	100.0%	\$23.4	\$664.2
2Q2006	\$23.5	99.9%	\$23.5	\$687.7
3Q2006	\$23.0	99.8%	\$23.1	\$710.8
4Q2006	\$23.2	99.6%	\$23.3	\$734.1
1Q2007	\$23.2	99.1%	\$23.5	\$757.5
2Q2007	\$23.2	98.2%	\$23.6	\$781.1
3Q2007	\$21.9	95.7%	\$22.9	\$804.0
4Q2007	\$16.8	73.4%	\$22.8	\$826.9

¹Estimated and cumulative total expenditures are less likely to change as the approximate completeness approaches 100 percent.

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

CY 2009 Physician Fee Schedule Update and Conversion Factor

The physician fee schedule update for CY 2009 is determined according to a statutory formula by multiplying (i) the Medicare Economic Index (MEI), and (ii) the update adjustment factor (UAF) as shown in table 5 ($0.946 = 1.017 \times 0.930$). The MEI measures the weighted average price change for various inputs involved with producing physicians' services. The update adjustment factor compares actual and target expenditures, and, for a given year, is determined by a formula, as shown below.

$$UAF_{2009} = \frac{\text{Target}_{2008} - \text{Actual}_{2008}}{\text{Actual}_{2008}} \times 0.75 + \frac{\text{Target}_{4/96-12/08} - \text{Actual}_{4/96-12/08}}{\text{Actual}_{2008} \times (1 + \text{SGR}_{2009})} \times 0.33$$

Substituting the estimated figures from tables 1, 3, and 4, as well as our current projections of actual expenditures for CY 2008 (summarized below) in this formula produces our current estimate of the UAF for 2009:

Target₀₈ = Estimated Allowed Expenditures for CY 2008 = \$85.4 billion (\$20.5 + \$21.9 + \$21.3 + \$21.7)
 Actual₀₈ = Estimated Actual Expenditures for CY 2008 = \$93.0 billion
 Target_{4/96-12/08} = Estimated Cumulative Allowed Expenditures from 4/1/96 - 12/31/08 = \$862.1 billion
 Actual_{4/96-12/08} = Estimated Cumulative Actual Expenditures from 4/1/96 - 12/31/08 = \$919.9 billion
 SGR₂₀₀₉ = Estimated Sustainable Growth Rate for 2009 = 0.7 percent or 0.007

$$UAF_{2009} = \frac{85.4 - 93.0}{93.0} \times 0.75 + \frac{862.1 - 919.9}{93.0 \times 1.007} \times 0.33 = -0.265 = -26.5\%$$

Since section 1848(d)(3)(D) of the Act does not allow the update adjustment factor for a given year to be greater than 3.0 percentage points nor less than -7.0 percentage points, the UAF for 2009 is estimated to be -7.0 percentage points.

The update adjustment factor for 2009 may be even more difficult to estimate by March 1 than the 2009 SGR. By March 1 of each year we have no actual data on several of the key elements that comprise the formula for updating the conversion factor for the next year. For example, by March 1, 2008, we do not have data on actual expenditures for physicians' services under the SGR for CY 2008 since we receive expenditure information on a quarterly basis during the year, with a lag time after the quarter closes. In addition, the formula depends on the SGR estimate, which is also subject to change, as noted earlier. Therefore, by March 1 of each year, we have only estimates of the three data elements required to determine the update adjustment to the physician fee schedule (actual expenditures for physicians' services for the current year, allowed expenditures through the end of the current year, and the SGR for the next year). See Appendix I for a quantitative analysis of this uncertainty.

As shown in table 5, the estimated physician fee schedule update for CY 2009 is determined by multiplying two factors: (i) the MEI for CY 2009 and (ii) the update adjustment factor for CY 2009. To determine the estimated CY 2009 conversion factor, the 2009 MEI and the 2009 UAF are applied to the conversion factor that will be used during July-December 2008.

Table 5. CY 2009 Physician Fee Schedule Conversion Factor

CY 2008 July-December Conversion Factor	\$34.0682
2009 MEI	1.7% (1.017)
2009 Update Adjustment Factor	-7.0% (0.930)
CY 2009 Conversion Factor Update	-5.4% (0.94581)
CY 2009 Conversion Factor	\$32.2285

Table 6 lists the historical MEI and physician updates from 1992 through 2008. The physician update reflects a weighted average for 1993 when there were two different updates (one for surgery and one for other services), and for 1994 through 1998 when there were three different updates (for surgery, primary care, and other services).

As shown in Table 7, the determination of the physician update for 2008 and 2009 is complicated by a change to the 2008 conversion factor midyear. Pursuant to the Tax Relief and Healthcare Act (TRHCA), the 2007 conversion factor was \$37.8975. Consistent with the Medicare, Medicaid, and SCHIP Extension Act (MMSEA), the conversion factor for 2008 is \$38.0870 for January through June, and then will be \$34.0682 for July through December. Therefore, the average annual change in physician payments per service (physician update) is 0.5 percent for the first half of 2008 (\$38.0870 in the first half of 2008 is 0.5 percent higher than \$37.8975 in the first half of 2007), and will be -10.1 percent for the second half of 2008 (\$34.0682 in the second half of 2008 is 10.1 percent lower than

\$37.8975 in the second half of 2007). Combining the physician updates for each half of 2008 produces a physician update for 2008 of –4.8 percent (the average of 0.5 percent and –10.1 percent).

The 2008 midyear conversion factor change also complicates the 2009 physician update. As noted earlier, the 2009 conversion factor is estimated to be \$32.2285 for the entire year, and the 2009 conversion factor update is estimated to be –5.4 percent (\$32.2285 is 5.4 percent lower than \$34.0682, the July-December 2008 conversion factor). However, the estimated average annual change in physician payments per service (physician update) is –15.4 percent for the first half of 2009 (\$32.2285 in the first half of 2009 is 15.4 percent lower than \$38.0870 in the first half of 2008), and is –5.4 percent for the second half of 2009 (\$32.2285 in the second half of 2009 is 5.4 percent lower than \$34.0682 in the second half of 2009). Combining the physician update for each half of 2009 produces a physician update for 2009 of –10.4 percent (the average of –5.4 percent and –15.4 percent).

Table 6. Actual Past Medicare Economic Index Increases and Physician Updates for 1992-2008, and Estimated Values for 2009

Year	Physician Medicare Economic Index Increase	Physician Update
<u>Actual:</u>		
1992	3.2%	1.9%
1993	2.7%	1.4%
1994	2.3%	7.0%
1995	2.1%	7.5%
1996	2.0%	0.8%
1997	2.0%	0.6%
1998	2.2%	2.3%
1999	2.3%	2.3%
2000	2.4%	5.5%
2001	2.1%	5.0%
2002	2.6%	–4.8%
2003	3.0%	1.7%
2004	2.9%	1.5%
2005	3.1%	1.5%
2006	2.8%	0.2%
2007	2.1%	0.0%
2008	1.8%	–4.8%
2009	1.7%	–10.4%
<u>Average Annual</u>		
1992-2009	2.4%	1.0%
1998-2009	2.4%	–0.1%
<u>Cumulative</u>		
1992-2009	53.4%	19.0%

Note: The update of 1.7% for 2003 was effective on March 1, 2003; therefore the average update for that year was 1.4%. For 2006, the Deficit Reduction Act froze the physician fee schedule conversion factor. The conversion factor freeze, together with refinements to the relative value units, resulted in an update of 0.2 percent for 2006. The Tax Relief and Healthcare Act (TRHCA) together with the Medicare, Medicaid, and SCHIP Extension Act (MMSEA) result in the average physician update for 2008 being –4.8 percent (0.5 percent for the first half of 2008, and –10.1 percent for the second half of the 2008). Similarly, TRHCA and MMSEA result in the average physician update for 2009 being –10.4 percent (–15.4 percent for the first half of 2009, and a –5.4 percent for the second half of 2009).

Table 7. Conversion Factors and Physician Updates for 2007, 2008, and 2009

Year	Conversion factor	Physician Update
2007	\$37.8975	0.0%
Jan – June 2008	\$38.0870	0.5%
July – Dec 2008	\$34.0682	-10.1%
2008		-4.8%
Jan – June 2009		-15.4%
July – Dec 2009		-5.4%
2009	\$32.2285	-10.4%

Notes: The figures shown in Table 7 for 2009 are estimated. The physician update is the average annual change in payment per service.

Questions on the information presented here may be addressed to:

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Appendix I

Assessment of the Uncertainty in the CY 2009 Physician Fee Schedule Update

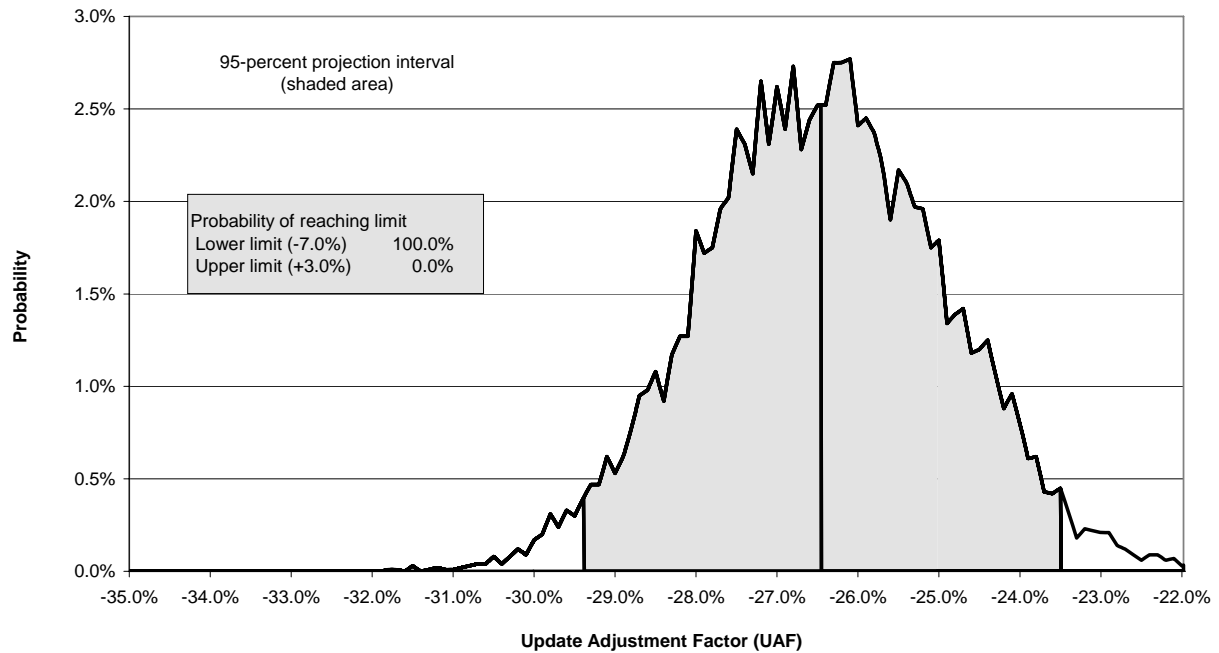
The preceding calculations are based on our best estimates. As we alluded to earlier, these estimates are subject to a great deal of uncertainty. The following analysis uses statistical techniques to help quantify a likely range for the CY 2009 update adjustment factor and the CY 2009 physician fee schedule update. The statistical methods employed here (also referred to as “stochastic” projection techniques) measure past variation in certain variables and assume that similar variation will occur in the future.

The update adjustment factor for 2009 is based on a comparison of actual and target expenditures through 2008. Several of the factors that affect both the actual and target expenditures, affect both in a similar way and, therefore, will have no impact on the comparison of the two. The only two factors that affect the comparison are the real GDP per capita and the growth in the volume and intensity of physicians’ services. As a result, this analysis will focus on the variability of the real GDP per capita estimates on target expenditures and the variability in the growth in the volume and intensity of physicians’ services delivered on the actual expenditures.

Past variations of real GDP per capita and the volume and intensity of physicians’ services were used to estimate the variability in the projected values, relative to the best estimates. There was very little evidence of correlation between these two variables; therefore they were assumed to be independent. The estimates of real GDP per capita and the volume and intensity of physicians’ services for 2007 are based largely on historical data. Consequently the variation for these factors in 2007 was reduced accordingly.

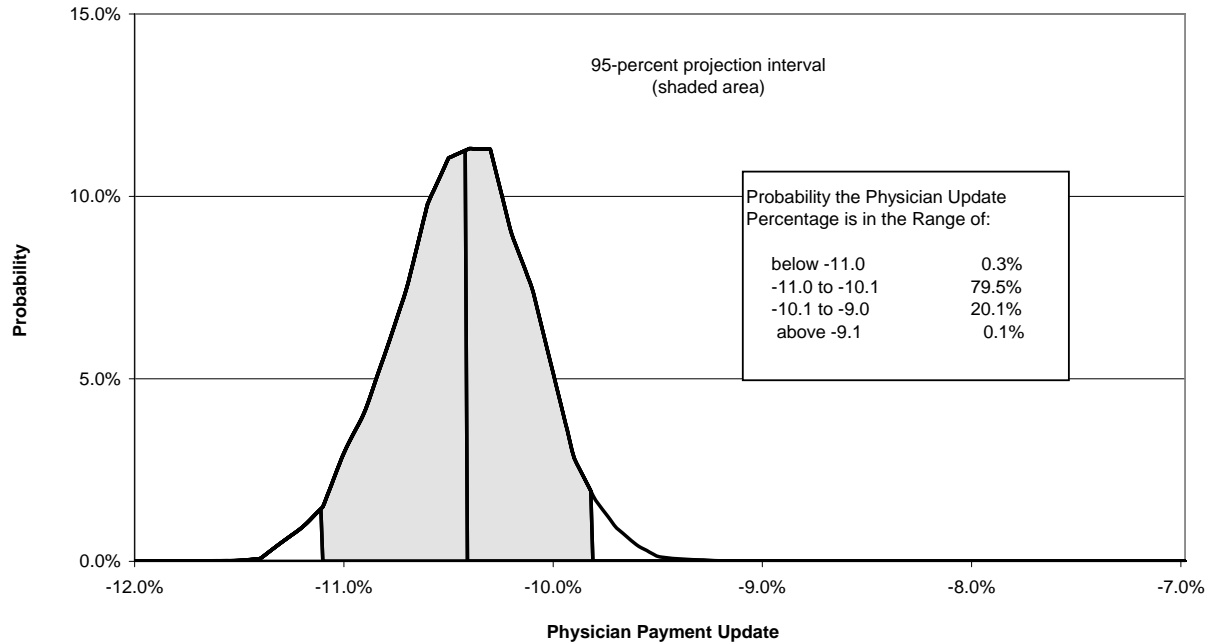
Individual scenarios are generated by randomly selecting the 2007 and 2008 growth rates for both real GDP per capita and the volume and intensity of physicians’ services from a frequency distribution given their estimated variability. Ten-thousand scenarios were generated, and a frequency distribution of the resulting update adjustments is shown in figure 1. The statutory limits of -7.0 percent and 3.0 percent were not applied for illustrative purposes. The results indicate that 95 percent of the time the 2009 update adjustment can be expected to fall between -30.0 percent and -24.5 percent. The calculated update adjustment did not exceed -7.0 percent in any of the ten-thousand scenarios generated, therefore, it is essentially certain that the update adjustment for 2009 will be -7.0 percent.

Figure 1. Frequency Distribution of the Estimated Update Adjustment Factor for CY 2009



The stochastic model was also used to assess the uncertainty of the physician fee schedule update for CY 2009. The calculated CY 2009 update includes the increase in the MEI, the update adjustment (between -7.0 percent and 3.0 percent), and the CY 2008 physician update (-4.6 percent). For this analysis, the MEI was also varied in a method similar to the one applied to real GDP per capita and the volume and intensity of physicians' services. The frequency distribution of the calculated CY 2009 physician fee schedule updates is shown in figure 2. The results indicate that 95 percent of the time the calculated 2009 physician fee schedule update can be expected to fall between -10.8 percent and -9.5 percent.

Figure 2. Frequency Distribution of the Estimated Physician Payment Update for CY 2009



The stochastic approach is beneficial because it provides an estimated probability of occurrence of various possible outcomes. However, there are several things to keep in mind when using this model. First, the stochastic technique relies heavily on past experience. The future may differ from the past in fundamental ways that cannot be anticipated, or reflected in a statistical model. Second, the model is based on current law and does not account for any legislated changes that could occur before the final CY 2009 physician update is determined in November. Finally, the growth in the MEI and real GDP per capita are assumed to be independent for the simulations. There is some evidence based on a limited data set that these two variables may be negatively correlated. Further study will be needed to draw any firm conclusions.

The rather large ranges shown here for both the update adjustment, and to a somewhat lesser degree the physician update for 2009, clearly demonstrate the uncertainty involved in making these estimates. Readers should carefully consider the inherent limitations of these estimates and be aware that the values scheduled to be announced in November will likely be at least somewhat different from those estimated here.