

July 1993

MEDICARE  
PHYSICIAN PAYMENT

Geographic Adjusters  
Appropriate But Could  
Be Improved With New  
Data



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**Human Resources Division**

B-251269

July 20, 1993

The Honorable Gary L. Ackerman  
House of Representatives

The Honorable David A. Levy  
House of Representatives

The Honorable Henry A. Waxman  
House of Representatives

On January 1, 1992, Medicare began implementing a new method of determining the amounts it will pay for physician services. Rather than basing payment on what physicians charged for services, as in the past, Medicare now uses a fee schedule that incorporates a resource-based relative value scale (RBRVS). Under the RBRVS fee schedule, each service receives a value that reflects, relative to other services, the work and other resources needed to furnish it. The values are adjusted for relative geographic differences in the costs of inputs, such as staff salaries and office rental costs. The adjusted values are converted to dollar payments by multiplying by a conversion factor.

Some physicians, particularly those practicing in areas with a high cost of living, have complained that the factors used to adjust the relative values for geographic differences in costs do not reflect actual cost differences. Specific complaints include that it was inappropriate to use (1) residential rent data as a proxy to measure office rent differences, (2) personal income data for highly educated professionals rather than physician income data to adjust the physician-work component of the geographic adjuster, (3) geographic variations in median wage levels of occupational groups employed in physician offices rather than differences in actual physician office staff costs, (4) 1980 census data because they are too old, and (5) malpractice insurance cost data that reflected less than half of the policies in force in some states.

As a result of these complaints, you asked us to assess whether the Health Care Financing Administration (HCFA), the federal agency that administers the Medicare program, had used the best available data when setting the geographic adjusters and whether new, better data sources need to be developed. You also asked about the appropriateness of the Medicare

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methodology for setting the adjusters and the frequency with which they should be updated.

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## Results in Brief

HCFA actively sought and tested numerous data sources when it was developing the geographic adjusters and made reasonable data and methodology choices, considering the time constraints under which the adjusters were developed. HCFA has been less active in determining whether new or different data sources should be used to update the adjusters. Although HCFA has expanded malpractice insurance cost data collection to include insurers that represent at least one-half of the market share in each state, it has not planned to modify the data used for other components of the adjusters.

We found that the Internal Revenue Service (IRS) has data available that could prove beneficial when the geographic adjusters are updated. For example, data on commercial office rental costs from selected categories of business tax returns might be a better measure of geographic differences for physician office rental costs than the residential rental rates used in the current practice-cost adjuster. In addition, because IRS obtains tax information annually, data from individual and business returns could be used to update other components of the adjusters during the 10-year period between censuses.

HCFA did not use IRS data in developing the current practice-cost adjuster because it did not believe that the technical and legal impediments to using these data could be overcome in the time available. Currently, HCFA is working with IRS to assess the feasibility of using IRS data in updating the adjusters. Because the IRS data needed for HCFA's purpose are summary data, and, thus, cannot be used to personally identify taxpayers, we believe that privacy concerns should not be an impediment to using these data.

Before a determination can be made on how frequently the adjusters should be updated, how rapidly the relative differences in costs change across geographic areas needs to be determined. HCFA is planning to have a contractor perform the analyses necessary to determine this.

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## Background

Medicare helps to pay for the health services of about 36 million elderly and disabled beneficiaries. Physician services represent the second most costly benefit after hospital care, with Medicare paying over \$36 billion for these services in 1992.

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Between 1975 and 1987, Medicare's spending per enrollee for physician services grew at an average annual rate of 15 percent, almost twice as fast as the per-capita gross national product. This rapid cost growth caused concern in the Congress. In addition, the Congress became concerned about the apparently inconsistent and irrational patterns of Medicare payments among services, physician specialties, and locations. For example, payment for some surgical and technical procedures was much greater relative to the time and effort involved than for evaluation and management services, such as office visits and consultations. Such payment inequities gave physicians a financial incentive to favor provision of surgical and technical procedures and to train in specialties emphasizing such procedures. Furthermore, fees were much higher in large metropolitan areas than in small cities and rural areas, giving physicians potentially undesirable incentives when choosing where to practice.

To advise it on ways to reform Medicare's physician payment methodology, the Congress mandated the creation of the Physician Payment Review Commission (PPRC) in 1986. Subsequently, in December 1989, the Congress, acting on the advice of PPRC, addressed the concerns about rapid cost growth and distorted incentives by providing that Medicare's physician payment methodology be revised on the basis of a methodology developed by HCFA. In place of the previous charge-based reimbursement methodology, payment levels were to be determined on the basis of the relative resources, including physician's effort and practice costs, required to perform services.

The Congress also required that payments be adjusted for geographic differences in the cost of providing physician services. Specifically, it required HCFA to develop three geographic adjusters, one each for physician-work costs, physician-practice costs, and malpractice insurance costs. The adjusters are designed to adjust payment rates for local differences in the costs of the goods and services necessary to furnish physician services. HCFA is required to review the geographic adjusters at least every 3 years, and may adjust the values on the basis of its review.<sup>1</sup>

The adjusters are supposed to reflect relative differences in costs across geographic areas. Therefore, if data on the actual costs involved are unavailable, data that measure relative differences among the cost categories can be substituted. Moreover, as required by law, the adjusters

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<sup>1</sup>This requirement was added by the Omnibus Budget Reconciliation Act of 1990, (P.L. 101-508), which also stipulates that if more than 1 year has passed since a previous adjustment any adjustment must be phased in over a 2-year period.

redistribute total Medicare payments across areas and do not increase or decrease this total payment amount.

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## Scope and Methodology

As requested, our objectives were to determine if HCFA had used appropriate data and sound methodologies in setting the geographic adjusters, whether new data sources are needed, and the frequency with which the adjusters should be changed. We reviewed HCFA's development process for the geographic adjusters, interviewed HCFA and contractor officials, and analyzed reports and documents related to the development of the geographic adjusters. In addition, we interviewed officials from IRS, the Bureau of the Census, and other agencies and obtained information on potential data sources from them. We also held discussions with representatives of local, state, and national physician groups.

Our work was performed between April 1992 and March 1993 in accordance with generally accepted government auditing standards.

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## Constraints Limited HCFA to Existing Data Sources

Time constraints limited HCFA's ability to develop data sources for use in establishing geographic adjusters. HCFA had only 2 years from the time the RBRVS law was enacted until the new method was required to be operational and only 8 months before it was required to propose the method.<sup>2</sup> HCFA made appropriate choices of data and methodology for developing the geographic adjusters, considering the constraints under which it operated. HCFA contracted with several research organizations to develop recommendations about data and methodologies for the geographic adjusters.<sup>3</sup> These contractors spent considerable effort in considering alternative data sources and methodologies, and used reasonable criteria for selecting the data and methodologies that they recommended for use.

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<sup>2</sup>The Omnibus Budget Reconciliation Act of 1986 (P.L. 99-509) had required HCFA to develop an interim geographic practice cost index using "... the most accurate and recent data that are available with respect to the costs of practice." Because of this wording, HCFA did not attempt to develop new data sources for the interim index.

This law also directed HCFA to collect data on practice costs to refine the interim index and update it. However, the effort HCFA undertook in response did not have a sample large enough to use for setting geographic adjusters under the RBRVS provisions enacted in 1989.

<sup>3</sup>The contractors were The Urban Institute; The Center for Health Economics Research; and JIL Systems and Services, Inc.

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## The Physician-Work Adjuster

In developing the index to measure the geographical variation in the value of a physician's own time, HCFA rejected the use of physician income data, although this was available from the 1980 census. HCFA did so on the grounds that physician incomes were determined, in significant part, by Medicare fees under the previous physician reimbursement system. Because one reason for the adoption of the new Medicare physician payment system was to correct perceived irrationalities in patterns of Medicare fees, HCFA officials believed that it would not be appropriate to use physician incomes to adjust Medicare fees under the new payment system. Also, HCFA noted that area variation in third-party insurance coverage and payment levels could have distorted physician income patterns.

HCFA also considered and rejected using a cost-of-living proxy for the cost of physicians' time. HCFA's analysis indicated that professionals often accept earnings that do not fully compensate them for cost-of-living differences because amenities (such as concerts and museums) are generally greater in areas with a high cost of living. Thus, using a cost-of-living proxy would overcompensate many physicians in such areas.

Instead, HCFA adopted median hourly earnings for workers in selected professions with at least 5 years of college as the basis for the physician-work adjuster. These data were obtained from the 1980 Census of Population and Housing and adjusted for geographical variation in mix of occupations.<sup>4</sup> HCFA chose these data because it believed that the preferences of highly educated professionals would closely coincide with those of physicians and the ratios of their earnings across geographic areas would, therefore, be similar.<sup>5</sup> Although the average earnings of such professionals are considerably lower than the average for physicians, this difference does not affect the results because the adjuster measures only the relative difference in earnings across areas, not the absolute amount of those earnings.

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<sup>4</sup>This adjustment was done to prevent biasing the results because of the differing mix of occupations across geographic areas. For example, if there is a higher percentage of highly paid professionals, such as engineers, in one area versus another, the first area, absent the adjustment, would appear to have higher wages for educated professionals than the second.

<sup>5</sup>When it created the new Medicare fee schedule, the Congress required that the amount of the adjuster for the value of physicians' work be reduced to one-fourth its nominal amount. This had the effect of lowering Medicare physician payments in high-cost (mostly large urban) areas and proportionately increasing them in low-cost (mostly rural and small urban) areas.

## The Practice-Expense Geographic Adjuster

HCFA also rejected using actual physician-office cost data as the basis for the nonphysician-labor cost component of the practice-expense geographic adjuster because available data sources were inadequate. HCFA identified two sources of such data with sufficient geographic detail for their use in developing an adjuster: Bureau of Labor Statistics data developed from reports submitted to state unemployment insurance agencies and IRS data from employment covered under Social Security. However, HCFA rejected both of these databases because they included the wages of employed physicians as well as physician office staff. Because physician wages are usually much higher than staff wages, the data showed unrealistically high average wages in those geographic areas that had a higher proportion of employed physicians. According to HCFA, this data problem resulted in implausible differences of as much as 76 percent in the average wage levels of physician offices in neighboring states.

HCFA also considered using the hospital wage index developed for Medicare's hospital prospective payment system for the office staff salary component of the practice-expense adjuster. HCFA rejected these data because the occupation mix of workers in physicians' offices is different from the mix in hospitals. Because of these problems, HCFA recommended use of wage data from the 1980 Census of Population and Housing, weighted for occupational mix in physician offices.

HCFA's most controversial choice from the view of the physician community was using residential rental data as a proxy for the physician-office cost component of the practice-expense adjuster. HCFA chose apartment rental data produced annually by the Department of Housing and Urban Development for its use in computing a low-income rental housing subsidy. In making this choice, HCFA rejected commercial rental data, available from two trade associations, and construction costs data. HCFA rejected the trade association data because they did not cover all geographic areas and were not necessarily representative for cities included in the surveys. It also rejected the construction costs data because these data, though available for most geographic areas, would not capture geographic variation in rental prices due to market demand conditions or variation in operating costs, such as utilities.

In choosing to use residential rental data, which are available nationwide, HCFA argued that residential and commercial rents are likely to be closely related because the same factors, such as population density, construction costs, and income, affect both. Subsequent analyses performed for PPRC



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and the American Medical Association have tended to support this relationship.

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### HCFA Plans to Use Improved Data to Update the Malpractice Adjuster

HCFA has contracted with The Urban Institute for collection of more complete data on malpractice liability insurance costs. These data may serve as the basis for updating the malpractice adjuster. HCFA was criticized for using malpractice cost data primarily from a single large insurer as the basis for the initial malpractice adjuster because the insurer did not have a large market share in all states. The goal of HCFA's new collection effort is to obtain data from insurers representing at least 50 percent of the market share in each state. HCFA officials told us that because of the volatility of malpractice costs across areas, they expect to use a multiyear average as the basis for the malpractice adjuster. To this end, the contractor is collecting several years worth of data.

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### IRS Data Could Be Useful for Future Updates

We found that, despite some problems, IRS data could be useful for future updates of the practice-expense and physician-work adjusters. HCFA could use data on commercial rents abstracted from business tax returns for professional offices, physician offices, or both in place of residential rental data in developing the office-cost component of the practice-expense adjuster. Because these data represent actual commercial space costs, and are available for all professional offices, they may be more acceptable to the physician community than data on residential rents. In addition, because of the universal nature of IRS data, adequate numbers of cases can be obtained for most Medicare localities. Taxpayer anonymity would be protected because HCFA needs only summary data for use in setting the geographic adjuster.

We have been working with IRS and HCFA personnel to facilitate planning of a pilot study to assess the feasibility of using these IRS data to develop the office-cost component of the adjuster. Although this process has identified a number of technical problems with using the data, the problems appear to be manageable. For example, the IRS data do not indicate the Medicare payment locality. However, they do contain the filing address. IRS officials agreed that they could extract zip codes from the filing address and use

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these in conjunction with information supplied by HCFA to aggregate the data into the 232 Medicare payment localities.<sup>6</sup>

Another problem is that tax returns do not contain a direct measure of the size of space. However, several options exist for this measurement. One possible proxy would be the number of employees in professional offices. While not available on tax returns, this information can be obtained from Social Security tax forms submitted by businesses. IRS officials said that they could link data from these forms with business tax return information through the employer identification number.

IRS data could also be used to update components of the physician-work and practice-expense adjusters between the decennial censuses. For the 1995 update, data from the 1990 census will be available, but the next census will not be made until 2000, and data from that census will probably not be available before the end of 2002. IRS officials told us that IRS was working on a project to include a code for the filer's profession in its database on individual tax returns. This change could permit HCFA to use IRS data from the same professions now used for this purpose to adjust components measuring geographic variation in the value of physician work and nonphysician labor.

HCFA officials with whom we discussed this matter agreed that there was considerable potential for the use of IRS data in the future development of the geographic adjuster. In fact, the two agencies have undertaken a pilot effort to test this potential. The HCFA officials said that the agency may need to seek additional funds to pay IRS for processing any data beyond the scope of the pilot project.

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## Data Insufficient to Determine Optimum Update Frequency

Before a determination can be made on how frequently the geographic adjusters should be updated, knowing how rapidly the relative differences in cost across geographic areas change is necessary. Data on such differences, however, are not yet available.

HCFA officials said that as they obtain data for the current update, they plan to compare these data with the older data used to develop the current geographic adjusters to determine the rate of change. HCFA plans to use

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<sup>6</sup>The location reported to IRS is the location from which the tax return is filed. This can differ from the actual place in which the business is conducted. However, because information from returns of relatively small concerns (individual proprietorships, partnerships, and small corporations) would be involved, in most instances the filing location and the business location(s) will be within the same locality.

this analysis as a basis for determining how often the adjusters should be updated.

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## Conclusions

HCFA's choices of data and methodology for the development of the geographic adjusters were reasonable, considering the constraints under which the adjusters were developed. However, with the exception of expanded malpractice data, HCFA had not planned to use different data sources to update the adjusters for 1995.

IRS data may be useful in updating the geographic adjusters. HCFA is working with IRS to assess the feasibility of using IRS data in updating the practice-expense adjuster. Because HCFA needs only summary data, taxpayer privacy concerns do not appear to be a barrier to using these data.

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## Recommendation

The Secretary of Health and Human Services should direct the Administrator of HCFA to complete work with IRS to test whether IRS data provide a superior basis for setting or updating the geographic adjusters. If IRS data prove superior to the data currently in use, the Secretary should direct the Administrator to obtain and use these data.

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## Agency Comments and Our Evaluation

In commenting on a draft of this report, the Department of Health and Human Services (HHS) agreed with our recommendation (see app. I). The agency said that it has requested data from IRS and has reserved funds in its research budget to analyze the data for their usefulness in updating the geographic adjusters.

HHS said that it believed the IRS data could be useful for validating geographic adjusters developed from other sources but would probably not be usable to establish the levels of the geographic adjusters. HHS also commented that our report was too optimistic about the potential for using IRS data to set future geographic adjusters.

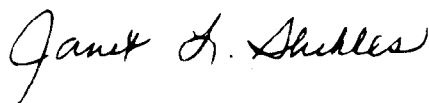
We did not recommend that HCFA use the IRS data to set the geographic adjusters but rather to test whether those data provide a superior basis for the adjusters and, if so, to obtain and use them. HHS' hypothesis that the IRS data might be most useful for validating the geographic adjusters derived from the other data sources could be correct under two conditions. First, the IRS data would have to show that the existing adjusters accurately

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reflect geographic differences in cost. Second, HCFA's future analyses of the optimal updating interval would have to show that the other data sources are available at the appropriate intervals. In any case, if the IRS data prove useful as a validation of other data or as a superior source for setting geographic adjusters, HCFA will be in a better position to defend the adjusters and physicians will be more assured that the adjuster levels are correct.

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We are sending copies of this report to the Secretary of HHS; the HHS Inspector General; the Administrator of HCFA; the Director, Office of Management and Budget; and other interested congressional committees. We will also make copies available to others on request. Please call me on (202) 512-7119 if you or your staff have any questions about this report. Other major contributors are listed in appendix II.



Janet L. Shikles  
Director, Health Financing  
and Policy Issues



# Comments From the Department of Health and Human Services

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

MAY 26 1993

Ms. Janet L. Shikles  
Director, Health Financing  
and Policy Issues  
United States General  
Accounting Office  
Washington, D.C. 20548

Dear Ms. Shikles:

Enclosed are the Department's comments on your draft report, "Medicare Physician Payment: Geographic Adjusters Appropriate But Could Be Improved With New Data." The comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

The Department appreciates the opportunity to comment on this draft report before its publication.

Sincerely yours,

  
Bryan B. Mitchell  
Principal Deputy Inspector General

Enclosure

Comments of the Department of Health and Human Services  
on the General Accounting Office (GAO) Draft Report,  
"Medicare Physician Payment: Geographic Adjusters Appropriate  
But Could Be Improved With New Data"

Overview

Last year, several New York congressmen requested that GAO assess whether the Health Care Financing Administration (HCFA) had used the best available data when setting the Medicare geographic adjustment factor (GAF) and whether new, better data sources needed to be developed to adjust physician payment.

In response to their request, GAO conducted a review and concluded that HCFA actively sought and tested numerous data sources when the GAF was developed and made reasonable data and methodology choices, considering the time constraints under which the adjusters were made.

For the current GAF review process, GAO concluded that HCFA has expanded malpractice data but is not planning to modify the data sources used for other components of the adjusters. The report focuses heavily on the fact that the Internal Revenue Service (IRS) has data available that could be useful, but acknowledges that HCFA is working with IRS to assess the feasibility in updating the adjusters with tax data.

GAO Recommendation

The Secretary of Health and Human Services (HHS) should direct the Administrator of HCFA to complete work with IRS to test whether IRS data provides a superior basis for setting or updating the geographic adjusters. If IRS data proves superior to the data currently in use, the Secretary should direct the Administrator to obtain and use these data.

Department Comment

We concur. Data have already been requested through an IRS interagency agreement and money is reserved in the research budget to examine the data to assess its usefulness in future updates of the geographic adjusters. However, we are concerned that the GAO report expresses too much optimism about the potential for using IRS data in future GAFs. We believe that IRS data could be useful to validate GAFs developed from other sources, but that IRS data would probably not be usable to establish the levels of the physician work or practice expense GAFs.

See comment 1.

**Appendix I**  
**Comments From the Department of Health**  
**and Human Services**

See comment 2.

See comment 3.

We are unsure that it will be possible to link solid counts of physicians to IRS expense data at the practice level. We understand the IRS data may only be available at the State level, not the Medicare locality level. In addition, we are concerned about the conceptual problem of developing physician work and practice expense geographic index levels to be used for payment purposes from/on physicians' actual expenses.



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## GAO Comments

1. The issue of a proxy for office space size is discussed on pages 7 and 8 of the report.
2. While this may be true for the pilot study now under way, IRS masterfile data should be adequate for reporting at the Medicare locality level in most instances. IRS will need to break the data down to the zip code level and reassemble them into Medicare localities, using information supplied by HCFA. The only potential problem is assuring enough data points to avoid confidentiality concerns.
3. We do not suggest that actual physician data be used for developing physician-work and practice-expense adjusters. Rather, as noted on page 5 of our report, we agree with HCFA's reasons for excluding the use of physician data. IRS data from the same professional categories as were used for the current adjuster could be used for the physician-work and nonphysician-work portions of the adjuster. As discussed on page 7 of our report, HCFA could analyze IRS rental-space data from other professional offices and physician offices and use either one or both sets of data, as indicated by the results of the analysis.

# Major Contributors to This Report

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