The sustainable growth rate (SGR), the system designed to control spending on services paid for under the Medicare Physician Fee Schedule (MPFS), was established by the Balanced Budget Act of 1997. The SGR replaced a similar system called the Medicare Volume Performance Standard, which went into effect with the MPFS in 1992. To set payment amounts for roughly 7,000 services and procedures, the MPFS uses a resource-based relative value scale (RBRVS), a weighting system that determines relative payments for physician services including office visits or diagnostic and therapeutic services. When the RBRVS relative value unit (RVU) weight is multiplied by a conversion factor (CF), which is usually a single dollar value in a given calendar year, the product is Medicare’s fee for the service. The fee is modified up or down by a geographic adjustment factor that accounts for cost differences across areas. (See Figure 1.)

**FIGURE 1: Medicare Physician Payment Formula**

\[
\text{Payment} = \text{RVU} \times \text{Geographic Adjustment} \times \text{CF}^* \\
\text{RVU (Relative Value Unit)} \quad \text{Reflects relative resource use of physician service} \\
\text{Geographic Adjustment} \quad \text{Accounts for geographic variation in the cost of providing physician services} \\
\text{CF (Conversion Factor)} \quad \text{Converts adjusted RVUs into dollar amounts} \\
\]

* Other adjustments could include those for non-physician providers, Health Professional Shortage Areas.

Note: The formula shown is a simplified version of the payment formula.
The SGR is used in calculating the update to the CF from one year to the next. The update to the CF, which can be positive or negative, depends on the relationship between a spending target and actual spending for a prior year. Under law, four factors determine the spending target:

* the change in the number of fee-for-service Medicare beneficiaries;
* the increase in the cost of operating a medical practice, as measured by the Medicare economic index (MEI);
* the increase in the ten-year moving average of real (that is, adjusted for inflation) gross domestic product (GDP) per capita in the United States (this is an allowance for added spending per beneficiary owing to rising volume and complexity of services); and
* the projected change in spending from changes in law or regulation.

The actuaries at the Centers for Medicare & Medicaid Services (CMS), the agency that administers the Medicare program, calculate the target for applicable Medicare physician spending for an upcoming year. If the target is exactly met by actual spending in that year, the CF is increased by the MEI; that is, fees are increased by estimated inflation in the cost of running a medical practice. If actual spending is less than the target, fees are increased by more than the MEI, as happened in 2000 and 2001. If actual spending exceeds the target, fees are increased less than the MEI or even reduced, as happened in 2002. (See Figure 2.)

### FIGURE 2
**Determination of the Update**

The fee update is determined in part by spending targets and the Medicare economic index (MEI).

<table>
<thead>
<tr>
<th>If actual spending compared with target is:</th>
<th>Then</th>
<th>Update compared with MEI is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>⇒</td>
<td>Lower</td>
</tr>
<tr>
<td>Equal to</td>
<td>⇒</td>
<td>Equal to</td>
</tr>
<tr>
<td>Lower</td>
<td>⇒</td>
<td>Higher</td>
</tr>
</tbody>
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The National Health Policy Forum is a nonpartisan research and public policy organization at The George Washington University. All of its publications since 1998 are available online at www.nhpf.org.
An important feature of the SGR is its cumulative nature. If the excess of spending over the SGR target is not completely recouped in a given year, the formula requires that the non-recouped spending be factored into the update calculations for the following year. This can happen because the update is limited to no more than 7 percentage points below MEI or 3 percentage points above, to minimize volatility in Medicare fees. Because the fee reduction in 2002 was limited in this way, further fee reductions were scheduled for subsequent years. Congressional action has also contributed to the carryover of non-recouped spending. In every year since 2003, Congress has overturned fee reductions and imposed a freeze or provided a small increase in fees in place of the SGR-determined update. Because the cumulative nature of the SGR requires that the “excess” spending resulting from not reducing fees be recouped eventually, the fee reduction necessary to achieve balance between cumulative targeted and actual spending reached about 29 percent for 2012.

Much of the current debate over the SGR has centered on the budgetary cost of repealing the SGR and replacing it with a guaranteed positive update. The Congressional Budget Office (CBO), the agency responsible for scoring the budgetary effects of bills offered in the Congress, estimates the ten-year cost of this SGR “fix” at over $300 billion. This is composed of the “excess” past spending associated with congressional overrides of SGR-scheduled fee cuts, which must be counted as a budgetary cost, plus the estimated amount of future fee-for-service physician spending growth that is above the SGR targets during the budget window.

SGR has been a continuing dilemma for the Congress, which has not wanted to risk jeopardizing Medicare beneficiary access to services that might accompany significant fee reductions, but has also been unwilling or unable to reduce other spending or increase revenues enough to offset the CBO-scored budgetary cost associated with SGR repeal. As a result, the Congress has “kicked the can down the road” on a yearly basis. Figure 3 (see next page) shows the relationship between the MEI, the CF update, and the increase in Medicare physician spending per fee-for-service beneficiary during the years the SGR has been in effect.

Another key feature of the SGR is that its allowance for increases in spending arising from volume and complexity growth is tied to the performance of the economy (as measured by real GDP per
capita). Volume refers to the number of services performed per fee-for-service beneficiary; complexity refers to the technological sophistication and expensiveness of such services. Through the 1980s growth in physician spending per beneficiary rose dramatically. When the RBRVS was put in place with the forerunner expenditure target system in 1992, per capita growth in physician spending was substantially moderated for several years. In the 2000s, however, spending trended upward again—not as much as in the 1980s, but still in excess of real GDP growth. Annual real GDP growth averaged about 1.7 percent during the first decade of this century, and growth in Medicare spending per fee-for-service beneficiary attributable to volume and complexity increases averaged well over twice that. (See Figure 4, see next page.)

The recent trend in spending per fee-for-service beneficiary has several implications. First, because of volume and complexity increases, many physicians have been able to increase their Medicare revenues despite the modest fee increases. Second, the trend is characteristic of the problem that Medicare and other payers face: the unsustainability of current levels of per capita medical

FIGURE 3
Percentage Change in Medicare Economic Index, Physician Fee Update, and Medicare Physician Spending per Beneficiary, 1998–2009

* Only beneficiaries in the traditional fee-for-service program.

Source: Data from the Centers for Medicare and Medicaid Services and the Boards of Trustees of the Federal Hospital Insurance (HI) and Federal Supplementary Medical Insurance (SMI) Trust Funds.
spending growth that exceeds the overall growth in the economy. A genuine solution to the SGR problem should not only rectify the congressional need to apply “band-aids” annually, but also to provide incentives that will limit Medicare spending growth.

Analysts may disagree about the consequences of the SGR. On the one hand, its presence has likely resulted in smaller increases in Medicare physician spending than might have otherwise occurred, and there is no current evidence that fee constraints have hurt beneficiary access to care. Further, the annual need to address the SGR problem has kept physician spending in full view. On the other hand, because it has overridden the SGR’s scheduled fee reductions, Congress has had to spend time and energy determining the annual update. Most importantly, the SGR has been a very blunt policy instrument, affecting all MPFS providers the same, regardless of their individual contributions to the Medicare spending problem. The optimal solution to the SGR problem will not only control Medicare spending but also reward providers who deliver cost-effective care.

As of this writing, the United States appears to be on the verge of a far-reaching debate on long-term reforms necessary to reduce

FIGURE 4
Growth in Volume and Intensity of Medicare Physician Services per FFS Beneficiary, 1980–2009

Source: Data from the Boards of Trustees of the Federal Hospital Insurance (HI) and Federal Supplementary Medical Insurance (SMI) Trust Funds.
the federal deficit and debt. Medicare spending will certainly be a part of the debate, and elimination or modification of the SGR may be subsumed in a larger set of changes to the Medicare program.

ADDITIONAL RESOURCES


## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CBO</td>
<td>Congressional Budget Office, the legislative agency responsible for estimating the budgetary effect of bills offered in the Congress.</td>
</tr>
<tr>
<td>CF</td>
<td>Conversion Factor, the dollar amount that, when multiplied by Relative Value Units, provides Medicare's fee for a service.</td>
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<tr>
<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services, the agency that administers the Medicare program within the Department of Health and Human Services.</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product, the measure typically used to gauge dollar output of the U.S. economy.</td>
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<tr>
<td>MEI</td>
<td>Medicare Economic Index, the measure CMS uses to estimate inflation in the cost of operating a private medical practice.</td>
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<tr>
<td>MPFS</td>
<td>Medicare Physician Fee Schedule, the schedule that uses the RBRVS to set fees for approximately 7,000 Medicare-covered services.</td>
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<tr>
<td>RBRVS</td>
<td>Resource-Based Relative Value Scale, the system of weights that determine the relative resource requirements of the different services covered by the fee schedule.</td>
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<tr>
<td>RVU</td>
<td>Relative Value Unit, the metric used to measure the relative resource use of services covered by the RBRVS.</td>
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<tr>
<td>SGR</td>
<td>Sustainable Growth Rate, the spending target system used by Medicare to update physician fees from one year to the next.</td>
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