

**Memorandum**

Date

APR 29 1994

From

June Gibbs Brown
Inspector General

Subject

Nationwide Review of the Methodology for Identifying Medicare's Share of Graduate Medical Education Costs (A-06-92-00020)

To

Bruce C. Vladeck
Administrator
Health Care Financing Administration

Attached are two copies of our final audit report entitled, "Nationwide Review of the Methodology for Identifying Medicare's Share of Graduate Medical Education Costs." We reviewed the overall reasonableness of the new methodology for reimbursing teaching hospitals under Medicare for their graduate medical education (GME) costs for the years beginning on or after July 1, 1985. We selected a random sample of 120 hospitals over a 4-year period to make this determination.

Our review of GME cost data for the sample of 120 teaching hospitals disclosed 2 components in the new GME payment system that will cause Medicare to share disproportionately in GME costs. First, the new system allows hospital cost centers with little or no Medicare patient utilization to be given increased importance in the calculation of the GME reimbursement. Those types of cost centers were given little, if any, Medicare reimbursement under the previous payment system. Second, the Medicare patient load percentage, used in the new system to compute Medicare's share of GME costs, does not accurately represent Medicare's share of the cost of services provided to Medicare patients. The patient load percentage is based only on inpatient data and is higher than Medicare's overall share of GME costs as determined under the previous more comprehensive method.

Medicare will pay more than its fair share of GME costs if changes in these two areas are not made. As a result, we are recommending that the Health Care Financing Administration (HCFA) propose legislative and regulatory changes to the new payment system to more accurately identify Medicare's share of GME costs. Our recommended changes to the new methodology will reduce Medicare's share of GME costs by \$157.3 million a year.

Page 2 - Bruce C. Vladeck

In responding to our draft report, HCFA concurred in principle with one finding but did not concur with either recommendation. The HCFA agreed that it would be appropriate to determine Medicare's share of GME costs based on the Medicare percentage of participation as was required under the prior reimbursement methodology. However, HCFA did not believe that this was an appropriate time to propose this change. The HCFA also believed that the removal of marginal cost centers would not result in actual savings because of offsetting factors. We have considered HCFA's response and continue to believe that if the GME revisions included in the Administration's health care reform package do not pass as proposed, our recommendations should be implemented so that the savings can be achieved.

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

To facilitate identification, please refer to Common Identification Number A-06-92-00020 in all correspondence relating to this report.

Attachments

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**NATIONWIDE REVIEW OF THE
METHODOLOGY FOR IDENTIFYING
MEDICARE'S SHARE OF GRADUATE
MEDICAL EDUCATION COSTS**



JUNE GIBBS BROWN
Inspector General

APRIL 1994
A-06-92-00020



Memorandum

Date **APR 29 1994**
From June Gibbs Brown
Inspector General *June Gibbs Brown*
Subject Nationwide Review of the Methodology for Identifying Medicare's Share of Graduate Medical Education Costs (A-06-92-00020)
To

Bruce C. Vladeck
Administrator
Health Care Financing Administration

The purpose of this report is to provide you with the results of our review of the new methodology for reimbursing teaching hospitals for their graduate medical education (GME) costs effective for years beginning on or after July 1, 1985. The objective of our review was to determine the overall reasonableness of the new reimbursement methodology. In accomplishing our objective, we analyzed Medicare GME payments as determined under the new system and payments determined under the former cost-reimbursement system.

Our review of GME cost data for a nationwide sample of 120 teaching hospitals disclosed 2 components in the new GME payment system that will cause Medicare to share disproportionately in GME costs. First, the new system allows hospital cost centers with little or no Medicare patient utilization to be given increased importance in the calculation of the GME reimbursement. Such marginal cost centers were given little, if any, Medicare reimbursement under the previous payment system. Second, the Medicare patient load percentage, used in the new system to compute Medicare's share of GME costs, does not accurately represent Medicare's share of the cost of services provided to Medicare patients. The patient load percentage is based only on inpatient data and is higher than Medicare's overall share of GME costs as determined under the previous more comprehensive method.

Medicare will pay more than its fair share of GME costs if changes in these two areas are not made. As a result, we are recommending that the Health Care Financing Administration (HCFA) propose legislative and regulatory changes to the new payment system to more accurately identify Medicare's share of GME costs. Our recommended changes to the new methodology will reduce Medicare's share of GME costs by an estimated \$157.3 million a year.

In responding to our draft report, HCFA officials concurred in principle with one finding but did not concur with either recommendation. The HCFA agreed that it would be appropriate to determine Medicare's share of GME costs based on the Medicare percentage of participation as was required under the prior reimbursement methodology. However, HCFA did not believe that this was an appropriate time to propose this change. The HCFA also believed that the removal of marginal cost centers would not result in actual savings because of offsetting factors. We have considered HCFA's response and continue to believe that our recommendations should be implemented and that the savings can be achieved. The full text of HCFA's comments is included as an Appendix to this report.

BACKGROUND

Many teaching hospitals are engaged in educational programs that include training graduate medical students. The training programs for physician interns, residents, and fellows are referred to as GME. Medicare 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 changed the method for determining the Medicare reimbursement of GME costs pertaining to residents. In this report, the term resident refers to residents, interns, and fellows. Previously, Medicare shared in these costs on a reasonable cost basis, referred to in this report as the cost-reimbursement method. Under that method, Medicare shared in GME costs in direct proportion to the services received by Medicare patients.

THE NEW PAYMENT SYSTEM

Under the new regulations, which are retroactive to cost reporting periods beginning on or after July 1, 1985, Medicare payments to a teaching hospital for GME costs are to be based on the hospital's average GME cost per resident for the hospital's base year.

- The base year for determining the amount per resident will be the hospital's cost reporting period beginning in Fiscal Year (FY) 1984. The amount for each resident will be computed by dividing the allowable GME costs for the base year by the average number of full-time equivalent (FTE) residents working in the teaching hospital during the base period.

- Total allowable GME costs for each cost reporting period beginning on or after July 1, 1985 and before July 1, 1986 will be determined as follows:
 - If a hospital's base period began on or after October 1, 1983 and before July 1, 1984, the base period amount per resident is updated by the Consumer Price Index for All Urban Consumers (CPI-U) and the updated amount is then increased by 1 percent. The updated amount is multiplied by the hospital's weighted actual number of FTE residents in approved GME programs, to determine total allowable GME costs.
 - If a hospital's base period began on or after July 1, 1984 and before October 1, 1984, the base period amount per resident is increased by the 1 percent alone. The updated amount is multiplied by the hospital's weighted actual number of FTE residents in approved GME programs, to determine total allowable GME costs.
- Total allowable GME costs for each cost reporting period beginning on or after July 1, 1986 will be determined by multiplying the per resident amount for the previous cost reporting period (updated for inflation using the CPI-U) by the hospital's weighted actual number of residents in approved GME programs.
- 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.

FISCAL INTERMEDIARY RESPONSIBILITIES

The HCFA assigned the responsibility of verifying the accuracy of GME costs and the resident count for the base period to each hospital's fiscal intermediary (FI). These amounts were used in calculating the average base period cost per resident. These reviews were scheduled to be completed by February 28, 1991.

The FIs were also responsible for verifying the accuracy of each hospital's count of FTE residents for cost reporting periods beginning on or after July 1, 1985 and ending on or before September 30, 1989 (referred to in this report as the payment years). The HCFA required these reviews to be completed by June 30, 1991.

SCOPE

Our audit was performed in accordance with generally accepted government auditing standards. Our objective was to determine the overall reasonableness of the new Medicare system for reimbursing hospitals for GME costs. After surveying the new system, our detailed review centered on two aspects of the new system: (1) the composition of the costs included in the calculation of the average base year cost per resident and (2) the Medicare patient load percentage.

For our analysis, we statistically selected a random sample of teaching hospitals from a universe of teaching hospitals covering 4 years of hospital cost reporting beginning October 1, 1985. We used a stratified sampling approach and randomly selected 30 hospitals from each year, for a total of 120 hospitals. The data for our universe was obtained from the Hospital Cost Reporting Information System (HCRIS) data base maintained by HCFA and from HCFA's list of each teaching hospital's average base year cost per resident. Exhibit I contains detailed information on the results of our review of this sample. Exhibit II contains the details of our determination of a universe of teaching hospitals and our sample methodology.

To accomplish our objective, we obtained from the FIs the most current base year and payment year cost reports for the 120 sampled hospitals. We used audited data when available. Otherwise, we used information reported to the FIs by the hospitals. We did not verify unaudited data. Using these cost reports, we analyzed the amount of Medicare reimbursement for GME which would be paid to each hospital under the new payment system, as well as under the previous system, for the four hospital cost reporting periods included in our review. In making this analysis, we quantified the effect of two modifications which we identified as needing to be made to the new payment system.

The objective of this financially-related audit did not require a review of the internal control systems of either the sampled hospitals or their FIs. Our audit was performed in our Oklahoma City field office and was concluded during FY 1993.

RESULTS OF REVIEW

Our review of the methodology for determining the Medicare reimbursement of GME costs identified two components in the new payment system that will cause

Medicare to share disproportionately in these costs. Both components allow Medicare reimbursement to be based, in part, on GME costs that are not related or have a very small relationship to the services provided to Medicare patients. We estimate that the changes we propose will result in annual savings of \$157.3 million per year to the Medicare program.

One component involves the inclusion of marginal cost centers, those involving little or no Medicare patient utilization, in the determination of the allowable GME costs for the base year. Marginal cost centers were given little, if any, Medicare reimbursement under the previous payment system.

The other component is the Medicare patient load percentage, which is used in determining Medicare's share of GME costs in the payment years. This new percentage does not accurately represent Medicare's share of the cost of services provided to Medicare patients. The patient load percentage is based only on inpatient data and is higher than Medicare's overall share of GME costs as determined under the previous more comprehensive method, which also included ancillary and outpatient data.

Medicare will pay more than its fair share of GME costs if changes are not made to these two components. We are proposing modifications to the new payment system which will eliminate these problems and result in a more accurate and representative share of GME costs charged to Medicare.

INCLUSION OF MARGINAL COST CENTERS (BASE YEAR COMPONENT)

Under the new payment methodology, cost centers with less than 1 percent Medicare patient utilization or previous Medicare reimbursement were included in the calculation of the average base year cost per resident. We identified this condition for 57 of the 120 hospitals in our sample. Including these cost centers in the new payment methodology will result in additional Medicare costs of \$4.3 million for the 57 hospitals during the 4 years of hospital cost reporting covered by our review. Projected to the teaching hospitals included in our universe for this time period, the added cost will be \$156.9 million.

In determining the GME costs used to calculate a hospital's average cost per resident for the base year, the GME costs allocated to a hospital's nursery, research, and other nonreimbursable cost centers are excluded from consideration. These exclusions are made because the activities in these cost

centers are either not related to patient care or are not specifically related to Medicare patients.

There are other cost centers which, while they have GME costs allocated to them, have less than 1 percent or no Medicare patient utilization. We identified cost centers that received less than 1 percent Medicare reimbursement under the previous cost-reimbursement system. We classified those marginal cost centers into the following four groups:

- Delivery and Labor Room
- Pediatrics
- Dental
- Other

Under the previous cost-reimbursement method, there was little or no allocation of those GME costs to Medicare. All GME costs allocated to those cost centers, however, are included in the costs used to calculate a hospital's base year cost per resident under the new methodology.

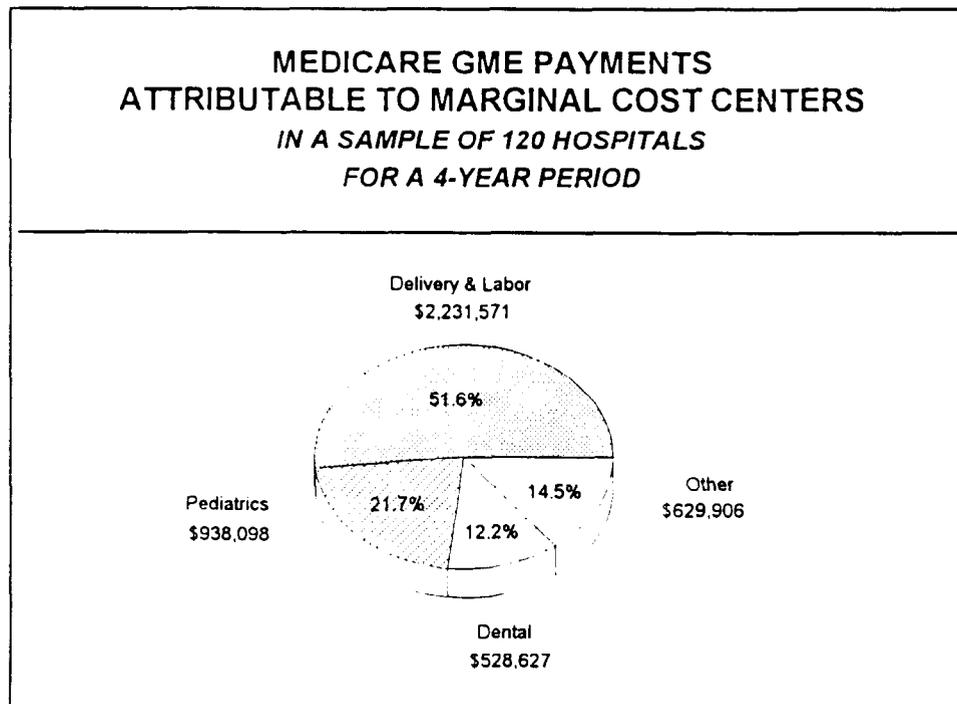


Figure 1

As previously stated, Medicare GME payments to 57 of the 120 hospitals in our sample will be increased by \$4.3 million over 4 years because of the inclusion of marginal cost centers. **Figure 1** shows that of this amount, \$2.2 million, or 51.6 percent, pertained to delivery and labor room cost centers and \$938,098, or 21.7 percent, was applicable to pediatric cost centers. It is possible that younger, disabled patients who are eligible for Social Security benefits, and therefore Medicare, would occasionally need these services. However, most Medicare patients are 65 or older, and it is unlikely that delivery and labor room or pediatric hospital services would be provided to Medicare patients with any degree of frequency. For these reasons, the rate of Medicare patient utilization in these cost centers was either zero or less than 1 percent for the hospitals represented by our sample for the period of time under review.

Figure 1 also shows that dental cost centers totaled \$528,627, or 12.2 percent, of the \$4.3 million of additional costs. Most dental services are not covered by the Medicare program, which results in little or no Medicare patient utilization in dental cost centers.

Costs of other marginal cost centers totaled \$629,906, or 14.5 percent, of the \$4.3 million. These centers involved psychiatric services, rehabilitation services, family practice clinics, and other services. However, in each case, Medicare patient utilization was either zero or less than 1 percent.

By contrast, Medicare patient utilization of marginal cost centers under the new payment system will be determined by use of the Medicare patient load percentage of the specific hospital, which considers only inpatient data. This is not a comprehensive measure of the actual Medicare patient utilization of a hospital's services since Medicare reimbursement for marginal cost centers will be based on the hospital's Medicare patient load percentage which averaged 36 percent for the 57 hospitals we reviewed that had marginal cost centers.

The effect of including the marginal cost centers in the calculation of the average base year cost per resident, and then multiplying that amount by the inflation factor, the resident count, and the Medicare patient load percentage, can be illustrated by the data from a hospital included in Year 4 of our sample. This hospital had \$22,504,215 in base year GME costs and an average base year cost per resident of \$61,509. The \$22,504,215 included \$861,215 of GME costs allocated to cost centers having less than 1 percent or no Medicare utilization or reimbursement in the base year. When we excluded the cost of these marginal cost centers from total base year costs, the cost per resident dropped from

\$61,509 to \$59,155. This change reduced Medicare's reimbursement of GME costs at this hospital, which had 460.4 residents in Year 4, by \$470,875 for that year.

Based on the results of our statistical sample of 120 hospitals nationwide, we estimate that the inclusion of marginal cost centers in the new Medicare reimbursement methodology will cost \$156.9 million for the 4 years of hospital cost reporting covered by our review. This results in an annual average cost of over \$39.2 million.

A HCFA official told us that the new GME legislation provided no basis to exclude marginal cost centers. The official further stated that these cost centers were included in the calculation of the average base year cost per resident because they traditionally had GME costs allocated to them. However, although GME costs have traditionally been allocated to these cost centers, Medicare's share has traditionally been less than 1 percent of these costs and not the total hospital's Medicare utilization rate for inpatient services.

We noted during our review that HCFA excluded some cost centers from consideration under the new system because of low or no Medicare usage, such as nursery and research centers, although this is not addressed in the law. We believe that additional centers need to be excluded for the same reasons that the nursery and research centers were excluded.

INCREASED RATE OF MEDICARE PARTICIPATION (PAYMENT YEAR COMPONENT)

The Medicare patient load percentage, under the new methodology for computing Medicare's share of GME costs, does not accurately represent Medicare's share of the cost of services provided to Medicare patients. This percentage is based only on inpatient data and, for 96 of the 120 hospitals in our sample, is higher than the Medicare rate of reimbursement used under the prior GME cost-reimbursement method. For the 120 hospitals in our sample, the use of the Medicare patient load percentage will increase Medicare's share of GME costs by \$13.8 million for the 4 years of hospital cost reporting covered by our review. Projected to the teaching hospitals included in our universe for this period, the added cost from using this type of percentage, rather than the previous and more comprehensive method for computing Medicare's share, will be \$502.4 million.

Under the new payment system, GME costs are multiplied by a Medicare patient load percentage to determine Medicare's share of these costs. The Medicare patient load percentage is computed by dividing the Medicare inpatient days by total inpatient days.

Since this approach considers only inpatient data, it is not as comprehensive and as representative as the former system, which used many different sharing ratios computed for specific centers. Use of the Medicare patient load percentage results in a different Medicare share for routine inpatient service costs, ancillary service costs, outpatient service costs, and other reimbursable costs than as provided under the prior cost-reimbursement method. For example:

- Under the previous system, routine service costs were allocated to the Medicare program as a separate cost per inpatient day for each routine service cost center. Medicare's share was based on the proportion of Medicare inpatient days for each cost center. In most instances, Medicare's percentage of costs reimbursed in the routine service cost centers was higher than the overall Medicare patient load percentage.
- Ancillary services, outpatient services, and other reimbursable services were previously allocated to Medicare based on the relationship of actual costs to billed charges. That percentage was then applied to the charges billed to Medicare patients for those services. In most instances, that percentage was lower than the Medicare patient load percentage.

We believe that Medicare's share of the GME costs under the new payment system should be computed on a more representative and accurate basis using these former principles, rather than being based solely on inpatient data.

Figure 2 provides a comparison of the average Medicare patient load percentage to the average Medicare percentage of participation based on reasonable cost data. The comparison applies to our sample of 120 hospitals selected from the 4 years of hospital cost reporting included in our review.

Figure 2 shows that the Medicare patient load percentage is higher every year when compared to the reasonable cost percentage, ranging from a difference of 4 percentage points in Year 2 to a 7 percentage point difference in Year 4. To determine the effect of the higher Medicare patient load percentage on GME reimbursements to the 120 sample hospitals, we computed the Medicare reimbursement based on the Medicare patient load percentage and also on the more comprehensive rate of participation based on the previous cost

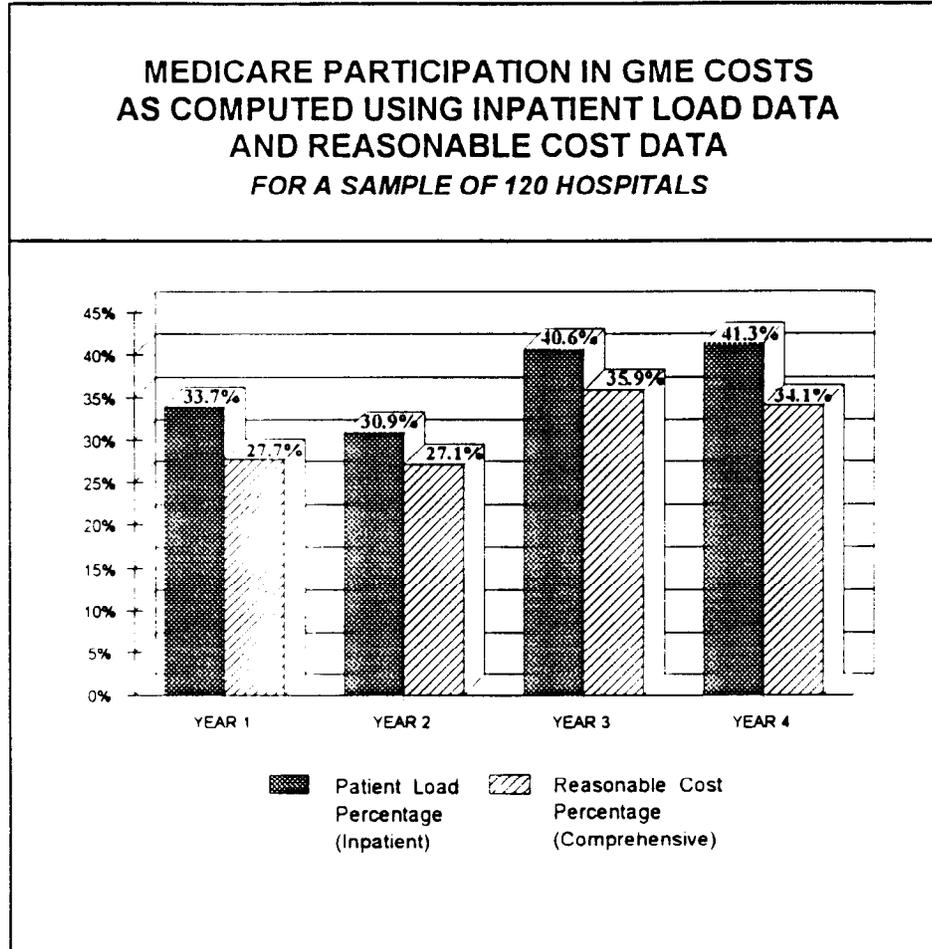


Figure 2

reimbursement principles. Use of the patient load percentage increased Medicare's share of GME costs from \$94.9 million to \$108.7 million. This represents an increase in GME payments of \$13.8 million, or 14.5 percent, during the 4 years of hospital cost reporting covered by our review.

Based on the results of our sample, we estimate that use of the Medicare patient load percentage will result in added costs of \$502.4 million during this 4-year period for all teaching hospitals included in our universe.

A HCFA official told us that HCFA implemented the new GME legislation as the Congress wrote it, and the Medicare patient load percentage was specifically provided for in the law. Any change in the use of this percentage would therefore require legislation.

EFFECT OF BOTH MODIFICATIONS

To increase the accuracy and reasonableness of the determination of Medicare GME payments under the new system, we believe that HCFA should adopt both of the payment modifications described in this report. We calculated the combined effect of both modifications, which are interrelated, on the Medicare program (See Exhibit I). For our sample of 120 hospitals, these modifications would have reduced Medicare GME payments under the new system by \$17.3 million for the 4 hospital cost reporting periods covered by our review. Projected to the teaching hospitals in our universe, the total savings to Medicare would have been \$629.2 million for those 4 years, or an average of about \$157.3 million per year.

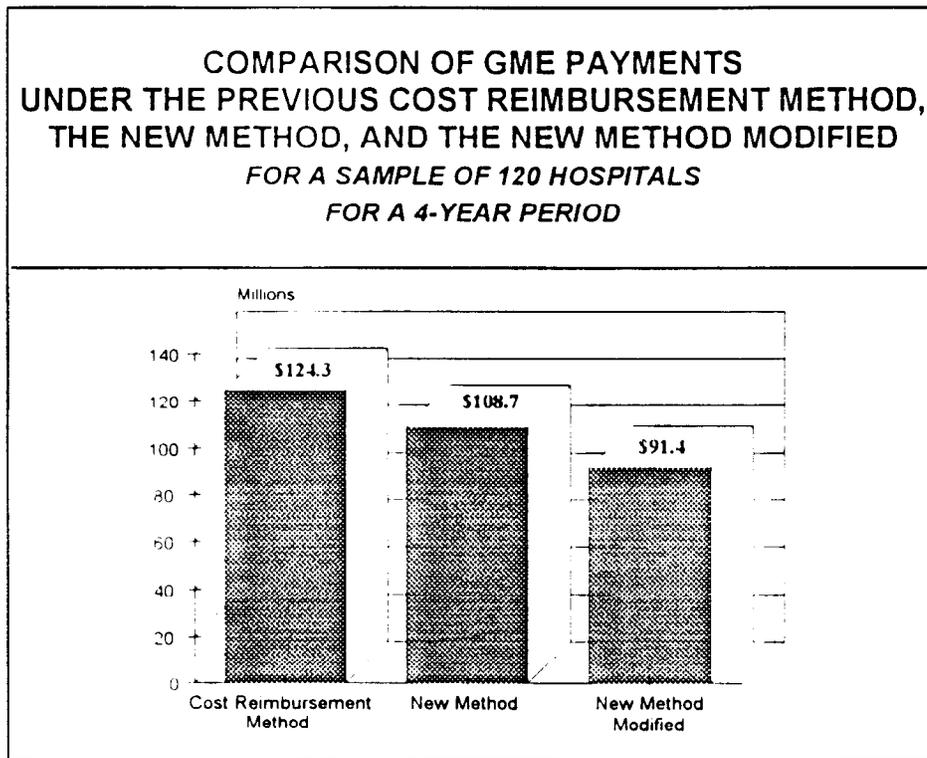


Figure 3

Figure 3 compares the Medicare GME payments to the 120 sample hospitals under the new payment method, under the previous cost-reimbursement method, and under the new payment method as modified to exclude marginal cost centers and to use the previous reasonable cost approach in computing the Medicare share.

The modified new system would have resulted in Medicare reimbursements of \$91.4 million, compared to \$108.7 million reimbursable under the new unmodified payment system, or \$124.3 million reimbursable under the prior cost-reimbursement system. The \$17.3 million difference between the new unmodified payment system and the modified system which we propose represents a 16 percent reduction in GME payments.

EFFECT OF APPEALS OF GME COST DETERMINATIONS

The costs shown in **Figure 3** for the new payment system and the new payment system as modified could be affected by about 550 pending appeals from teaching hospitals. Medicare payments under the new system are based on the results of FI audits of hospitals' base year costs and resident counts. These audits resulted in significant amounts of claimed GME costs being disallowed by the FIs.

Teaching hospitals have made about 550 appeals covering provisions of the new regulations or various aspects of the FIs' base year audits. According to HCFA officials, all 550 appeals were active and unresolved at the time of our field work.

Depending on the outcome of these appeals, the determinations of hospital allowable base year GME costs, and the subsequent Medicare reimbursement based on that data, could be affected significantly. This in turn would affect the cost and savings amounts cited in this report for both the new method and the modified new method. For example, if some costs disallowed by the FIs are reinstated, the savings shown in **Figure 3** for the new method as compared to the prior cost-reimbursement method would be reduced. In that case, the savings from modifying the new method as proposed in this report would be greater than the estimates we have cited.

CONCLUSIONS AND RECOMMENDATIONS

In the event that the proposed changes to GME in the Administration's health care reform package are not enacted, we recommend that HCFA reevaluate the new payment system. We believe that modifying the new payment system to exclude marginal cost centers from Medicare participation and replacing the Medicare patient load percentage with the former method for computing Medicare's share of GME costs would result in a more representative and accurate sharing of GME costs by Medicare. The other components of the new payment system would remain unchanged.

We estimate that the proposed modifications would result in average annual savings of \$157.3 million for the 4 years of hospital cost reporting covered by our review. Similar savings will occur in future years and will gradually increase due to the effect of inflationary adjustments. Further, if the disputed audits are resolved in favor of the hospitals, the savings from making these modifications should be greater.

We recommend that HCFA:

1. Revise the GME regulations prospectively to require the identification and removal from allowable GME base year costs of GME costs allocated to cost centers with little or no Medicare patient utilization.
2. Submit a legislative proposal that will base Medicare's share of GME costs in future years on Medicare's percentage of participation in GME costs as determined under the previous cost-reimbursement method, or a similarly comprehensive method.

COMMENTS FROM HCFA AND OFFICE OF INSPECTOR GENERAL'S (OIG) RESPONSE

Although HCFA officials did not agree to implement our recommendations, they did concur that it would be appropriate to determine Medicare's share of GME costs based on the Medicare percentage of participation as was required under the prior reimbursement methodology. The HCFA's comments are summarized below and are followed by an OIG response. The full text of HCFA's comments is included as an Appendix to this report.

Marginal Cost Centers

The HCFA did not believe that the GME regulations should be revised prospectively to require the identification and removal of cost centers with little or no Medicare patient utilization from allowable GME base year costs. The HCFA stated that while this recommendation would result in a lower base year cost per resident, the Medicare utilization rate would increase due to the removal of those cost centers from the calculation of the Medicare patient load percentage in the following payment years. As a result, HCFA stated that there would be little or no Medicare savings. Also, HCFA stated that a significant amount of administrative funds may be needed to implement this recommendation.

OIG's Response

We continue to believe that there would be significant savings from removing marginal cost centers from base year costs. First, the inclusion of marginal cost centers inflates the average cost per resident for the base year. Second, as to the payment years, the Medicare patient load percentage is presently calculated only from those cost centers having inpatient day statistics, which only involve routine service cost centers. Seventy-five percent of the marginal cost centers identified in **Figure 1** were ancillary service cost centers which do not have inpatient day statistics associated with them. The ancillary service cost centers, therefore, were not incorporated into the Medicare patient load percentage. Thus, the Medicare utilization rate would not increase in the future from the removal of those centers, as they were already excluded.

As to the need for additional administrative funds, we are recommending that the GME regulations be revised prospectively, and not retroactively, through rebasing the GME payments on a new base year. We recognize that additional administrative costs would be incurred to do this. However, we believe that our review shows that the benefits in savings to Medicare would outweigh the additional costs involved.

Rate of Medicare Participation

The HCFA agreed that it would be appropriate to base Medicare's share of GME costs on utilization in each cost center rather than only on inpatient days. However, HCFA replied that it does not believe that a legislative proposal to change the rate of Medicare participation is appropriate at this time due to the major changes that may result from the Administration's health care reform proposals.

OIG's Response

Regardless of the method that is used in determining total GME costs, there is a need to determine Medicare's share of those costs in a fair and equitable manner. We believe that our recommendation accomplishes that goal. Therefore, we believe that if the GME provisions included in the Administration's health care reform package do not pass as proposed, our recommendations should be implemented.

EXHIBITS

EXHIBIT I

**COMPARISON OF GME COSTS REIMBURSED BY MEDICARE
UNDER THE NEW PAYMENT SYSTEM AND
AS PAYABLE WITH PROPOSED MODIFICATIONS TO THE NEW SYSTEM**

*Based on a Review of 120 Hospitals
for a 4-Year Period*

	Amount (in Millions)
MARGINAL COST CENTERS (BASE YEAR MODIFICATION)	
Total Reimbursed--New Payment System	\$108.7
Amount Reimbursed After Removing Marginal Cost Centers From Base Year Calculations	<u>104.4</u>
Savings to Medicare - Sample Hospitals	\$ 4.3
Savings to Medicare - Projected to Universe	<u>\$156.9</u>
MEDICARE PATIENT LOAD PERCENTAGE (PAYMENT YEAR MODIFICATION)	
Total Reimbursed--New Payment System	\$108.7
Amount Reimbursed After Replacing the Medicare Patient Load Percentage	<u>94.9</u>
Savings to Medicare - Sample Hospitals	\$ 13.8
Savings to Medicare - Projected to Universe	<u>\$502.4</u>
BOTH MODIFICATIONS COMBINED	
Total Reimbursed--New Payment System	\$108.7
Amount Reimbursed After Implementing Both Modifications Combined	91.4
Savings to Medicare - Sample Hospitals	<u>\$ 17.3^a</u>
Savings to Medicare - Projected to Universe	<u>\$629.2^a</u>
Average Savings Per Year	<u>\$157.3</u>

^a The savings resulting from the base year modification (\$4.3 million) and the payment year modification (\$13.8 million) were first computed independently of each other to illustrate the effect of each individual change. When these two modifications are handled in one combined calculation, the Medicare savings are less than adding together the effect of the individual modifications. The combined calculation results in savings of \$17.3 million instead of \$18.1 million (\$4.3 million + \$13.8 million). The projected savings for all hospitals is similarly affected.

**REVIEW OF THE METHODOLOGY FOR IDENTIFYING
MEDICARE'S SHARE OF GRADUATE MEDICAL EDUCATION COSTS**

SAMPLE METHODOLOGY

Sample Objective: To evaluate the reasonableness of the new GME payment system and to determine the cost differential to Medicare resulting from changing certain components of the new system.

Target Population: The universe consists of those teaching hospitals that claimed GME costs on their Medicare cost reports in each of 4 prospective payment system (PPS) years after July 1, 1985, and for which an FI established an average base year cost per resident, as required by the new GME regulations. The 4 years covered by our review were PPS Years 3 through 6. The period covered by these years is October 1, 1985 through September 30, 1989.

The data for our universe was obtained from the HCRIS data base maintained by HCFA and from HCFA's list of each hospital's average base year cost per resident. We matched the GME hospitals on the HCRIS data base to HCFA's list of each hospital's base year cost per resident to obtain a universe of teaching hospitals from which to sample. This match was made for each of the 4 years. Our universe from which the nationwide sample of hospitals was taken consisted of the following:

PPS Year 3	10/1/85 - 9/30/86	1,104 Hospitals
PPS Year 4	10/1/86 - 9/30/87	1,112 Hospitals
PPS Year 5	10/1/87 - 9/30/88	1,108 Hospitals
PPS Year 6	10/1/88 - 9/30/89	1,071 Hospitals

Individual hospital cost reporting periods could begin anytime during the period covered by each PPS year. Although a selected hospital's cost reporting period may extend beyond the end of a PPS year, the hospital was still considered to be a part of that same PPS year for HCFA's reporting purposes.

We excluded from our audit universe those hospitals on HCFA's list which had a base year cost per resident of zero and total GME costs of less than \$1 million. For those hospitals with a base year cost per resident of zero and total GME costs of \$1 million or more, we contacted the applicable FI to determine whether a final base year cost per resident greater than zero would be established. We reinstated in our audit universe any of those hospitals that the FI confirmed would have a base year cost per resident above zero.

Sampling Frame:

Each of the 4 PPS years was considered a strata for sample selection. The sampling frame was the hospitals cited above for each year. The sample was the hospitals selected in each strata. For each sample hospital, we obtained the hospital's base year cost report, which supported the average base year cost per resident, and the cost report applicable to the PPS year for which the hospital was selected.

Sampling Unit:	<p>The sampling unit was a hospital, as represented by its annual Medicare cost report. For the one hospital in our sample which did not use the Medicare cost report for settlement of GME costs, we treated it as having no difference in cost between the old and the new GME payment systems and no cost differences resulting from the modifications we propose for the new system. This hospital was a waiver hospital which was not under PPS. Hospitals on PPS waivers did not use the Medicare cost report to settle GME costs.</p>
Sample Size:	<p>A sample of 30 hospitals was selected from each of the 4 strata, resulting in a sample of 120 hospitals.</p>
Characteristics Measured:	<p>We determined the amount that each sample hospital was to be paid under the new payment system and the amount that the hospital was reimbursed under the prior cost-reimbursement method. In addition, we calculated the difference in GME payments which would occur if certain modifications were made to the new payment system.</p>
Estimation Methodology:	<p>We projected the additional cost to Medicare resulting from certain components of the new system as compared to the deletion or replacement of those components.</p> <p>After completing our review of the 120 sample hospitals, we projected the sample results to our universe of teaching hospitals. Since this report is designed to demonstrate savings from prospective change, and not to recover past costs, we have used the point estimate to demonstrate added costs or savings. Our projections, which are included in Exhibit I, have the following precision at the 90 percent confidence level:</p>

Base Year Modification	Plus or Minus 30.22 Percent
Payment Year Modification	Plus or Minus 29.90 Percent
Combined Modification	Plus or Minus 27.68 Percent

Accordingly, concerning our estimate that the two GME payment system modifications cited in this report could, on a combined basis, have saved \$629.2 million over 4 years, there is a 90 percent probability that the actual savings would fall within a range from \$455.0 million to \$803.4 million. There is a 95 percent probability that the savings would have been at least \$455.0 million and a 5 percent probability that they would exceed \$803.4 million.

COMMENTS BY THE
HEALTH CARE FINANCING ADMINISTRATION



DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care
Financing Administration

Memorandum

Date: NOV 2 1993

From: Bruce C. Vladeck, Administrator 

Subject: Office of Inspector General (OIG) Draft Report: Nationwide Review of the Methodology for Identifying Medicare's Share of Graduate Medical Education (GME) Costs (A-06-92-00020)

To: Bryan B. Mitchell
Principal Deputy Inspector General

We reviewed OIG's draft report examining the new payment system for reimbursing GME costs to teaching hospitals under Medicare.

OIG recommends that the Health Care Financing Administration (HCFA) revise the GME regulations prospectively to require the identification and removal of cost centers with little or no Medicare patient utilization from allowable GME base year costs. We do not concur with this recommendation. OIG's recommendation would result in a lower per resident amount by reducing a hospital's GME costs. However, Medicare's utilization rate would increase due to the removal of inpatient days from those cost centers with little or no Medicare utilization from the Medicare patient load calculation, thereby resulting in little or no Medicare savings.

It should also be noted that a significant amount of administrative funds may be needed to adjust base period costs and recalculate each teaching hospital's GME payment rate. Each of the base period cost reports of the approximately 1,250 hospitals would need to be reviewed and, in some instances, additional audit procedures would need to be performed to obtain accurate data for the recalculations.

OIG also recommends that HCFA submit a legislative proposal that will base Medicare utilization on individual cost centers with GME costs as determined under the previous cost-reimbursement methodology. We agree it is appropriate that Medicare's share of GME be based on utilization in each individual cost center, as was the basis in the prior methodology, rather than on inpatient days. However, we do not believe a legislative proposal would be appropriate at this time. As a part of Health Care Reform, the Administration has called for major changes to existing GME programs and system for payment. While we agree with the intent of the recommendation, we believe it is not appropriate to propose this change in the midst of current reform efforts. Thus, we do not concur with this recommendation.

Thank you for the opportunity to review and comment on this draft report. Please advise us if you would like to discuss our position on the report recommendations at your earliest convenience.