

SECTION  
2B

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**Physician services**

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## R E C O M M E N D A T I O N

The Congress should update payments for physician services in 2007 by the projected change in input prices less the Commission's expectation for productivity growth.

**COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2**

# SECTION 2B

## Physician services

### Section summary

Our analysis of beneficiary access to physician care, physician supply, Medicare-to-private fee level comparisons, service volume, and ambulatory care quality finds that most of these indicators are stable and the large majority of beneficiaries are able to obtain physician care. The volume of services used per beneficiary continues to grow significantly. In consideration of expected input costs for physician services and our payment adequacy analysis, the Commission recommends that the Congress update payments in 2007 for physician services by the projected change in input prices less the Commission's expectation for productivity growth.

In contrast to this recommendation, current law calls for substantial negative updates from 2007 to at least 2011, under the sustainable growth rate (SGR) formula. The Commission does not support these impending fee cuts. We are concerned that such consecutive annual cuts would threaten beneficiary access to physician services over time, particularly those provided by primary care physicians. Reimbursement cuts may disproportionately affect primary care providers who average

### In this section

- Are current Medicare payments for physician services adequate?
- How should Medicare payments for physician services change in 2007?

lower volume growth in their practices than procedure-based specialists. Because many Medicare beneficiaries rely on primary care providers for important health care management, payment policies that may discourage medical students and residents from becoming primary care physicians raise particular concern for the Commission.

The Commission has discussed several problems associated with the SGR in Congressional testimonies and Reports to the Congress. The Commission considers the SGR formula a flawed, inequitable mechanism for volume control and plans to examine alternative approaches to it in the coming year.

Our approach for recommending updates for 2007 first considers payment adequacy from the most currently available data and then assesses the factors that will affect efficient providers' costs in the coming year. Below is a summary of our findings from this analysis for physician services.

***Beneficiary access***—Results from several surveys conducted between 2003 and 2005 show that beneficiary access to physicians is generally good with few statistically significant changes in recent years. Most beneficiaries are able to find new doctors and schedule medical appointments in an amount of time they find acceptable, but small subsets of beneficiaries report problems. Further analysis is needed to understand these problems. Researchers have found that other factors, such as local health system developments, may influence beneficiary access as much or more than Medicare payment levels (Trude and Ginsburg 2005, Lake et al. 2005).

***Physician supply***—Our analysis of Medicare fee-for-service claims data shows that the number of physicians providing services to Medicare beneficiaries has more than kept pace with growth in the beneficiary population in recent years. National physician survey data also show that the large majority of physicians in the United States are willing to accept new Medicare beneficiaries. This share remains steady compared to previous years' survey results. The Commission notes, however, that the future supply of primary care providers may be important to monitor.

**Private insurer rates compared to Medicare**—Averaged across all services and areas, Medicare fees for physician services were 83 percent of private fees in 2004. This share is slightly higher than in 2003 (81 percent), indicating that, in 2004, Medicare rates increased a little more than private rates, on average, as extrapolated from Medicare claims and two large, national private insurers (Hogan 2005b). Within a market area and for a given service, the difference between Medicare and private fees may vary substantially.

**Volume growth**—Per capita service volume continued to grow in 2004. Across all services, volume (as a function of both service units and intensity) grew 6.2 percent per beneficiary. This growth is higher than the average annual volume growth seen in previous years. Among broad categories of services—evaluation and management, major procedures, other procedures, imaging, and tests—volume growth rates varied, but all were positive. As we have seen before, per capita volume for imaging, tests, and nonmajor procedures grew the most. From 2003 to 2004, the imaging volume growth rate, per beneficiary, was 11.0 percent. For the first time, the volume of nonmajor procedures (categorized as “other procedures”) grew nominally faster than the volume of tests; other procedures grew 9.3 percent per beneficiary in 2004 and tests grew 8.9 percent.

In recent years, the volume of physician services has grown rapidly, resulting in substantial increases in Part B spending. In 2004 alone, CMS found that spending on physician services increased by 11.5 percent (Office of the Actuary 2006). This spending increase was driven in part by increases in per capita service use and intensity (McClellan 2005). CMS has noted that although some of these volume increases are related to improvements in health care quality, much of the increase cannot easily be explained by changes in treatments based on new medical evidence and valuable new technologies. Others note, however, that more complete data analysis is needed for this kind of assessment.

**Ambulatory care quality**—Our claims analysis shows small improvements and overall stability in the quality of ambulatory care. We see increases in the share of beneficiaries receiving necessary ambulatory care and averting potentially avoidable hospitalizations. Further, for some medical conditions, we see improvements on outcome measures concurrent with improvements on process measures. Few measures indicated a worsening of care. However, in nearly half of the measures, less than two-thirds of beneficiaries received the indicated services.

**Input costs**—The Medicare Economic Index (MEI) forecasts that input prices for physician services will increase by 3.7 percent in 2007. (Because the MEI is revised quarterly, this estimate may change.) Although professional liability insurance (PLI) continues to be the fastest growing input cost, PLI premium increases have slowed in the past few years. ■

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## **Recommendation 2B**

**COMMISSIONER VOTES:**

**YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2**

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*The Congress should update payments for physician services in 2007 by the projected change in input prices less the Commission's expectation for productivity growth.*

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## Background

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Physician services include office visits, surgical procedures, and a broad range of other diagnostic and therapeutic services. These services are furnished in all settings, including physician offices, hospitals, ambulatory surgical centers, skilled nursing facilities and other post-acute care settings, hospices, outpatient dialysis facilities, clinical laboratories, and beneficiary homes. Physician services are billed to Medicare Part B. Payments for these services (about \$54 billion in 2004) account for about 17 percent of total Medicare spending.

Medicare pays for physician services according to a fee schedule that lists services and their associated payment rates. The fee schedule assigns each service a set of three relative weights intended to reflect the resources needed to provide the service. These weights are adjusted for geographic differences in practice costs and multiplied by a dollar amount—the conversion factor—to determine payments. In general, Medicare updates payments for physician services by increasing or decreasing the conversion factor.

By law, these updates are subject to a formula called the sustainable growth rate (SGR). This formula ties physician payment updates to a number of factors, including growth in input costs, growth in fee-for-service (FFS) enrollment, and growth in the volume of physician services relative to growth in the national economy. Over the last several years, physician fees were slated to decrease according to the SGR. However, recent Acts of Congress overrode these cuts. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) explicitly increased payments for all physician services through a 1.5 percent update to the conversion factor, additional fee increases, and bonus payments to certain physicians, particularly those in rural areas.<sup>1</sup>

The Deficit Reduction Act of 2005 again overrides the SGR by averting a cut to the 2006 conversion factor. This Act did not increase payment rates; rather, it held them at 2005 levels. The SGR continues to call for substantial negative updates for 2007—the year for which we are making our recommendation—through at least 2011. The Commission does not support these impending fee cuts. We are concerned that such consecutive annual cuts would threaten beneficiary access to physician services over time, particularly those provided by primary care physicians. Also, the Commission has discussed several problems

associated with the SGR in Congressional testimonies (Hackbarth 2005a, Hackbarth 2005b) and Reports to the Congress (MedPAC 2005, MedPAC 2002). We consider the SGR formula a flawed, inequitable mechanism for volume control and plan to examine alternative approaches to it in the coming year.

In recommending an update for Medicare's payment for physician services in 2007, the Commission follows its usual two-step approach. We first analyze payment adequacy from the most currently available data and then assess the factors that will affect efficient providers' costs in the coming year.

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## Are current Medicare payments for physician services adequate?

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The Commission's framework for assessing payment adequacy for physician services relies on several indicators. We cannot look at financial performance directly because physicians are not required to report their costs to Medicare, as are other providers like hospitals. Instead, we consider other available indicators. We analyze information on beneficiary access to physician care, including beneficiary and physician survey information and physician supply data. We also compare Medicare's reimbursement levels with those of the private sector and examine changes in the volume of physician services. For the first time in our physician payment analysis, we examine changes in ambulatory care quality.

For the purposes of this analysis, we examine payments for physician services in the aggregate to determine general payment adequacy and update recommendations. Chapter 3 of this report analyzes the process for reviewing the relative value units (RVUs) assigned to services for physician work. This chapter considers ways to improve the review process so that it might better identify and correct misvalued physician services. In future work, the Commission intends to focus more closely on a number of other specific physician payment issues. For example, we plan to analyze the process for assigning practice expense values for fee schedule services. We will also be examining differences in practice costs among geographic areas to assess CMS's designated payment locality boundaries. Finally, as mentioned previously, our research agenda also includes an exploration of alternatives to the SGR formula.

## **Beneficiary access to physician services**

Physicians are often the most important link between Medicare beneficiaries and health care. Some 80 percent of noninstitutionalized beneficiaries report that a doctor's office or a doctor's clinic is their usual source of care (CMS 2003). Beneficiary access to physicians, therefore, is an important indicator of access to health care as well as payment adequacy.

To assess beneficiary access to physician services, this section examines results from surveys of beneficiaries and reviews data on physician supply and physician willingness to serve Medicare patients. By design, many of the surveys' questions rely on respondents' own views. For example, respondents use their own judgment when determining if they are able to schedule timely appointments. Subjective responses can be useful measures for tracking beneficiary experience and perceptions, particularly over time, but perceptions of concepts such as timeliness may vary across individuals and subpopulations.

Additionally, we have difficulty determining what the adequate level of access should be. Beneficiary judgment on access to physicians is made in an environment where the majority of beneficiaries have supplemental insurance against out-of-pocket liability. This coverage effectively lowers beneficiary costs for physician visits, thereby diminishing the ability for cost to temper demand. Some economists might argue that a payment policy goal of beneficiaries reporting little to no access problems is inefficient or unattainable. Even so, monitoring for changes in access, particularly among underserved populations, is crucially important for the Medicare program.

We find access measures most useful, therefore, when looking for trends across years. They help us observe changes in beneficiaries' access to physicians over time and supplement our analysis of payment adequacy. However, our access measures do not necessarily inform us on the quality or content of physician-patient encounters. Although we begin to examine some quality measures in this chapter through claims analyses, we need further research to evaluate beneficiary experiences during physician visits.

### **Beneficiary surveys on access to physicians**

Results from several surveys conducted from 2003 to 2005 show that beneficiary access to physicians appears to be steady, with the majority of beneficiaries reporting little

to no access problems. Most are able to schedule timely medical appointments and find new doctors, but small subsets of beneficiaries report access problems.

To obtain the most current access measures possible, the Commission sponsors a telephone survey. This survey was piloted in 2003. In our last two rounds—2004 and 2005—we surveyed both Medicare and privately insured individuals (age 50 to 64) to assess the extent to which any access problems, such as appointment scheduling, are unique to the Medicare population. (We were unable to distinguish FFS Medicare enrollees from those in Medicare Advantage in this survey.) As in the pilot year, the results from this telephone survey are weighted to be nationally representative with respect to basic demographic variables. We did not survey Medicare beneficiaries younger than age 65 due to sample-size limitations.

Most Medicare beneficiaries have one or more doctor appointments in a given year. Therefore, one access indicator we examine is beneficiaries' ability to schedule timely appointments. The 2005 survey found that most Medicare beneficiaries and privately insured people age 50 to 64 did not have to delay getting an appointment due to scheduling issues (Table 2B-1). Rates across the survey years have remained steady, with Medicare beneficiaries enjoying lower rates of scheduling delays. In 2005, among those who tried to schedule a routine-care appointment, 74 percent of Medicare beneficiaries and 67 percent of privately insured individuals reported that they never experienced delays. Two percent of Medicare beneficiaries and 3 percent of privately insured individuals reported always experiencing delays. As expected, for illness or injury, timely appointments were more common. Among those who scheduled an appointment for an illness or injury, 83 percent of Medicare beneficiaries and 75 percent of privately insured individuals said they never experienced a delay. Low shares of both groups reported frequent delays in getting an appointment for illness or injury.

Our survey also monitors beneficiaries' ability to find a new physician. Compared with the number who schedule doctor appointments, a considerably smaller number of beneficiaries look for a new physician during the year. Therefore, survey questions about problems finding a new doctor apply only to a small share of respondents (10 percent to 20 percent). With this small subset, the differences we see among years and between privately insured and Medicare respondents are not statistically



**TABLE  
2B-1**

**Access to physicians is similar for Medicare beneficiaries and privately insured people**

Survey question	Medicare (Age 65 and older)			Private insurance (Age 50-64)	
	2003	2004	2005	2004	2005
<b>Unwanted delay in getting an appointment:</b>					
Among those who had an appointment, "How often did you have to wait longer than you wanted, to get a doctor's appointment?"					
<b>For routine care</b>					
Never	71%	73%*	74%*	66%*	67%*
Sometimes	21	21*	21	26*	25
Usually	3	4	3	5	5
Always	5	2	2	3	3
Standard error	(3.3)	(2.6)	(2.4)	(2.3)	(2.3)
<b>For illness or injury</b>					
Never	80%	83%*	83%*	77%*	75%*
Sometimes	16	13*	15	19*	19
Usually	3	2	1	3	3
Always	1	2	1	2	2
Standard error	(3.5)	(2.7)	(2.6)	(2.4)	(2.5)
<b>Getting a new physician:</b>					
Among those who tried to get an appointment with a new primary care physician or a specialist, "How much of a problem was it finding a primary care doctor/specialist who would treat you? Was it..."					
<b>Primary care physician</b>					
No problem	75%	77%	75%	73%	75%
Small problem	18	11	12	15	16
Big problem	7	11	13	13	9
Standard error	(11.2)	(8.5)	(8.6)	(6.9)	(7.4)
<b>Specialist</b>					
No problem	85%	89%	89%	83%	86%
Small problem	8	5	6	8	7
Big problem	5	5	5	8	6
Standard error	(7.7)	(7.0)	(5.8)	(5.1)	(4.8)
<b>Not accessing a doctor for medical reasons:</b>					
"In the past year, do you think you should have seen a doctor for a medical problem, but did not?"					
	7%	6%*	7%*	11%*	12%*
Standard error	(3.0)	(2.2)	(2.2)	(2.2)	(2.2)

Note: Numbers may not sum to 100 percent due to rounding. Missing responses are not presented. For the 2003 survey, n=1,040 Medicare beneficiaries; for the 2004 survey, n=4,122 (2,087 Medicare, 2,035 privately insured); for the 2005 survey, n=4,021 (2,012 Medicare, 2,009 privately insured). For each survey question, the difference between 2003, 2004, or 2005 is not statistically significant among the same sample population, at a 95% confidence level.

\*Indicates a statistically significant difference between the Medicare and privately insured populations in the same study year, at a 95% confidence level.

Source: MedPAC-sponsored telephone surveys, conducted September–October 2003, August–September 2004, and August–September 2005.

significant. Table 2B-1 (p. 85) lists standard errors to provide more statistical information on the sample response rates for each question. (A standard error of 3.0, for example, indicates that the sample response rates could differ from the true response rate by +/- 3 percent at a 95 percent confidence interval.)

In our sample, 75 percent of people—both Medicare beneficiaries and privately insured individuals—who were looking for a new primary care physician reported that they experienced no problems. Although access appears good for most, some concerns are worth noting. Among the subset of people who reported any problems, Medicare beneficiaries were somewhat more likely, in our 2005 sample, to characterize their problem as big (versus small) than their privately insured counterparts. Also, the share of Medicare beneficiaries indicating that they experienced big problems accessing a primary care physician grew in both the 2004 and 2005 samples. These trends in our samples, however, may not generalize to the actual population because of data limitations in the small share of people looking for new doctors and the even smaller share reporting problems.<sup>2</sup> Nevertheless, these trends are important to monitor. Some subpopulations of beneficiaries may be experiencing more difficulty accessing primary care physicians in recent years, and to a greater degree than privately insured individuals. Additional data are needed, however, to draw this conclusion.

We found that access to new specialists in our sample was generally better than access to new primary care physicians; 95 percent of Medicare beneficiaries and 93 percent of privately insured individuals looking for a new specialist reported either no problem or only a small problem accessing specialists. Statistically, this difference in our sample between Medicare beneficiaries and privately insured people is not large enough to be considered significant.

Our survey asked a follow-up question to those beneficiaries who indicated that they had a problem (big or small) finding a new physician (specialist or primary care physician or both). This question asked if anyone from the doctor's office told them that their problem finding a doctor was because they were covered by Medicare. Roughly one-quarter of these beneficiaries stated "yes" to this question in 2005. Although this share amounts to less than 1 percent of the entire Medicare sample, the Commission will continue to track this question closely

in future surveys, and perhaps develop additional survey questions to gain more insights.

Another measure of access to physicians examines reasons respondents give for not seeing a physician for their medical problems. Similar to previous years, Medicare beneficiaries report better access than privately insured people on this measure, and the difference between the two is statistically significant. The 2005 survey found that 7 percent of Medicare beneficiaries and 12 percent of privately insured individuals said they think they should have seen a doctor for a medical problem in the past year, but did not. Within this small subset, physician availability issues (appointment time, finding a doctor) were listed as the problem by just 11 percent of the Medicare beneficiaries and 8 percent of the privately insured people. The remaining reasons given by individuals in this subset included cost, procrastination, and low perceived seriousness of the problem (at the time of the illness).

The Center for Studying Health System Change (HSC) also compares access to physician services for Medicare beneficiaries and privately insured people age 50 to 64. Their survey is somewhat larger, but their most recent results are from 2003 (Trude and Ginsburg 2005). Comparing 2001 to 2003, their survey showed parallel trends on access measures for Medicare beneficiaries and privately insured individuals. Approximately 10 percent of Medicare beneficiaries and 17 percent of privately insured individuals reported delaying or not getting care in 2003. Compared to 2001, both rates improved in 2003. Regarding delays in scheduling appointments, both Medicare and privately insured people waited a little longer to get appointments in 2003 than in 2001. Also, in both years, fewer Medicare beneficiaries reported dissatisfaction with their choice of physician, compared with the privately insured sample, but the differences were not large and the rates were fairly stable for both. The parallel movement of these indicators suggests that other factors, such as local health system developments, may influence beneficiary access as much or more than Medicare payment levels.

An even larger beneficiary survey, the Consumer Assessment of Health Plans Survey for Medicare fee-for-service (CAHPS-FFS), includes two questions related to beneficiary access to physicians: one on access to specialists and the other on appointment scheduling for routine care. Sponsored by CMS, the CAHPS-FFS survey is conducted annually, primarily by mail. It samples between 100,000 and 120,000 beneficiaries, including

**TABLE  
2B-2****Most beneficiaries report little to no problem accessing specialty and routine care**

Survey question	2000	2001	2002	2003	2004
<b>Within the past 6 months...</b>					
If you or your doctor thought you needed to see a specialist, how much of a problem, if any, was it to see the specialist?					
No problem or small problem	93.6%	94.8%	94.3%	94.5%	95.2%*
Big problem	6.4	5.2	5.7	5.5	4.8*
If you made an appointment for regular or routine care, how often did you get an appointment as soon as you wanted?					
Always or usually	92.5	92.1	90.3	91.5	91.4*
Sometimes	6.4	6.7	7.9	6.8	7.0*
Never	1.2	1.2	1.8	1.6	1.7*

Note: Numbers may not sum to 100 percent due to rounding. n>100,000.

\*Indicates a statistically significant change between 2003 and 2004, at a 95% confidence level.

Source: MedPAC analysis of 2000–2004 Consumer Assessment of Health Plans Survey (CAHPS) data for fee-for-service Medicare from CMS.

community-dwelling, institutionalized, and disabled individuals. It asks an assortment of questions related to health care services FFS beneficiaries receive. The data from this survey go up to 2004 and are not as recent as the data we have from the MedPAC-sponsored telephone survey discussed earlier.

Results from the CAHPS–FFS survey also show that the large majority of Medicare beneficiaries report good access to physicians—consistent with responses from the MedPAC-sponsored telephone survey. Specifically, nearly 95 percent of beneficiaries reported either no problem or small problems accessing a specialist (Table 2B-2). Also, the majority of beneficiaries reported being able to schedule timely appointments for routine care either always or usually. These rates have remained stable over the last several years. Further analysis of the CAHPS–FFS reveals that older beneficiaries (age 85 and older) were least likely to report big problems finding a specialist or getting an appointment. These patients may be more likely than younger patients to have long-established physician-patient relationships.

CMS has sponsored another survey—the Targeted Beneficiary Survey (TBS)—devoted specifically to beneficiary access to physicians in 11 market areas suspected of access problems (Lake et al. 2005). This survey was conducted in 2003 and 2004. These 11 selected areas were chosen based on relatively high rates of physician access problems reported on the 2001 CAHPS–

FFS and in other CMS monitoring activities on physician access.<sup>3</sup>

The TBS found that even in these selected areas, only a small percentage of beneficiaries had access problems attributed to physicians not taking new Medicare patients. The rates of access problems did not change between 2003 and 2004. In both years, the study showed that certain subgroups in these markets were more likely to experience access problems.

Specifically, the TBS found that in both 2003 and 2004, more than 90 percent of beneficiaries within these 11 markets reported either no problem or a small problem “getting a personal doctor they were happy with since joining Medicare.” Similarly, among those needing a specialist, more than 90 percent reported either no problem or a small problem seeing one in the past six months. Among beneficiaries seeking routine care appointments in 2004, 79 percent reported that they always got an appointment as soon as they wanted (a slightly higher percentage than in 2003), and another 14 percent said they usually got an appointment as soon as they wanted. Among those seeking urgent care in the 2004 survey, 84 percent reported that they always received care as soon as they wanted, and another 9 percent said they usually received care as soon as they wanted. (Note that this urgent-care measure does not distinguish site of care, such as a doctor’s office or a hospital emergency room.)

**TABLE  
2B-3**

**Number of physicians billing Medicare is increasing steadily, 1999–2004**

	Number of Medicare patients in caseload			
	≥15	≥50	≥100	≥200
<b>Number of physicians</b>				
1999	432,355	386,720	338,344	261,218
2000	444,187	398,905	351,012	274,059
2001	457,292	411,424	364,023	286,862
2002	466,299	419,269	370,144	291,593
2003	470,213	424,684	374,721	292,183
2004	483,945	440,462	393,730	315,398
Percent growth, 1999–2004	11.9%	13.9%	16.4%	20.7%
<b>Physicians per 1,000 beneficiaries</b>				
1999	11.7	10.4	9.1	7.1
2000	11.9	10.7	9.4	7.3
2001	12.1	10.9	9.7	7.6
2002	12.3	11.0	9.8	7.7
2003	12.3	11.1	9.8	7.6
2004	12.5	11.3	10.1	8.1

Note: Calculations include physicians (allopathic and osteopathic). Nurse practitioners, physician assistants, psychologists, and other health care professionals are not included in these calculations. To calculate the ratios, Part B enrollment is used, which includes beneficiaries in fee-for-service Medicare and Medicare Advantage, on the assumption that physicians are providing services to both types of beneficiaries. To calculate physicians' Medicare caseload size, only fee-for-service beneficiaries are included.

Source: MedPAC analysis of Health Care Information System, 1999–2004, from CMS.

Transitioning beneficiaries—those new to a market area, new to Medicare, or recently disenrolled from a Medicare Advantage plan—had slightly higher rates of reported problems seeing a specialist and “getting a personal doctor they were happy with since joining Medicare.” The rates of reported difficulty getting timely routine appointments or urgent care were similar to those of the other Medicare FFS beneficiaries in the survey.

In both 2003 and 2004, 93 percent of beneficiaries surveyed on the TBS said the ease of seeing a doctor in the past year had either stayed the same or gotten easier. Among those who reported problems accessing physicians, 4 percent or fewer said that the problems they experienced were due to physicians not taking Medicare patients or not taking assignment. Other reasons beneficiaries gave for access problems included: the doctor was not taking any new patients, they did not like the doctor, and transportation issues.

Previous research on access to physician services in 2002 and 2003 assesses changes in access related to the 5.4 percent fee reduction in 2002 (Trude and Ginsburg 2005, MedPAC 2003). Most survey data show little to no change in access to care in 2002 and 2003, but the cut was in place for only one year.<sup>4</sup> The prospect of multiple years of fee cuts in current law makes comparison with 2002 difficult. Beneficiary access to physician services would likely be negatively affected by multiple consecutive years of payment cuts.

**Changes in the supply of physicians**

Our analysis of Medicare FFS claims data shows that the number of physicians providing services to Medicare beneficiaries has more than kept pace with growth in the beneficiary population in recent years. To analyze physician supply, we examined Medicare claims data, physician survey results, and other published articles and information on physician supply.

Comparing growth in the number of physicians with growth in the Medicare population, we see that from 1999 to 2004, the number of physicians who billed Medicare grew faster than Medicare Part B enrollment. During this time, Part B enrollment grew 4.8 percent. In comparison, the number of physicians with at least 15 Medicare patients grew 11.9 percent (Table 2B-3).<sup>5</sup> The number of physicians with 200 or more Medicare patients grew even faster at 20.7 percent. Therefore, the ratio of physicians per 1,000 beneficiaries grew more rapidly for physicians with higher Medicare caseloads. This growth has contributed to the growing share of physicians seeing more Medicare patients. In 2004, a little more than half of all physicians billing Medicare saw at least 200 different Medicare patients.

Our claims analysis also shows that a large share of the 2004 physicians (80 percent) stayed active in the Medicare market during all five of the study years (1999 through 2004). Despite the overall increase in physicians who regularly saw Medicare FFS beneficiaries, the supply of physicians was still somewhat dynamic, with small shares of physicians either starting or stopping their regular Medicare practice. These changes affect existing patient-physician relationships and could contribute to the small, but persistent, share of beneficiary complaints about access problems.

**Physician surveys on willingness to accept new beneficiaries** A key indicator in examining physician supply is the degree to which physicians are accepting new Medicare patients. The most recent data indicate that the large majority of physicians in the United States are willing to accept new Medicare beneficiaries, and this share remains steady.

The Center for Studying Health System Change, as part of its broader Community Tracking Study Physician Survey, asks physicians about acceptance of new patients. This phone survey is designed to be nationally representative of physicians involved in direct patient care. Conducted four times in the last decade, this survey provides useful information on trends in physician acceptance of new patients over time (Cunningham et al. 2006).

In the most recent survey, only 3 percent of physicians with practices open to private patients completely closed their practice to new Medicare patients (Table 2B-4). In contrast, 73 percent of physicians with practices open to private patients reported that they accepted all new Medicare patients, 13 percent said they accepted most

**TABLE  
2B-4**

**Physician acceptance of new Medicare patients has stabilized**

**Percentage of physicians accepting new patients**

<b>Patients</b>	<b>1996-1997</b>	<b>2001-2002</b>	<b>2004-2005</b>
<b>New Medicare</b>			
All	75%	71%*	73%
Most	13	15*	14
Some	10	10	10
None	3	4*	3
<b>New privately insured</b>			
All	71	68*	72**
Most	16	17	15
Some	10	10	9
None	4	5*	4

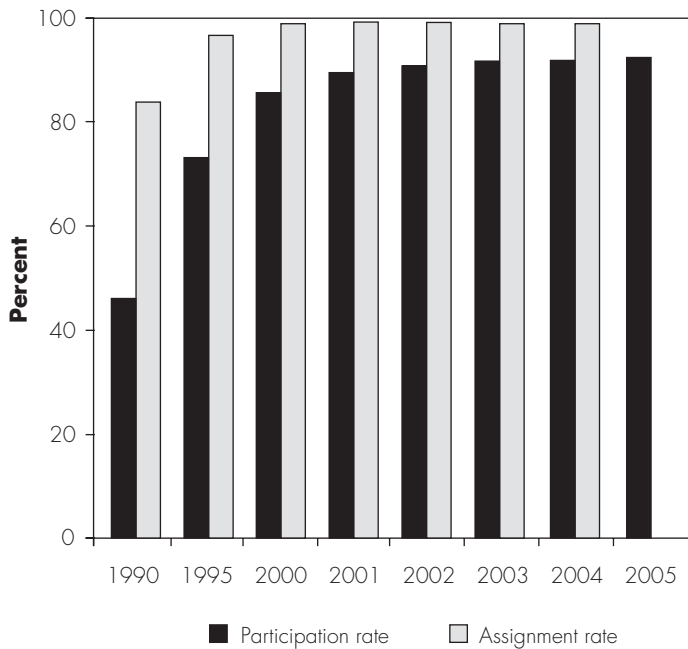
Note: Medicare rates exclude pediatricians, pediatric specialists, nephrologists, and physicians accepting no new privately insured patients.  
\*Change from 1996-1997 is statistically significant at p<.05.  
\*\*Change from 2000-2001 is statistically significant at p<.05.

Source: Center for Studying Health System Change (Cunningham et al. 2006).

new Medicare patients, and 10 percent said they accepted some new Medicare patients. Cunningham and colleagues suggest that while there was a dip in acceptance of Medicare patients between 1996-1997 and 2000-2001, some increases occurred in the most recent survey (2004-2005), which suggests stabilization. Indeed, rates in this past survey are statistically unchanged from the previous one (2000-2001).

Another key finding from this physician survey indicates that physician acceptance of new Medicare patients follows a similar trend as acceptance of new privately insured patients. The study authors suggest, therefore, that overall health system dynamics have played a larger role in physician decisions about accepting Medicare patients than have Medicare payment policies. For example, compared to 2000, physician capacity constraints may have eased somewhat, decreasing physician pressures to limit the number of new patients—of any type—in their practices.

This study shows that acceptance of new Medicare patients continues to be lower for primary care physicians than it is for both medical and surgical specialists. In the

**FIGURE  
2B-1****Participation and assignment rates  
remain at high levels, 1990-2005**

Note: Participation rate is the percentage of physicians and nonphysician providers signing Medicare participation agreements. Assignment rate is the percentage of allowed charges paid on assignment. The assignment rate for 2005 is not shown; it requires calculations from claims not yet available.

Source: Ways and Means Greenbook 2004, unpublished CMS data, and MedPAC analysis of Medicare claims for a 5 percent random sample of Medicare beneficiaries.

most recent survey round, however, the study found a statistical increase in the share of primary care physicians accepting new Medicare patients. Rates for the specialists in the most recent survey were statistically unchanged from the previous survey round.

Among the 3 percent of physicians who reported that they did not accept new Medicare patients, the top reasons were: inadequate reimbursement, billing and paperwork, high clinical burden, and practice too full. This study did not explore reasons physicians gave for not accepting private patients, which occurred at a similar rate.

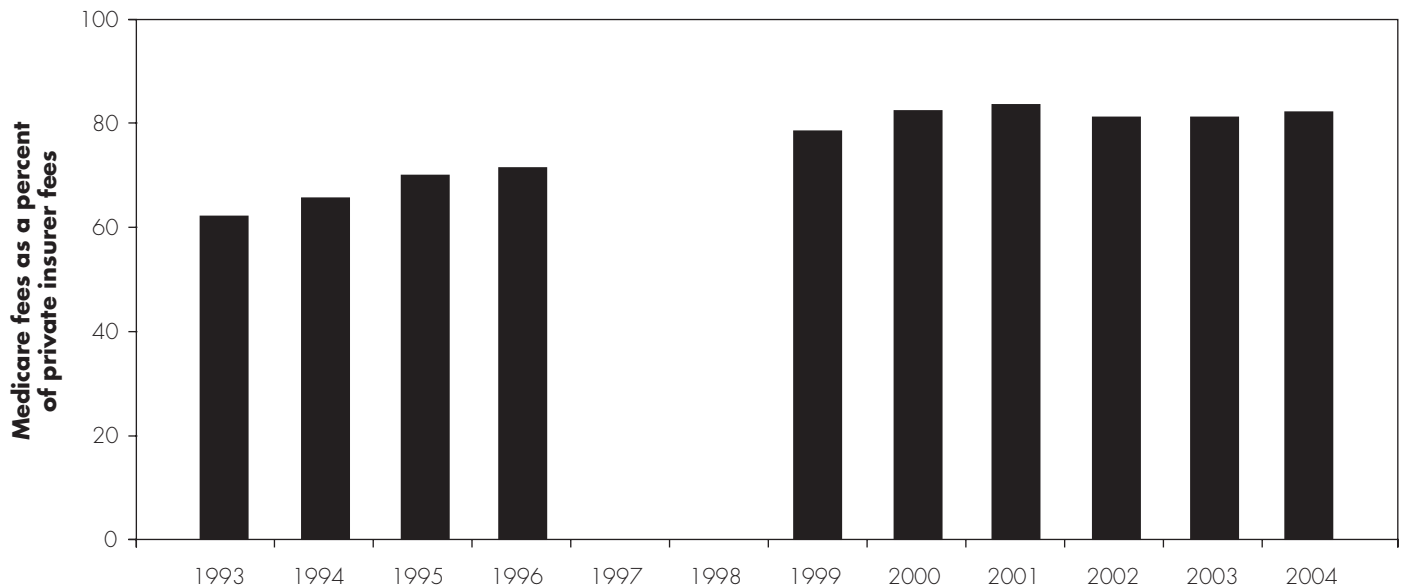
Another physician survey, the National Ambulatory Medical Care Survey (NAMCS), conducted annually by the National Center for Health Statistics, also shows that the large majority of physicians accept some or all new Medicare patients. For 2004, this survey found that among physicians with at least 10 percent of their practice revenue

coming from Medicare, 94 percent accepted new Medicare patients (Cherry 2005). In comparison, 96 percent of physicians reported that they had open practices, and thus were accepting some or all new patients. This survey also found that more physicians accepted new Medicare patients than privately insured patients in capitated and noncapitated health plans. Importantly, both the overall patient acceptance rate and the Medicare acceptance rate remained steady compared to results from the 2003 NAMCS.<sup>6</sup>

The small share of physicians who leave the Medicare market, or who report reluctance to serve Medicare beneficiaries, may be responding to a variety of factors other than, or in addition to, payment adequacy. These other factors may relate to local conditions such as physician supply, demand for physician services, and insurance market conditions. Also factoring into physicians' decisions to accept Medicare patients may be their dependence on referrals, the size of their Medicare patient caseload, the amount of time they are willing to devote to patient care, and their personal retirement decisions. Disentangling these other factors from Medicare payment adequacy is difficult. To some extent, comparing physicians' willingness to accept Medicare patients with their willingness to accept all patients helps to control for non-Medicare factors.

**Assignment and participation rates** To supplement our data on the supply of physicians treating Medicare patients and patients' access to physician care, we examine assignment rates (the share of allowed charges for which physicians accept assignment) and physician participation rates (the share of physicians signing Medicare participation agreements). Claims data show that 99 percent of allowed charges for physician services were assigned in 2004 (Figure 2B-1). That is, for almost all allowed services, physicians agreed to accept the Medicare fee schedule charge as the service's full charge.

The number of participating physicians as well as the participation rate increased in 2004 and 2005. Participating physicians agree to accept assignment on all allowed claims in exchange for a 5 percent higher payment on allowed charges. Participating physicians receive other valuable benefits, including having their name and contact information listed on Medicare's website and the ability to verify a patient's Medicare eligibility and medigap status. Medicare's physician participation

**FIGURE  
2B-2****Ratio of Medicare to private reimbursement rates for physician services is stable**

Note: Data are not available for 1997 and 1998.

Source: Direct Research, LLC, for MedPAC.

agreement does not require physicians to take Medicare patients.

While 96 percent of allowed charges were for services provided by participating physicians, 3 percent were for services provided by nonparticipating physicians who decided to accept assignment. Only 0.9 percent of allowed charges were for services provided by nonparticipating physicians who did not accept assignment. For this small amount of nonassigned charges, physicians likely billed higher amounts, making the beneficiary liable for added coinsurance.

This practice is called balanced billing. Medicare limits the amount physicians may balance bill a patient. The total nonassigned charges for a service may not exceed the fee schedule amount by more than 9.25 percent. (This amount is equal to 115 percent of the nonparticipating physicians' allowed charge, which is 95 percent of the fee schedule amount.) In general, physicians do not consider the additional payment from balance billing to be worth forgoing the nonmonetary benefits associated with accepting assignment. A chief nonmonetary benefit, for example, is that when physicians accept assignment, they can receive payments directly from Medicare (less

the beneficiary cost-sharing portion) rather than collecting from the beneficiary. This arrangement is a major convenience for many physicians. In future analyses, the Commission may examine policy options related to the current balance billing limits.

The high rate of assigned charges also reflects the fact that the majority of physicians and nonphysician providers who bill Medicare agree to participate in Medicare—92 percent in 2005 (Figure 2B-1).

**Private payer payment rates for physician services**

We compare trends in Medicare's physician fees with those of private insurers as another measure of payment adequacy. Historically, Medicare payment rates for physician services have been below private insurer rates, but the difference between the two narrowed by the late 1990s and has remained relatively steady in recent years (Figure 2B-2). Averaged across all services and areas, 2004 Medicare rates were 83 percent of extrapolated private rates. This share is slightly higher than it was in 2003 (81 percent), indicating that, in 2004, Medicare rates increased a little more than private rates, on average (Hogan 2005b).

To analyze trends in Medicare rates for physician services relative to private rates, our contractor, Direct Research, LLC, used private claims databases from two large, national insurers (Hogan 2005b).<sup>7</sup> In addition to physician fee comparisons, this analysis estimates average annual fees based on private enrollment trends for different types of plans, such as health maintenance organizations (HMOs), preferred provider organizations (PPOs), and traditional indemnity insurance. This research finds that the difference between Medicare and private payment rates has narrowed considerably since the mid-1990s, when Medicare rates were about 66 percent of private payment rates. Enrollment shifts in the private market from higher-paying indemnity plans to lower-paying HMOs accounted for much of the narrowing between Medicare and private insurance rates from the mid-1990s to 2001.

Medicare's average fee for physician services grew by about 2 percent in 2004. This increase stems from several provisions in the Medicare Prescription Drug, Improvement, and Modernization Act of 2003. In addition to a 1.5 percent increase in the conversion factor, the law also imposed a floor on the geographic practice cost index (GPCI) for physician work—the component of the fee schedule that accounts for geographic variation in costs for physicians' salaries and fringe benefits. This provision effectively raised payments, through 2006, for services furnished in all areas with below-average physician work GPCIs. The MMA also increased fees in Alaska, through 2005, and provided bonus payments, through 2007, for services provided by physicians in newly established physician scarcity areas (determined separately for primary care physicians and specialists).<sup>8</sup>

In contrast, we found that private insurer payment rates in our databases increased, on average, less than 1 percent in 2004. In addition to steady fees, the mix of private enrollment by type of plan (preferred provider, point-of-service, health maintenance organization, and traditional indemnity insurance) remained steady between 2003 and 2004 (Gabel et al. 2004). Thus, enrollment mix did not affect the change in average private fees.

Relative to private insurer fees, the net effect of Medicare's payment increases resulted in a 2-percentage-point narrowing of the Medicare-to-private fee ratio in 2004. Consequently, across all areas and services, Medicare fees averaged 83 percent of private insurer rates in 2004, up from 81 percent in 2003.<sup>9</sup> Within a market area and for a given service, the difference between Medicare and private fees may vary substantially.

While our research averages payments across all areas, some research by HSC has examined access rates by geographic area, with particular attention to the difference between Medicare and private insurer fees in each area (Trude and Ginsburg 2005). This research has found that despite differences in Medicare and commercial payment rates across markets, the proportion of Medicare beneficiaries reporting access to care problems in markets with the widest payment rate gap did not vary significantly from the proportion reporting problems in markets with more comparable payment rates. In addition, privately insured people age 50 to 64 did not appear to gain better access to care relative to Medicare beneficiaries in markets with higher commercial payment rates. These findings suggest that local and national health system developments may be more important influences on both Medicare beneficiary access and privately insured access. Indeed, these conditions may affect beneficiary access as much as or more than Medicare payment levels.

### **Changes in the volume of physician services used**

Changes in the volume and intensity of services may be another indicator of the adequacy of Medicare's payments for services. Using claims data from 1999 through 2004, we calculated per capita growth in the units of services beneficiaries used. We then weighted the units of services used by each service's relative value units from the physician fee schedule. The result is a measure of growth—or volume—that accounts for changes in both the number of services and the complexity, or intensity, of those services (Table 2B-5). We thus distinguish growth in volume from growth in units of service: Volume growth includes an adjustment for change in intensity; unit-of-service growth does not. Compared to an analysis of spending growth, looking at RVU growth removes the effects of price inflation.

Per capita volume continued to grow in 2004. Across all services, volume grew 6.2 percent per beneficiary. This growth is higher than the average annual volume growth seen in recent previous years. Among broad categories of services—evaluation and management, major procedures, other procedures, imaging, and tests—volume growth rates varied, but all were positive. As we have seen before, per capita volume for imaging grew the most. From 2003 to 2004, the imaging volume growth rate was 11.0 percent. For the first time, the volume of other procedures (which includes nonmajor procedures and outpatient therapies) grew more than the volume of tests but these were similar; other procedures grew 9.4 percent per beneficiary in 2004 and tests grew 8.9 percent.



**TABLE  
2B-5**

**Use of physician services per beneficiary in fee-for-service Medicare, for selected services, 1999-2004**

Type of service	Average annual percent change in units of service per beneficiary		Average annual percent change in volume per beneficiary*		Percent of total volume*
	1999-2003	2003-2004	1999-2003	2003-2004	
<b>All services</b>	<b>4.2%</b>	<b>4.5%</b>	<b>5.4%</b>	<b>6.2%</b>	<b>100.0%</b>
<b>Evaluation and management</b>	<b>2.4</b>	<b>1.4</b>	<b>3.6</b>	<b>3.3</b>	<b>41.1</b>
Office visit—established patient	2.5	1.3	3.4	3.2	17.7
Hospital visit—subsequent	2.1	0.5	3.0	1.9	8.0
Consultation	4.3	3.7	5.7	5.2	5.8
Emergency room visit	3.3	1.4	6.4	3.9	2.7
Hospital visit—initial	0.8	0.1	1.2	0.7	2.0
Office visit—new patient	0.1	1.8	0.1	2.0	1.9
Nursing home visit	0.4	2.1	2.1	3.5	1.7
<b>Imaging</b>	<b>5.2</b>	<b>5.8</b>	<b>9.9</b>	<b>11.0</b>	<b>15.7</b>
Standard—nuclear medicine	12.7	10.5	16.8	14.3	2.3
Echography—heart	8.7	7.3	10.8	10.0	2.2
Advanced—CT: other	13.7	13.0	16.3	16.2	2.0
Advanced—MRI: other	17.7	17.1	19.3	18.2	1.8
Standard—musculoskeletal	3.4	4.2	5.1	4.5	1.2
Advanced—MRI: brain	14.0	9.6	13.3	11.6	1.1
Standard—chest	0.5	-0.6	-0.2	-1.3	0.7
Standard—breast	7.2	13.0	-5.3	4.5	0.7
Echography—other	9.7	8.1	11.6	12.0	0.6
Procedure—other	8.6	18.2	8.3	16.1	0.5
<b>Major procedures</b>	<b>2.9</b>	<b>0.2</b>	<b>3.8</b>	<b>3.4</b>	<b>9.0</b>
Cardiovascular—other	2.5	-6.2	4.0	-3.1	2.0
Orthopedic—other	7.3	8.3	7.5	8.9	1.1
Coronary artery bypass graft	-2.5	-4.0	-3.6	-4.5	0.7
Knee replacement	10.2	14.4	9.7	14.6	0.7
Coronary angioplasty	7.9	6.1	7.3	6.7	0.5
Hip fracture repair	-1.1	-0.1	-0.4	0.9	0.4
Hip replacement	6.4	6.3	6.4	6.4	0.4
<b>Other procedures</b>	<b>8.6</b>	<b>6.3</b>	<b>7.0</b>	<b>9.4</b>	<b>21.7</b>
Minor—other, including outpatient rehab	16.0	23.7	14.7	21.3	4.4
Ambulatory—skin	5.3	4.2	4.6	5.8	2.1
Cataract removal/lens insertion	0.8	2.0	1.0	2.2	1.8
Colonoscopy	9.2	1.9	9.3	1.4	1.1
Upper gastrointestinal endoscopy	3.8	4.2	3.4	4.0	0.6
Cystoscopy	2.0	3.0	2.2	3.4	0.5
<b>Tests</b>	<b>4.3</b>	<b>10.8</b>	<b>7.0</b>	<b>8.9</b>	<b>5.1</b>
Other tests	6.1	26.7	11.0	16.8	2.0
Lab test—other (physician fee schedule)	5.4	1.7	5.2	2.7	1.5
Electrocardiogram	1.5	2.1	1.7	2.7	0.7
Cardiovascular stress test	8.0	8.3	10.2	10.2	0.6

Note: CT (computed tomography). To put service use in each year on a common scale, we used the relative weights for 2004. For billing codes not used in 2004, we imputed relative weights based on the average change in weights for each type of service. Some low-volume categories and services are not shown on the table, but are included in the summary calculations.

\*Volume is measured as units of service multiplied by each service's relative weight (relative value units) from the physician fee schedule.

Source: MedPAC analysis of claims data for 100 percent of Medicare beneficiaries from all 12 months of each year.

These estimates include only services paid for under the physician fee schedule. The estimates would be higher if they included the volume of other services in CMS's broader definition of physician services, such as Medicare Part B drugs and laboratory services. The Commission has found, for example, that volume of chemotherapy drugs increased 12 percent from 2003 to 2004 and erythropoietin (for patients without end-stage renal disease) grew 36 percent (Hogan 2005a).

The imaging category includes several services with double-digit volume increases in 2004, including specified magnetic resonance imaging, computerized tomography, and nuclear medicine. Chapter 3 of MedPAC's March 2005 report discusses volume increases in imaging and explores a variety of policy options and recommendations to address volume growth in imaging services.

The other procedures category includes the subcategory with the highest volume growth in 2004—minor procedures. This subcategory, which grew 21.3 percent per beneficiary, includes drug administration and outpatient rehabilitation, such as physical therapy. Although much of the growth is attributable to physical therapy services, we also find growth in drug administration, some of which may be due to payment changes included in the MMA.<sup>10</sup>

Increases in volume translate directly to growth in Part B spending. Indeed, CMS reports that total physician-related Part B services experienced an 11.5 percent increase in spending in 2004, driven in part by increases in the volume and intensity of services on a per beneficiary basis (Office of the Actuary 2006). Several years of sustained rapid volume growth has increased Medicare spending and is, in large part, responsible for the negative updates required by the SGR formula. In fact, the SGR target provides an allowance for growth in three factors:

- inflation in physicians' practice costs,
- changes in enrollment in fee-for-service Medicare, and
- changes in spending due to law and regulation.

It then allows for growth above those factors based on growth in real gross domestic product (GDP) per capita. GDP, the measure of goods and services produced in the United States, is used as a benchmark of how much growth in spending the United States can afford. The spending target in the SGR combines all these factors. The basic SGR mechanism lowers the update when cumulative

actual spending exceeds target spending. For 2004, for example, the cumulative impact of actual spending was about \$17.4 billion higher than the SGR target for that year (Office of the Actuary 2005). The disparity in actual spending relative to the target has grown because of several factors including volume and legislated fee increases.

Using information supplied by the American Medical Association (AMA), CMS assessed potential reasons for recent volume growth. In its assessment, CMS noted that although some of these increases are related to improvements in health care quality, much of the increase cannot easily be explained by changes in treatments based on new medical evidence and valuable new technologies. The AMA has stated that CMS's conclusion is based on incomplete data analyses. CMS reports that it is continuing to analyze which changes in utilization are likely to be associated with important health improvements and which ones may have more questionable value.

Consistently, the categories with the lowest volume increases include major procedures and evaluation and management (E&M) services. Inherent volume constraints on these services may explain their relatively lower volume growth. That is, major surgical procedures are considerably less discretionary and may, in some cases, be substituted by medical treatments or other procedures (as illustrated in the paragraph below). Also, volume growth for E&M services may be constrained by their greater dependence on actual physician time than many imaging and procedure-based services, which may achieve greater volume increases with the aid of technology and nonphysician practitioners.

Although all broad categories of service increased in volume in 2004, some individual services decreased. The largest decrease (4.5 percent) was for coronary artery bypass graft (CABG). This decrease likely represents substitution of less invasive services. Specifically, CABG volume is decreasing while the volumes of two newer procedures for treating coronary artery disease are increasing—namely, coronary angioplasty and coronary artery stent insertion (NCHS 2004).

Our analysis of volume growth shows that per capita service use is increasing for the vast majority of services, suggesting that beneficiaries are able to access Medicare-covered services. Data on growth in the volume of physician services must be interpreted cautiously; there is evidence that volume goes up for some services when

payment rates go down, the so-called volume offset (Codespote et al. 1998). Such a volume offset makes it difficult to interpret volume increases as a payment adequacy indicator.

### Changes in quality of ambulatory care

This year’s payment adequacy analysis begins to examine the quality of ambulatory care through Medicare claims data. We developed a set of indicators—the Medicare Ambulatory Care Indicators for the Elderly (MACIEs)—to track the provision of necessary care and rates of potentially avoidable hospitalizations over time. (The text box on p. 96 describes the development of the MACIEs in more detail.)

Our analysis finds that most of the indicators we measured were steady or showed small improvements from 2002 to 2004 (Table 2B-6). Specifically, among 38 measures, 20 showed improvement and 15 did not change statistically. This finding suggests that in 2004, beneficiaries with selected conditions were a little more likely to receive certain minimally necessary services for their condition and avert potentially avoidable hospitalizations related to their condition. Further, we see some improvements on outcome measures concurrent with improvements on process measures for the same conditions.

We only found a decline in quality as defined by our measures in 3 out of 38 measures. All three of these measures were related to breast cancer. We found small declines in general mammography screenings for females and clinically indicated imaging for women with a history or new diagnosis of breast cancer. Recent findings from the National Committee for Quality Assurance (NCQA) also show slight declines in breast cancer screening for beneficiaries in Medicare Advantage plans as well as people in other commercial plans (NCQA 2005). NCQA notes that some public debate on the effectiveness of mammography may contribute to confusion about how often—and whether—women should be screened for breast cancer.

Among the 38 indicators, 6 measured occurrence of potentially avoidable hospitalizations or emergency department visits for selected chronic conditions. For all these measures, none showed a statistically significant decline between 2002 and 2004; all showed either improvement (fewer occurrences) or no statistical change. For example, in 2004, a smaller share of beneficiaries with chronic obstructive pulmonary disease (COPD) had COPD-related inpatient hospitalizations, and a smaller

**TABLE  
2B-6**

### Most ambulatory care indicators show improvement or stability, 2002–2004

Indicators	Number of indicators			
	Improved	Stable	Worsened	Total
All	20	15	3	38
Anemia & GI bleed	3	1	0	4
CAD	3	1	0	4
Cancer	0	4	3	7
CHF	5	3	0	8
COPD	2	0	0	2
Depression	0	1	0	1
Diabetes	6	1	0	7
Hypertension	0	1	0	1
Stroke	1	3	0	4

Note: GI (gastrointestinal), CAD (coronary artery disease), CHF (congestive heart failure), COPD (chronic obstructive pulmonary disease).

Source: MedPAC analysis of Medicare Ambulatory Care Indicators for the Elderly (MACIE) from the Medicare 5 percent Standard Analytic Files.

share of beneficiaries with diabetes were hospitalized for serious short-term (e.g., diabetic coma) or long-term complications (e.g., nontraumatic amputations).

We found that for several conditions, declines in potentially avoidable hospitalizations occur concurrently with increases in the use of clinically necessary services for the same condition. For example, for diabetes we found decreases in the rate of diabetes-related hospitalizations over the same time period that we found increases in the use of diagnostic testing and follow-up. Therefore, we see improvements on outcome measures (lower rates of short-term and long-term complications) concurrent with improvements on process measures (higher rates of necessary care, such as lipid and hemoglobin testing).

In addition to measuring change from 2002 to 2004, we also evaluated the underlying percentages of beneficiaries receiving the indicated care for their conditions. For 2004, we found that for 20 out of the 32 measures for getting necessary care, at least two-thirds of beneficiaries received the indicated care for their condition. Alternatively, for 12 measures, less than two-thirds of beneficiaries received the specified care for their condition. Among the indicators with the highest rates were two annual visits for people with history of stroke, congestive heart failure, COPD, coronary artery disease, and/or diabetes. Among the lowest

## Development of the Medicare Ambulatory Care Indicators for the Elderly (MACIEs)

The Commission developed a set of indicators to analyze ambulatory care quality and evaluate the provision of necessary care through Medicare claims data. These indicators are called the Medicare Ambulatory Care Indicators for the Elderly (MACIEs). They were initially developed nearly 10 years ago by a research team at RAND who sought measures of care that were both clinically meaningful and could feasibly be analyzed from claims data.<sup>11</sup> In May 2004, we convened an expert panel of physicians, clinicians, and researchers to review and update the original indicators to reflect current medical practice. The experts reviewed clinical evidence from existing clinical guidelines, other organizations' efforts to identify and use ambulatory indicators, and the limits of claims data.<sup>12</sup>

MACIEs are designed to reflect basic clinical standards of care for common medical diagnoses. They focus on two types of measures: (1) the percentage who received clinically necessary services for their diagnoses and (2) the percentage who had potentially avoidable hospitalizations directly related to their diagnoses.

Building off of the initial work for these indicators, "clinically necessary services" are defined as routine care for which:

- the benefits of the service outweigh its risk,
- the benefits to the patient are likely and substantial, and
- physicians have judged that not recommending the care would be improper.

Steven Asch and colleagues describe this definition of routine necessary care in published research (Asch et al. 2000). Measures of potentially avoidable hospitalizations include use of emergency department services and inpatient hospitalizations that might have been averted had patients received better ambulatory care.

For the MACIEs, we selected medical conditions:

- that have a high prevalence or incidence among the elderly population,
- for which effective medical treatment is available, and
- that are readily identifiable from diagnoses coded on Medicare claims.

Under these criteria, the current MACIE analysis focuses on the following medical conditions: anemia, gastrointestinal bleed, breast cancer, colon cancer, coronary artery disease, diabetes, congestive heart failure, depression, hypertension, chronic obstructive pulmonary disease, and stroke.

The MACIE indicators reflect minimum standards of acceptable care for certain diagnoses. For example, they include lipid testing for people with coronary artery disease. The MACIE indicators are not intended to show optimal care, and they cannot account for reasons why patients do not receive necessary care. Because these measures can be derived from claims data, they provide a resource-efficient method to monitor potential underuse of necessary medical

*(continued next page)*

rates was gastrointestinal work-up near the time of initial diagnosis or iron deficiency anemia.

In sum, our MACIEs analysis mostly shows small improvements and stability in the quality of ambulatory care, as defined by our measures. We see increases in the share of beneficiaries receiving necessary ambulatory care and averting potentially avoidable hospitalizations.

Few measures indicated a worsening of care. However, in a little less than half of the process measures, fewer than two-thirds of the applicable beneficiaries received the indicated services. Further analysis with these measures could provide more information on these findings, such as trends in ambulatory care quality by geographic location and beneficiary characteristics.

## Development of the Medicare Ambulatory Care Indicators for the Elderly (cont.)

services by Medicare beneficiaries. While we are using these indicators as a measure of quality, needed services may not be provided for a number of reasons, including problems accessing the health care system, failure of providers to perform or recommend services, or failure of beneficiaries to follow provider recommendations to obtain care. Additionally, there may be circumstances for which the indicated services are in fact contraindicated, such as for patients with certain comorbidities. The MACIE analysis takes particular caution to assign accurate diagnoses, but claims analysis is subject to diagnosis coding errors in the claims files.<sup>13</sup>

The MACIE data analysis requires two years of claims data for each beneficiary cohort in order to check for

service use within a specified amount of time (e.g., eye exam within a two-year period for diabetics). Therefore, the data set is restricted to the population of beneficiaries who were continuously in Medicare fee-for-service during the two-year study period. Consequently, beneficiaries were excluded from the data set if—during the study period—they died, newly enrolled in Medicare, used hospice care, or were in managed care. Beneficiaries younger than age 65 were also excluded from the sample. For purposes of our update analysis, we are tracking these quality indicators in the aggregate. Further analysis on quality and access to care could compare MACIEs for specified subpopulations, such as by geographic location, income status, or other factors. ■

### How should Medicare payments for physician services change in 2007?

After considering current payment adequacy, we also analyze changes in input costs projected for the coming year. For physicians, we examine two factors to forecast input costs: change in input prices and the Commission's policy goal of increased productivity.

#### Input price increases

To measure input price inflation for physician services, we use the Medicare Economic Index (MEI), which CMS constructs from various data sets on price information and survey data supplied by the American Medical Association. The MEI provides a weighted average of price changes for inputs used to provide physician services. For 2007, the MEI currently forecasts that input prices for physician services will increase by 3.7 percent (Table 2B-7, p. 98). (Because the MEI forecasts are revised quarterly, this estimate may change.) For our analysis, we exclude CMS's adjustment for productivity in the MEI because we calculate an expected productivity adjustment (discussed in Chapter 2) that may be used across all provider sectors.

Within this aggregate estimate are individual input cost changes. CMS sorts specified inputs into two major

categories: physician work and physician practice expense. Physician work includes salaries and fringe benefits allotted for physicians. Physician practice expense includes nonphysician employee compensation, office expenses, professional liability insurance (PLI), drugs and supplies, and medical equipment.

To calculate the projected costs for these inputs, CMS first estimates the share, or weight, of physicians' practice revenues attributable to each input, based primarily on data supplied by the AMA. CMS attributes 52.5 percent of physician revenues to physician work and 47.5 percent to practice expense, which includes a PLI weight of 3.9 percent. In 2004, CMS updated its input category weights based on 2000 survey data from the AMA. Rebasings these weights resulted in a decrease in the share of revenues going toward physician work and an increase in the share of revenues going toward practice expense. For the next revision of the MEI, CMS will need to substitute another data source for determining many of the weights because the AMA has discontinued its survey.

CMS uses more timely data to forecast input price changes. CMS currently projects that from 2005 to 2006, input prices for physician work will increase 3.7 percent, based on increases of 3.5 percent in wages and salaries and 4.5 percent in nonwage compensation. Practice expenses are projected to increase by 3.8 percent. This projection includes an 8.6 percent increase in PLI.<sup>14</sup> Although PLI

**TABLE  
2B-7****MEI weights and forecasted  
input price changes for  
physician services for 2007**

Input component	Category weight	Price changes for 2007
Total	100.0%	3.7%
<b>Physician work</b>	<b>52.5</b>	<b>3.7</b>
Wages and salaries	42.7	3.5
Fringe benefits (nonwage compensation)	9.7	4.5
<b>Physician practice expense</b>	<b>47.5</b>	<b>3.8</b>
Nonphysician employee compensation	18.7	3.8
Wages and salaries	13.8	3.5
Fringe benefits (nonwage compensation)	4.8	4.6
Office expense	12.2	2.0
Professional liability insurance	3.9	8.6
Medical equipment	2.1	1.2
Drugs and supplies	4.3	3.9
Pharmaceuticals	2.3	4.9
Medical materials and supplies	2.0	2.5
Other professional expense	6.4	2.4

Note: MEI (Medicare Economic Index). Forecasted price changes for individual components are calculated by multiplying the component's weight by its price proxy. Forecasted price changes are not adjusted for productivity. Numbers may not total exactly because of rounding.

Source: Unpublished estimates from CMS, dated December 07, 2005.

costs continue to be the fastest growing input cost, PLI premium increases have slowed a little in the past few years. CMS shows that average increases for 2005 were 9.9 percent, compared with 18.7 percent in 2004 and 30.3 percent in 2003. Historically, changes in premiums for PLI have generally followed a cyclical pattern. From past experience one would have predicted a slowdown in 2001 and 2002, but in fact, premium increases did not slow until more recently (MedPAC 2003).

Some physicians—particularly those practicing in certain geographic areas and those whose specialties include high-risk procedures—report PLI premium increases that are much higher, and thus take up a significantly higher percentage of their revenues than forecasted in the MEI. The MEI, however, is not designed to reflect price changes for individual physicians; instead it accounts for an average price change for all physicians. The fee schedule, on the other hand, is the primary tool that

reimburses services differentially to account for PLI premium variation by service and geographic area. For example, the fee schedule's PLI RVUs designate higher payments for services furnished by neurosurgeons and cardiothoracic surgeons because they pay higher PLI premiums. Similarly, the fee schedule's PLI GPCIs adjust payments to physicians who practice in geographic areas with high PLI premiums, such as Detroit, Michigan. Given both of these factors, over 20 percent of Medicare's payments to a Detroit neurosurgeon under the fee schedule can be attributable to PLI, if a fairly high proportion of the neurosurgeon's practice consists of major procedures (MedPAC 2003).

**Productivity growth**

In making our update recommendation, the Commission has adopted a productivity objective, or goal, to encourage provider efficiency. Chapter 2 discusses the source of our productivity estimates and our rationale for incorporating productivity goals into our payment update analyses. We currently estimate productivity growth to be 0.9 percent for 2007. This estimate is similar to CMS's when it adjusts the MEI.

**RECOMMENDATION 2B**

**The Congress should update payments for physician services in 2007 by the projected change in input prices less the Commission's expectation for productivity growth.**

**RATIONALE 2B**

Access, supply, and volume measures suggest that the majority of Medicare beneficiaries are able to obtain physician services with little or no problems. Ambulatory quality measures are generally stable and improving. Our analysis of the most recently available data finds that Medicare payments for physician services are adequate. Currently, the projected change in input prices for 2007 is 3.7 percent, and the Commission's goal for 2007 productivity growth is 0.9 percent.

**IMPLICATIONS 2B****Spending**

- Our estimates indicate that this recommendation for 2007 would increase federal program spending by more than \$1.5 billion in the first year and \$5 billion to \$10 billion over five years, relative to current law. Any positive update would increase spending relative to current law because the statute calls for substantial

negative updates from 2007 to 2011, under the SGR. Over longer periods of time, however, the impact would be lower because the SGR would make up for the added spending.

### **Beneficiary and provider**

- This recommendation would increase beneficiary liability for cost sharing, premiums, and deductibles. Cost sharing liability for Part B services would increase directly with the increase in the conversion factor. Part B premiums and deductibles would increase subject to statutory formulas and actuarial projections to ensure that the Medicare program has sufficient revenue to cover costs. For example, by law, the monthly premium for Medicare Part B must be sufficient to cover 25 percent of the program's costs.

### **Additional comments**

Our analysis of payment adequacy is based primarily on data for 2004 and 2005, during which time the Congress overrode the SGR and increased fees for physician services through modest conversion factor increases and other mechanisms (such as GPCI fee increases and bonus payments). Obviously, data are not available for us to examine the impact of the Deficit Reduction Act of 2005—which holds payments for 2006 at 2005 levels—on access, supply, volume, and quality. We will monitor these indicators closely as data become available.

Although the recent Deficit Reduction Act overrode the cut that the SGR called for in 2006, it does not address payment levels for 2007—the year for which we are making our recommendation—and beyond. Under current law, the SGR continues to call for substantial negative updates for 2007 through at least 2011. The Commission does not support these impending fee cuts. We are concerned that such consecutive annual cuts would threaten access to physician services over time, particularly primary care services. Reimbursement cuts may disproportionately affect primary care providers who average lower volume growth in their practice than procedure-based specialists. Because many Medicare beneficiaries rely on primary care providers for important health care management, payment policies that may discourage medical students and residents from becoming primary care physicians raise particular concern for the Commission.

The Commission has discussed several problems associated with the SGR in Congressional testimonies (Hackbarth 2005a, Hackbarth 2005b) and Reports to the Congress (MedPAC 2005, MedPAC 2002). The Commission considers the SGR formula a flawed, inequitable mechanism for volume control and plans to examine alternative approaches to it in the coming year. ■

## Endnotes

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- 1 For example, through 2006, the MMA imposed a floor for the geographic practice cost index (GPCI) for physician work. Establishing a floor raises payments for services furnished in areas with below-average physician work GPICs, which are largely rural. The MMA also provided bonus payments, through 2007, for services provided by physicians in newly established physician scarcity areas (determined separately for primary care physicians and specialists). Services provided in an area that qualifies for the scarcity-area bonus and the pre-existing 10 percent shortage-area bonus can receive both incentive bonuses.
- 2 Small shares of the sample (under 10 percent for each group) reported that they tried to find a new primary care doctor. Of them, only about one-quarter reported having any problems.
- 3 Specifically, CMS combined the 2001 CAHPS-FFS measures with state-level information taken from CMS monitoring activities, including environmental scanning reports by CMS regional offices and telephone calls to 1-800-Medicare and Medicare carriers in 2002. Areas designated as eligible for site selection generally met two criteria: (1) they had high rates of 2001 access problems reported on CAHPS-FFS, and (2) they were located in states where CMS monitoring efforts in 2002 indicated emerging physician access issues related to Medicare payment or Medicare physician participation.
- 4 In 2002, other payment changes also occurred, such as the full phase-in of resource-based relative values for the practice expense component of the physician fee schedule.
- 5 We conservatively categorized physicians who saw fewer than 15 patients under the assumption that they did not regularly serve FFS beneficiaries and provided services to beneficiaries for only a short time during a year or only on an emergency or temporary basis while covering for colleagues.
- 6 Although the percentage rates were stable, estimates of the raw numbers of physicians accepting new patients, including Medicare patients, declined slightly.
- 7 To compare Medicare and private payment rates, the contractor first calculated a price index for each type of private plan (HMO, point-of-service, preferred provider organization, and indemnity). Each price index was a weighted average of service-level price comparisons between Medicare and private payment rates, using Medicare's volume in each service as the weights. These plan-specific estimates were then weighted based on estimates of private enrollment in each type of plan. Because this analysis extrapolates private fees from two large, national insurance carriers, it does not capture the impacts of any enrollment shifts between small, local organizations and large insurers. Such shifts add some uncertainty to the difference between Medicare and private rates across *all* private insurers.
- 8 Services provided in an area that qualifies for the scarcity-area bonus and the pre-existing 10 percent shortage-area bonus can receive both incentive bonuses.
- 9 The Medicare-to-private insurer ratio narrows slightly (1 percentage point) when Part B drugs and lab tests are excluded from the analysis. Without these items, Medicare's physician fees averaged 84 percent of private insurer fees in 2004. Both Medicare and private payers reduced payments for Part B drugs in 2004. With Part B drugs and lab tests excluded, overall average fee increases were 3.4 percent for Medicare and 1.3 percent for private insurers.
- 10 Prior to 2004, oncologists were allowed to bill for the administration of only one chemotherapy drug per day by injection, referred to as "push technique," regardless of the actual number of drugs administered. Starting in 2004, CMS allows oncologists to bill for each additional drug administered by push technique on the same day. The MMA also increased payments for drug administration services, but this payment increase is held constant in our volume analysis.
- 11 MACIEs were formerly called Access to Care for the Elderly Project (ACE-PRO) indicators.
- 12 Sources of guidelines included: the National Guidelines Clearinghouse, the American Heart Association (AHA), U.S. Preventive Services Task Force (USPSTF), the American Diabetes Association (ADA), the Institute for Clinical Systems Improvement (ICSI), the National Cholesterol Education Program's (NCEP's) Third Adult Treatment Panel, and the National Cancer Institute (NCI). In addition to the original ACE-PRO indicators, measures for consideration in the selected conditions/topics were identified from the following sources: the National Quality Measures Clearinghouse, the Physician Consortium for Performance Improvement, the National Health Quality Report (NHQR), the Veterans Health Administration (VHA), National Committee for Quality Assurance (NCQA), National Diabetes Quality Improvement Alliance, ICSI, Centers for Medicare & Medicaid Services (CMS), the Agency for Healthcare Research and Quality (AHRQ), and the Study of Clinically Relevant Indicators of Pharmacologic Therapy (The SCRIPT Project).
- 13 To assign the most accurate diagnosis possible, the MACIE analysis often requires that the specified diagnosis be on at least two physician or outpatient claims or on one inpatient claim. The use of two codes within a year increases positive predictive value and decreases the false positives likely associated with testing for a condition.
- 14 As 2007 approaches, this figure may change to reflect updated premium information.



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