Attached are two copies of our final report entitled, "Fiscal Intermediary Determinations of Hospitals’ Graduate Medical Education Costs for the Medicare Base Year." The Medicare system for reimbursing teaching hospitals for graduate medical education (GME) costs was changed in 1989. The new system uses a formula approach based on each hospital’s average GME cost per physician intern and resident (per resident) for a designated base year. The average cost per resident is calculated using both the total GME base year costs and the number of residents working in the hospital during the base year. The purpose of our review was to determine whether the Medicare program’s fiscal intermediaries (FI) have (1) adequately audited the GME costs and the total number of residents counted in the base year and (2) correctly established each hospital’s average GME cost per resident.

Audits and reviews contracted or performed by the FIs found inaccuracies in both the base year GME costs and the total number of residents counted during the base year. In addition, our review of 36 hospitals found problems with the FI audits. The most significant problem involved the accuracy of the resident counts. We identified 176.76 additional full-time equivalent (FTE) resident positions that had not been counted and an additional $5.6 million of unallowable base year GME costs. Because of these Office of Inspector General adjustments, we recommended in separate reports to the affected FIs that they recover $14.4 million for past years.

Our review found that the base year resident counts were not always determined by hospitals as well as FIs in accordance with the Health Care Financing Administration’s (HCFA) instructions. These inaccurate resident counts were then used to establish the average base year cost per resident. Since similar resident counts are also made for each subsequent year and applied to a formula which determines the Medicare reimbursement for that year, improved audit coverage and HCFA oversight of the accuracy of those counts will be needed in future payment years.
Our review found numerous inaccuracies in base year data. However, since base year cost determinations can no longer be adjusted except under rare conditions, we are not recommending that HCFA perform additional base year reviews. Instead, since some base year data is still overstated, HCFA should also focus its oversight activities on determining the reasonableness of GME payments in future years. This could be accomplished through studies that would compare Medicare reimbursement with actual current GME costs. These studies would be the basis for determining update adjustments for future years to ensure that payments are comparable to actual costs.

Accordingly, we are recommending that HCFA (1) direct its FIs to emphasize in future audits of the payment years the accuracy of the FTE resident counts, (2) monitor the effectiveness of these audits through the Audit Quality Review Program, and (3) consider analyzing and comparing GME payments under the new payment methodology with actual GME costs, as part of its oversight responsibilities.

In response to our draft report, HCFA concurred with our first two recommendations. However, HCFA did not concur with our third recommendation by stating that hospitals will not strive to report accurate cost data. We believe that the current certification statement for cost reports, which indicates that intentional misrepresentation may be punishable by fines and/or imprisonment, sufficiently motivates hospital staff to report accurate information. Therefore, we continue to believe that HCFA's oversight responsibilities should include determining the reasonableness of GME payments in future years by comparing Medicare reimbursement with actual costs. The HCFA's comments are presented as an Appendix to this report and are addressed on page 8.

We would appreciate your views and the status of any further action taken or contemplated on our recommendations within the next 60 days. If you have any questions, please call me or have your staff contact George M. Reeb, Assistant Inspector General for Health Care Financing Audits, at (410) 966-7104. Copies of this report are being sent to other interested Department officials.

To facilitate identification, please refer to Common Identification Number A-06-94-00059 in all correspondence relating to this report.

Attachments
Department of Health and Human Services

OFFICE OF
INSPECTOR GENERAL

FISCAL INTERMEDIARY DETERMINATIONS
OF HOSPITALS' GRADUATE MEDICAL EDUCATION COSTS
FOR THE MEDICARE BASE YEAR

JUNE GIBBS BROWN
Inspector General

JUNE 1995
A-06-94-00059
Memorandum

Date: Jun 20 1995
From: June Gibbs Brown
Inspector General
Subject: Fiscal Intermediary Determinations of Hospitals' Graduate Medical Education Costs for the Medicare Base Year (CIN: A-06-94-00059)
To: Bruce C. Vladeck
Administrator
Health Care Financing Administration

This final report provides you with our review of fiscal intermediary (FI) determinations of hospitals' graduate medical education (GME) base year costs. The Medicare system for reimbursing teaching hospitals for GME costs was changed in 1989. The new system uses a formula approach based on each hospital's average GME cost per physician intern and resident (per resident) for a designated base year. The average cost per resident is calculated using both the total GME base year costs and the number of residents working in the hospital during the base year. The purpose of our review was to determine whether the Medicare program's FIs have (1) adequately audited the GME costs and the total number of residents counted in the base year and (2) correctly established each hospital's average GME cost per resident.

Audits and reviews contracted or performed by the FIs found inaccuracies in both the base year GME costs and the total number of residents counted during the base year. In addition, our review of 36 hospitals found problems with the FI audits. The most significant problem involved the accuracy of the resident counts. We identified 176.76 additional full-time equivalent (FTE) resident positions that had not been counted and an additional $5.6 million of unallowable base year GME costs. Because of these Office of Inspector General adjustments, we recommended in separate reports to the affected FIs that they recover $14.4 million for past years.

Our review found that the base year resident counts were not always determined by hospitals as well as FIs in accordance with the Health Care Financing Administration's (HCFA) instructions. These inaccurate resident counts were then used to establish the average base year cost per resident. Since similar counts are also made for each subsequent year and applied to a formula which determines the Medicare reimbursement for that year, improved audit coverage and HCFA oversight of the accuracy of those counts will be needed in future payment years.

Our review found numerous inaccuracies in base year data. However, since base year cost determinations can no longer be adjusted except under rare conditions, we are not
recommending that HCFA perform additional base year reviews. Instead, since some base year data is still overstated, HCFA should also focus its oversight activities on determining the reasonableness of GME payments in future years. This could be accomplished through studies that would compare Medicare reimbursement with actual current GME costs. These studies would be the basis for determining update adjustments for future years to ensure that payments are comparable to actual costs.

Accordingly, we are recommending that HCFA (1) direct its FIs to emphasize in future audits of the payment years the accuracy of the FTE resident counts, (2) monitor the effectiveness of these audits through the Audit Quality Review Program, and (3) consider analyzing and comparing GME payments under the new payment methodology with actual GME costs, as part of its oversight responsibilities.

In response to our draft report, HCFA concurred with our first two recommendations. However, HCFA did not concur with our third recommendation by stating that hospitals will not strive to report accurate cost data. We believe that the current certification statement for cost reports, which indicates that intentional misrepresentation may be punishable by fines and/or imprisonment, sufficiently motivates hospital staff to report accurate information. Therefore, we continue to believe that HCFA's oversight responsibilities should include determining the reasonableness of GME payments in future years by comparing Medicare reimbursement with actual costs. The HCFA's comments are presented as an Appendix to this report and are addressed on page 8.

BACKGROUND

Many teaching hospitals are engaged in educational programs that include training for graduate medical students. These programs for physician interns and residents are referred to as GME. The Medicare program shares in the cost of approved GME programs in medicine, osteopathy, dentistry, and podiatry.

On September 29, 1989, HCFA issued final regulations (42 CFR 413.86), effective October 30, 1989, which implemented Section 1886(h) of the Social Security Act. These provisions changed the method for determining Medicare's share of GME costs pertaining to residents. Previously, Medicare shared in these costs on a reasonable cost basis, in direct proportion to the services received by Medicare patients.

THE NEW PAYMENT SYSTEM

Under Section 1886(h) of the Social Security Act, which is retroactive to cost reporting periods beginning on or after July 1, 1985, Medicare payments to a teaching hospital for GME costs were based on the hospital's average GME cost per resident for the hospital's base year.
The base period for determining the amount per resident was the hospital’s cost reporting period beginning in Fiscal Year (FY) 1984. The amount for each resident was computed by dividing the allowable GME costs for the base period by the average number of FTE residents working in the teaching hospital during the base period. Medicare’s share of the total allowable GME costs for a given year will be determined by multiplying the Medicare patient load percentage for that year by the total allowable GME costs.

RESPONSIBILITY FOR IMPLEMENTATION

The HCFA was given responsibility for implementing the new GME regulations and ensuring that each hospital’s base year cost per resident was accurately determined. In carrying out this responsibility, HCFA prepared instructions for the FIs to use in auditing the teaching hospitals’ GME costs and resident counts for the base year.

The HCFA assigned the responsibility for verifying the GME costs and the resident counts for the base period to the FIs. The FIs were to use the results of these reviews to calculate the base period cost per resident for each teaching hospital. The HCFA required the FIs to establish the per resident cost for the base year by February 28, 1991.

SCOPE

Our review was performed in accordance with generally accepted government auditing standards. Our objective was to assess the adequacy of the FIs’ determinations of the average GME cost per resident for teaching hospitals for the base year. For 36 selected hospitals, we reviewed the quality and adequacy of the FIs’ base year audits by verifying: (a) the reasonableness and allowability of the base year costs, (b) the accuracy of the base year resident count, and (c) the accuracy of the FIs’ calculations of the base year cost per resident.

We accomplished our objectives by first reviewing HCFA’s instructions to the FIs for their base year reviews. We then selected a nonstatistical sample of hospitals for review. According to information provided by HCFA, as of May 31, 1991, there were 1,218 teaching hospitals nationwide that required a determination by the FIs of the per resident cost. Using that information, we identified all teaching hospitals that had $8 million or more in GME base year costs. We judgmentally selected 36 of these hospitals for review. Of the 36 hospitals, 34 had been audited by FIs for GME costs. The two remaining hospitals were not audited by the FI, as their GME costs did not exceed HCFA’s criterion of $40,000 per resident. Due to the proprietary nature of some of the information, under separate cover, we will provide HCFA the details on each of the 36 hospitals.

We reviewed selected audit working papers prepared by the FIs and, in some cases, public accounting firms which were used as subcontractors to perform these audits. We
reviewed the working papers and, as necessary, hospital records for: (a) resident salaries and benefits, (b) teaching physician compensation and support costs allocated to GME, (c) indirect costs allocated to GME, and (d) the base year resident counts. We determined the propriety of the adjustments made by the FIs which affected the per resident amounts.

To measure the financial impact of our audit adjustments for these 36 hospitals, we obtained resident counts and Medicare patient load percentages from the FIs for each year after July 1, 1985 for which data was available. The number of such years ranged from 3 to 6 years and covered FYs 1986 through 1991. We did not verify the accuracy of the FIs' determinations of the resident counts or patient load percentages for these subsequent years, as our audit scope centered on the base year. However, we did make adjustments to the resident counts for these other years if it came to our attention that errors in the base year were also prevalent in one or more subsequent years.

Our review of internal controls was limited to analyzing the procedures HCFA had implemented to ensure that the GME cost amounts per resident for the base year were accurately determined. Our objective did not require an understanding or assessment of the internal control structure of the FIs or the hospitals reviewed. However, where warranted, we included in separate reports to the FIs our recommendations for improvement in those controls that affected specific areas of GME costs or resident counts.

Our audit covered each selected hospital's base year, which began during FY 1984 (October 1, 1983 through September 30, 1984). Our reviews of the 36 hospitals were performed from December 1991 through August 1993. We performed on-site reviews at the applicable FIs and, as necessary, at selected hospitals. This data was consolidated and analyzed at our Oklahoma City field office.

RESULTS OF AUDIT

Audits performed by the FIs have reduced base year GME costs by $291 million and reduced the count of residents by 1,280 FTE positions. However, we identified problems with the FI audit coverage. Our reviews of the FI audit working papers and hospital records for 36 hospitals revealed that base year costs were still overstated by $5.6 million and the number of FTE residents was understated by 176.76. Because of these OIG adjustments, we recommended in reports to the affected FIs that they recover $14.4 million for past years for these 36 hospitals. We also calculated future savings of $16.7 million from these adjustments over the next 5 years.

The more significant findings identified in our base year reviews involved inaccurate FTE resident counts. Since these counts are also made for each subsequent year and applied
to a formula which determines the Medicare reimbursement for that year, improved audit coverage and HCFA monitoring into the accuracy of those counts will be needed.

The audit problems we found involved auditor error due to oversight, failure to follow HCFA's audit instructions, or a misunderstanding of those instructions. We were also told that time and budget constraints were responsible for some problems. Another contributing factor was that HCFA's instructions to the FIs only required audits of hospitals with an average cost per resident of $40,000 or more.

**FI BASE YEAR REVIEWS**

The HCFA provided comprehensive audit guidance to ensure that FIs nationwide had the information needed to properly establish each hospital's average GME cost per resident for the base year. The HCFA reported that FIs had provided information on a total of 1,336 hospitals. Of this number, the FIs audited the base year costs and resident counts of 941 hospitals. The FIs reduced total GME base year costs from $3.19 billion to $2.90 billion, a reduction of about $291 million. The HCFA also reported a decrease in the total number of FTE residents, from 69,547 to 68,267.

**OIG REVIEW OF FI BASE YEAR AUDITS AND DETERMINATION OF GME COST PER RESIDENT**

We reviewed data for 36 teaching hospitals; 34 of these hospitals were audited by the FIs and 2 were under HCFA's $40,000 threshold, thus not requiring an audit. We recommended adjustments for 18 of the 36 hospitals. Our review showed the following:

- **Resident Counts** - The FI audits had increased the base year resident counts at these hospitals by 94 residents. However, we identified an additional 176.76 FTE residents. Each additional resident position lowers a hospital’s average GME cost per resident.

- **Base Year Costs** - The FI audits reduced the GME base year costs by about $39.5 million (from $483.4 million to $443.9 million). We identified additional unallowable and unsupported base year costs totaling $5.6 million.

- **Cost Per Resident** - Our reviews found that the cost per resident should have been reduced for 15 hospitals and increased for 3 hospitals.

We reported the results of our reviews to the FIs and recommended recoveries totaling $14.4 million over a 3 to 6-year period, covering the hospitals' FYs 1986 through 1991. Further, we estimated additional savings of $16.7 million for the 5 years following the years we audited.
Figure 1 shows the $14.4 million of OIG recommended audit recoveries classified into four categories. The recommended recoveries include:

- $9.4 million resulting from base year resident counts that were not determined in accordance with HCFA's instructions.

- $3.5 million resulting from unallowable and unsupported physician compensation allocated to GME base year costs.

- $1.0 million resulting from other direct costs that were improperly allocated or charged to GME base year costs.

- $490,000 generally resulting from indirect costs related to unallowable direct costs.

**Base Year Resident Counts**

Base year resident counts were understated by 176.76 FTE residents, involving 17 of the 36 hospitals reviewed. Officials of these FIs stated that these errors were caused by oversights, failure to follow HCFA's audit instructions, or time and budgetary constraints placed on the base year audits. Identifying these additional residents resulted in a net increase of $477,303 in base year GME costs. However, increases in residents will lower the average GME cost per resident, resulting in overall Medicare savings in subsequent years. Consequently, our reports to the FIs recommended recoveries of $9.4 million. Further, we estimated future savings over 5 years of $10.8 million for the Medicare program.

**Base Year Physician Compensation Allocated to GME**

Our review identified unallowable physician compensation totaling $2,171,488 and unsupported physician compensation totaling $2,379,445. These costs should have been excluded from the base year costs of four of the hospitals included in our review. Two of the four hospitals were audited by the FIs. At the other two hospitals, the FI was not required to perform base year audits because the base year per resident amounts were
less than $40,000. In the absence of FI audits, we conducted field reviews at these two hospitals. In our reports to the affected FIs, we recommended recoveries totaling $3.5 million over the first 4 to 5 years of the new payment system. We also estimated $4.2 million of savings over the next 5 years from these adjustments.

Other Direct Costs

At 10 hospitals, we identified $824,240 of direct GME costs that were either unallowable or unsupported. These direct costs included secretarial salaries, administrative salaries, and other personnel costs improperly charged to GME and unallowable resident salaries and benefits. Applying these OIG adjustments to the GME calculations resulted in recommended recoveries totaling $1 million over the first 3 to 6 years of the new payment system. In addition, we estimated savings of $1.2 million over the next 5 years from these adjustments.

Indirect Costs

We identified $694,829 of unallowable indirect costs that should have been removed from the base year costs of nine hospitals. Some of our indirect cost adjustments resulted from the adjustments we made to direct GME costs. We also made indirect cost adjustments in those instances where the FIs made audit adjustments to direct costs but overlooked adjusting the corresponding indirect costs. Our adjustments deleting these costs resulted in recommended recoveries totaling $490,000 and estimated future savings over 5 years of $478,000 for Medicare.

CONCLUSION

Our reviews found significant problems with the resident counts which were then used to establish the average base year cost per resident. Since these resident counts are also made for each subsequent year and applied to a formula which determines the Medicare reimbursement for that year, improved audit coverage and HCFA oversight of the accuracy of resident counts will be needed in future payment years.

Our reviews found numerous inaccuracies in base year data. However, since base year cost determinations can no longer be adjusted except under rare conditions, we are not recommending that HCFA perform additional base year reviews. Instead, since some base year data is still overstated, HCFA should also focus its oversight activities on determining the reasonableness of GME payments in future years. This could be accomplished through studies that would compare Medicare reimbursement with actual current GME costs.
We envision these studies to be based on analyzing cost data routinely reported to HCFA by hospitals. The HCFA staff would develop a computer program to compare each teaching hospital’s GME actual costs to the predetermined reimbursement. The amounts of costs, reimbursements and the difference for each hospital could then be profiled in various ways. For example, urban hospitals’ data could be compared to rural hospitals’ data. In another comparison, proprietary hospitals’ data could be compared to nonprofit hospitals’ data. These comparisons would be the basis for determining update adjustments for future years to assure that payments are comparable to actual costs.

It should be noted that comparing hospital payment year cost and revenue data as a review technique has been widely used in the past in monitoring Medicare payments for acute care services. We believe that this technique is appropriate for monitoring GME activities.

**RECOMMENDATIONS**

We recommend that HCFA:

1. Direct the FIs to focus their audits of teaching hospitals on the accuracy of the FTE resident counts used in determining GME payments.

2. Monitor the effectiveness of these payment year audits through HCFA’s contractor evaluation program known as the Audit Quality Review Program.

3. Consider analyzing and comparing GME payments under the new payment methodology with actual GME costs, as part of its oversight responsibilities.

Our specific recommendations for changes to GME costs and resident counts for the hospitals we reviewed were contained in separate audit reports issued to the individual FIs.

**HCFA’S COMMENTS AND OIG’S RESPONSE**

In response to our draft report, HCFA concurred with our first two recommendations. The HCFA did not concur with the third recommendation to consider analyzing and comparing GME payments under the new payment methodology with actual GME costs. The HCFA indicates that currently Medicare GME payments are not tied to reported costs, so neither the hospital nor the intermediary have any great interest in assuring that the costs reported for GME are necessarily accurate. Therefore, HCFA concludes that the value of making the comparison of reported costs to payments is questionable.

The HCFA did not offer any evidence to justify its assertion that future GME cost data reported by hospitals would be necessarily inaccurate. We believe that the current
certification statement on cost reports (signed by an officer or administrator) does motivate the reporting of accurate data. The certification statement reads, in part:

**INTENTIONAL MISREPRESENTATION OR FALSIFICATION OF ANY INFORMATION CONTAINED IN THIS REPORT MAY BE PUNISHABLE BY FINE AND/OR IMPRISONMENT**

I hereby certify that I have read the above statement and that I have examined the accompanying cost report...and that to the best of my knowledge and belief, it is a true, correct and complete statement prepared from the books and records of the provider in accordance with applicable instructions....

Notwithstanding HCFA's comments, we continue to believe that HCFA should consider performing these comparisons in the future as better data becomes available. We understand that HCFA is in the process of obtaining or developing various data sources in other programmatic areas to assist in more closely matching Medicare payments with the actual costs incurred in providing care. We hope that this effort to obtain more relevant data also includes costs associated with GME. The availability of better cost data will assist with HCFA's oversight responsibilities and particularly in determining the reasonableness of payments in future years.
Memorandum

DATE MAR 27 1995
FROM Bruc C. Vladeck, Administrator
TO June Gibbs Brown, Inspector General

We reviewed the subject draft report which examined whether the Medicare program's FIs have (1) adequately audited the GME costs and the total number of residents counted in the base year, and (2) correctly established each hospital's average GME cost per resident. Our comments are attached for your consideration.

Thank you for the opportunity to review and comment on this report. Please advise us if you would like to discuss our position on the report's recommendations.

Attachment

OIG Recommendation
Direct the FIs to focus their audits of teaching hospitals on the accuracy of full-time equivalent (FTE) resident counts used in determining GME payments.

HCFA Response
We concur. HCFA's initial GME base period audit instructions (issued in 1990) directed FIs to review hospitals' FTE resident counts for the "payment years" during their GME base period audits. In Fiscal Year (FY) 1991 HCFA issued contractor budget guidelines which directed FIs to perform special audits of FTE resident counts. In FY 1992, audits of teaching hospitals were reemphasized in HCFA's Audit Priority Matrix, and in FYs 1993 and 1994 the contractor budget guidelines directed the FIs to plan to audit 75 percent of their teaching hospitals' FTE resident counts. We plan to continue that emphasis.

OIG Recommendation
Monitor the effectiveness of these payment year audits through HCFA's contractor evaluation program known as the Audit Quality Review Program.

HCFA Response
HCFA concurs. HCFA's improved contractor evaluation process provides the flexibility to review many different aspects of our intermediaries' audit operation. While this area may not receive continual emphasis, we plan to include it when monitoring contractor audit operations. In addition, we will encourage the regional offices to perform targeted review of the GME resident counts of selected teaching hospitals.

OIG Recommendation
Consider analyzing and comparing GME payments under the new payment methodology with actual GME costs, as part of its oversight responsibilities.

HCFA Response
HCFA nonconcurs. It is our understanding that since currently Medicare GME payments are not tied to reported costs, neither the hospital nor the intermediary have any great interest in assuring that the costs reported for GME are necessarily accurate. Therefore, the value of making the comparison of reported costs to payments is questionable.