

July 2006

# MEDICARE PHYSICIAN SERVICES

## Use of Services Increasing Nationwide and Relatively Few Beneficiaries Report Major Access Problems



G A O

Accountability \* Integrity \* Reliability



Highlights of [GAO-06-704](#), a report to congressional committees

## Why GAO Did This Study

Congress, policy analysts, and groups representing physicians have periodically raised concerns that Medicare's efforts to control spending on physician services by limiting annual updates to physician fees could have an adverse impact on beneficiaries' access to physician services. These concerns were heightened in 2002 when Medicare's formula for setting physician fees required a 5.4 percent reduction in fees to help moderate rapid spending increases. From 2003 to 2006, fees have not grown as rapidly as the estimated cost to physicians of providing services, and concerns about access have remained.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 requires GAO to study access to physician services by beneficiaries in the traditional fee-for-service (FFS) program. This report focuses on (1) trends and patterns in beneficiaries' perceptions of the availability of physician services from 2000 through 2004, (2) trends in beneficiaries' utilization of physician services from 2000 through 2005, and (3) indicators of physician supply and willingness to serve Medicare beneficiaries from 2000 through 2005. GAO analyzed the most recent data available, including several years of data from an annual survey of FFS Medicare beneficiaries as well as utilization trends based on all Medicare physician claims for services provided in April of each year from 2000 through 2005.

[www.gao.gov/cgi-bin/getrpt?GAO-06-704](http://www.gao.gov/cgi-bin/getrpt?GAO-06-704).

To view the full product, including the scope and methodology, click on the link above. For more information, contact A. Bruce Steinwald at (202) 512-7101 or [steinwalda@gao.gov](mailto:steinwalda@gao.gov).

# MEDICARE PHYSICIAN SERVICES

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### What GAO Found

From 2000 through 2004, among beneficiaries who needed access to physician services, the percentages reporting major difficulties—that is, “having a big problem” finding a personal provider or specialist or never being able to schedule an appointment promptly—remained relatively constant. Nationwide, no more than about 7 percent of beneficiaries reported a major access difficulty. We identified certain beneficiary characteristics—including health status, age, and race—that were associated with beneficiaries' reporting major access difficulties.

In general, from April 2000 to April 2005, an increasing proportion of beneficiaries received physician services and an increasing number of physician services were provided to beneficiaries who were treated (see figure). This trend was evident in every state's urban areas and nearly every state's rural areas.

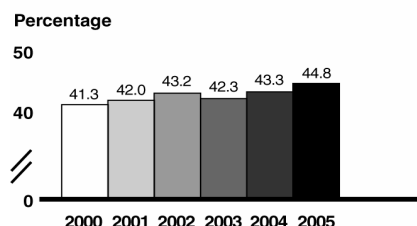
Two other access related indicators—the number of physicians billing Medicare for services and the proportion of services for which Medicare's fees were accepted as payment in full—increased from April 2000 to April 2005. These increases suggest that there was no reduction in the predominant tendency of physicians to accept Medicare patients and payments.

The increases in utilization and complexity of services GAO observed demonstrate that beneficiaries were able to access physician services. However, GAO did not determine the medical appropriateness of these increases. Although access to appropriate care is important, the implications of these trends in utilization for the long-term fiscal sustainability of the Medicare program would require careful examination.

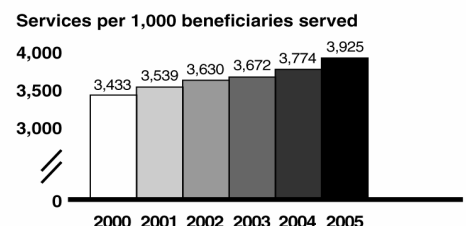
CMS agreed with GAO's findings and conclusions, stating that the analysis was well-conceived and executed. CMS also provided technical comments, which GAO incorporated as appropriate.

### Trends in Access to Physician Services, April 2000 through April 2005

Percentage of Medicare beneficiaries receiving physician services in April, 2000-2005



Number of physician services provided per 1,000 Medicare beneficiaries served in April, 2000-2005



Source: GAO analysis of Medicare Part B claims and enrollment data from the Centers for Medicare & Medicaid Services.

Note: Beneficiaries and services were included if services were received in the first 28 days of April.

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## Abbreviations

|        |                                           |
|--------|-------------------------------------------|
| AMA    | American Medical Association              |
| ARF    | Area Resource File                        |
| BETOS  | Berenson-Eggers Type of Service           |
| CABG   | coronary artery bypass graft              |
| CAHPS  | Consumer Assessment of Health Plans Study |
| CAT    | computed axial tomography                 |
| CMS    | Centers for Medicare & Medicaid Services  |
| E&M    | evaluation and management                 |
| FFS    | fee-for-service                           |
| FQHC   | federally qualified health center         |
| GDP    | gross domestic product                    |
| HSC    | Center for Studying Health System Change  |
| MedPAC | Medicare Payment Advisory Commission      |
| MEI    | Medicare Economic Index                   |
| MSA    | metropolitan statistical area             |
| MVPS   | Medicare volume performance standard      |
| NCH    | National Claims History file              |
| RHC    | rural health clinic                       |
| RVU    | relative value units                      |
| SGR    | sustainable growth rate                   |

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July 21, 2006

#### Congressional Committees

Since the early 1990s, Congress, policy analysts, and groups representing physicians have periodically raised concerns that Medicare's efforts to control spending on physician services by limiting annual updates to physician fees could have an adverse impact on beneficiaries' access to physician services. These concerns were heightened in 2002, when Medicare's formula for setting physician fees required a 5.4 percent reduction in fees to help moderate rapid spending increases for physician services.<sup>1</sup> In 2003 through 2006, a combination of administrative and legislative changes averted additional fee declines that would otherwise have occurred under the formula. However, concerns about access remained because fees in these years did not grow as rapidly as the increase in the estimated cost to physicians for providing their services.<sup>2</sup> In the absence of additional actions, Medicare's formula is projected to reduce physician fees by approximately 5 percent each year for 9 years beginning in 2007.<sup>3</sup>

In January 2005, we reported that based on beneficiaries' utilization of physician services, the 2002 fee cut did not appear to have an immediate impact on beneficiary access to physician services and that beneficiary

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<sup>1</sup>For example, in February 2002, shortly after the fee reduction went into effect, two congressional hearings on Medicare physician payments were held. See *Medicare Payment Policy: Ensuring Stability and Access Through Physician Payments, Hearing Before the Subcommittee on Health of the Committee on Energy and Commerce, House of Representatives*, February 14, 2002, Serial No. 107-91, Washington, D.C., and *Physician Payments, Hearing Before the Subcommittee on Health of the Committee on Ways and Means, House of Representatives*, February 28, 2002, Serial No. 107-70, Washington, D.C.

<sup>2</sup>The change in the cost of providing physician services is measured by the Medicare Economic Index (MEI). MEI measures input prices for resources needed to provide physician services. It is designed to estimate the increase in the total cost for the average physician to operate a medical practice.

<sup>3</sup>The Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, *2006 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (Washington, D.C.: May 1, 2006).

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access increased from April 2000 to April 2002.<sup>4</sup> Our report did not assess, however, how beneficiary access to physician services might have changed since 2002 or how beneficiaries perceived their access to physician services.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 directed us to study access to physician services by beneficiaries in the traditional fee-for-service (FFS) program.<sup>5</sup> Specifically, we examined

- trends and patterns in beneficiaries' perceptions of the availability of physician services from 2000 through 2004,
- trends in beneficiaries' utilization of physician services from 2000 through 2005, and
- indicators of physician supply and willingness to serve Medicare beneficiaries from 2000 through 2005.

In addressing these objectives, we analyzed the most recent data available from two data sources. First, we analyzed several years of data from an annual Centers for Medicare & Medicaid Services (CMS) patient satisfaction survey of FFS Medicare beneficiaries, called the Consumer Assessment of Health Plans Study (CAHPS®).<sup>6</sup> Specifically, we examined beneficiaries' responses for the years 2000 through 2004 to three questions related to access to physician services.<sup>7</sup> The survey questions asked whether

- finding a personal provider was “no problem,” “a small problem,” or “a big problem”;
- seeing a specialist was “no problem,” “a small problem,” or “a big problem”; and

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<sup>4</sup>GAO, *Medicare Fee-for-Service Beneficiary Access to Physician Services: Trends in Utilization of Services, 2000 to 2002*, [GAO-05-145R](#) (Washington, D.C.: Jan. 12, 2005).

<sup>5</sup>Pub. L. No. 108-173, § 604, 117 Stat. 2066, 2301-02.

<sup>6</sup>CAHPS is a registered trademark of the Department of Health and Human Services' Agency for Healthcare Research and Quality. CAHPS refers to a family of surveys that asks consumers and patients to evaluate their health care using a standardized set of questions. CMS conducts a CAHPS survey of both the Medicare FFS population and the Medicare Advantage population. Throughout this report we refer to the FFS CAHPS ® survey as the CAHPS survey. Beginning in 2005, the CAHPS acronym stands for Consumer Assessment of Healthcare Providers and Systems.

<sup>7</sup>Between 100,000 and 125,000 individuals responded to the survey each year.



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- beneficiaries were able to schedule an appointment for routine care promptly “always,” “usually,” “sometimes,” or “never.”

We measured access problems based only on beneficiaries’ responses in the most negative category—that is, “a big problem” or “never.” This approach enabled us to be as definitive as possible in describing beneficiaries’ perceptions of access difficulties.<sup>8,9,10</sup> Because the personal provider and prompt appointment questions were not limited to physician services, the proportion of beneficiaries who reported major difficulties for these questions may not be specific to difficulties accessing physicians. We also sought to determine whether certain characteristics, such as age, race, health status, and supply of physicians in a beneficiary’s county of residence—15 beneficiary and area characteristics in all—were associated with the survey responses. To determine these relationships, we conducted a multivariate statistical analysis that yields an estimate of each characteristic’s effect, controlling for the effects of all other characteristics in the analysis. (See app. I for more details on the methodology of our analysis of the CAHPS data.)

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<sup>8</sup>Throughout this report, we describe beneficiaries’ collective responses to the CAHPS survey questions as their perceptions of access.

<sup>9</sup>Throughout this report, we collectively characterize the most negative responses to these three questions as “having major difficulties.”

<sup>10</sup>Our pattern of results would have been similar if we had analyzed the three questions for reports of any problem, that is, a “small problem” or “big problem” and “sometimes” or “never.”

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Second, we analyzed utilization trends for 6 years by examining all Medicare physician claims for services provided in April of each year from 2000 through 2005.<sup>11,12,13</sup> These data encompass several periods: 2 years in which fee increases were greater than the increase in the estimated cost of providing services (2000 and 2001), 1 year in which fees decreased (2002), and 3 years in which fee increases were less than the increase in the estimated cost of providing services (2003, 2004, and 2005). Because it was outside the scope of our study, we did not adjust the claims data for factors that could affect the provision and use of physician services, such as incidence of illness or coverage of new benefits. Thus, we could not determine whether the amount of physician services provided over our period of study was appropriate. We also used the claims data to analyze trends in the number of physicians billing Medicare and in the proportion of services for which Medicare was accepted as payment in full. (See app. II for more details on our analysis of the Medicare claims data.)

We ensured the reliability of the CAHPS and claims data used in this report by performing appropriate electronic data checks and by interviewing agency officials who were knowledgeable about the data. Specifically, we examined the accuracy and completeness of the CAHPS data by testing for implausible values and internal consistency and by interviewing experts at CMS about whether the CAHPS data could appropriately be used as we intended. The Medicare claims data we used are considered to be generally reliable, as they are used by the Medicare program as a record of payments to health care providers and are closely monitored by both CMS and the Medicare carriers—contractors that

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<sup>11</sup>We examined over 60 million claims for April of each year. These claims samples from the month of April represent an annual snapshot of beneficiary access to physician services for each of the 6 years. Physician fee updates generally occur at the beginning of each calendar year and remain constant throughout the year. We selected April to allow time for the annual fee updates to be implemented and for physician behavior to adjust to the new fees. To avoid “calendar bias”—that is, the occurrence of more weekdays in April in one year compared to another—and to create an equal number of weekdays in each year’s data set, we limited each year’s claims to services performed within the first 28 days of the month.

<sup>12</sup>We defined physician services to include those services provided by a medical doctor and paid under the physician fee schedule—such as office visits, major and minor surgeries, and imaging services. We also included anesthesia services. We excluded claims for services provided by nurse practitioners, physician assistants, and other nonphysician practitioners.

<sup>13</sup>We excluded beneficiaries in Guam, Puerto Rico, and the U.S. Virgin Islands because access issues in these areas may be substantively different than those in the rest of the United States.

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process, review, and pay claims for Part B-covered services. In addition, we examined the claims data files for obvious errors, missing values, values outside of expected ranges, and dates outside of expected time frames. We also interviewed experts at CMS who regularly use the claims data for evaluation and analysis. We found that both the CAHPS and claims data were sufficiently reliable for the purpose of our analyses. We conducted our work from October 2004 through June 2006 in accordance with generally accepted government auditing standards.

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## Results in Brief

From 2000 through 2004, among beneficiaries who needed access to physician services, the percentages reporting major difficulties—that is, “having a big problem” finding a personal provider or specialist or never being able to schedule an appointment promptly—remained relatively constant. Nationwide, relatively few beneficiaries—no more than about 7 percent—reported a major access difficulty. Beneficiaries living in urban areas and beneficiaries living in rural areas reported major access difficulties in similar percentages. Although the proportion of beneficiaries who reported major difficulties varied considerably among states—by as much as 12 percentage points—their perceptions over time of access to physician services in the vast majority of states remained nearly the same or improved. In our analysis of beneficiary subgroups, we identified certain beneficiary characteristics—including health status, age, and race—that were associated with beneficiaries’ reporting a big problem finding a personal provider or specialist or never being able to schedule an appointment promptly. Specifically, survey respondents who rated their health as poor, were under 65 and disabled, were not white, and had no supplemental health insurance or had supplemental insurance from Medicaid, were more likely to have experienced physician access difficulties.

Two indicators of beneficiary access to physician services—the proportion of beneficiaries who received services and the number of services provided to beneficiaries who were treated—suggest an increase in access from April 2000 to April 2005. In particular, the proportion of beneficiaries receiving services rose by 4 percentage points nationwide—from about 41 percent to about 45 percent; by 4 percentage points in urban areas—from about 42 percent to 46 percent; and by 3 percentage points in rural areas—from about 39 percent to about 42 percent. Moreover, the average number of services provided per 1,000 beneficiaries nationwide rose by 14 percent, in urban areas by 15 percent, and in rural areas by 12 percent. Likewise, within every state’s urban areas and almost every state’s rural areas, the proportion of beneficiaries who received services

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increased, and within all states' urban and rural areas, the average number of services provided to beneficiaries who received services increased. Volume generally increased, for specific services—office visits, procedures, imaging services, and tests. Finally, services per beneficiary rose not only in number but also in complexity for the April 2000-April 2005 period we examined.

Two other access related indicators—the number of physicians billing Medicare for services and the proportion of services for which Medicare's fees were accepted as payment in full—increased from April 2000 to April 2005. Specifically, the number of physicians billing Medicare increased by 11 percent, while the number of Medicare beneficiaries increased by 8 percent, over the period covered by our claims analysis. In addition, from April 2000 through April 2005, the vast majority of Medicare services were performed by participating physicians—that is, physicians who accept Medicare's fees as payment in full for services provided. This proportion increased over this period from 95 percent to over 96 percent. The increase suggests that there was no reduction in the predominant tendency of physicians to accept Medicare patients and payments.

CMS agreed with our findings and conclusions, stating that our analysis of existing data was well-conceived and executed. Officials from the American Medical Association (AMA) stated that our analysis of survey, claims, and physician participation data showed no deterioration in beneficiaries' access to physician services over the time period studied. However, AMA officials cautioned that the results of this analysis should not be interpreted as an improvement in access and suggested that the report place more emphasis on our finding that beneficiaries with certain characteristics, such as those in poor health, were more likely, relative to other beneficiaries, to respond that they experienced major difficulty accessing physician services. CMS and AMA also provided technical comments, which we incorporated as appropriate.

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## Background

Medicare is the federally financed health insurance program for persons age 65 and over, certain individuals with disabilities, and individuals with end-stage kidney disease. In 2005 there were approximately 43 million Medicare beneficiaries.<sup>14</sup> Eligible individuals are automatically covered by

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<sup>14</sup>In 2005, 42.5 million people were covered by Medicare: 35.8 million were age 65 and older, and 6.7 million were disabled.

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Part A, which helps pay for inpatient hospital, skilled nursing facility, and hospice care, as well as home health care that follows a stay in a hospital or skilled nursing facility. Most eligible individuals elect to pay a monthly premium—\$88.50 a month in 2006—to obtain Medicare Part B coverage, which helps pay for physician services, hospital outpatient services, and certain other services, such as physical therapy.<sup>15</sup> In addition, most Medicare beneficiaries have supplemental insurance that helps them pay for their care, thus reducing financial barriers to obtaining care. In 2002, 90 percent of Medicare beneficiaries obtained supplemental coverage either through their former employer (32 percent), a privately purchased supplemental insurance policy known as Medigap (26 percent), Medicaid (16 percent), or some other program.

Medicare beneficiaries may choose how they receive covered services. In 2005, most beneficiaries in Part B—about 87 percent—were enrolled in Medicare’s traditional FFS option and could obtain care from any licensed provider willing to accept Medicare patients. The remaining beneficiaries were enrolled in private health plans that contract to serve Medicare beneficiaries and could obtain care through their health plans. These plans typically contract with some of the same physicians and hospitals that participate in FFS Medicare.

Over the last several years, rapid spending growth for Part B services—driven in part by spending growth for physician services—has heightened concerns about the Medicare program’s long-range fiscal outlook. Medicare spending for physician services has increased from about \$32 billion in 1998 to about \$59 billion in 2005. We and others have noted that because of demographic trends and increases in per beneficiary health care spending, the Medicare program in its present form is not sustainable. Long-term projections indicate that Medicare’s burden on the federal budget and the economy will balloon—almost tripling by 2035 and quadrupling by 2075.<sup>16</sup> Moderating spending growth for physician services, in part by seeking to ensure that services provided are necessary and appropriate, will continue to be part of the larger effort to ensure future program sustainability.

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<sup>15</sup>In 2005, about 93 percent of the 43 million individuals covered by Medicare were enrolled in Part B.

<sup>16</sup>Medicare spending in 2005 was 2.7 percent of the gross domestic product (GDP) and is projected to grow to 7.5 percent of GDP by 2035 and 12.9 percent of GDP by 2075.

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## Some Medicare Spending for Physician Services May Be Unnecessary

The provision of more services does not necessarily mean better health care or better health care outcomes. The wide geographic variation in Medicare spending for physician services—unrelated to beneficiary health status or outcomes—provides evidence that health needs alone do not determine spending. Furthermore, some studies have shown that in some instances growth in the number of services provided may lead to medical harm.<sup>17</sup> Payments under the Medicare program, however, generally do not foster quality, efficiency, or medical efficacy. Therefore, some of the growth in beneficiary utilization of, and spending for, physician services may not be warranted. Although access to appropriate care is important, overutilization of services represents wasteful spending and may, in some instances, harm beneficiaries. Consequently, policymakers have deemed it both reasonable and desirable to question the appropriateness of current and projected spending on physician services, and to explicitly consider the affordability of such spending when setting physician fees.

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## Efforts to Control Medicare Spending on Physician Services Include Fee Schedule and Spending Targets

In the 1990s, several reforms to Medicare physician fees were implemented to help control rapid spending growth for physician services in the traditional FFS Medicare program. Among those reforms were the establishment of a national fee schedule and a system of spending targets.<sup>18</sup> The target system was designed to control Medicare physician spending growth attributable to increases in the number of services, known as volume, and in the complexity and costliness of services, known as intensity. Under the design of the fee schedule and target system, annual updates to physician fees depend, in part, on whether actual spending has fallen below or exceeded the target. Fees are permitted to increase at least as fast as the costs of providing physician services as long as volume and intensity growth remains below a specified rate—currently, a little more than 2 percent a year. If spending associated with volume and

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<sup>17</sup>Elliott S. Fisher and H. Gilbert Welch, “Avoiding the Unintended Consequences of Growth in Medical Care: How Might More Be Worse?” *Journal of the American Medical Association*, vol. 281, no. 5 (1999): 446-453; E.S. Fisher, et al., “The Implications of Regional Variations in Medicare Spending. Part 1: The Content, Quality, and Accessibility of Care,” *Annals of Internal Medicine*, vol. 138, no. 4 (2003): 273-287; E.S. Fisher, et al., “The Implications of Regional Variations in Medicare Spending. Part 2: Health Outcomes and Satisfaction with Care,” *Annals of Internal Medicine*, vol. 138, no. 4 (2003): 288-298; and Joseph P. Newhouse, *Free for All? Lessons from the RAND Health Insurance Experiment* (Cambridge, Mass.: Harvard University Press, 1993).

<sup>18</sup>The first system of spending targets, the Medicare volume performance standard (MVPS), was established along with the fee schedule in 1992. In 1998, the sustainable growth rate (SGR) system replaced MVPS. SGR is the current spending target system.

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intensity grows faster than the specified rate, the target system reduces fee increases or causes fees to fall.

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## Medicare's Physician Fee Schedule Based on Relative Values

Under the fee schedule, Medicare pays for more than 7,000 services that can be classified in several broad categories—patient evaluation and management, which includes office visits, hospital visits, and consultations; procedures, which includes inpatient and minor surgeries; imaging, which includes X rays and more sophisticated diagnostic radiology, such as computed axial tomography (CAT) scans; and tests, which includes urinalysis and blood chemistries. Within these broad categories are varying levels of service complexity.

The fee schedule expresses this complexity through relative value units (RVU), which account for the amount of physician time, expertise, and resources required to deliver a service compared to other services.<sup>19,20</sup> The relative complexity—as measured by the costliness—of each service is compared to a benchmark service, defined as a midlevel office visit. For example, if a midlevel office visit had an RVU value of 1.000,<sup>21</sup> a service with 1.475 RVUs is estimated to be 47.5 percent more costly to provide than the midlevel office visit; while a service with 0.925 RVUs is estimated to be 7.5 percent less costly than the midlevel office visit. In this way, RVU weights quantify the complexity of services provided.

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<sup>19</sup>Some services paid under the physician fee schedule do not have RVUs associated with them; these services are priced by Medicare's claims administration contractors.

<sup>20</sup>Medicare adjusts a service's RVU-based payment for area differences in physicians' cost of operating a private medical practice. The adjustment is made using geographic practice cost indexes.

<sup>21</sup>In 2005, the RVUs for a midlevel office visit were 1.39 for services provided in a non-facility setting and 0.94 for services provided in a facility setting.

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## Medicare's Payments to Physicians for Services Are Affected by Physician Participation and Assignment Status of Claim

Traditional FFS Medicare generally pays physicians a predetermined amount for each service provided. Physicians who “accept assignment” agree to accept Medicare’s fee as payment in full for the services they provide to Medicare beneficiaries. This includes the coinsurance amount (usually 20 percent) paid by the beneficiary to the physician.<sup>22</sup> Physicians who sign Medicare participation agreements—referred to as participating physicians—must accept assignment for all the covered services they provide to beneficiaries. Physicians who do not sign participation agreements—referred to as nonparticipating physicians—can either opt to accept assignment on a service-by-service basis or not at all. When a nonparticipating physician accepts assignment the fee schedule amount, also known as the Medicare-approved amount, is reduced by 5 percent. Medicare pays the physician 80 percent of the reduced amount; the beneficiary pays 20 percent of the reduced amount. When a nonparticipating physician does not accept assignment, the Medicare-approved amount is also reduced by 5 percent, but the physician is allowed to collect an additional amount from the beneficiary that more than offsets the 5 percent fee reduction—a practice known as balance billing.<sup>23</sup> Specifically, nonparticipating physicians who do not accept assignment can charge up to 15 percent over the reduced Medicare approved amount and thus receive in total approximately 109 percent of the Medicare approved fee for that service (this amount is known as the “limiting charge”).<sup>24</sup> The beneficiary typically has to pay the nonparticipating physician the full amount of the limiting charge. Medicare later reimburses the beneficiary for 80 percent of the reduced Medicare approved amount. (See table 1.)

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<sup>22</sup>Although beneficiaries are responsible for this amount, most Medicare FFS beneficiaries—about 90 percent in 2002—have supplementary coverage that covers out-of-pocket expenses, including the beneficiary’s coinsurance amount.

<sup>23</sup>Physicians may “opt out” of the Medicare program altogether and charge any amount for the services they provide but they must inform the beneficiary in advance of this arrangement. Under this option, physicians must agree not to file any Medicare claims for 2 years, and their patients are responsible for 100 percent of the charges. Relatively few physicians—approximately 5,000 as of 2005—have opted out of the Medicare program.

<sup>24</sup>The limiting charge is 115 percent of 95 percent of the Medicare approved amount, or 109.25 percent.



**Table 1: Example of Medicare Payment and Beneficiary Coinsurance for Physician Services When the Medicare-Approved Amount Is \$100**

|                                                                     | Participating physician                                         | Physician accepting assignment but not participating            | Physician not accepting assignment                                                                                             |
|---------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Amount charged                                                      | \$150                                                           | \$150                                                           | \$150                                                                                                                          |
| Medicare-approved amount                                            | \$100                                                           | \$95                                                            | \$95                                                                                                                           |
| Limiting charge (15 percent more than the Medicare-approved amount) | Not applicable                                                  | Not applicable                                                  | \$109.25                                                                                                                       |
| Medicare payment (80 percent)                                       | \$80                                                            | \$76                                                            | \$76                                                                                                                           |
| Beneficiary coinsurance (usually 20 percent)                        | \$20                                                            | \$19                                                            | \$33.25 <sup>a</sup>                                                                                                           |
| How payment is made                                                 | Medicare directly pays physician. Beneficiary pays coinsurance. | Medicare directly pays physician. Beneficiary pays coinsurance. | Beneficiary pays physician limiting charge. Medicare reimburses beneficiary for its share (80 percent of the approved amount). |

Source: GAO analysis of CMS information.

<sup>a</sup>The beneficiary pays the coinsurance of \$19.00 plus the \$14.25 difference between the Medicare payment to the physician and the limiting charge.

## Studies of Medicare Beneficiary Access Suggest Few Problems Nationwide

Studies from the Medicare Payment Advisory Commission (MedPAC), CMS, and the Center for Studying Health System Change (HSC) have reported that Medicare beneficiary access to physician services nationwide has been good in recent years, with some exceptions. In its March 2006 report,<sup>25</sup> MedPAC reported the results of its 2005 survey comparing patient access measures between Medicare beneficiaries and privately insured individuals age 50 to 64. It found that similar proportions of Medicare and privately insured individuals had no problems finding a physician or scheduling an appointment. Specifically, 75 percent of both Medicare beneficiaries and of privately insured individuals had no problem finding a new primary care physician,<sup>26</sup> while 74 percent of Medicare beneficiaries and 67 percent of privately insured individuals never

<sup>25</sup>See Medicare Payment Advisory Commission, *Report to the Congress, Medicare Payment Policy* (Washington, D.C.: March 2006).

<sup>26</sup>In 2005, 12 percent of Medicare beneficiaries had a small problem and 13 percent had a big problem finding a new primary care physician. Similarly, 16 percent of privately insured individuals had a small problem and 9 percent had a big problem finding a new primary care physician.

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experienced an unwanted delay in getting an appointment for routine care.<sup>27</sup> These results are generally consistent with previous MedPAC reports on access related solely to Medicare beneficiaries.<sup>28</sup>

In 2005, CMS reported findings from its “targeted” beneficiary survey, that is, a survey focused only on beneficiaries in 11 markets who might have been likely to experience problems accessing physician services based on evidence from CMS monitoring activities and responses to the 2001 CAHPS survey.<sup>29,30</sup> The survey results generally showed stability or improvement in obtaining access from 2003 through 2004. For example, the proportion of FFS Medicare beneficiaries who reported that seeing a doctor “has gotten harder in the past year or two” remained the same—at 7 percent—for both years. In addition, the proportions of beneficiaries reporting problems getting routine care appointments in 2003 and 2004 declined from 27 percent to 21 percent. CMS also noted that certain groups of beneficiaries—those transitioning to a new physician, disabled individuals, those in poor or fair health, those with low incomes, and those without supplemental coverage—had higher rates of problems accessing physician services. For example, about 10 percent of disabled (under age 65) Medicare beneficiaries reported access problems related to physicians’ willingness to accept Medicare, whereas no more than 4 percent of beneficiaries older than 65 (and therefore eligible for Medicare on the basis of age) reported the same problem.

A January 2006 HSC report, based on periodic surveys of physicians, found that the proportion of physicians nationwide accepting new Medicare

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<sup>27</sup>In 2005, with regard to getting an appointment for routine care, 21 percent of Medicare beneficiaries sometimes experienced an unwanted delay, 3 percent usually experienced an unwanted delay, and 2 percent always experienced an unwanted delay. Similarly, among privately insured individuals, 25 percent sometimes, 5 percent usually, and 3 percent always experienced an unwanted delay in getting an appointment for routine care.

<sup>28</sup>See Medicare Payment Advisory Commission, *Report to the Congress, Medicare Payment Policy* (Washington, D.C.: March 2005); *Report to the Congress, Medicare Payment Policy* (Washington, D.C.: March 2004); *Report to the Congress, Medicare Payment Policy* (Washington, D.C.: March 2002); and *Report to the Congress, Medicare Payment Policy* (Washington, D.C.: March 2000).

<sup>29</sup>Centers for Medicare & Medicaid Services and Mathematica Policy Research, Inc., *Results from the 2003 and 2004 Targeted Beneficiary Surveys on Access to Physician Services Among Medicare Beneficiaries* (Washington, D.C.: Jan. 20, 2005).

<sup>30</sup>The 11 markets included the state of Alaska; Phoenix, Arizona; San Diego, California; San Francisco, California; Denver, Colorado; Tampa, Florida; Springfield, Missouri; Las Vegas, Nevada; Brooklyn, New York; Fort Worth, Texas; and Seattle, Washington.

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patients remained unchanged for the two most recent survey periods.<sup>31,32</sup> Specifically, for both the 2000-2001 and 2004-2005 survey periods, HSC found that over 70 percent of physicians surveyed accepted all new Medicare patients.<sup>33</sup> Only a small fraction—less than 4 percent—of physicians responded that they did not accept any new Medicare patients. HSC concluded that despite fluctuations in Medicare payments to physicians, access has remained high for beneficiaries and comparable to access rates for privately insured individuals.

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## Overall Trends in Beneficiary Perceptions of Major Access Difficulties Were Stable over Time, with Some Beneficiaries More Likely Than Others to Report Difficulties

From 2000 through 2004, the percentage of beneficiaries who reported major difficulties accessing physician services—that is, “having a big problem” finding a personal provider or specialist or never being able to promptly schedule a routine appointment—did not vary much from year to year, and relatively small percentages of beneficiaries reported these difficulties. The percentage of beneficiaries who reported major difficulties accessing physician services varied widely by state, but in the vast majority of states this percentage remained relatively constant or declined from 2000 through 2004. Beneficiaries living in urban areas and beneficiaries living in rural areas reported major access difficulties in similar percentages. However, beneficiaries with certain characteristics—such as those in poor health or less than 65 years of age—were more likely to report access difficulties relative to other beneficiaries regardless of where they lived.

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<sup>31</sup>Center for Studying Health System Change, *Tracking Report: Physician Acceptance of New Medicare Patients Stabilizes in 2004-2005* (Washington, D.C.: January 2006).

<sup>32</sup>The HSC Community Tracking Study Physician Survey is a nationally representative telephone survey of physicians involved in direct patient care in the continental United States. The survey had three data collection periods, 1996-1997, 2000-2001, and 2004-2005.

<sup>33</sup>If the proportion of physicians who accepted “some” or “most” new patients had been included, the percentage would have been higher.

Proportions of Beneficiaries Reporting Major Access Difficulties Were Relatively Small and Stable

The percentage of beneficiaries who reported major difficulties accessing physician services did not vary substantially from 2000 through 2004. (See table 2.) For example, among those who needed to find a personal doctor or nurse,<sup>34</sup> about 7 percent of beneficiaries reported a big problem in 2000, and about 5 percent reported a big problem in 2004. Similarly, among those who needed to see a specialist,<sup>35</sup> the percentage of beneficiaries who reported having a big problem varied by less than 2 percentage points—from a high of 5.6 percent in 2000 to a low of 4.3 percent in 2004. Among beneficiaries who needed to schedule an appointment,<sup>36</sup> the percentage who reported never being able to schedule an appointment promptly remained at less than 2 percent throughout the 5-year period.

Table 2: Medicare Beneficiary Responses to Three CAHPS Survey Questions regarding Access to Physician Services, 2000-2004

| CAHPS survey questions regarding access to physician services                                                    | Percentage of respondents who reported having major difficulties |      |      |      |      |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------|------|------|------|
|                                                                                                                  | 2000                                                             | 2001 | 2002 | 2003 | 2004 |
| How much of a problem was it finding a personal doctor or nurse you were happy with since enrolling in Medicare? | 7.1                                                              | 5.6  | 6.0  | 5.8  | 5.3  |
| In the last 6 months, how much of a problem was it seeing a specialist?                                          | 5.6                                                              | 4.6  | 5.0  | 4.9  | 4.3  |
| In the last 6 months, how often did you get an appointment promptly?                                             | 1.1                                                              | 1.1  | 1.6  | 1.5  | 1.5  |

Source: GAO analysis of CMS's Medicare CAHPS surveys.

Notes: We define major difficulties as reporting “a big problem” finding a personal doctor or nurse or seeing a specialist or as reporting “never” being able to promptly schedule a health care appointment. These questions were paraphrased for the purposes of this report. The total number of individuals responding to each question varied from year to year. We reported proportions only for those beneficiaries who needed to find a personal doctor or nurse, needed to see a specialist, or needed to schedule an appointment.

<sup>34</sup>In each survey year, an average of 47 percent of beneficiaries reported that they did not have the same personal doctor or nurse as before joining Medicare.

<sup>35</sup>In each survey year, an average of 56 percent of beneficiaries reported needing to see a specialist in the past 6 months.

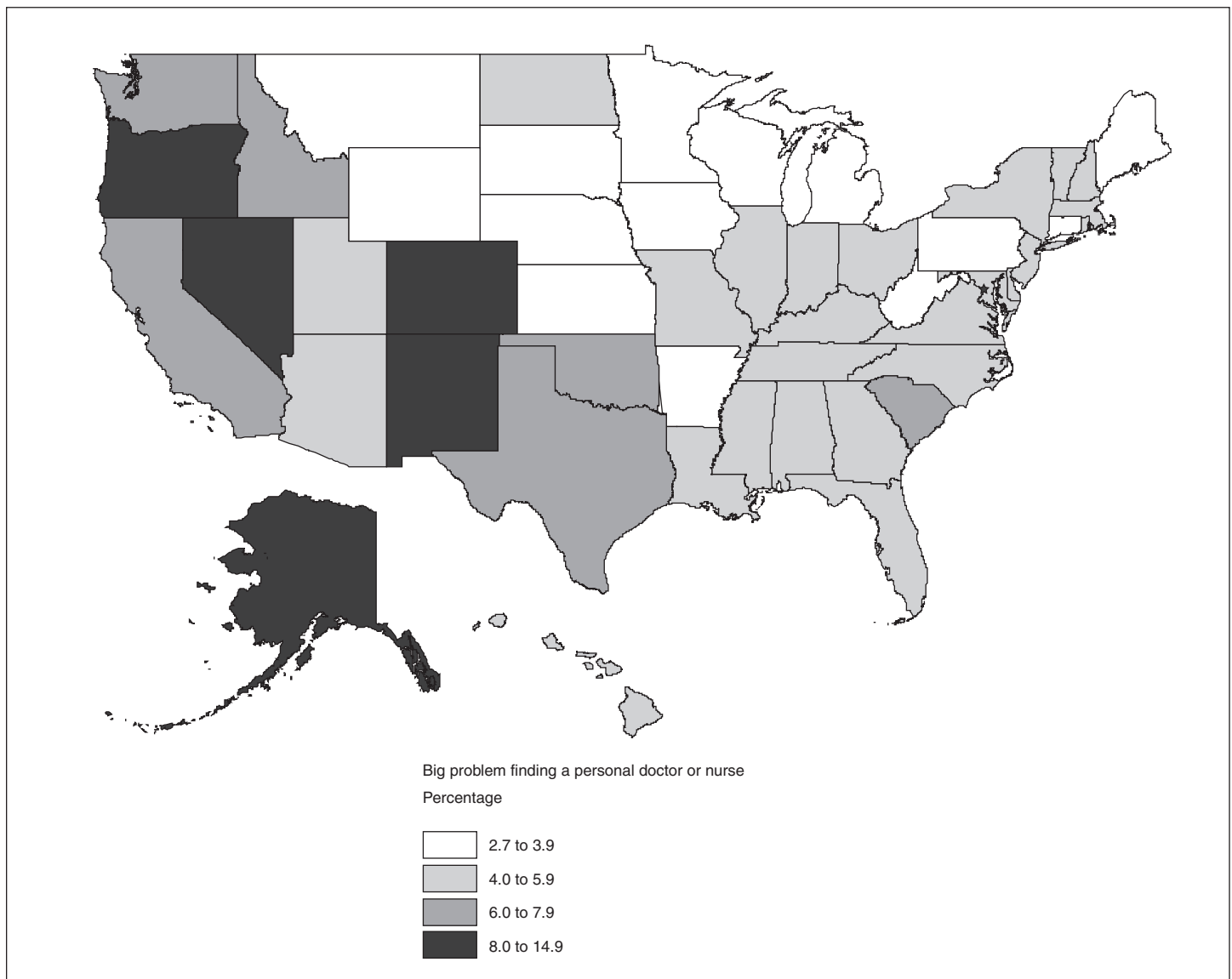
<sup>36</sup>In each survey year, an average of 74 percent of beneficiaries reported needing to schedule an appointment in the past 6 months.

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## Beneficiary Perceptions of Major Access Difficulties Varied by State, but Trends over Time Were Stable or Improved

In each survey year, the proportion of beneficiaries who reported major difficulties accessing physician services varied considerably across the 50 states and the District of Columbia. For example, in 2004, Alaska had the highest proportion of beneficiaries—15 percent—who reported having a big problem finding a personal doctor or nurse, whereas Nebraska had the lowest, 3 percent. Figure 1 shows variation among the states in the percentage of beneficiaries who reported having a big problem finding a personal doctor or nurse in 2004. Also in 2004, the percentage who reported having a big problem seeing a specialist ranged from a high of 11 percent in Alaska to a low of 2 percent in Vermont. In contrast, the proportion of beneficiaries who reported never being able to schedule an appointment promptly had a smaller range—from a high of 5 percent in Alaska to less than 1 percent in Nebraska. In a separate analysis, we found that the supply of health care resources, such as physicians and hospital beds, did not have a sufficiently important impact on beneficiaries' perceptions of access to physician services; the variation we found among states in the percentages reporting major difficulties should therefore not be interpreted as being related to the availability of health care resources. (See app. I.)

**Figure 1: Variation by State in Percentage of Medicare Beneficiaries Who Reported Having a Big Problem Finding a Personal Doctor or Nurse, 2004**



Source: GAO analysis of CMS's Medicare CAHPS survey.

Note: Percentages are reported only for beneficiaries who indicated in their survey responses that they had a different personal doctor than before they enrolled in Medicare.

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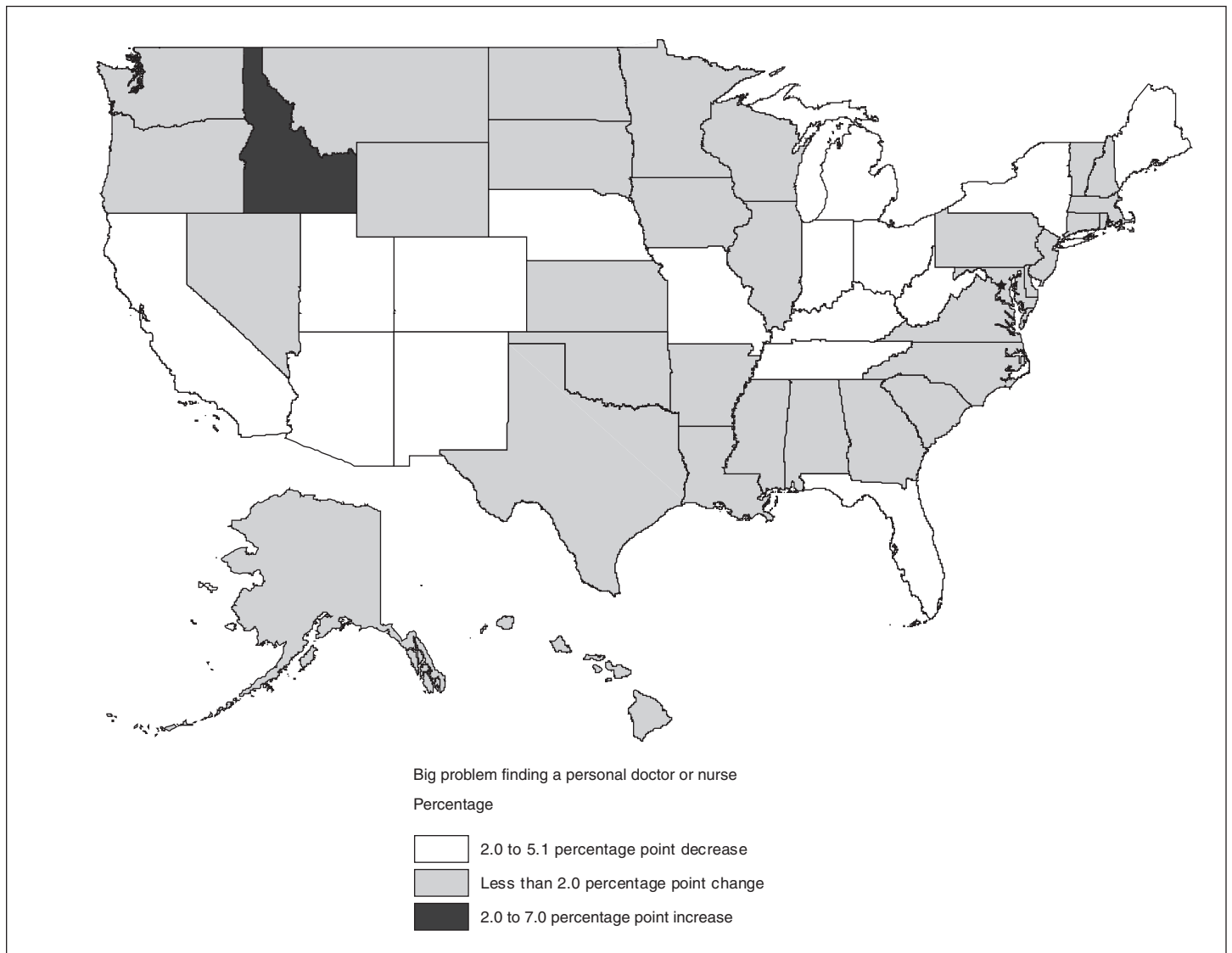
In the vast majority of states, the proportion of beneficiaries in 2004 who reported major difficulties accessing physician services was nearly the same as, or lower than, the proportion in 2000. Specifically, in 49 states, the proportion of beneficiaries in each state who reported a big problem finding a personal doctor or nurse either stayed the same—within 2 percentage points of that reported in 2000—or fell by more than 2 percentage points.<sup>37</sup> (See fig. 2.) Similarly, in all 50 states and the District of Columbia, the proportion of beneficiaries who reported a big problem seeing a specialist either stayed the same or declined. In 47 states, proportions of beneficiaries who reported never being able to schedule an appointment promptly remained the same.<sup>38</sup>

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<sup>37</sup>The proportion of beneficiaries who reported a big problem finding a personal doctor or nurse increased from 2000 to 2004 in the District of Columbia and Idaho.

<sup>38</sup>The proportion of beneficiaries who reported never being able to schedule an appointment promptly increased from 2000 to 2004 in Alaska, the District of Columbia, Idaho, and Nevada.

**Figure 2: Percentage Point Change in Medicare Beneficiary Reports of Having a Big Problem Finding a Personal Doctor or Nurse, 2000 to 2004**



Source: GAO analysis of CMS's CAHPS survey.

Note: Percentage point changes are reported only for beneficiaries who indicated in their survey responses that they had a different personal doctor than before they enrolled in Medicare.



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The District of Columbia and Idaho were exceptional in that beneficiaries' perceptions of access grew worse from 2000 to 2004 on more than one question. Specifically, during that period, the proportion of beneficiaries in the District of Columbia who reported a big problem finding a personal doctor or nurse increased by 7 percentage points, and the proportion who reported never having scheduled an appointment promptly increased by 3 percentage points. Over the same period, the proportions of beneficiaries in Idaho who reported a big problem finding a personal doctor or nurse and who reported never having scheduled an appointment promptly increased by 2 percentage points.

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### Beneficiary Perceptions of Major Access Difficulties Were Similar for Urban and Rural Areas

We observed very little difference between the proportions of urban and rural beneficiaries who reported major difficulties accessing physician services during the period 2000 through 2004. For example, in 2004, 5.5 percent of urban beneficiaries reported having a big problem finding a personal doctor or nurse, and 4.8 percent of rural beneficiaries reported a big problem. In that same year, 4.4 percent of urban beneficiaries and 4.1 percent of rural beneficiaries reported having a big problem finding a specialist. Similarly, 1.6 percent of urban beneficiaries reported never being able to schedule an appointment promptly, and 1.4 percent of rural beneficiaries reported this difficulty.

The proportions of both urban and rural beneficiaries who reported major access difficulties remained relatively stable—changing by no more than 2 percentage points—from 2000 through 2004. For example, the proportion of urban beneficiaries who reported having a big problem finding a personal doctor or nurse ranged from a high of 7.3 percent in 2000 to a low of 5.5 percent in 2004. Similarly, the proportion of beneficiaries in rural areas who reported a big problem ranged from a high of 6.7 percent in 2000 to a low of 4.8 percent in 2004. When asked about seeing a specialist, the percentage of urban beneficiaries who reported having a big problem was 5.6 in 2000 and 4.4 in 2004. Likewise, 5.4 percent of rural beneficiaries reported having a big problem in 2000, as did 4.1 percent in 2004. Finally, the proportion of urban beneficiaries who reported never being able to schedule an appointment promptly was relatively stable—1.2 percent in 2000 and 1.6 percent in 2004. Among rural beneficiaries, 1.0 percent and 1.4 percent reported this difficulty in 2000 and 2004, respectively.

Beneficiaries with Certain Characteristics More Likely Than Others to Report Major Access Difficulties

Beneficiaries with certain characteristics—fair or poor self-reported health status, under age 65, nonwhite, no supplemental health insurance or supplemental insurance from Medicaid, college-educated—were somewhat more likely than other beneficiaries to report major difficulties accessing physician services.<sup>39</sup> For example, when asked about their ability to find a personal doctor or nurse they were happy with, on average over the 5 years, about 8 percent of beneficiaries in fair or poor health responded that they had a big problem, compared with about 4 percent of beneficiaries in excellent or very good health.<sup>40</sup> (See table 3.) On the other two physician access questions, those in fair or poor health similarly reported major difficulties more frequently on average than those in better health.<sup>41</sup> This relationship between health status and reported access is consistent with the fact that people in fair or poor health are likely to have more physician encounters and thus have more opportunities to experience an access problem.

Table 3: Average Percentage of Medicare Beneficiaries Who Reported Major Difficulties Accessing Physician Services by Self-Reported Health Status, 2000-2004

| Beneficiary self-reported health status | Percentage reporting a big problem finding a personal doctor or nurse they were happy with <sup>a</sup> | Percentage reporting a big problem seeing a specialist <sup>b</sup> | Percentage reporting never being able to schedule an appointment promptly <sup>c</sup> |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Excellent or very good                  | 4.1                                                                                                     | 2.5                                                                 | 1.2                                                                                    |
| Good                                    | 4.8                                                                                                     | 3.4                                                                 | 1.2                                                                                    |
| Fair or poor                            | 8.0                                                                                                     | 7.2                                                                 | 1.6                                                                                    |

Source: GAO analysis of CMS's Medicare CAHPS surveys.

<sup>a</sup>Percentages are reported for beneficiaries who reported that they did not have the same personal doctor or nurse before joining Medicare.

<sup>b</sup>Percentages are reported for beneficiaries who reported needing to see a specialist in the past 6 months.

<sup>c</sup>Percentages are reported for beneficiaries who reported needing to make an appointment in the past 6 months.

<sup>39</sup>Other beneficiary and area characteristics, such as sex, county of residence, and county-level supply of physicians and hospital beds, did not affect the proportion of beneficiaries reporting major difficulties. (See app. I.)

<sup>40</sup>Beneficiaries' health status was self-reported.

<sup>41</sup>Fair or poor health status was associated with reporting major access difficulties even after we controlled for other characteristics, such as age and race. (See app. I.) In total, we controlled for survey year and 15 beneficiary and area characteristics.

Compared with respondents age 65 and over, a larger proportion of beneficiaries under age 65, who typically qualify for Medicare on the basis of disability,<sup>42</sup> reported major difficulties accessing physician services. For example, on average during this period, about 11 percent of beneficiaries under age 65 reported a big problem seeing a specialist, compared with 4 percent of beneficiaries over age 65.<sup>43</sup> (See table 4.) This relationship suggests that disabled beneficiaries were more likely to report having major physician access difficulties than beneficiaries age 65 and older.

**Table 4: Average Percentage of Medicare Beneficiaries Who Reported Having Major Difficulties Accessing Physician Services by Beneficiary Age Group, 2000-2004**

| Beneficiary age group    | Percentage reporting a big problem finding a personal doctor or nurse they were happy with <sup>a</sup> | Percentage reporting a big problem seeing a specialist <sup>b</sup> | Percentage reporting never being able to schedule an appointment promptly <sup>c</sup> |
|--------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Under 65                 | 13.2                                                                                                    | 10.8                                                                | 2.5                                                                                    |
| 65 and over <sup>d</sup> | 5.1                                                                                                     | 4.0                                                                 | 1.2                                                                                    |

Source: GAO analysis of CMS's Medicare CAHPS surveys.

<sup>a</sup>Percentages are reported for beneficiaries who did not have the same personal doctor or nurse before they joined Medicare.

<sup>b</sup>Percentages are reported for beneficiaries who indicated that they needed to see a specialist in the past 6 months.

<sup>c</sup>Percentages are reported for beneficiaries who attempted to make an appointment in the past 6 months.

<sup>d</sup>Across the age breakouts for those age 65 and over—that is, 65 to 69, 70 to 74, 75 to 79, 80 to 84, and 85 and over—the percentage reporting having major difficulties varied little.

Nonwhite beneficiaries were somewhat more likely to report major difficulties accessing physician services than white beneficiaries. For example, the percentage of nonwhites reporting a big problem finding a personal doctor or nurse, on average, was about 2 percentage points higher relative to whites. In addition, the percentages of nonwhites reporting major difficulties accessing specialists and scheduling

<sup>42</sup>Some beneficiaries under age 65 qualify for Medicare for other reasons, such as having end-stage renal disease.

<sup>43</sup>When we controlled for the effect of other characteristics, including self-reported health status, being under age 65 was associated with reporting major access difficulties. (See app. I.) Regardless of health status, these disabled beneficiaries reported major difficulties more frequently. In total, we controlled for survey year and 15 beneficiary and area characteristics.

appointments were larger on average than the percentages of whites reporting major difficulties—a difference of 6 and 1 percentage points, respectively.<sup>44</sup> (See table 5.)

**Table 5: Average Percentage of Medicare Beneficiaries Who Reported Having Major Difficulties Accessing Physician Services by Race, 2000-2004**

| Beneficiary race | Percentage reporting a big problem finding a personal doctor or nurse they were happy with <sup>a</sup> | Percentage reporting a big problem seeing a specialist <sup>b</sup> | Percentage reporting never being able to schedule an appointment promptly <sup>c</sup> |
|------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| White            | 5.7                                                                                                     | 4.1                                                                 | 1.2                                                                                    |
| Black            | 6.4                                                                                                     | 8.9                                                                 | 2.1                                                                                    |
| Hispanic         | 8.2                                                                                                     | 11.3                                                                | 2.4                                                                                    |
| Other            | 9.3                                                                                                     | 11.2                                                                | 2.4                                                                                    |
| All nonwhite     | 7.5                                                                                                     | 10.1                                                                | 2.3                                                                                    |

Source: GAO analysis of CMS's Medicare CAHPS surveys.

<sup>a</sup>Percentages are reported for beneficiaries who did not have the same personal doctor or nurse before they joined Medicare.

<sup>b</sup>Percentages are reported for beneficiaries who indicated that they needed to see a specialist in the past 6 months.

<sup>c</sup>Percentages are reported for beneficiaries who attempted to make an appointment in the past 6 months.

Medicare beneficiaries with no supplemental health insurance and those with Medicaid as a supplement were more likely than beneficiaries with only Medigap or other non-Medicaid supplemental health insurance to report major difficulties accessing physician services. For example, on average, beneficiaries with no supplemental coverage or with Medicaid were about 2 and about 4 percentage points, respectively, more likely than beneficiaries with only non-Medicaid supplemental coverage to report a big problem finding a personal doctor or nurse. (See table 6.) With respect to seeing a specialist, beneficiaries with no supplemental health insurance or Medicaid were, on average, about 5 and 6 percentage points respectively, more likely to report a big problem, compared with

<sup>44</sup>After we controlled for other beneficiary characteristics, nonwhite race remained associated with reporting major access difficulties for the questions on finding a specialist and scheduling an appointment. (See app. I.) For the question on finding a personal doctor or nurse, however, blacks were less likely to report a big problem than whites, and Hispanics were as likely as whites to report a big problem after we controlled for other beneficiary characteristics.

beneficiaries with non-Medicaid supplemental coverage. Beneficiaries with no supplemental coverage or Medicaid were about 1 percentage point more likely than those with other supplemental coverage to report never being able to schedule an appointment promptly.<sup>45</sup>

**Table 6: Average Percentage of Medicare Beneficiaries Who Reported Having Major Difficulties Accessing Physician Services by Supplemental Health Insurance Coverage, 2000-2004**

| Supplemental health insurance coverage | Percentage reporting a big problem finding a personal doctor or nurse they were happy with <sup>a</sup> | Percentage reporting a big problem seeing a specialist <sup>b</sup> | Percentage reporting never being able to schedule an appointment promptly <sup>c</sup> |
|----------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| None                                   | 7.5                                                                                                     | 8.9                                                                 | 2.1                                                                                    |
| Medicaid                               | 8.8                                                                                                     | 9.2                                                                 | 1.8                                                                                    |
| Non-Medicaid                           | 5.1                                                                                                     | 3.6                                                                 | 1.1                                                                                    |

Source: GAO analysis of CMS's Medicare CAHPS surveys.

Note: Non-Medicaid includes supplemental coverage from the Department of Veterans Affairs, Tricare, Medigap, and other private insurance. Some beneficiaries included in the Medicaid supplemental category may also have had non-Medicaid supplemental coverage.

<sup>a</sup>Percentages are reported for beneficiaries who did not have the same personal doctor or nurse before they joined Medicare.

<sup>b</sup>Percentages are reported for beneficiaries who indicated that they needed to see a specialist in the past 6 months.

<sup>c</sup>Percentages are reported for beneficiaries who attempted to make an appointment in the past 6 months.

After we controlled for the other factors that could affect access to physician services,<sup>46</sup> including health status, age, and race, beneficiaries who had a 4-year college degree were more likely to report major difficulties accessing physician services. (See app. I.) For example, a typical beneficiary—a white female, age 70 to 74, with a high school diploma—had about a 7 percent likelihood of reporting a big problem finding a personal doctor or nurse.<sup>47</sup> In contrast, if the same beneficiary

<sup>45</sup>After we controlled for other beneficiary characteristics, lack of supplemental coverage from a source other than Medicaid remained associated with reporting major difficulties accessing physician services. (See app. I.)

<sup>46</sup>In total we controlled for survey year and 15 beneficiary and area characteristics, which we describe in app. I.

<sup>47</sup>A typical beneficiary also had fair or poor self-reported health status, had supplemental health insurance coverage only from a source other than Medicaid, and resided in an urban area. See app. I for a complete list of the typical characteristics—both beneficiary and area related.

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had attained a 4-year college degree, she would have slightly more than an 8 percent likelihood of reporting a big problem finding a personal doctor or nurse.

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## From 2000 to 2005, Both Proportion of Beneficiaries Receiving Physician Services and Number of Services Provided per Beneficiary Increased

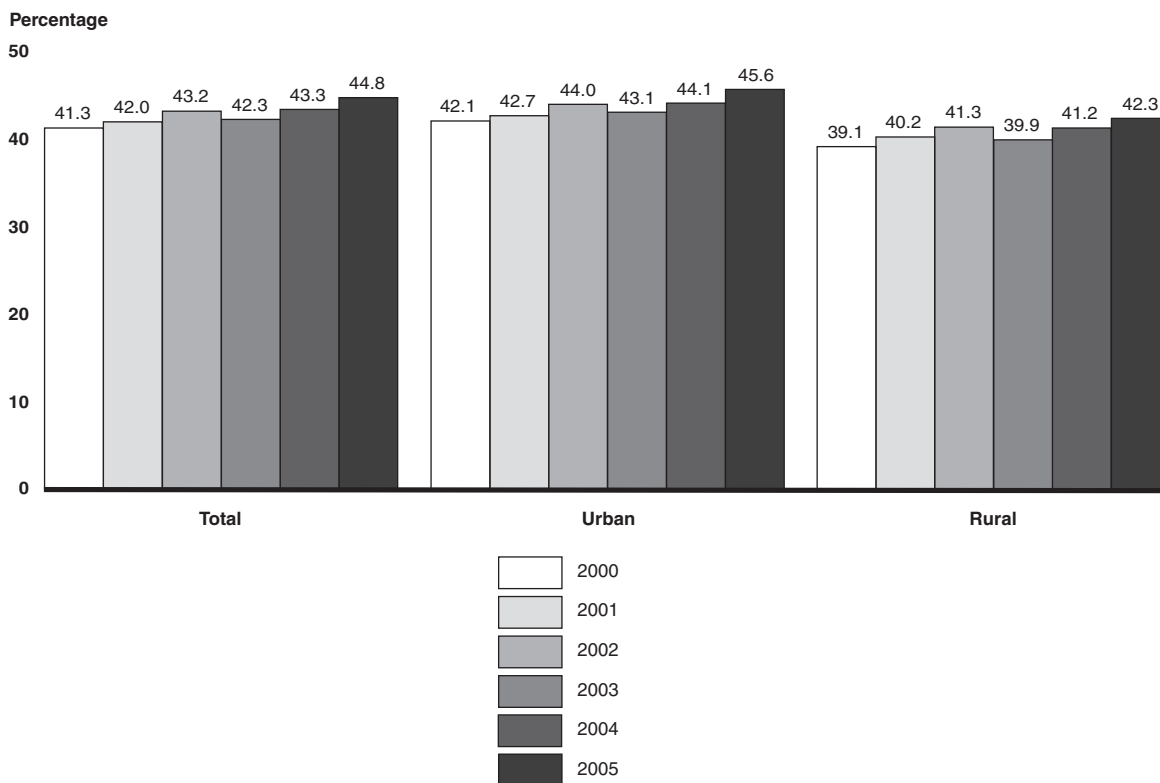
Two indicators of beneficiary access to physician services—the proportion of beneficiaries who received services and the number of services provided to beneficiaries who were treated—suggest an increase in access from April 2000 to April 2005. Nationwide, in urban areas and in rural areas, the proportion of beneficiaries receiving services rose by 3 to 4 percentage points over this period. Moreover, the average number of services provided per 1,000 beneficiaries who received services rose nationwide by 14 percent, in urban areas by 15 percent, and in rural areas by 12 percent. These two indicators increased within every state’s urban areas and almost every state’s rural areas.

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### Proportion of Beneficiaries Receiving Physician Services Grew

In general, the proportion of beneficiaries who received physician services rose during the period covered in our review. (See fig. 3.) Specifically, from 2000 to 2005, the proportion of beneficiaries receiving services during the month of April rose from about 41 percent to about 45 percent. Although this measure declined slightly in April 2003, the proportion of beneficiaries receiving services remained a percentage point higher than in April 2000 and the upward trend resumed in 2004. Nationwide, this measure increased in both urban and rural areas. Specifically, the proportion of beneficiaries receiving services rose from about 42 percent in April 2000 to about 46 percent in April 2005 in urban areas and from about 39 percent in April 2000 to about 42 percent in April 2005 in rural areas.

**Figure 3: Percentage of Medicare Beneficiaries Receiving Physician Services in April, 2000-2005**



Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

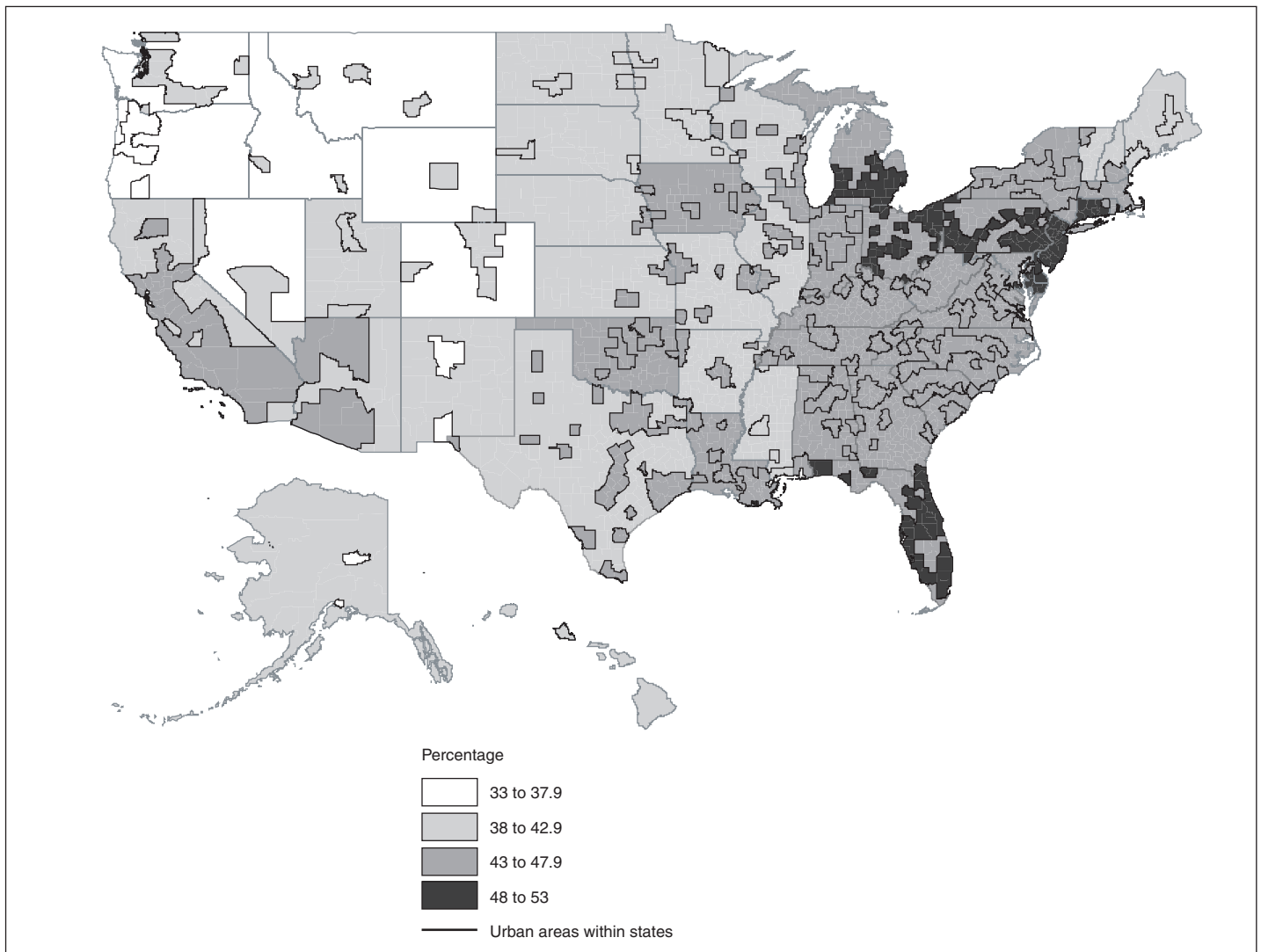
Note: Beneficiaries were included if they received a service in the first 28 days of April.

In each year, the proportions of beneficiaries receiving services in April varied by state urban and rural areas. (See fig. 4.) For example, in 2005, the lowest proportion of beneficiaries receiving services was 33 percent in urban Alaska, whereas the highest proportion was 53 percent in rural Delaware. The proportion of beneficiaries receiving services in April 2005 was 40 percent or higher in almost three-quarters of the 99 urban and rural areas we examined.<sup>48</sup> Specifically, within the states, in four-fifths of the

<sup>48</sup>Using the Office of Management and Budget's system for defining metropolitan statistical areas, we classified the nation's counties as urban or rural. We consolidated the urban counties and rural counties in each state and the District of Columbia, and created 99 geographic areas. There were 51 urban areas and 48 rural areas. There are no rural areas in New Jersey, Rhode Island, and the District of Columbia.

urban areas and two-thirds of the rural areas, the proportion of beneficiaries receiving services was 40 percent or more.

**Figure 4: Variation by State Urban and Rural Areas in Proportion of Medicare Beneficiaries Receiving Physician Services, April 2005**



Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

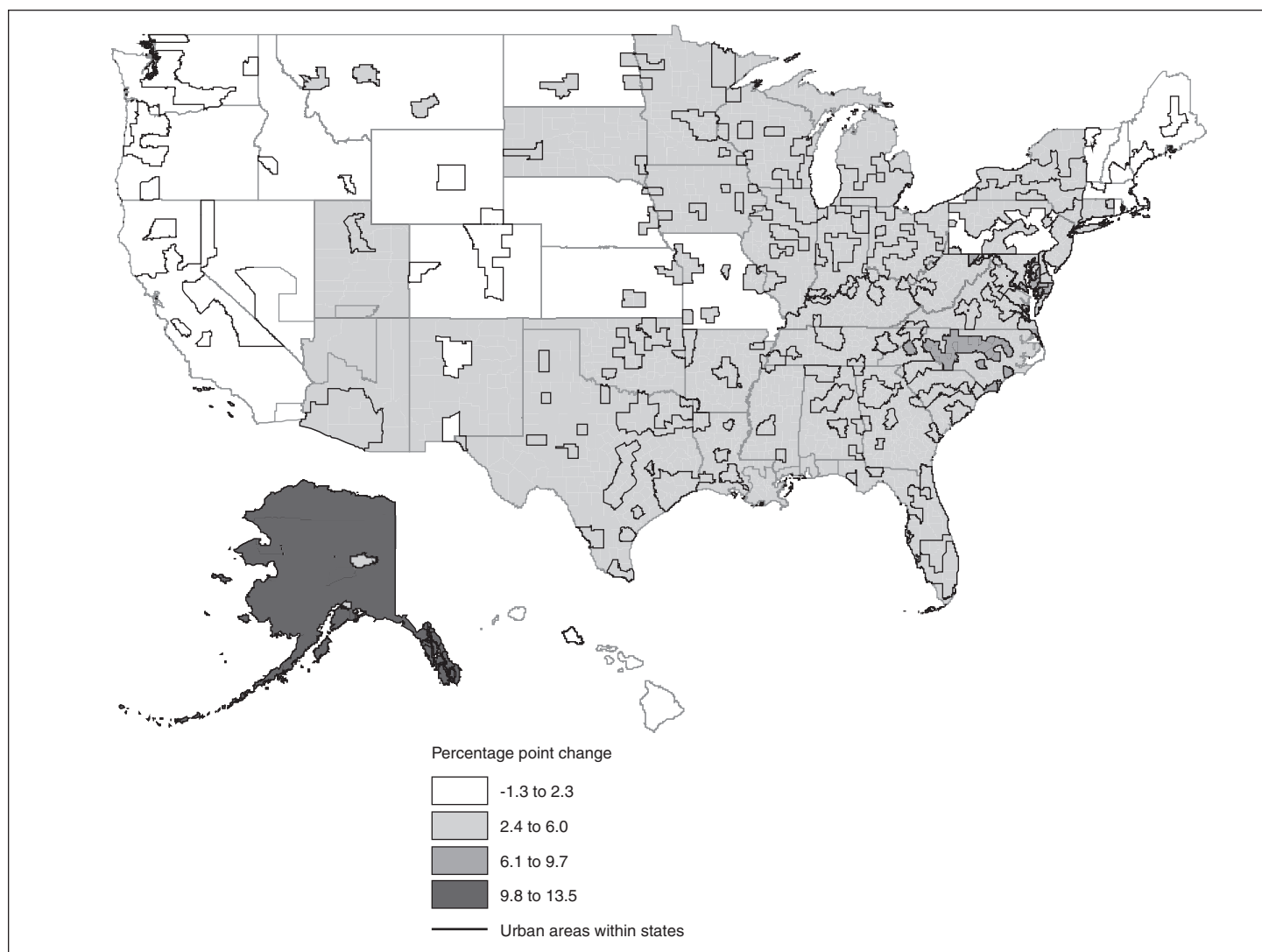
Note: Beneficiaries were included if they received a service in the first 28 days of April.



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Within every state's urban areas and almost every state's rural areas, the proportion of beneficiaries receiving services increased from April 2000 to April 2005. The percentage of beneficiaries receiving services increased by 4 percentage points in urban areas and by 3 percentage points in rural areas. There was a slight decline—1 percentage point or less—in the rural areas of Hawaii and Washington. (See fig. 5.) The largest increase—14 percentage points—occurred in rural Alaska. In two-thirds of the 99 areas we examined, there was at least a 3 percentage point increase from April 2000 to April 2005.

**Figure 5: Percentage Point Change from 2000 to 2005 in Proportion of Medicare Beneficiaries Receiving Physician Services in April, by State Urban and Rural Areas**



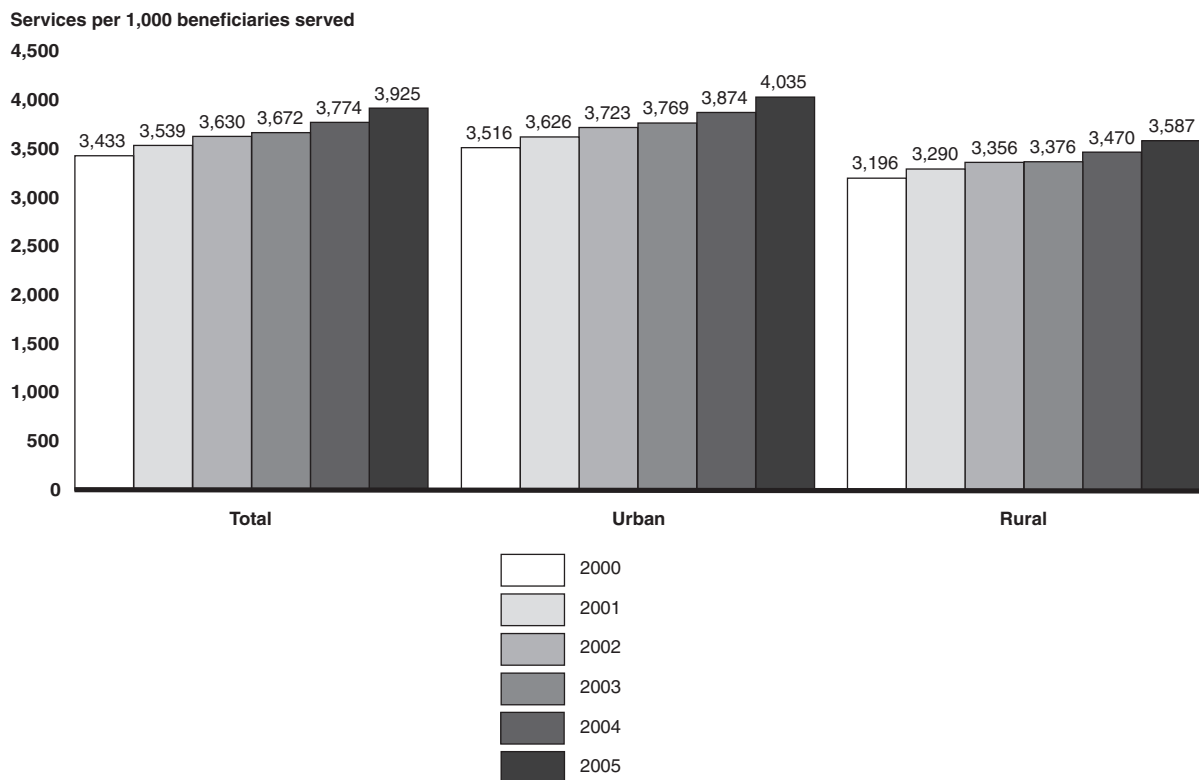
Source: GAO analysis of Medicare Part B claims data from CMS.

Note: Beneficiaries were included if they received a service in the first 28 days of April.

## Average Number of Services Provided Rose

From April 2000 to April 2005, an increasing number of services were provided to beneficiaries who were treated by a physician. Specifically, in that period, the average number of services provided per 1,000 beneficiaries who were treated rose by 14 percent—from about 3,400 to about 3,900. From April 2000 to April 2005, the number of services provided per 1,000 beneficiaries was lower in rural areas (3,196 services per 1,000 beneficiaries who received services in 2000) relative to urban areas (3,516 services per 1,000 beneficiaries who received services in 2000). (See fig. 6.) However, in percentage terms, the urban and rural areas experienced similar increases in the number of services per treated beneficiary—15 percent in urban areas, compared with 12 percent in rural areas.

**Figure 6: Number of Physician Services Provided per 1,000 Medicare Beneficiaries Served in April, 2000-2005**



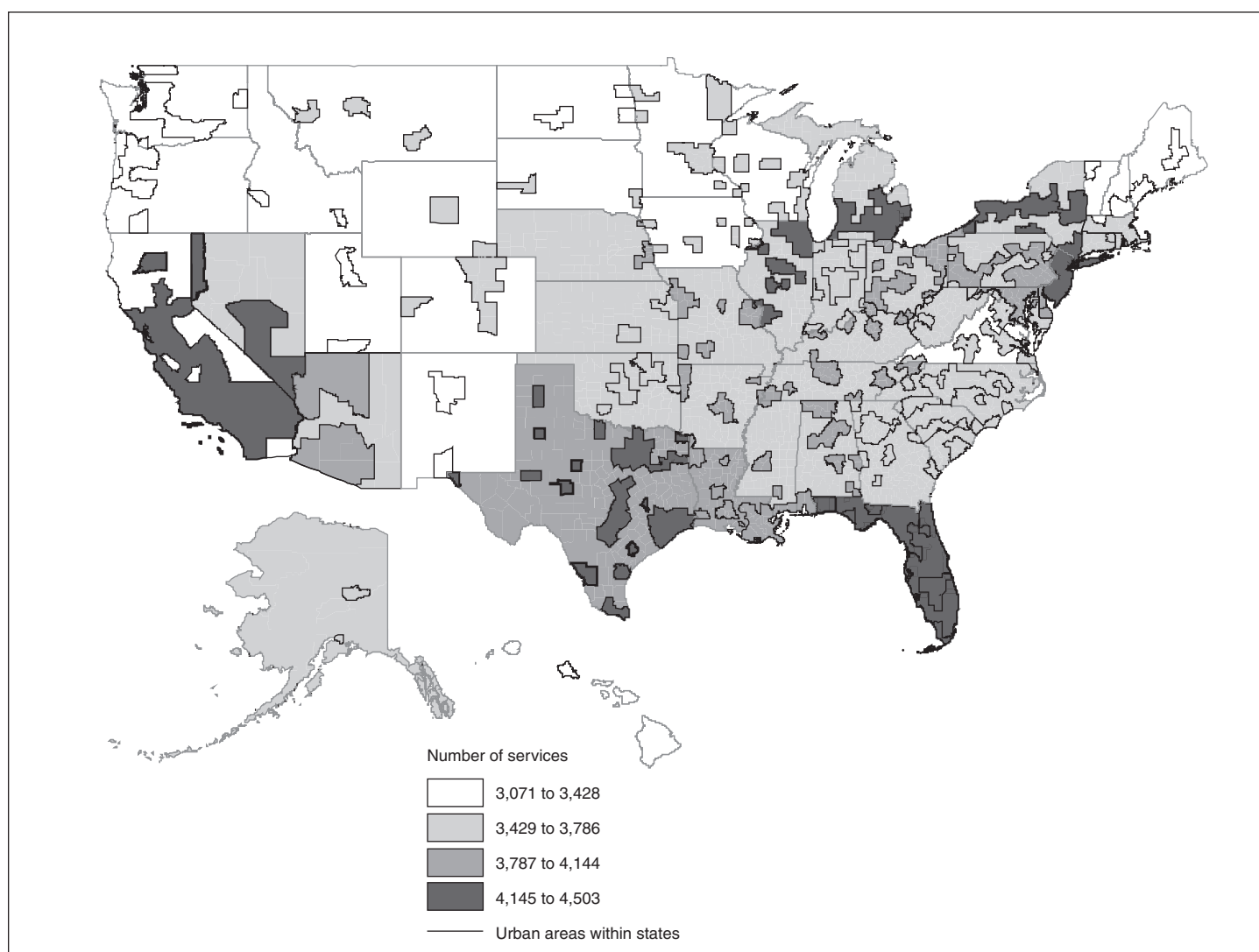
Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

Note: Beneficiaries and services were included if services were received in the first 28 days of April.

The number of services provided also varied among states' urban areas and rural areas. (See fig. 7.) For example, in April 2005, the lowest number

of services provided per 1,000 beneficiaries who were treated by a physician was 3,071 services in urban Vermont, whereas the highest number was 4,503 services in urban Florida. In rural areas, the number ranged from 3,094 services in Vermont to 4,191 in Florida.

**Figure 7: Variation by State Urban and Rural Areas in the Average Number of Physician Services Provided per 1,000 Medicare Beneficiaries Served, April 2005**



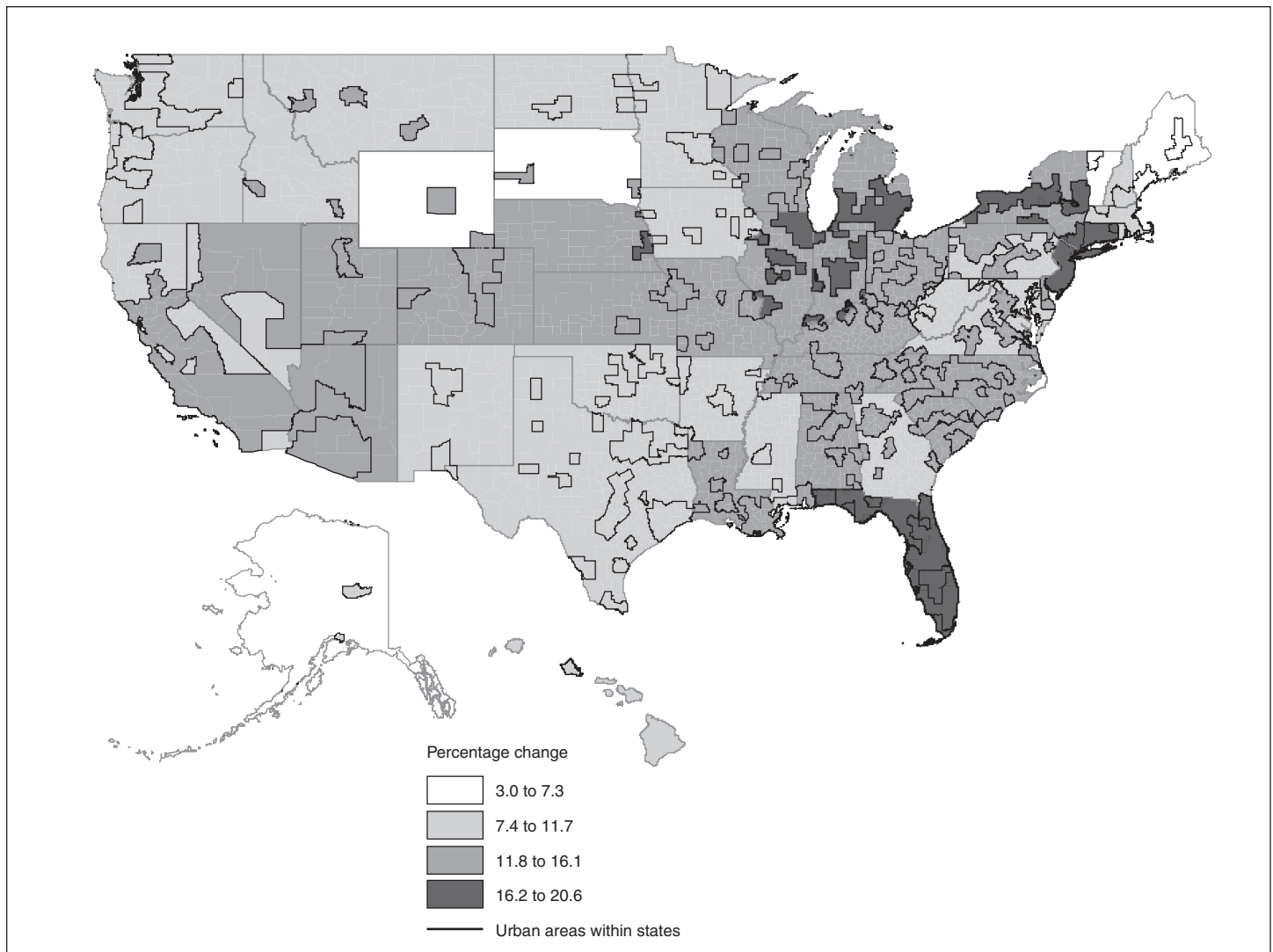
Source: GAO analysis of Medicare Part B claims data from CMS.

Note: Beneficiaries and services were included if services were received in the first 28 days of April.

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Within every state's urban and rural areas, there was an increase from April 2000 to April 2005 in the average number of services provided for each beneficiary who was treated by a physician. (See fig. 8.) In 57 of the 99 areas we examined, the number of services provided per 1,000 beneficiaries increased by at least 12 percent. Among the 51 urban areas we examined, the percentage increase in the number of services provided per 1,000 beneficiaries ranged from a high of 21 percent in New York to a low of 3 percent in Vermont. Among the 48 rural areas, the increase ranged from a high of 20 percent in Connecticut to a low of 4 percent in Wyoming.

**Figure 8: Change from 2000 to 2005 in Number of Physician Services Provided per 1,000 Medicare Beneficiaries in April, by State Urban and Rural Areas**



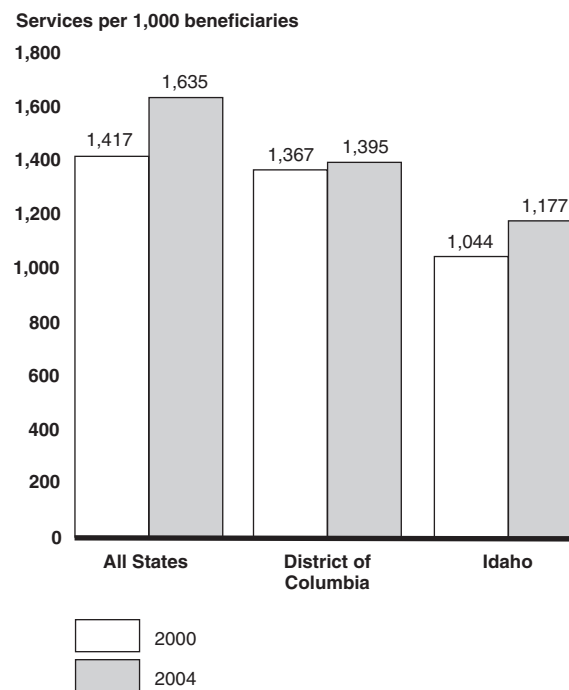
Source: GAO analysis of Medicare Part B claims data from CMS.

Note: Beneficiaries and services were included if the services were received in the first 28 days of April.

Although the CAHPS survey showed a worsening in beneficiaries' perceptions of access to physician services in two states—the District of Columbia and Idaho—our analysis of the claims data demonstrated that the number of services provided to Medicare beneficiaries increased in both states and increased substantially in one of the two states. For

example, from April 2000 to April 2004, the same period covered by the CAHPS surveys, we found a double-digit increase in the number of services provided per capita both nationwide (24 percent) and in Idaho (13 percent).<sup>49</sup> In contrast, over the same period, the number of services provided per capita increased by only 2 percent in the District of Columbia. (See fig. 9.)

**Figure 9: Number of Physician Services Provided per 1,000 Medicare Beneficiaries in April, 2000 and 2004**



Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

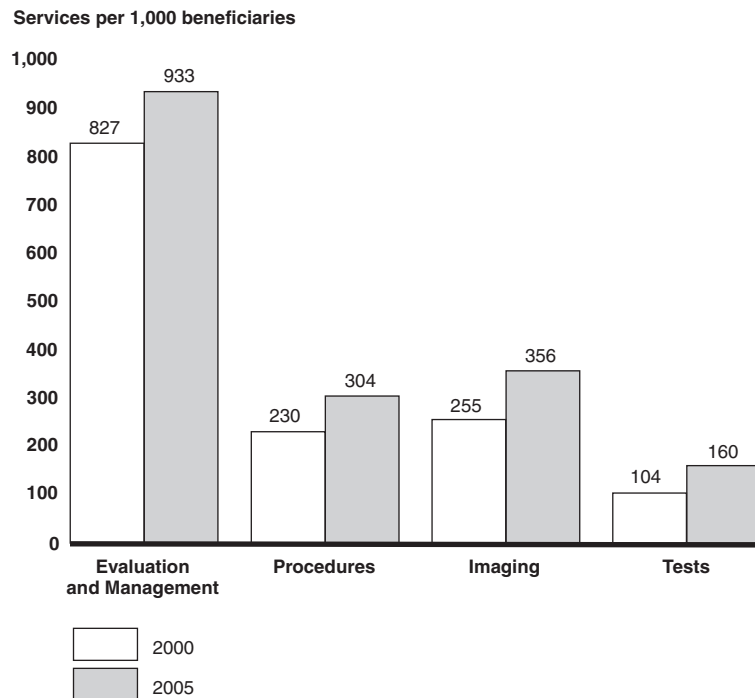
Notes: Services were included if they were received in the first 28 days of April. We focused on the two states identified by our analysis of CAHPS data as showing a worsening access problem from 2000 to 2004.

In examining trends in the number, or volume, of services, we found that volume generally increased across broad categories of services—evaluation and management, procedures, imaging services, and tests. Specifically, the number of services provided per 1,000 Medicare beneficiaries increased in all of these categories from April 2000 to April

<sup>49</sup>Per capita refers to the average number of services per 1,000 Medicare beneficiaries.

2005. (See fig. 10.) Within the procedures category, the number of minor procedures provided per 1,000 beneficiaries increased by 36 percent, whereas the number of major procedures declined slightly by 3 percent.

**Figure 10: Number of Services Provided per 1,000 Medicare Beneficiaries in April, by Service Category, 2000 and 2005**



Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

Note: Services were included if they were received in the first 28 days of April.

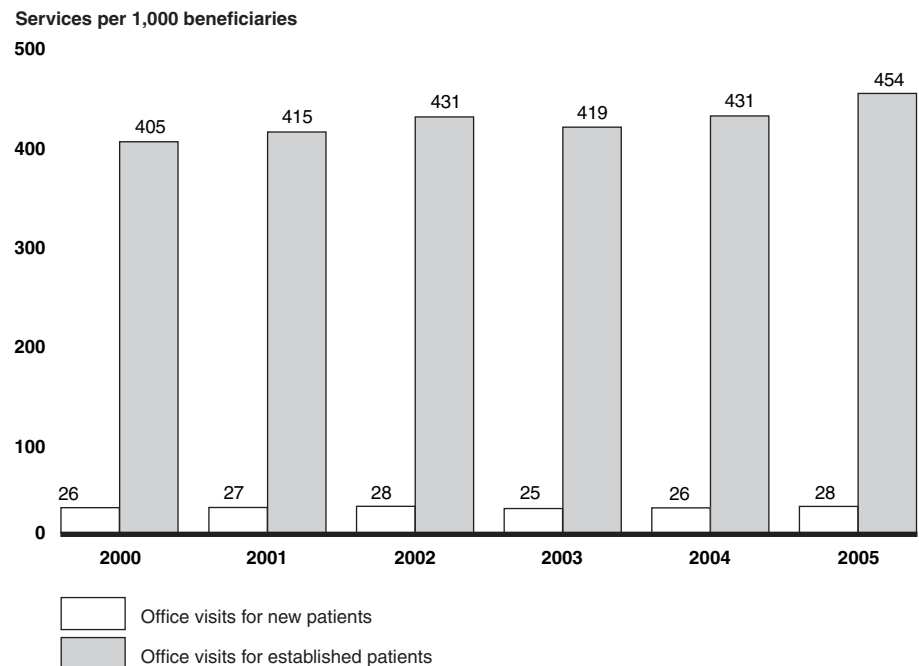
In examining trends in the numbers of services provided, we also found that the average number of office visits—an indicator of access to the most basic level of physician services—generally increased (see fig. 11).<sup>50</sup> Specifically, from 2000 to 2005, the number of office visits per 1,000 Medicare beneficiaries received during the month of April increased from 26 visits to 28 visits for new patients (an increase of about 8 percent) and

<sup>50</sup>Office visits can be provided by both primary care physicians and specialists. We examined office visits because they are the typical entry point into the health care system and the most basic level of physician services.



from 405 visits to 454 visits for established patients (an increase of about 12 percent).<sup>51</sup>

**Figure 11: Number of Office Visits per 1,000 Medicare Beneficiaries in April by New and Established Patients, 2000-2005**



Source: GAO analysis of Medicare Part B claims data from CMS.

Notes: Services were included if they were received in the first 28 days of April. Medicare defines an established patient as one who has seen the same physician at least once before in the past 3 years.

We also found that the number of specialty services provided generally increased over the 6 years reviewed. Most of the specialty services we examined—such as aneurysm repairs, pacemaker insertions, and hip replacements—experienced double-digit growth rates. (For a complete list of the services we examined, see app. III.) For example, per capita growth in aneurysm repairs rose by about 65 percent; in pacemaker insertions, by about 64 percent; and in hip replacements, by about 11 percent. Moreover, we found double-digit per capita growth rates over the 6 years reviewed for services that are most likely to be affected by physician fee changes.

<sup>51</sup>We examined office visits separately for new and established patients to assess access to care trends among new patients who might be more likely to experience access difficulties.

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These discretionary services could be postponed without medically harming the patient, and therefore physicians might provide fewer of them when there is downward pressure on fees. For example, per capita growth in knee replacement procedures rose by about 47 percent; in electrocardiograms, by about 18 percent; and in CAT scans, by about 65 percent. Although per capita declines occurred for a few specialty procedures,<sup>52</sup> these declines may have resulted for reasons other than access difficulties, such as physician discretion, patient acuity, or the ability to substitute other procedures. For example, coronary artery bypass grafting (CABG) declined per beneficiary by about 31 percent, whereas coronary angioplasty, a substitute in some cases for CABG, grew per beneficiary by about 34 percent.

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## Complexity of Services Provided Also Increased

Service complexity—an element of utilization—increased from April 2000 to April 2005. Specifically, physician services per beneficiary rose in complexity, as measured in average annual changes in RVUs, over this period. Increases in service volume occurred for each broad category of services—evaluation and management, procedures, imaging, and tests—with the exception of major procedures. Similarly, for all categories of services, the complexity of services provided per beneficiary rose over the same period. (See table 7.) Overall, volume rose by an average of about 4 percent, while complexity rose by an average of about 5 percent. Thus, beneficiaries' increased utilization of physician services has manifested itself in both increased volume and increased complexity of services for the 6 years reviewed.

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<sup>52</sup>The procedures included were coronary artery bypass grafts, thromboendarterectomy, sigmoidoscopy, hip fracture repair, and corneal transplant.

## From 2000 to 2005, Indicators of Physician Supply and Willingness to Serve Medicare Beneficiaries Were Favorable

**Table 7: Changes in Volume and Complexity of Physician Services Provided per Medicare Beneficiary, April 2000-April 2005**

| Type of service                       | Annual percentage<br>change in number<br>of services per<br>beneficiary,<br>April 2000-April 2005 | Annual percentage<br>change in<br>complexity of<br>services per<br>beneficiary, as<br>measured in RVUs,<br>April 2000-April 2005 |
|---------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| All services                          | 4.4                                                                                               | 5.2                                                                                                                              |
| Evaluation and management<br>services | 2.4                                                                                               | 3.7                                                                                                                              |
| Procedures                            | 5.7                                                                                               | 4.3                                                                                                                              |
| Major                                 | -0.7                                                                                              | 2.3                                                                                                                              |
| Minor                                 | 6.3                                                                                               | 5.2                                                                                                                              |
| Imaging                               | 6.9                                                                                               | 10.5                                                                                                                             |
| Tests                                 | 9.1                                                                                               | 13.9                                                                                                                             |

Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

Notes: Services were included in the calculation of average annual percentage changes if the services were received in the first 28 days of April. To account for complexity of services, we used RVU weights for 2005.

Two additional access related indicators—the number of physicians billing Medicare for services and the percentage of services for which Medicare’s fees were accepted as payment in full—increased from 2000 to 2005. These increases suggest that in the aggregate, physicians continued to accept Medicare patients without requiring additional payments from beneficiaries during this period.

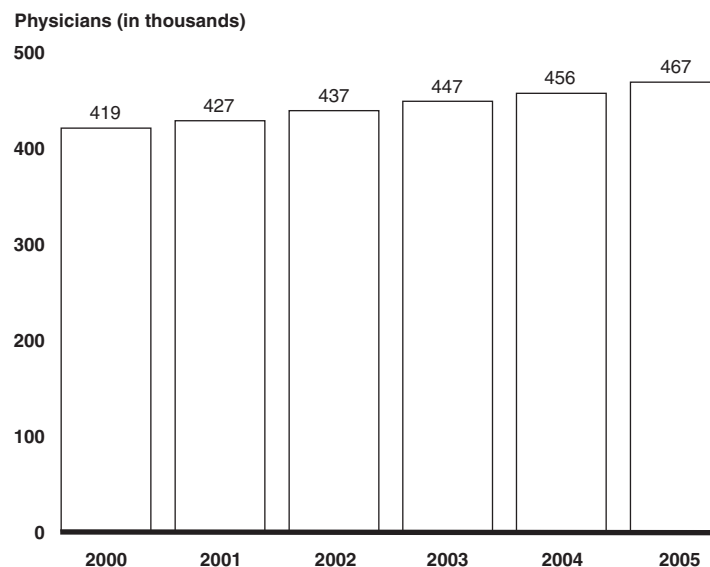
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## Number of Physicians Serving Medicare Beneficiaries Increased

An increasing number of physicians billed Medicare from April 2000 to April 2005. (See fig. 12.) In April 2000, the number of physicians billing Medicare was about 419,000, and in April 2005, that number had increased to a little more than 467,000. While Medicare experienced an 11 percent increase in the number of physicians billing the program, the number of beneficiaries in Medicare—FFS and managed care combined—rose by 8 percent.<sup>53</sup>

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**Figure 12: Number of Physicians Billing Medicare for Services Provided to Medicare Beneficiaries in April, 2000-2005**



Source: GAO analysis of Medicare Part B claims data from CMS.

Notes: Physicians were included if they served a beneficiary in the first 28 days of April. We counted each occurrence of the unique physician identification number on the claim once.

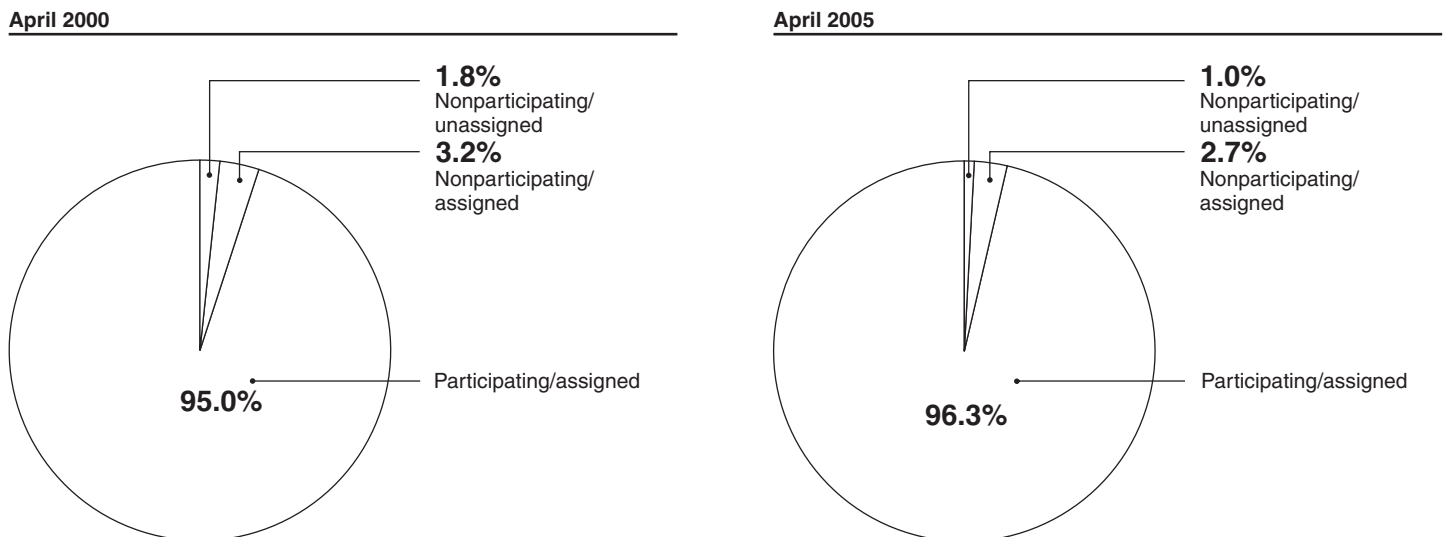
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<sup>53</sup>Because the majority of physicians serving FFS Medicare beneficiaries also likely serve beneficiaries in Medicare managed care, we report the change in the total number of Medicare beneficiaries—FFS and managed care combined. The number of FFS beneficiaries increased by 13 percent, an increase driven in part by a decline of about 18 percent in the number of enrollees in managed care, from 6.8 million to 5.6 million.

## Proportion of Services for Which Physicians Accepted Medicare Payment in Full Increased

From April 2000 to April 2005, the vast majority of Medicare physician services were performed by participating physicians—that is, physicians who formally agreed to participate in the Medicare program and submit all claims on assignment.<sup>54</sup> This percentage increased from 95 percent to over 96 percent. (See fig. 13.) During the same period, the overall percentage of services paid on assignment—that is, services performed by both participating and nonparticipating physicians who accepted assignment—also increased. In April 2000, 98.2 percent of services were paid on assignment, and in April 2005, 99.0 percent of services were paid on assignment. Fewer beneficiaries were likely to be subject to balance billing for physician services in 2005 than in 2000 as the percentage of services for which physicians were permitted to balance bill Medicare beneficiaries fell from 1.8 percent to 1.0 percent.

**Figure 13: Proportion of Physician Services by Medicare Participation and Assignment Status, April 2000 and April 2005**



Source: GAO analysis of Medicare Part B claims data from CMS.

Note: Services were included if they were received in the first 28 days in April.

<sup>54</sup>Physicians may decide on an annual basis whether they will be Medicare participating physicians.

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## Concluding Observations

Although concerns have been raised that Medicare's efforts to control spending on physician services might have diminished beneficiary access to those services, our analyses of data from 2000 through 2005 found access to physician services stayed the same or increased. Specifically, during the years we studied, relatively small proportions of beneficiaries reported problems accessing physician services, the percentage of beneficiaries who received physician services increased, and the number of services provided per beneficiary increased. Finally, our indicators of physician willingness to serve Medicare beneficiaries—the number of physicians billing Medicare and the proportion of services for which physicians accepted Medicare payment in full—help round out the picture of beneficiary access to services. We found that during the 2000-2005 period covered by our claims analysis, an increasing number of physicians billed Medicare and an increasing number of claims were submitted “on assignment.” The general stability in perceptions of access problems and increases in other indicators of access are notable, considering that during all but 2 of the years examined, annual updates caused physician fees either to fall or to increase at rates below the increase in the estimated cost of providing services.

The increases in utilization and complexity we observed demonstrate that beneficiaries were able to access physician services. However, we did not determine the medical appropriateness of these increases. A more complex study would be required to determine whether the increased utilization over the period we studied resulted in positive health outcomes for beneficiaries. Such analysis is important because these utilization trends have implications for the long-term fiscal sustainability of the Medicare program.

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## Agency and Industry Comments and Our Evaluation

### Agency Comments

In written comments on a draft of this report, CMS agreed with our findings and conclusions, stating that our analysis of existing data was well-conceived and executed. CMS noted the agency's commitment to ensuring continued beneficiary access to care while attempting to address the long-term fiscal sustainability of the Medicare program. CMS said that it had conducted its own analyses of data from a variety of sources in order to identify any beneficiary difficulties in accessing physician services, and these analyses did not indicate a national problem accessing

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care. CMS noted that we may want to include claims reflecting services performed in federally qualified health centers (FQHC) and rural health clinics (RHC) in any future analyses of utilization, as relying solely upon Part B claims from the National Claims History files may underrepresent utilization of physician services. However, the agency stated that including these claims would not substantively change GAO's results and conclusions. Furthermore, we note that our utilization measures would change only to the extent that services provided in FQHCs and RHCs were performed by medical doctors, as we excluded services performed by nonphysicians, such as nurse practitioners and physician assistants. CMS also provided other comments it characterized as minor editorial and technical points, which we incorporated where appropriate. We have reprinted CMS's letter in appendix IV.

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## American Medical Association Comments

We obtained oral comments on our draft report from officials representing the AMA. The AMA officials expressed two overall concerns. First, while stating that our analysis of survey, claims, and physician participation data showed no deterioration in beneficiaries' access to physician services over the period studied, the officials cautioned the analyses' results should not be interpreted as an improvement in access. The AMA officials said that for example, increases in the utilization of physician services could be the result of beneficiaries growing sicker, the substitution of physician services for care in the hospital or other settings, or beneficiaries taking advantage of new Medicare-covered benefits. An investigation of alternate explanations for the growth in utilization was beyond the scope of this report. Although our report finds that the percentage of beneficiaries reporting major access difficulties remained relatively constant over the period, that the utilization of services generally increased nationwide, and that physician participation in Medicare also increased, the report does not characterize these findings as improvements in access. Second, the AMA officials said that the report should place more emphasis on our finding that beneficiaries with certain characteristics, such as those in poor health, were more likely, than to other beneficiaries, to respond that they experienced major difficulty accessing physician services. Although this finding is not the focus of our report, we believe that it is accorded the appropriate emphasis, as it is included in the Highlights section and the Results in Brief. Based on other comments from AMA officials, we revised our draft report where appropriate.

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We are sending copies of this report to the Administrator of CMS, appropriate congressional committees, and other interested parties. We will also provide copies to others on request. In addition, this report is available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have questions about this report, please contact me at (202) 512-7101 or [steinwalda@gao.gov](mailto:steinwalda@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

A handwritten signature in black ink, reading "A. Bruce Steinwald". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

A. Bruce Steinwald  
Director, Health Care



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*List of Committees*

The Honorable Charles E. Grassley  
Chairman  
The Honorable Max Baucus  
Ranking Minority Member  
Committee on Finance  
United States Senate

The Honorable Joe L. Barton  
Chairman  
The Honorable John D. Dingell  
Ranking Minority Member  
Committee on Energy and Commerce  
House of Representatives

The Honorable William M. Thomas  
Chairman  
The Honorable Charles B. Rangel  
Ranking Minority Member  
Committee on Ways and Means  
House of Representatives

The Honorable Nathan Deal  
Chairman  
The Honorable Sherrod Brown  
Ranking Minority Member  
Subcommittee on Health  
Committee on Energy and Commerce  
House of Representatives

The Honorable Nancy L. Johnson  
Chairman  
The Honorable Pete Stark  
Ranking Minority Member  
Subcommittee on Health  
Committee on Ways and Means  
House of Representatives

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# Appendix I: Methods and Models Used in Analyzing Factors Affecting Medicare Beneficiaries' Perceptions of Access

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This appendix explains how we analyzed beneficiaries' perceptions of their ability to access physician services and factors that might contribute to those perceptions. First, we describe the data we analyzed from the Medicare Consumer Assessment of Health Plan Study (CAHPS), which contains indicators of fee-for-service (FFS) beneficiary perceptions of physician access. Next, we explain how we identified beneficiaries' characteristics that were associated with their perceptions of access to physician services. We then describe how we reported the way those beneficiary characteristics were associated with major difficulties accessing physician services. We also explain how we identified trends in beneficiary perceptions over time and across states. Finally, we discuss how we evaluated the reliability of our data and the limitations of our analysis.

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## Data Sources

To study beneficiaries' perceived access to physician services, we used data from the Centers for Medicare & Medicaid Services' (CMS) CAHPS FFS annual surveys administered from 2000 through 2004. The CAHPS survey asks beneficiaries to describe their experiences with the Medicare FFS program. We identified these annual surveys as a nationally representative source of Medicare beneficiaries' perceptions of their access to health care that would enable comparisons over time among states and between urban and rural areas. CMS surveyed over 168,000 FFS beneficiaries each year.<sup>1</sup> The response rate was at least 63 percent each year.

We focused on the three CAHPS questions that were related to beneficiaries' access to physician services. The questions, reproduced in table 8, asked about beneficiaries' ability to access a personal provider of care (a physician or nurse), specialists, and prompt appointments. For each question, we included only the responses from those beneficiaries who could have encountered an access problem—those who reported in a prior question that they in fact needed care.<sup>2</sup> For example, we include responses to the specialist access question only for those beneficiaries who answered in a prior survey question that they needed to see a

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<sup>1</sup>We excluded responses from beneficiaries residing outside the 50 states and the District of Columbia in our analysis.

<sup>2</sup>About 50 percent of beneficiaries indicated a need for a new personal provider. Similarly, about 60 percent self-reported a need for access to specialists, and about 70 percent indicated that they needed an appointment.

specialist in the past 6 months. We calculated the proportion of respondents who responded the most negatively—those who responded that they had “a big problem” or who “never” scheduled a prompt appointment. This approach enabled us to be as definitive as possible in describing beneficiaries perceptions of access difficulties.<sup>3</sup>

Table 8: CAHPS Survey Questions Related to Physician Access, 2000-2004

| Respondents included in analysis                                                                                | Percentage of all survey respondents | Access question                                                                                                        | Response                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Beneficiaries who reported that they did not have the same doctor before joining Medicare.                      | 47                                   | Since you joined Medicare, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with? | <ul style="list-style-type: none"><li>• A big problem</li><li>• A small problem</li><li>• Not a problem</li></ul> |
| Beneficiaries who reported that they needed to see a specialist in the past 6 months.                           | 56                                   | In the past 6 months, how much of a problem, if any, was it to see a specialist that you needed to see?                | <ul style="list-style-type: none"><li>• A big problem</li><li>• A small problem</li><li>• Not a problem</li></ul> |
| Beneficiaries who reported that they needed to schedule a routine health care appointment in the past 6 months. | 74                                   | In the past 6 months, how often did you get an appointment for health care as soon as you wanted?                      | <ul style="list-style-type: none"><li>• Never</li><li>• Sometimes</li><li>• Usually</li><li>• Always</li></ul>    |

Source: GAO analysis of CMS’s annual Medicare CAHPS surveys.

Note: The exact wording of each question varied by survey year.

The CAHPS survey also asked beneficiaries to provide information about themselves, and we used those responses to determine whether beneficiary characteristics were systematically associated with beneficiaries reporting major difficulties accessing physician services. Specifically, we analyzed beneficiary sex, race, age, educational attainment, urban or rural residence, additional health care coverage, and self-reported health status.<sup>4</sup> We supplemented the CAHPS data for each beneficiary with county-level information from the 2000 Area Resource

<sup>3</sup>When we conducted the analyses described in this appendix using any negative responses—that is, both “big problem” and “small problem” and both “never” and “sometimes”—the proportions were larger, but the effects of beneficiary and area characteristics on the likelihood of reporting a problem were about the same.

<sup>4</sup>Additionally, we tested whether the use of a proxy to help respondents complete the survey had an effect on beneficiaries’ perceptions of access.

File (ARF)<sup>5</sup> on primary care physicians per capita, specialist physicians per capita, managed care penetration, per capita income, the proportion of the population enrolled in Medicare, hospital beds per capita, and ambulatory surgical centers per Medicare beneficiary.<sup>6</sup>

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## Analysis of Beneficiary Responses to the CAHPS Survey

To analyze the extent to which various beneficiary and area characteristics were associated with perceived access to physician services, we first used a standard statistical method of analysis known as logistic regression modeling to identify key beneficiary and area characteristics, and then we computed simple proportions of beneficiaries with key characteristics who reported major difficulties. For example, our model showed that age was associated with reporting major difficulties, so we reported percentages reporting major difficulties by age group. Logistic regression modeling estimates the effect of each independent variable—in this case, a beneficiary characteristic—on an either/or (binary) variable—in this case, either reporting a major difficulty or not—while holding constant the effects of other independent variables in the model. The size of the effect of each beneficiary characteristic is expressed as a coefficient, which can be mathematically converted into an odds ratio. The odds ratio compares the likelihood of reporting a major difficulty when a characteristic is present to the likelihood of reporting a major difficulty when the characteristic is absent. When a characteristic is absent, the beneficiary is classified as belonging to a “reference group.” For example, for the characteristic “race,” our logistic regression model compares three race variables—black, Hispanic, and other race—to the reference group, white. (See table 9.) The odds ratio of the reference group is always set equal to 1.00. Odds ratios larger than 1.00 indicate that the presence of the characteristic increases the likelihood of reporting a major difficulty compared to the reference group, while odds ratios smaller than

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<sup>5</sup>The ARF, which is maintained by the Health Resources and Services Administration, is a county-based health resources information database that contains data from many sources, including the U.S. Census Bureau and the American Medical Association. The ARF is a standard data source that is well-documented and widely used. We linked year 2000 ARF data to beneficiaries from all 5 CAHPS survey years for two reasons. First, we reasoned that local area characteristics would not change much over the CAHPS survey years—2000 through 2004. Second, some fields of ARF data were not available for 2001 through 2004.

<sup>6</sup>In the year 2000, CAHPS data on county of residence were missing for all beneficiaries living in eight states—Alaska, Idaho, Montana, North Dakota, Rhode Island, South Dakota, Wyoming, and Vermont—and the District of Columbia. These missing data rendered 3,600 beneficiaries—roughly 3 percent of the year 2000 CAHPS respondents—not linkable to the ARF data.

1.00 indicate that the presence of the characteristic decreases the likelihood of reporting a major difficulty compared to the reference group. We combined observations from all 5 CAHPS survey years in the logistic regression analysis.<sup>7</sup> The logistic regression models for the three access questions included variables for 15 beneficiary and area characteristics, which are listed, together with their odds ratios, in table 9.

**Table 9: Estimated Effects of Selected Medicare Beneficiary and Area Characteristics on Reporting Major Difficulty Accessing Physician Services, 2000-2004**

|                                        |                        | Odds ration                                                 |                                              |                                                      |
|----------------------------------------|------------------------|-------------------------------------------------------------|----------------------------------------------|------------------------------------------------------|
|                                        | Characteristic         | Big problem finding a personal doctor or nurse <sup>a</sup> | Big problem seeing a specialist <sup>b</sup> | Never scheduled an appointment promptly <sup>c</sup> |
| Age                                    | Under 65               | 1.00 <sup>d</sup>                                           | 1.00 <sup>d</sup>                            | 1.00 <sup>d</sup>                                    |
|                                        | 65-69                  | <b>0.63**</b>                                               | <b>0.61**</b>                                | <b>0.77**</b>                                        |
|                                        | 70-74                  | <b>0.51**</b>                                               | <b>0.58**</b>                                | <b>0.56**</b>                                        |
|                                        | 75-79                  | <b>0.43**</b>                                               | <b>0.55**</b>                                | <b>0.55**</b>                                        |
|                                        | 80-84                  | <b>0.36**</b>                                               | <b>0.55**</b>                                | <b>0.53**</b>                                        |
|                                        | 85 and over            | <b>0.30**</b>                                               | <b>0.52**</b>                                | <b>0.56**</b>                                        |
| Sex                                    | Female                 | 1.00 <sup>d</sup>                                           | 1.00 <sup>d</sup>                            | 1.00 <sup>d</sup>                                    |
|                                        | Male                   | <b>0.84**</b>                                               | 0.93 <sup>*</sup>                            | <b>1.21**</b>                                        |
| Race                                   | White                  | 1.00 <sup>d</sup>                                           | 1.00 <sup>d</sup>                            | 1.00 <sup>d</sup>                                    |
|                                        | Black                  | <b>0.83**</b>                                               | <b>1.38**</b>                                | <b>1.28**</b>                                        |
|                                        | Hispanic               | 1.09                                                        | <b>1.86**</b>                                | <b>1.50**</b>                                        |
|                                        | Other                  | <b>1.28**</b>                                               | <b>2.14**</b>                                | <b>1.64**</b>                                        |
| Self-reported health status            | Excellent or very good | <b>0.80**</b>                                               | <b>0.75**</b>                                | 0.99                                                 |
|                                        | Good                   | 1.00 <sup>d</sup>                                           | 1.00 <sup>d</sup>                            | 1.00 <sup>d</sup>                                    |
|                                        | Fair or poor           | <b>1.57**</b>                                               | <b>1.80**</b>                                | <b>1.26**</b>                                        |
| Supplemental health insurance coverage | None                   | <b>1.26**</b>                                               | <b>1.91**</b>                                | <b>1.60**</b>                                        |
|                                        | Medicaid               | <b>1.27**</b>                                               | <b>1.64**</b>                                | <b>1.33**</b>                                        |
|                                        | Non-Medicaid           | 1.00 <sup>d</sup>                                           | 1.00 <sup>d</sup>                            | 1.00 <sup>d</sup>                                    |

<sup>7</sup>Time trends in the likelihood of reporting a major difficulty were captured by including a variable for survey year in the model.

**Appendix I: Methods and Models Used in  
Analyzing Factors Affecting Medicare  
Beneficiaries' Perceptions of Access**

|                                                                     |                               | Odds ration                                                       |                                                    |                                                            |
|---------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------|
|                                                                     | Characteristic                | Big problem<br>finding a personal<br>doctor or nurse <sup>a</sup> | Big problem<br>seeing a<br>specialist <sup>b</sup> | Never scheduled<br>an appointment<br>promptly <sup>c</sup> |
| Educational attainment                                              | No high school diploma        | <b>0.84**</b>                                                     | 1.04                                               | 1.03                                                       |
|                                                                     | High school diploma           | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
|                                                                     | 4-year college degree or more | <b>1.25**</b>                                                     | <b>1.20**</b>                                      | <b>1.15*</b>                                               |
| Proxy assisted in survey completion                                 | Yes                           | 1.02                                                              | 1.00                                               | 0.89*                                                      |
|                                                                     | No                            | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Urban or rural residence                                            | Urban                         | 0.99                                                              | 0.91*                                              | 1.03                                                       |
|                                                                     | Rural                         | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of hospital beds per capita                                | Lowest                        | 1.09**                                                            | 0.98                                               | 0.98                                                       |
|                                                                     | Second                        | 1.03                                                              | 1.03                                               | 1.06*                                                      |
|                                                                     | Third                         | 0.96*                                                             | 0.99                                               | 0.98                                                       |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of ambulatory surgical<br>centers per Medicare beneficiary | Lowest                        | 0.94*                                                             | 0.93*                                              | 0.95                                                       |
|                                                                     | Second                        | 0.89**                                                            | 1.06*                                              | 0.95                                                       |
|                                                                     | Third                         | 1.07*                                                             | 1.01                                               | 1.07*                                                      |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of primary care physicians<br>per capita                   | Lowest                        | 0.98                                                              | 1.03                                               | 1.04                                                       |
|                                                                     | Second                        | 0.97                                                              | 0.98                                               | 0.99                                                       |
|                                                                     | Third                         | 1.01                                                              | 0.97                                               | 0.97                                                       |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of specialist physicians per<br>capita                     | Lowest                        | 0.90*                                                             | 1.01                                               | 0.99                                                       |
|                                                                     | Second                        | 1.04*                                                             | 1.00                                               | 0.97                                                       |
|                                                                     | Third                         | 1.09**                                                            | 1.01                                               | 0.99                                                       |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of Medicare managed care<br>penetration                    | Lowest                        | 0.89**                                                            | 0.88**                                             | 0.96                                                       |
|                                                                     | Second                        | 1.01                                                              | 0.96*                                              | 0.94*                                                      |
|                                                                     | Third                         | 1.05*                                                             | 1.08**                                             | 0.99                                                       |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of Medicare beneficiaries per<br>capita                    | Lowest                        | 1.11**                                                            | 1.11**                                             | 1.05                                                       |
|                                                                     | Second                        | 0.98                                                              | 0.97                                               | 0.95*                                                      |
|                                                                     | Third                         | 0.92**                                                            | 0.94*                                              | 0.96                                                       |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
| Quartile of per capita income                                       | Lowest                        | 1.01                                                              | 1.00                                               | 0.94                                                       |
|                                                                     | Second                        | 0.99                                                              | 0.99                                               | 0.98                                                       |
|                                                                     | Third                         | 0.98                                                              | 1.01                                               | 1.03                                                       |
|                                                                     | Highest                       | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |

**Appendix I: Methods and Models Used in  
Analyzing Factors Affecting Medicare  
Beneficiaries' Perceptions of Access**

|      |                | Odds ration                                                       |                                                    |                                                            |
|------|----------------|-------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------|
|      | Characteristic | Big problem<br>finding a personal<br>doctor or nurse <sup>a</sup> | Big problem<br>seeing a<br>specialist <sup>b</sup> | Never scheduled<br>an appointment<br>promptly <sup>c</sup> |
| Year | 2000           | 1.00 <sup>d</sup>                                                 | 1.00 <sup>d</sup>                                  | 1.00 <sup>d</sup>                                          |
|      | 2001           | <b>0.81**</b>                                                     | 0.88*                                              | 1.04                                                       |
|      | 2002           | 0.88**                                                            | 1.00                                               | <b>1.62**</b>                                              |
|      | 2003           | <b>0.82**</b>                                                     | 0.94                                               | <b>1.43**</b>                                              |
|      | 2004           | <b>0.74**</b>                                                     | <b>0.82**</b>                                      | <b>1.46**</b>                                              |

Source: GAO analysis of CMS's Medicare CAHPS and ARF data.

Legend: \*\*= significant at the 0.0001 level; \*= significant at the 0.05 level.

Note: **Bolded** odds ratios indicate a value equal to or below 0.85, and equal to or above 1.15. Nonbolded odds ratios indicate a value from 0.85 to 1.15.

<sup>a</sup>These results were derived from the responses of beneficiaries who answered that they changed personal doctors since enrolling in Medicare—an average of 47 percent a year.

<sup>b</sup>These results were derived from the responses of beneficiaries who answered that they needed to see a specialist in the past 6 months—an average of 56 percent a year.

<sup>c</sup>These results were derived from the responses of beneficiaries who answered that they needed an appointment in the past 6 months—an average of 74 percent a year.

<sup>d</sup>Omitted reference group.

Based on the results of our logistic regression analysis, we identified beneficiary characteristics that were associated at the 0.05 level of significance or better with either a substantial increased likelihood—an odds ratio greater than or equal to 1.15—or a substantial decreased likelihood—an odds ratio less than or equal to 0.85— of reporting a major difficulty.<sup>8</sup> For these characteristics, we computed a readily understandable measure—the percentage of respondents in each group who reported having a major difficulty—for each of the three survey questions.<sup>9</sup> However, for one characteristic—educational attainment of a 4-year college degree or more—we had to use a more sophisticated technique to account for confounding factors. We estimated the likelihood of a typical beneficiary reporting major difficulty finding a personal doctor

<sup>8</sup>We required the characteristic to be important in the same direction—that is, an increased or a decreased likelihood—on at least two of the three questions related to physician access.

<sup>9</sup>For illustrative purposes, we combined black, Hispanic, and other race into one nonwhite category, when calculating the proportions for race, and we combined all beneficiaries over age 65 into one age group when calculating proportions for age.

or nurse.<sup>10-11</sup> We then compared that likelihood to the estimated likelihood for a beneficiary who had a 4-year college degree and who was typical in all other respects.

In order to understand how reports of major difficulties accessing physician services changed over time and varied among states, we analyzed the proportion of beneficiaries reporting major difficulties on each of the three questions related to physician access by state of residence and by survey year. We also calculated these proportions for each survey year by all urban and rural areas in the nation.

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## **Data Reliability and Limitations**

We took several steps to ensure that the CAHPS data were sufficiently reliable for our analysis. We examined the accuracy and completeness of the data by testing for implausible values and internal consistency.<sup>12</sup> In addition, we interviewed experts at CMS about whether the CAHPS data could appropriately be used as we intended. We concluded that the data were sufficiently reliable for the purpose of this analysis. We conducted our work from October 2004 through June 2006 in accordance with generally accepted government auditing standards.

There were three main limitations to our analysis. First, the CAHPS questions on finding a personal provider and scheduling an appointment were not limited to physician services.<sup>13</sup> (See table 8.) If these survey

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<sup>10</sup>The characteristics of a typical beneficiary were female, white, age 70-74, fair or poor health, no proxy assistance for completion of the survey, high school diploma or some college, residence in an urban area, and non-Medicaid supplemental health insurance coverage. We assigned the study year 2003 and the second quartile of other measures, such as primary care physicians per capita, as beneficiary characteristics.

<sup>11</sup>For this characteristic, we chose to report the likelihood of reporting major difficulties finding a personal doctor or nurse for illustrative purposes; we also analyzed the likelihood of reporting major difficulties seeing a specialist or making an appointment promptly with somewhat similar results.

<sup>12</sup>In order to ensure the consistency of individuals' responses to both the prior question on the need for care and the related access question, we recoded some survey responses. For example, if an individual answered in a prior question that he or she did not need a specialist, we recoded the response on the access question related to specialists to "not applicable." We also excluded observations with implausible ARF values—less than 1 percent of all observations—where complete ARF data were essential to the analysis.

<sup>13</sup>For example, the question on finding a personal provider may include services provided by nonphysicians, such as personal nurses. The question on scheduling an appointment promptly for health care may include services other than those provided by physicians.



questions had asked only about access to physician services, we likely would have found different proportions of beneficiaries who reported big problems finding a personal provider or who reported never being able to schedule an appointment promptly. Second, the proportions of beneficiaries reporting major difficulties accessing physician services may not be representative of the national population of Medicare beneficiaries.<sup>14</sup> Finally, although we endeavored to model all of the important beneficiary characteristics using logistic regression, we lacked some information that may have been important, such as beneficiary income.

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<sup>14</sup>While the CAHPS is a random sample, we subset the data such that it became a nonprobability sample. A nonprobability sample's statistics cannot be generalized to a population because some elements of the population being studied have no chance or an unknown chance of being selected as part of the sample.

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# Appendix II: Methods Used to Analyze Medicare Claims Data

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To analyze Medicare beneficiaries' access to physician services, through their utilization of services, we used Medicare Part B claims data from the National Claims History (NCH) files. We constructed data sets for 100 percent of Medicare claims for physician services performed by physicians in the first 28 days of April of 2000 through 2005.<sup>1</sup> These data encompass several periods: 2 years in which fee increases were greater than the increase in the estimated cost of providing services (2000 and 2001), 1 year in which fees decreased (2002), and 3 years in which fee increases were less than inflation in the estimated cost of providing services (2003, 2004, and 2005). We established a consistent cutoff date (the last Friday in September of the subsequent year) for each year's data file and only included those claims for April services that had been submitted by that date.<sup>2</sup> Because claims continue to accrete in the data files, this step was necessary to ensure that earlier years were not more complete than later years. We supplemented these claims files with CMS data on the number of beneficiaries in the FFS program as of March of each year from the Medicare Managed Care Market Penetration Quarterly State/County Data Files. In addition, on the basis of beneficiary location, we associated each service with an urban or rural location, using the Office of Management and Budget's classification of metropolitan statistical areas (MSA).

We constructed several utilization measures to determine whether Medicare beneficiaries experienced changes in their access to physician services; these indicators included

- the percentage of Medicare FFS beneficiaries obtaining services in April of each year,<sup>3</sup>
- the total number of physician services received, and

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<sup>1</sup>We excluded claims for services provided by nurse practitioners, physician assistants, and other nonphysician practitioners. We included services covered by the fee schedule as well as anesthesia services. We identified claims for physician services covered by the fee schedule by limiting the files to include only Healthcare Common Procedure Codes that are on the physician fee schedule and covered by Medicare. We excluded claims from beneficiaries in Guam, Puerto Rico, and the U.S. Virgin Islands because access issues in these areas may be substantively different than those in the rest of the United States.

<sup>2</sup>We chose the month of September so our data would include two quarters of processed claims from April of each year. This equates to about 95 percent of the claims for services provided in April of each year.

<sup>3</sup>Beneficiaries refers to all FFS Medicare beneficiaries, not just those for whom claims were filed.

- the total number of physician services per beneficiary who received services.

We analyzed these utilization measures nationally, for urban and rural areas within each state, and for specific services, such as office visits for new and established patients. Using MSAs, we classified the nation's counties as urban or rural, consolidated the urban counties and rural counties in each state and the District of Columbia, and created 99 geographic areas to analyze access at a subnational level.<sup>4</sup> We also determined the number of physicians billing Medicare, whether services were performed by participating or nonparticipating physicians, and whether claims for physician services were paid either on assignment or not on assignment. We did not adjust the data for factors that could affect the provision and use of physician services, such as incidence of illness or coverage of new benefits.

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## Data Reliability

Medicare claims data, which are used by the Medicare program as a record of payments made to health care providers, are closely monitored by both CMS and the Medicare carriers—contractors that process, review, and pay claims for Part B-covered services. The data are subject to various internal controls, including checks and edits performed by the carriers before claims are submitted to CMS for payment approval. Although we did not review these internal controls, we did assess the reliability of the NCH data. First, we reviewed all existing information about the data, including the data dictionary and file layouts. We also interviewed experts at CMS who regularly use the data for evaluation and analysis. We examined the data files for obvious errors, missing values, values outside of expected ranges, and dates outside of expected time frames. We found the data to be sufficiently reliable for the purposes of this report. We also assessed the reliability of the Medicare Managed Care Market Penetration Quarterly State/County Data Files by examining the data for obvious errors, missing values, and values outside of expected ranges. In addition, to further assess the reliability of these supplementary data, we interviewed experts at CMS who are responsible for the creation of these files and who regularly use the data for evaluation and analysis. We found these data to be sufficiently reliable for the purposes of this report.

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<sup>4</sup>Rhode Island and New Jersey had no rural counties. The District of Columbia is only counted as an urban area.

# Appendix III: Specific Physician Services Reviewed

Using the Berenson-Eggers Type of Service (BETOS) code to which each procedure code in our claims data was assigned, we reviewed specific categories of physician services. According to the CMS, the BETOS coding system consists of readily understood clinical categories, is stable over time, and is relatively immune to minor changes in technology or practice patterns. Table 11 shows the specific categories we reviewed and the percentage change in the number of services provided per 1,000 beneficiaries from April 2000 to April 2005. This table highlights certain frequently performed services and procedures. We collapsed data on other services and procedures into summary categories.

**Table 10: Percentage Change in the Number of Services Provided per 1,000 Medicare Beneficiaries, April 2000 to April 2005**

| Overall service category                   | Specific category                  | Services per 1,000 Medicare beneficiaries, April 2000 | Services per 1,000 Medicare beneficiaries, April 2005 | Percentage change, April 2000 to April 2005 <sup>a</sup> |
|--------------------------------------------|------------------------------------|-------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------|
| <b>Evaluation and management (E&amp;M)</b> | Office visits-new patients         | 26.3                                                  | 27.6                                                  | 5.0                                                      |
|                                            | Office visits-established patients | 404.8                                                 | 454.4                                                 | 12.2                                                     |
|                                            | Hospital visits                    | 170.6                                                 | 209.9                                                 | 23.0                                                     |
|                                            | Emergency room visits              | 31.6                                                  | 36.4                                                  | 15.3                                                     |
|                                            | Other E&M services                 | 193.6                                                 | 204.5                                                 | 5.6                                                      |
| <b>Imaging</b>                             | Advanced imaging-CAT scans         | 24.6                                                  | 40.6                                                  | 64.7                                                     |
|                                            | Advanced imaging-MRIs              | 6.5                                                   | 12.7                                                  | 93.5                                                     |
|                                            | Imaging procedures                 | 15.8                                                  | 22.7                                                  | 43.7                                                     |
|                                            | Standard imaging                   | 152.6                                                 | 199.8                                                 | 31.0                                                     |
| <b>Procedures</b>                          |                                    |                                                       |                                                       |                                                          |
| <b>Major</b>                               | Coronary artery bypass grafts      | 1.1                                                   | 0.8                                                   | -30.5                                                    |
|                                            | Aneurysm repairs                   | 0.1                                                   | 0.2                                                   | 65.3                                                     |
|                                            | Thromboendarterectomies            | 0.3                                                   | 0.2                                                   | -23.7                                                    |
|                                            | Coronary angioplasties             | 0.9                                                   | 1.2                                                   | 34.2                                                     |
|                                            | Pacemaker insertions               | 0.6                                                   | 1.0                                                   | 63.9                                                     |
|                                            | Other cardiac procedures           | 10.1                                                  | 8.2                                                   | -18.8                                                    |
|                                            | Hip fracture repairs               | 0.5                                                   | 0.4                                                   | -12.8                                                    |
|                                            | Hip replacements                   | 0.3                                                   | 0.4                                                   | 11.1                                                     |
|                                            | Knee replacements                  | 0.5                                                   | 0.7                                                   | 47.1                                                     |
|                                            | Other orthopedic procedures        | 1.6                                                   | 2.2                                                   | 35.5                                                     |
|                                            | Other major procedures             | 7.2                                                   | 7.2                                                   | 0.1                                                      |

**Appendix III: Specific Physician Services  
Reviewed**

| Overall service category | Specific category                  | Services per 1,000 Medicare beneficiaries, April 2000 | Services per 1,000 Medicare beneficiaries, April 2005 | Percentage change, April 2000 to April 2005 <sup>a</sup> |
|--------------------------|------------------------------------|-------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------|
| Minor                    | Ambulatory procedures              | 29.9                                                  | 50.4                                                  | 68.6                                                     |
|                          | Corneal transplants                | 0.0                                                   | 0.0                                                   | -17.3                                                    |
|                          | Cataract removals/lens insertions  | 4.7                                                   | 4.8                                                   | 2.2                                                      |
|                          | Retinal detachment repairs         | 0.1                                                   | 0.1                                                   | 8.9                                                      |
|                          | Eye procedure treatments           | 0.8                                                   | 0.9                                                   | 14.0                                                     |
|                          | Other eye procedures               | 3.2                                                   | 4.5                                                   | 39.3                                                     |
|                          | Arthroscopies                      | 0.5                                                   | 0.8                                                   | 65.1                                                     |
|                          | Upper gastrointestinal endoscopies | 4.3                                                   | 5.2                                                   | 20.6                                                     |
|                          | Sigmoidoscopies                    | 1.7                                                   | 0.5                                                   | -69.0                                                    |
|                          | Colonoscopies                      | 5.1                                                   | 7.1                                                   | 39.7                                                     |
|                          | Cystoscopies                       | 3.2                                                   | 3.6                                                   | 13.6                                                     |
|                          | Bronchoscopies                     | 0.7                                                   | 1.0                                                   | 56.3                                                     |
|                          | Laryngoscopies                     | 1.0                                                   | 1.3                                                   | 38.5                                                     |
|                          | Other endoscopic procedures        | 1.4                                                   | 1.7                                                   | 18.1                                                     |
|                          | Dialysis services                  | 7.7                                                   | 8.1                                                   | 5.9                                                      |
|                          | Other minor procedures             | 104.0                                                 | 158.4                                                 | 52.3                                                     |
|                          | Anesthesia                         | 14.5                                                  | 16.6                                                  | 14.3                                                     |
| Tests                    | Lab tests                          | 5.4                                                   | 33.8                                                  | 530.4                                                    |
|                          | Electrocardiograms                 | 59.0                                                  | 69.8                                                  | 18.3                                                     |
|                          | Stress tests                       | 9.7                                                   | 14.1                                                  | 44.9                                                     |
|                          | EKG monitoring                     | 2.7                                                   | 3.3                                                   | 23.7                                                     |
|                          | Other nonlab tests                 | 26.9                                                  | 39.0                                                  | 44.7                                                     |
| <b>All services</b>      |                                    | <b>1,417.4</b>                                        | <b>1,757.1</b>                                        | <b>24.0</b>                                              |

Source: GAO analysis of Medicare Part B claims and enrollment data from CMS.

Note: Services were included if they were received in the first 28 days of April.

<sup>a</sup>Percentage change was calculated prior to rounding.

# Appendix IV: Comments from the Centers for Medicare & Medicaid Services




DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

JUN 26 2006

200 Independence Avenue SW  
Washington, DC 20201

**TO:** A. Bruce Steinwald  
Director, Health Care  
Government Accountability Office

**FROM:** Mark B. McClellan, M.D., Ph.D.   
Administrator  
Centers for Medicare & Medicaid Services

**SUBJECT:** Government Accountability Office (GAO) Draft Report: "MEDICARE PHYSICIAN SERVICES: Use of Services Increasing Nationwide and Relatively Few Beneficiaries Report Major Access Problems" (GAO-06-704)

Thank you for the opportunity to review and comment on the draft report, "MEDICARE PHYSICIAN SERVICES: Use of Services Increasing Nationwide and Relatively Few Beneficiaries Report Major Access Problems," dated June 7, 2006 (the Draft Report). CMS is deeply committed to ensuring continued beneficiary access to care as we move toward the goal of paying for the right care for the right person at the right time while simultaneously attempting to address the long-term fiscal sustainability of the Medicare program. GAO findings reflect similar results of surveys conducted in recent years by the Centers for Medicare & Medicaid Services (CMS), including the annual Fee-for-Service Consumer Assessment of Health Plans Study (FFS CAHPS®) reports, which have been completed for the years 2000 to 2004.

The CAHPS surveys which serve as the basis for the reports are part of the first comprehensive effort to assess consumer experiences with their health plans and services. The Medicare CAHPS effort consists of: the Medicare (FFS) survey, a disenrollment survey, and a Medicare Advantage survey. These surveys are part of a group of consumer surveys developed by a consortium of researchers from the Research Triangle Institute, the RAND Corporation, and the Harvard Medical School through cooperative agreements with the Agency for Healthcare Research and Quality. The goal of the CAHPS initiative, which began in 1995, was to develop and test standardized questionnaires and report formats that could be used to collect and report meaningful and reliable information about health plans. The surveys contain core items that can be used with any population and additional items targeted to particular groups. Thus, they can be used with all types of health insurance consumers, including Medicaid recipients, Medicare beneficiaries, those who are commercially insured, and across the full range of health care delivery systems. The core CAHPS survey asks respondents for four overall ratings of: their doctor; specialist (if used); overall health care; and health care plan. Information from most of the specific questions is combined to create composite scores on getting needed care, getting care quickly, doctor communication, courtesy and helpfulness of office staff, and paperwork, information, and customer service.

In response to anecdotal reports that suggested beneficiaries in certain parts of the country may be having difficulty finding physicians who will accept Medicare patients,

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CMS designed and implemented a monitoring system to track beneficiaries' access to physicians' services as market dynamics change. The data from a variety of sources, including claims, CAHPS® surveys, beneficiary inquiries to the 1-800-Medicare number, and environmental scanning activities, do not suggest the presence of a national access to care problem. We have, however, identified access problems in certain geographic areas, e.g., Alaska, Puerto Rico, that predate earlier cuts in physician payments.

To further investigate this issue, in 2003 CMS conducted a targeted survey of Medicare beneficiaries on physician access issues in 11 local markets. The study assessed the extent to which beneficiaries were experiencing problems in accessing physicians' services and whether certain types of beneficiaries were more likely to experience problems. It also examined the reasons given by beneficiaries for reported problems, with the goal of identifying whether there is evidence of a link between changes in physician fees and access problems. Due to the sampling method, the findings cannot be generalized beyond the study area. However, the results suggest that these fee reductions have not led to marked restrictions in access to care. Even though the study targeted geographic areas thought most likely to be experiencing difficulties, relatively few Medicare beneficiaries in these local markets reported major problems with access to physician care, and only a small percentage had problems attributed to physicians not taking new Medicare patients or limiting Medicare participation. The findings also indicate that access problems are more common among certain subgroups in these markets that may be especially vulnerable to changes in access, including beneficiaries who had recently moved to the area or who had changed insurance coverage. Finally, while only a small percentage of respondents reported access is worse than in the past, more said it is getting worse than say it is getting better.

It is in this context that CMS turns to the findings of GAO's Draft Report. The Draft Report focused upon: 1) trends and patterns in beneficiaries' perceptions of the availability of physicians' services from 2000 to 2004; 2) trends in beneficiaries' utilization of physicians' services from 2000 to 2005; and 3) indicators of physician supply and willingness to serve Medicare beneficiaries from 2000 to 2005. The Draft Report concludes that beneficiaries were able to access physicians' services. In fact, the Draft Report found that both the utilization and complexity of services had increased over this period. GAO did not attempt to assess the medical appropriateness of the increases. Furthermore, GAO concludes that the implications of these trends in utilization for the long-term fiscal sustainability of the Medicare program would require careful examination.

Overall, CMS finds that the Draft Report clearly describes a well-conceived and executed analysis of existing data relevant to the concerns and questions surrounding the impact of Medicare's efforts to control spending on physicians' services on beneficiaries' access to those services. The results, insofar as they use similar data, are comparable to existing CMS research and monitoring results. CMS has no concerns regarding the conclusions stated in the Draft Report as they seem warranted and sustained by the data and analyses presented.

The main conclusion of the Draft Report (i.e., that "...Relatively Few Beneficiaries Report Major Access Problems") seems to conform with presentations of similar findings

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in the annual CAHPS® reports. Because the GAO Draft Report employed data only from the 50 continental United States and the District of Columbia but excluded any FFS CAHPS® information from Puerto Rico or the US Virgin Islands, it is not possible to make exact comparisons with the published CMS Medicare FFS CAHPS® Reports.

The CMS noted a number of minor editorial and technical points that do not substantively change the GAO analyses or materially change the results and conclusions presented in the Draft Report, but may prove helpful in final editing as well as future analyses. These points are:

1. Future analyses might include claims reflecting services from Federally Qualified Health Centers (FQHC) and Rural Health Clinics (RHC) not found in Part B claims but are found within the Outpatient file;
2. The Report should strengthen its description of the information that is being presented as taken from the Medicare FFS CAHPS® Survey;
3. Footnote 66 on page 47 is in error because laboratories would not be included among "physicians or other health providers" with respect to beneficiary access in the cited CAHPS® item;
4. The Report uses the term "physician services" which is inconsistent with the term "physicians' services" used in the legislation requiring the study that forms the basis of the Draft Report, namely Section 604 of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (P.L. 108-173).

These points are discussed below.

Due to the generally high quality of the GAO Draft Report, CMS does not feel it is necessary to address the Draft Report item-by-item. Instead, we will address the few technical and editorial issues directly by describing them and offering specific suggestions for editing the Draft Report with respect to each issue.

*1) Future analyses might include claims reflecting services from Federally Qualified Health Centers (FQHC) and Rural Health Clinics (RHC) not found in Part B claims but are found within the Outpatient file.*

The analysis of utilization trends used CMS Part B claims only as described briefly on page 3 and in detail in Appendix II (page 48-50) of the Draft Report. Relying solely upon Part B claims from the National Historical Claims under-represents utilization of Medicare beneficiaries because it omits the services provided by FQHC and RHC. Due to the nature of FQHC and RHC reimbursement, those claims are submitted on a form UB-92 and included in the outpatient file representing facility services, not the physicians' services Part B file. Given that FQHC and RHC are most often located in health professional shortage areas and medically underserved areas, the absence of those claims would tend to undercount ambulatory services obtained by Medicare beneficiaries, especially those residing in rural areas and among underserved populations. An undercount of beneficiary services would not likely affect the Draft Report's general conclusion that access to physicians' services stayed the same or improved (as stated on page 37). Adding these FQHC and RHC claims to the GAO analyses might affect the results of several sub-analyses, namely geographic variations in utilization patterns (pp



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25-31). Additional services in underserved areas may reduce the observed geographic variation (e.g., the proportion of beneficiaries receiving services in Alaska and other rural regions). It may also affect the relative strength of the impact of non-white status on utilization. CMS does not believe the omission of these claims in the reported analyses is a concern because the change by adding utilization in the rural areas and among the underserved populations would likely strengthen support for the conclusion that beneficiary utilization increased from 2000 to 2005.

The Draft Report might include a statement in footnote 11 on page 3, and again in footnote 68 on page 48, indicating that the definition of physicians' services did not include those physicians' services billed through an FQHC or RHC.

*2) The Report should strengthen its description of the information that is being presented as taken from the Medicare FFS CAHPS® Survey.*

Although this would not change the findings of the Draft Report, in the interests of clarity for readers the GAO should strengthen its description of the information that is being presented as being from the Medicare FFS CAHPS® Survey, and note that there is another Medicare CAHPS® Survey, namely the Medicare Advantage (MA) CAHPS Survey, for which no measures appear to be presented in the Draft Report. This distinction perhaps can be made as an additional footnote on page 2 of the Draft Report, following footnote 5. The additional footnote should state something to the effect that "CMS has also collected beneficiary experience information on an annual basis from those beneficiaries enrolled in Medicare Advantage health plans in the Medicare Advantage CAHPS® Survey. The measures of beneficiary access to physicians in MA health plans are not presented in this report."

We would further recommend that each time the Medicare FFS CAHPS measures are presented in the GAO Draft Report that they be labeled as such (i.e., as "Medicare FFS CAHPS") and not simply as Medicare CAHPS measures. The omission of the "FFS" distinction in each case where the FFS CAHPS® measures are presented could cause confusion to the reader who does not realize that the information being presented does not include any beneficiary experience information from those beneficiaries who were enrolled in a Medicare Advantage plan, which the GAO Draft Report correctly points out on page 6 was about 13 percent of the total Medicare population in 2005 (i.e., 100 – 87 percent shown on page 6).

Places in the Draft Report where the Medicare CAHPS® information should be labeled as Medicare FFS CAHPS® occurs on at least the following pages: 2, 3, 4, 12, 14, 20, 21, 22, 23, 30, and 31, as well as in the discussion of the Medicare CAHPS® Survey in the appendix on pages 41-47.

*3) Footnote 66 on page 47 is in error because laboratories would not be included among "physicians or other health providers" with respect to beneficiary access in the cited CAHPS® item.*

Footnote 66 on page 47 erroneously states that "laboratories" might be included in the Medicare CAHPS® response categories concerning beneficiary access to physicians or

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other health providers. This is not the case. The response categories in the questions referred to in this discussion include physicians, nurses (originally described as "nurse practitioner" although the term "practitioner" was dropped in 2003), and physician assistants.

We fully agree with the statements in discussion of the CAHPS® methodology on pages 46-47 that the Medicare FFS "CAHPS data were sufficiently reliable for [the] analysis [performed] and that they could appropriately be used as we intended." The last paragraph on page 47, however, should be modified given the issue of the error included in Footnote 66 as noted above. While it is true that the survey questions asked about access to both physicians and specific non-physician practitioners, namely the categorical providers in the responses listed (nurse or physician assistant), only about 2-3 percent of all respondents noted these specific non-physician practitioners as their personal health provider. The intent of the questions discussed in this paragraph, and elsewhere in the Draft Report, was to obtain information about access to a physician or to one of the other non-physician practitioners specifically listed in the response categories. In these situations, it is likely that the physician assistant and probably many of the nurses were providing services in which they could consult with a physician on an "as needed" basis. This is especially the case with physician assistants, although in some States nurse practitioners may practice independent of a physician.

*4) The Report uses the term "physician services" which is inconsistent with the term "physicians' services" used in the legislation requiring the study underlying the Draft Report, namely section 604 of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA) (P.L. 108-173).*

Finally, we note that the title of the Draft Report includes language inconsistent with the statutory mandate which requires a study of access of Medicare beneficiaries to "physicians' services." The body of the report also contains this inconsistency. Section 604 of the MMA (P.L. 108-173) requires GAO to conduct a study on access of Medicare beneficiaries to "physicians' services." We suggest that the reference to "physicians' services" in the report should be consistent with the Medicare statute.

The CMS appreciates the opportunity to review the GAO Draft Report, GAO-06-704 "MEDICARE PHYSICIAN SERVICES: Use of Services Increasing Nationwide and Relatively Few Beneficiaries Report Major Access Problems." CMS concurs with the major findings and conclusions presented within this draft report. We believe the overall analytic strategy for assessing Medicare physicians' services to be realistic given the data sources available. We find the analyses to be sound, the results comparable to similar CMS research results, and the conclusions to be justified and appropriate in scope. We hope that the technical and editorial issues addressed in this response strengthen and improve the final published report. This GAO Draft Report on Medicare physicians' services provides an independent confirmation of our internal assessments of the current state of beneficiary access problems for physicians' services. It also provides a solid basis for continued monitoring of access to care and identifies two other major factors (appropriateness of care and the cost of care) that must be managed to maintain or improve the Medicare program.

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# Appendix V: GAO Contact and Staff Acknowledgments

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## GAO Contact

A. Bruce Steinwald (202) 512-7101 or [steinwalda@gao.gov](mailto:steinwalda@gao.gov)

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## Acknowledgments

James Cosgrove, Assistant Director; Kevin Dietz; Jessica Farb; Hannah Fein; Zachary Gaumer; Rich Lipinski; Jennifer M. Rellick; Dan Ries; and Eric Wedum made key contributions to this report.

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