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United States Government Accountability Office  
Washington, DC 20548

January 12, 2005

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

Subject: *Medicare Fee-for-Service Beneficiary Access to Physician Services: Trends in Utilization of Services, 2000 to 2002*

In the 1990s, several reforms to Medicare physician fees were implemented to help control spending growth in the traditional Medicare program, known as fee-for-service (FFS) Medicare. Concerns were raised that these reforms might have a negative impact on Medicare beneficiaries' access to physician services, but at the end of the decade, there was little or no evidence of nationwide access problems. In 2002, access concerns were again raised when Medicare physician fees were reduced 5.4 percent. Some policymakers have questioned whether access to physician services may have diminished either nationwide, in certain geographic areas, or for certain beneficiaries needing high-cost services.

In October 2003, we briefed the Senate Finance Committee on trends from 2000 to 2002 in (1) Medicare beneficiaries' use of physician services, an indicator of access to these services; and (2) physicians' decisions to "accept assignment," that is, accept Medicare's fee as payment in full. This report addresses the same two objectives and expands on the information provided in our October 2003 briefing. Enclosure I of the report contains an augmented set of briefing slides. A second report on this topic, as required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA),<sup>1</sup> will include 2003 and 2004 data and additional analyses.

To address the two objectives of the 2003 study for the Senate Finance Committee, we obtained data on physician services from the Centers for Medicare & Medicaid Services (CMS).<sup>2</sup> Specifically, we analyzed all of the Medicare physician claims for

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<sup>1</sup>See Pub. L. No. 108-173, §604, 117 Stat. 2066, 2301-02.

<sup>2</sup>CMS is the agency responsible for administering Medicare.

services provided during the month of April in 2000, 2001, and 2002.<sup>3</sup> We used counts of FFS beneficiaries that were tallied at the end of March in the 3 years selected. We restricted our analyses to physician services that were provided to Medicare FFS beneficiaries in the 50 states and the District of Columbia.<sup>4</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, 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>5</sup> We did not adjust the data for factors that could affect the provision and use of physician services, such as beneficiary diagnosis or coverage of new benefits. (For more detail on our methodology and data reliability testing, see enc. II.) We performed our work from March 2003 through December 2004 according to generally accepted government auditing standards.

## Background

Growth in the supply of physicians in both urban and rural areas more than kept pace with the increase in the Medicare beneficiary population in those areas. From 1996 to 2001, the number of physicians is estimated to have increased at an average annual rate of 2.6 percent in urban areas and 3.5 percent in rural areas.<sup>6</sup> This compares with the average annual increase in Medicare beneficiaries from 2000 to 2002 of 1.6 percent in urban areas and 1.3 percent in rural areas.

Individuals age 65 and older and certain younger disabled individuals who desire Medicare coverage for physician services may enroll in Part B of the program, which also covers outpatient hospital care and certain other services, such as occupational therapy.<sup>7</sup> In 2002, approximately 87 percent of the beneficiaries in Part B 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 obtained care through their health plans.

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<sup>3</sup>These three samples represent a snapshot of beneficiary access to physician services for each of the 3 years. Physician fee updates generally occur at the beginning of each calendar year and remain constant throughout the year. We selected the month of April to allow time for the annual fee updates to be implemented and for physician behavior to adjust to the new fees.

<sup>4</sup>Medicare uses a fee schedule to pay for physician services in the traditional Medicare program. Under the fee schedule, Medicare pays for more than 7,000 services. We included services covered by the fee schedule as well as anesthesia services. We excluded other services that the Secretary of Health and Human Services has defined as physician services but which are not covered by the fee schedule, such as laboratory tests and Medicare-covered outpatient prescription drugs.

<sup>5</sup>Rhode Island and New Jersey had no rural counties.

<sup>6</sup>For information on changes in physician supply, see GAO, *Physician Workforce: Physician Supply Increased in Metropolitan and Nonmetropolitan Areas but Geographic Disparities Persisted*, GAO-04-124 (Washington, D.C.: Oct. 31, 2003).

<sup>7</sup>In 2002, approximately 94 percent of the more than 40 million individuals covered by Medicare were enrolled in Part B.

Traditional FFS Medicare generally pays physicians a predetermined amount for each service provided based on an established fee schedule. Physicians who “accept assignment” agree to accept Medicare’s fee as payment in full. This includes the coinsurance amount (usually 20 percent) paid by the beneficiary. Physicians who sign Medicare participation agreements must accept assignment for all covered services that they provide to beneficiaries. Physicians who do not sign participation agreements can either opt to accept assignment on a service-by-service basis or not at all. When a nonparticipating physician accepts assignment, 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>8</sup> Specifically, nonparticipating physicians who do not accept assignment can charge up to 15 percent over the reduced amount (this amount is known as the “limiting charge”) and thus receive in total approximately 109 percent of the Medicare fee for the service.<sup>9</sup> The beneficiary typically has to pay the nonparticipating physician the full amount. Medicare later reimburses the beneficiary for 80 percent of the reduced fee schedule amount. (See table 1.)

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<sup>8</sup>Physicians may “opt out” of the Medicare program altogether and charge any amount for the services they provide. 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 3,000 in 2004—have opted out of the Medicare program.

<sup>9</sup>The limiting charge is 115 percent of 95 percent of the fee schedule, 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 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.

Source: CMS.

<sup>a</sup>The beneficiary pays the difference between the Medicare payment to the physician and the limiting charge.

CMS adjusts or updates the physician fee schedule each year using a mechanism called the sustainable growth rate (SGR) system.<sup>10</sup> Under this system, CMS sets a spending target and adjusts physician fees up or down, relative to the estimated increase in the Medicare Economic Index (MEI),<sup>11</sup> depending on whether actual spending has fallen below or exceeded the target. Physicians raised concerns about the SGR system when fees dropped significantly in 2002, a decline that was, in part, a correction for fees that had been set too high in prior years because of errors in forecast estimates and other data.<sup>12</sup>

## Results in Brief

Two indicators of beneficiary access to physician services—the percentage of beneficiaries who received services and the number of services provided to

<sup>10</sup>The SGR system was created by the Balanced Budget Act of 1997 (see Pub. L. No. 105-33, §4503, 111 Stat. 251, 433-34) and was revised by the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (see Pub. L. No. 106-113, App. F, §211(b), 113 Stat. 1501A-321, 348-49) and, most recently, by MMA (see § 601(b), 117 Stat. 2301).

<sup>11</sup>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>12</sup>GAO, *Medicare Physician Payments: Concerns about Spending Target System Prompt Interest in Considering Reforms*, [GAO-05-85](#) (Washington, D.C.: Oct. 8, 2004).

beneficiaries who were treated, including the number of office visits—suggest an increase in access from April 2000 to April 2002. These indicators also suggest that access increases occurred in virtually all parts of the country—both urban and rural areas. Specifically, our analysis of Medicare physician claims data produced the following results:

- Nationally, the percentage of beneficiaries that received physician services during the month of April rose from 42.0 percent in 2000 to 46.0 percent in 2002. Although the percentage of beneficiaries who received physician services was generally lower in rural areas (39.7 percent in 2000) relative to urban areas (42.9 percent in 2000), the increase from 2000 to 2002 was somewhat higher in rural areas (4.3 percentage points) relative to urban areas (3.8 percentage points). Over the 2-year period, the percentage of beneficiaries receiving physician services increased in the rural areas and the urban areas of every state in the nation.
- On average, the number of services provided per 1,000 beneficiaries who saw a physician rose by 322 (from 3,619 to 3,941) in urban areas and by 251 (from 3,278 to 3,529) in rural areas from April 2000 to April 2002. All rural and urban areas, except rural Alaska, exhibited an increase in this indicator.<sup>13</sup>

The average number of office visits—an indicator of beneficiaries' access to the typical entry point into the health care system and the most basic level of physician services—rose for Medicare FFS beneficiaries. The average number of office visits for both new and established patients per 1,000 Medicare FFS beneficiaries rose by 68 in rural areas (from 399 to 467) and by 79 in urban areas (from 453 to 532) from April 2000 to April 2002.

The vast majority—95.6 percent in April 2002—of services were performed by participating physicians, that is, physicians who submit claims on assignment. This represents a 0.6 percentage point increase in the share of services performed by participating physicians since 2000. Nonparticipating physicians performed a commensurately smaller percentage of services. This suggests that physicians did not attempt to compensate for the 2002 fee reduction by changing their decision to accept assignment in order to balance bill patients. From April 2000 to April 2002, the percentage of services that physicians submitted as unassigned claims—the only claims for which physicians are permitted to balance bill beneficiaries—fell from 1.7 percent to 1.3 percent. In short, from 2000 to 2002, Medicare beneficiaries were less likely to be exposed to balanced billing.

### **Agency Comments**

In written comments on a draft of this report, CMS agreed with our findings, stating that they are a very useful measure to assess overall access of Medicare beneficiaries to medical services. CMS said it was particularly pleased with the finding that rural

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<sup>13</sup>In rural Alaska, the number of services each beneficiary received decreased on average by 0.9 percent.

beneficiaries' utilization of services increased from 2000 to 2002. CMS noted the agency's continued efforts to monitor and enhance beneficiary access to physician services and expressed its commitment to working with Congress to preserve beneficiaries' access to high-quality health care and address future updates under the Medicare physician fee schedule. CMS provided technical comments, which we incorporated where appropriate. We have reprinted CMS's letter in enclosure III.

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As we agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from the date of this letter. We will then send copies of this report to the Administrator of CMS and to interested parties upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staffs have any questions or need additional information, please contact me at (202) 512-7101. Another contact and key contributors are listed in enclosure IV.



A. Bruce Steinwald  
Director, Health Care – Economic and Payment Issues

Enclosures – 4



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# **Medicare Fee-for-service (FFS) Beneficiary Access to Physician Services**

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## **Trends in Utilization of Services 2000 to 2002**

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## Objectives

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1. Analyze the trend in Medicare FFS beneficiaries' use of physician services from 2000 to 2002.
  2. Analyze the trend in physicians' decisions to accept Medicare's fee as payment in full from 2000 to 2002.
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## Methodology

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- We analyzed Medicare Part B claims data for physician services performed during the month of April in 2000, 2001, and 2002.
  - The number of Medicare FFS beneficiaries is from the end of March each year.
  - We restricted our analyses to physician services covered by the physician fee schedule that were provided to Medicare FFS beneficiaries in the 50 states and the District of Columbia.
  - We did not measure the influence of the many factors that might influence the provision and use of physician services, such as beneficiary diagnosis or coverage of new benefits.
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## Summary of Results

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### **From April 2000 to April 2002, both nationally and in states' urban and rural areas:**

- The percentage of Medicare FFS beneficiaries that received physician services in April each year increased.
  - The number of physician services received by Medicare FFS beneficiaries increased.
  - On average, each Medicare FFS beneficiary who saw a physician received an increasing number of services.
  - On average, the number of office visits for Medicare FFS beneficiaries (both new and established patients) increased.
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## Summary of Results (continued)

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### From April 2000 to April 2002:

- Participating physicians provided an increasing proportion of services.
- Overall, the proportion of services for which claims were submitted on assignment increased.

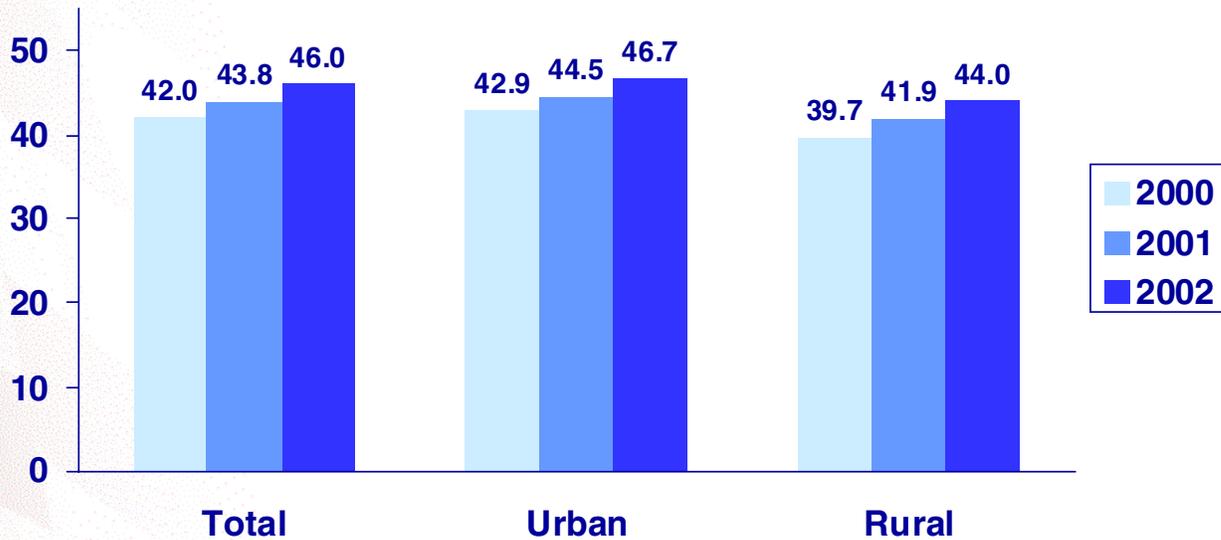
**Consequently, beneficiaries were less likely to be exposed to balance billing.**

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## Percentage of Medicare FFS Beneficiaries Receiving Physician Services for April of 2000, 2001, and 2002

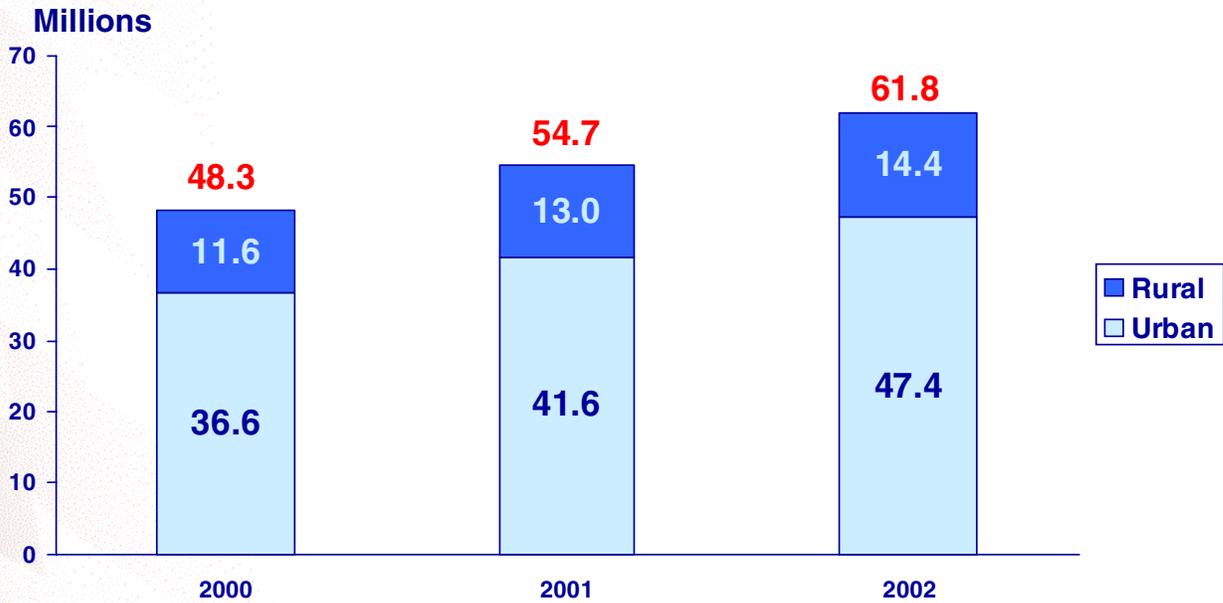
Percentage of Medicare FFS beneficiaries



Source: GAO analysis of Medicare Part B claims data from the Centers for Medicare & Medicaid Services (CMS).



## Number of Physician Services Received by Medicare FFS Beneficiaries for April of 2000, 2001, and 2002

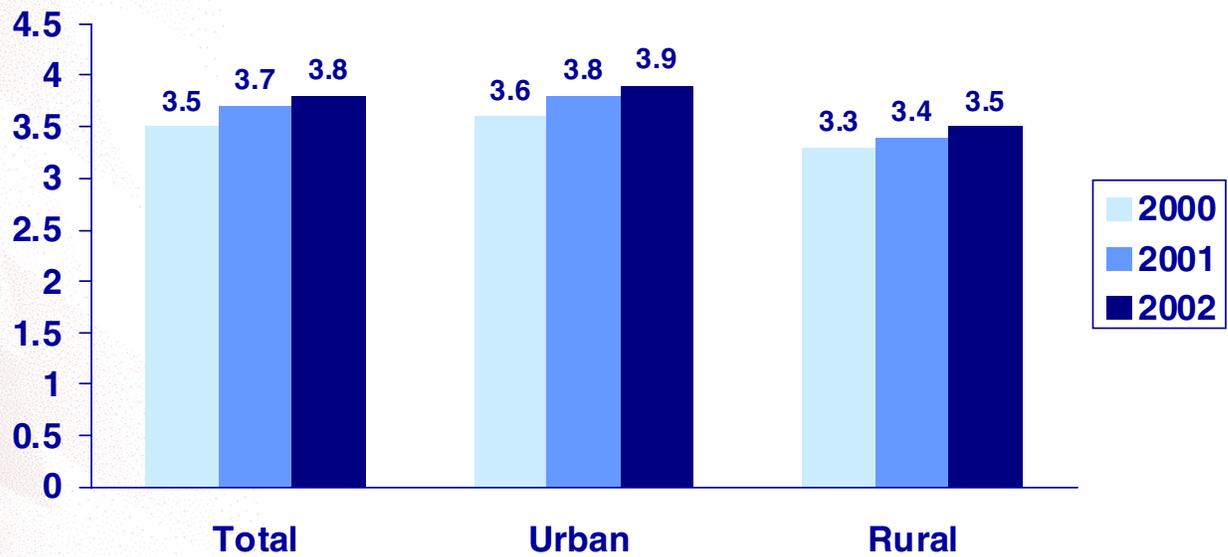


Source: GAO analysis of Medicare Part B claims data from CMS.  
Note: The sum of urban and rural may not add to totals due to rounding. We counted each occurrence of a Healthcare Common Procedure Code (HCPC) as a service. We included services covered by the physician fee schedule as well as anesthesia services.



## Number of Physician Services per Medicare FFS Beneficiary Served for April of 2000, 2001, and 2002

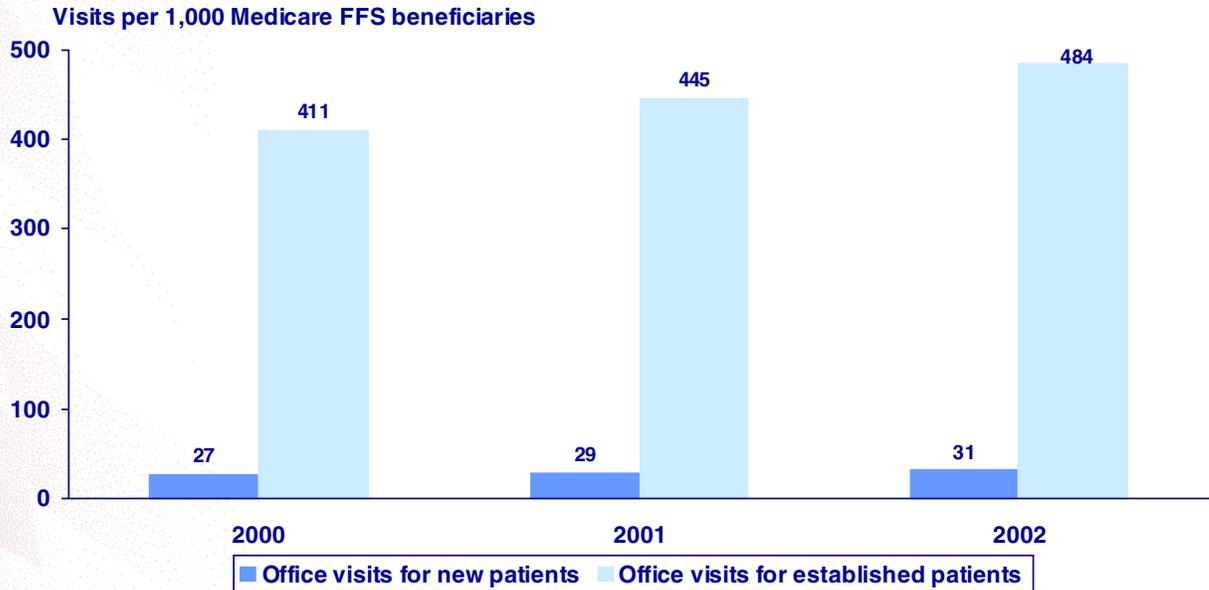
Number of physician services per Medicare FFS beneficiary



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



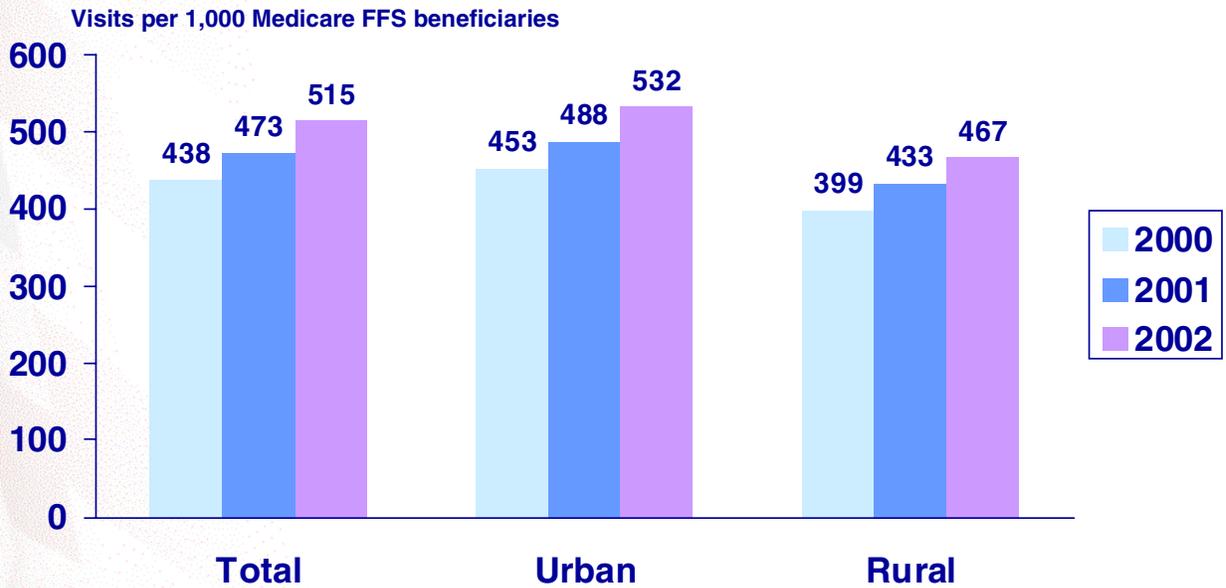
## Number of Office Visits for Medicare FFS Beneficiaries (Both New and Established Patients) for April of 2000, 2001, and 2002



Source: GAO analysis of Medicare Part B claims data from CMS.  
Note: Medicare defines an established patient as one who has seen the same physician at least once before in the past 3 years.



### Number of Office Visits for Medicare FFS Beneficiaries for April of 2000, 2001, and 2002, by Urban and Rural Location



Source: GAO analysis of Medicare Part B claims data from CMS.  
Note: The numbers combine office visits for new and established patients.



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## **Utilization of Physician Services in States’ Urban and Rural Areas (see app. I)**

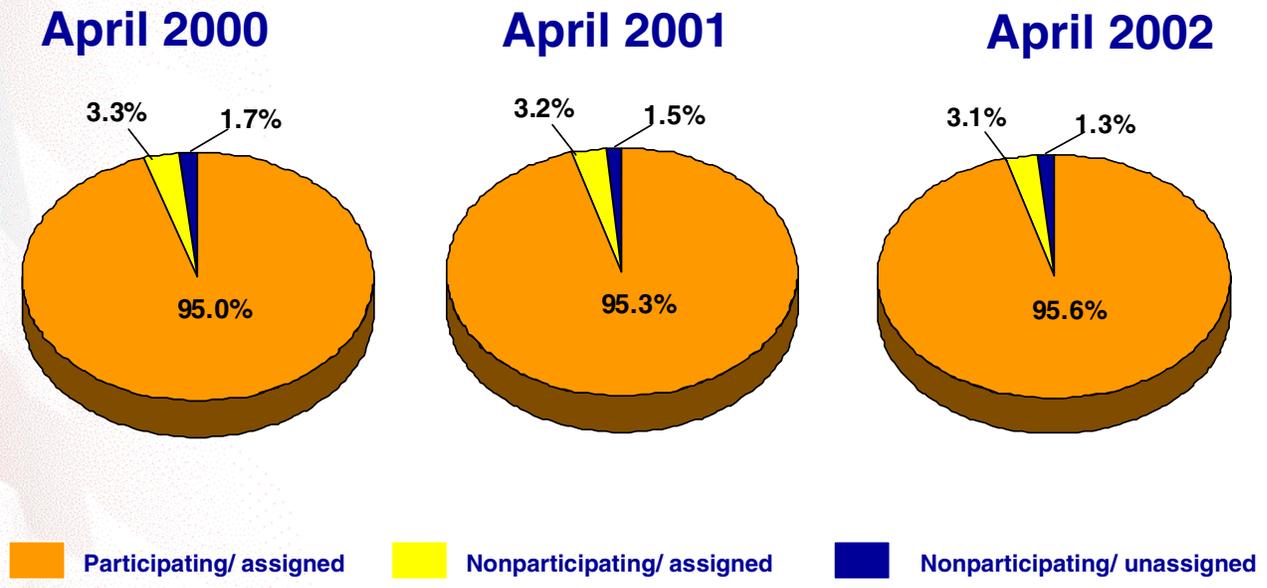
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### **From April 2000 to April 2002:**

- The percentage of Medicare FFS beneficiaries receiving physician services increased—at varying rates—in the rural areas and the urban areas of every state.
  - The total number of services per 1,000 Medicare FFS beneficiaries who saw a physician increased—at varying rates—in the rural areas and the urban areas of every state except for rural Alaska.
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## Proportion of Physician Services by Medicare Participation and Assignment Status



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



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# Appendix I

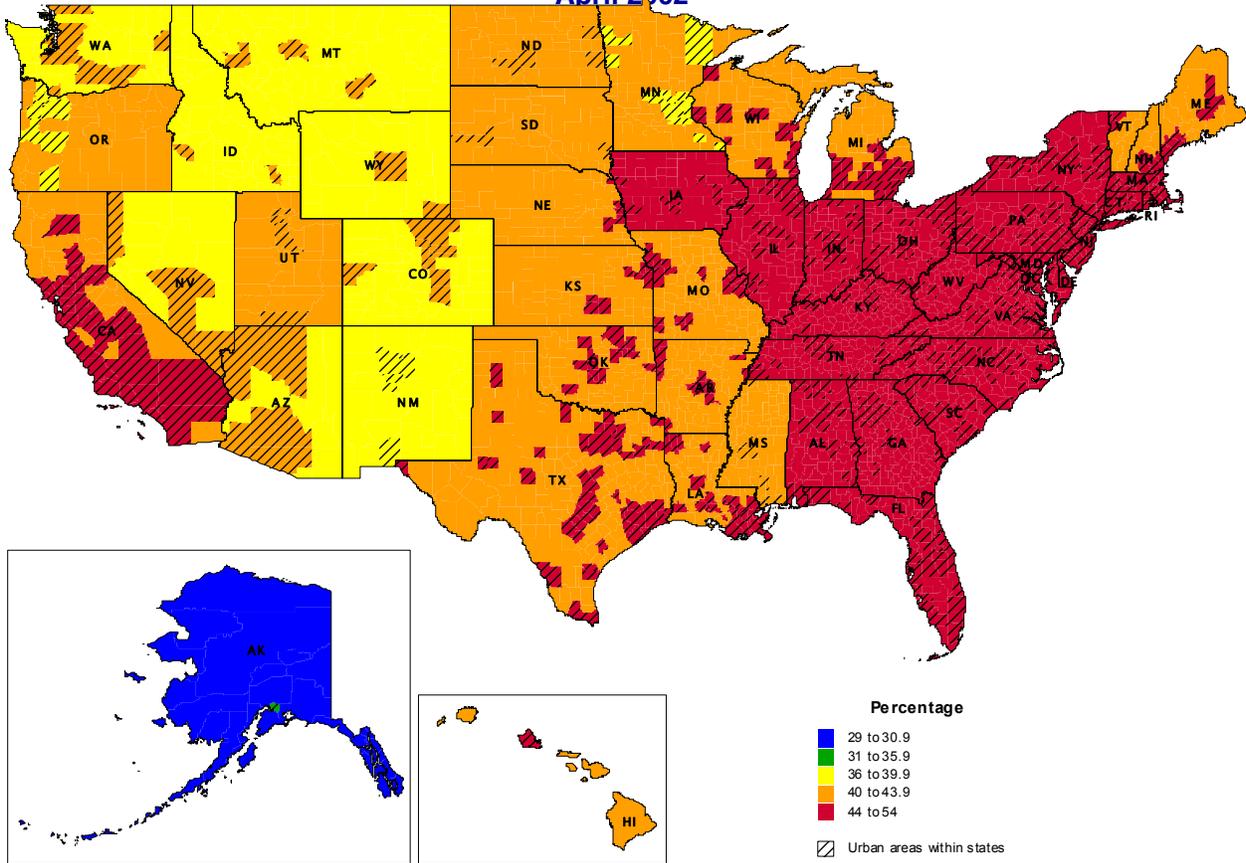
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## Utilization of Physician Services in States' Urban and Rural Areas

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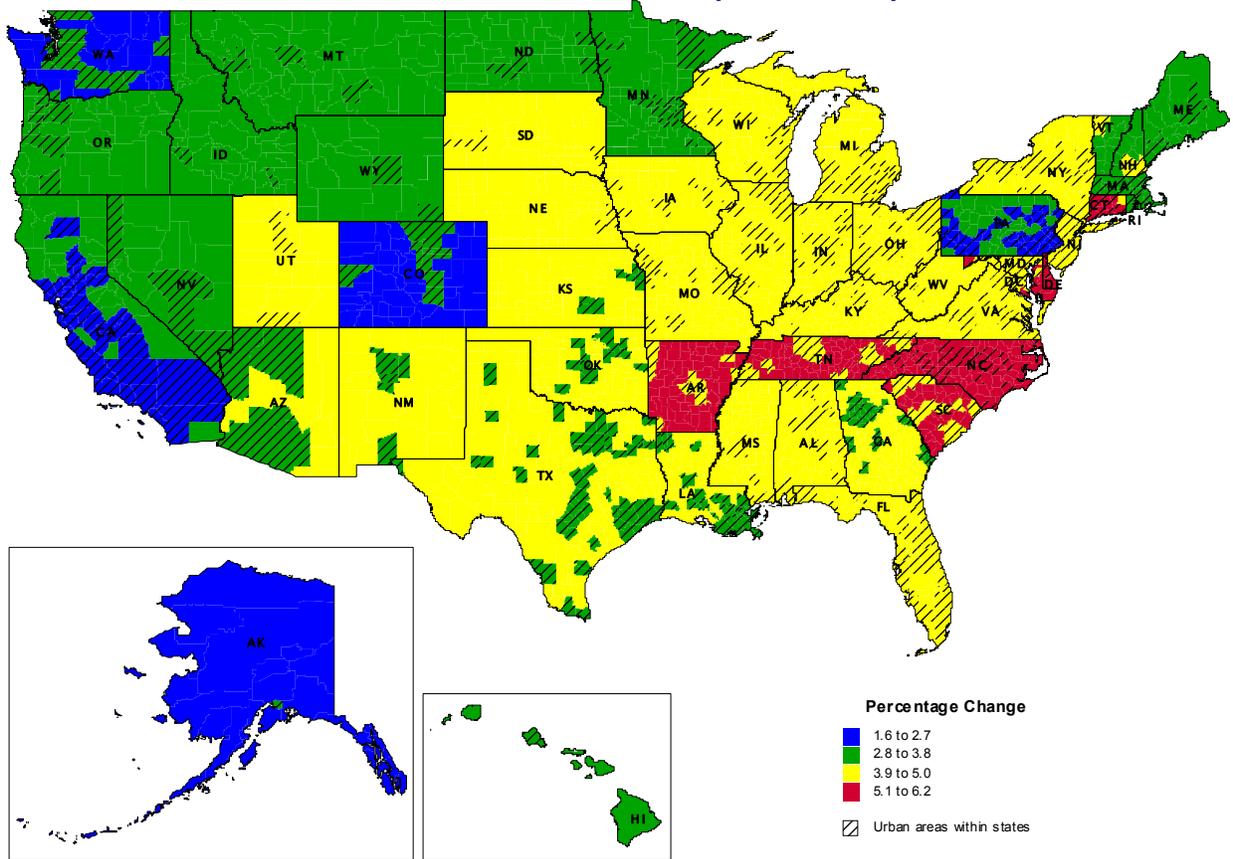
### Percentage of Medicare FFS Beneficiaries Served by Physicians in States' Urban and Rural Areas, April 2002



Source: GAO analysis.

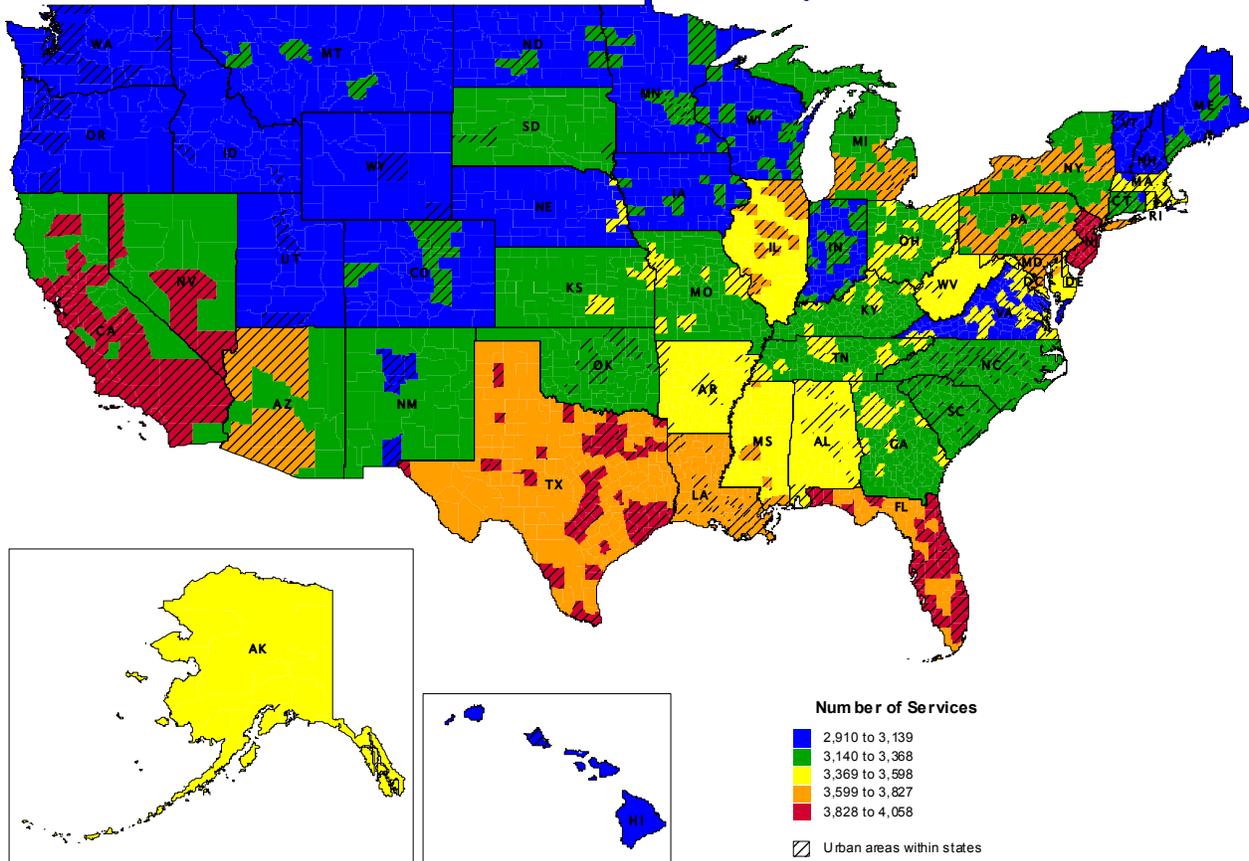
Note: Based on Medicare Part B claims data from CMS.

### Change in the Percentage of Medicare FFS Beneficiaries Served by Physicians in States' Urban and Rural Areas, April 2000 to April 2002



Source: GAO analysis.  
Note: Based on Medicare Part B claims data from CMS.

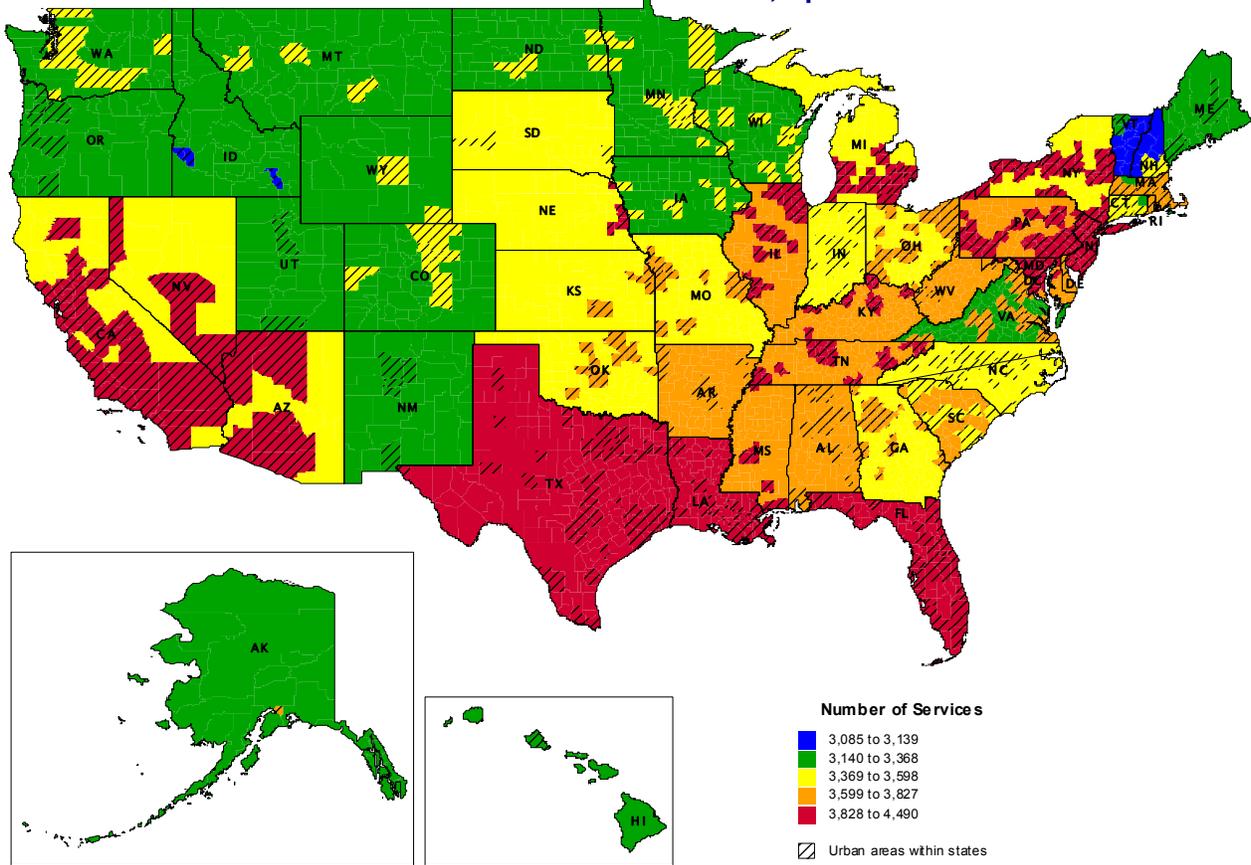
### Number of Physician Services per 1,000 Medicare FFS Beneficiaries Who Received Services in States' Urban and Rural Areas, April 2000



Source: GAO analysis.

Note: Based on Medicare Part B claims data from CMS.

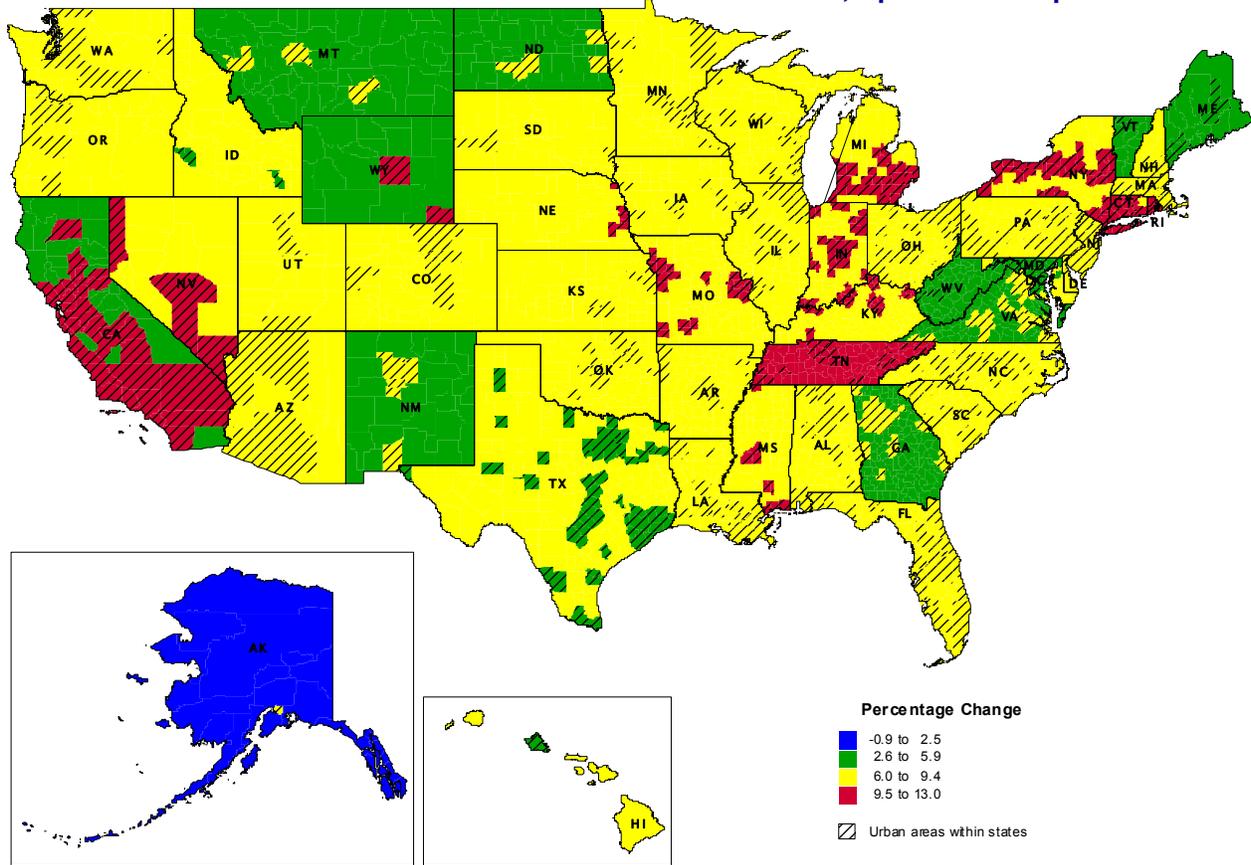
### Number of Physician Services per 1,000 Medicare FFS Beneficiaries Who Received Services in States' Urban and Rural Areas, April 2002



Source: GAO analysis.

Note: Based on Medicare Part B claims data from CMS.

### Percentage Change in the Number of Physician Services per 1,000 Medicare FFS Beneficiaries Who Received Services in States' Urban and Rural Areas, April 2000 to April 2002



Source: GAO analysis.

Note: Based on Medicare Part B claims data from CMS. In rural Alaska, the number of services each beneficiary received decreased on average by 0.9 percent.

## Scope and Methodology

To analyze Medicare beneficiary access to physician services, we used Medicare Part B claims data from the National Claims History (NCH) files. These data, which are used by the Medicare program to make payments 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 constructed datasets for 100 percent of Medicare claims for physician services performed by physicians in April of 2000, 2001, and 2002.<sup>14,15,16</sup> These years encompass a period during which fees rose (2000–2001) and a period during which fees decreased (2001–2002). We established a consistent cut-off date (the last Friday in December) for each year’s data file and only included those claims for April services that had been submitted by that date. 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) for that year. We assessed the reliability of these supplementary 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 the Medicare Managed Care Market Penetration Quarterly State/County Data Files, 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>14</sup>We excluded claims for services provided by nurse practitioners, physician assistants, and other nonphysician practitioners.

<sup>15</sup>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.

<sup>16</sup>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.

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>17</sup>
- the total number of physician services received, and
- the total number of physician services per beneficiary.

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>18</sup> We also determined 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 beneficiary diagnosis or coverage of new benefits.

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<sup>17</sup>Beneficiaries refers to all Medicare beneficiaries not just those for whom claims were filed.

<sup>18</sup>Rhode Island and New Jersey had no rural counties.

## Comments from Centers for Medicare & Medicaid Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Centers for Medicare & Medicaid Services

*Administrator*  
Washington, DC 20201

**DATE:** DEC 21 2004

**TO:** A. Bruce Steinwald  
Director, Health Care-Economic and Payment Issues  
Government Accountability Office

**FROM:** Mark B. McClellan, M.D., Ph.D.   
Administrator

**SUBJECT:** Government Accountability Office's (GAO) Draft Report: *MEDICARE FEE-FOR-SERVICE BENEFICIARY ACCESS TO PHYSICIAN SERVICES: Trends in Utilization of Services, 2000-2002* (GAO-05-145R)

Thank you for the opportunity to review and comment on the draft report. Beneficiary access to high quality health care services is a top priority for the Centers for Medicare & Medicaid Services (CMS). We recognize the efforts of GAO and are pleased with the findings of the report concluding beneficiary access and physician participation both increased from 2000 to 2002. We believe these findings are a very useful measure to assess overall access of Medicare beneficiaries to medical services, and we commend GAO for its thorough analysis. Overall, we are particularly pleased with the finding that rural beneficiaries' utilization increased during the period.

The report found that Medicare beneficiary utilization of physician fee schedule services increased from the period 2000 to 2002. For example, the report found the number of services provided per 1,000 beneficiaries who saw a physician increased for both the urban and rural areas of every state, except rural Alaska. In fact, although the percentage of beneficiaries who received physicians' services was generally lower in rural areas relative to urban areas, the increase from 2000 to 2002 was somewhat higher in rural areas.

The number of physicians accepting Medicare assignment during this period increased as well. As the report points out, this is particularly significant in light of the negative update to the physician fee schedule conversion factor in 2002, as a result of the sustainable growth rate formula during that year.

Reductions in the fee rates paid to physicians by Medicare in 2002 and early 2003 raised concerns that beneficiaries in some market areas may have difficulty obtaining the care they need in a timely manner. In response to these concerns, in the spring of 2003, CMS sponsored a survey of Medicare beneficiaries in 11 targeted geographic areas. The purpose of the survey was to assess the extent to which beneficiaries were experiencing problems in accessing physicians' services, and whether certain types of beneficiaries

Page 2 - A. Bruce Steinwald

were more likely to experience problems. The goal was to identify whether there was evidence of a link between changes in physicians' fees and beneficiary access problems.

While not being able to generalize beyond these 11 markets, the findings from the survey suggest that the fee reductions did not lead to measurable restrictions in access to care. Even though the study targeted geographic areas thought most likely to be experiencing difficulties, relatively few Medicare beneficiaries in the 11 markets reported major problems with access to physicians' care, and only a small percentage had problems attributed to physicians not taking new Medicare patients or limiting Medicare participation.

However, the findings did indicate that access problems were more common among certain subgroups that may be especially vulnerable to changes in access, including beneficiaries who had recently moved to the area, were new to Medicare, or had changed from managed care to fee-for-service. A repeat of the survey in the same 11 markets was conducted in the spring of 2004. Findings from the second round of the survey will be available soon.

We are also working on other policies intended to enhance access to physician services, particularly in rural areas. For example, we implemented for 2005 additional payments to physicians in counties where there is a scarcity of physicians, and automated the process to identify practitioners who are eligible to receive incentive payments for practicing in existing health professional shortage areas.

In addition to payment policy changes focused on improving access in rural areas, a Medicare demonstration projects is under development that will further enhance beneficiary access. For example, the recently announced demonstration project to reduce disparities in cancer prevention and treatment will focus on helping minority beneficiaries navigate the health care system. Services available through the demonstration, such as the provision of transportation, and the coordination of care among various providers will help minority beneficiaries overcome barriers that lead to fragmentation in care.

The CMS would like to thank GAO for this report. CMS is committed to working with Congress to preserve beneficiaries' access to high quality care and address future updates under the Medicare physician fee schedule. We believe it will be important, as we proceed to establish future physician fee schedule updates, to continue to monitor access through similar analyses.

**GAO Contact and Staff Acknowledgments**

**GAO Contact**

James Cosgrove, (202) 512-7029

**Acknowledgments**

In addition to the contact named above, Kevin Dietz, Jessica Farb, Hannah Fein, Jennifer Podulka, and Mike Thomas made key contributions to this report.

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