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Health, Education and Human Services Division

B-276272

March 3, 1997

The Honorable John R. Kasich  
Chairman, Committee on the Budget  
House of Representatives

Subject: Medicaid: Graduate Medical Education Payments

Dear Mr. Chairman:

The federal government, primarily through its Medicare program, is the largest single payer to teaching hospitals for the costs they incur training medical residents.<sup>1</sup> Medicare makes graduate medical education (GME) payments based on specific formulas applied uniformly to all qualifying teaching hospitals. GME payments cover the period of formal clinical training that follows graduation from medical school during which new physicians—medical residents—are prepared to practice in a chosen specialty area. This training usually occurs in teaching hospitals and is supervised by faculty physicians. To operate and maintain such physician training programs, teaching hospitals incur direct and indirect costs. In fiscal year 1996, Medicare GME payments totaled an estimated \$6.7 billion.

States may also choose to pay for GME through their Medicaid programs, and these expenses are supposed to be shared with the federal government. However, unlike Medicare, for which the amount of GME payments is well documented, not much is known about Medicaid's support of GME. For this reason, you asked us to provide you with information on (1) existing studies that estimate overall Medicaid expenditures for GME; (2) the amount of Medicaid GME payments for the 10 states with the largest overall Medicaid expenditures, and the basis for determining these payments; and (3) how Medicaid and Medicare coordinate their GME payments to avoid duplication.

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<sup>1</sup>The Department of Veterans' Affairs and the Department of Defense also contribute to graduate medical education. In addition, while private insurers usually do not make payments specifically designated for graduate medical education, part of the amount they pay may, in fact, be used for education.

To answer these questions, we reviewed available literature on GME and Medicaid and contacted Medicaid officials from the 10 states with the largest total Medicaid expenditures in fiscal year 1995. These 10 states accounted for close to 60 percent of total Medicaid expenditures during this period. We discussed hospital reimbursement methodologies with officials from the Health Care Financing Administration (HCFA) and these 10 states. We also obtained from these states estimates of Medicaid GME payments for the most recently available time period.<sup>2</sup> Finally, we obtained and reviewed the 10 states' Medicaid plans and discussed with state and HCFA officials how Medicare and Medicaid GME programs are coordinated.<sup>3</sup> We performed our review between December 1996 and February 1997 in accordance with generally accepted government auditing standards.

In summary, although the exact amount of Medicaid GME payments is unknown, two studies estimated these expenditures at about \$1.3 billion and \$2.2 billion in fiscal year 1995. We also found that 8 of the 10 states with the largest overall Medicaid expenditures in fiscal year 1995 provided support to teaching hospitals for costs associated with GME. These states used different methods to calculate their GME payments, and their annual estimated expenditures for GME, which they generally considered rough approximations, ranged from a low of \$17 million to a high of \$870 million. Regarding whether programs coordinate their GME payments, HCFA officials told us that HCFA does not determine whether Medicaid GME payments duplicate those made by Medicare. On the other hand, officials from the eight states told us that their payments were intended to cover Medicaid's share of GME. We could not independently determine from the documents reviewed if duplication exists because states' plans often did not contain sufficient detail explaining their Medicaid GME payment systems.

## BACKGROUND

The direct medical education (DME) costs of providing GME include salaries and fringe benefits for residents and teaching physicians, the cost of conference and classroom space, the cost of equipment and supplies used for instructional

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<sup>2</sup>The states we contacted operate on a variety of calendar and fiscal years. Therefore, the data they reported often cover different time periods.

<sup>3</sup>Each state operates its Medicaid program under a state plan that HCFA must approve for compliance with current Medicaid law and regulations. Among other things, these plans describe how the state reimburses medical providers.

purposes, and allocated overhead costs. Indirect medical education (IME) costs are the higher patient care costs that teaching hospitals are thought to incur because of such factors as increased diagnostic testing, increased number of procedures, higher staff ratios, and increased recordkeeping associated with training.

Medicare and most state Medicaid programs make payments to teaching hospitals for GME. Other payers generally agree to pay hospitals a given amount for each service provided with no explicit recognition of GME. Hospitals may include the cost of GME when determining their prices for these services. Medicare DME payments are based on hospitals' fiscal year 1984 identified DME costs, while Medicare IME payments are calculated based on hospitals' ratio of residents to beds as well as Medicare prospective payment rates.

In contrast, states are free to design their own Medicaid hospital payment systems, and significant variation exists among them. As with Medicare, some states specifically recognize both DME and IME costs in their payment systems. Other states, while not designating a specific GME payment, base their payments to hospitals on cost data that reflect GME costs. In these states, isolating the actual amount of GME payments is often difficult.

Some states also pay managed care organizations a capitated rate for Medicaid beneficiaries' care. Depending upon how the capitated rate is determined, a portion of it may be for GME. Determining this amount with precision, however, is often difficult.

**PRIOR ESTIMATES OF TOTAL  
MEDICAID GME PAYMENTS**

While the total amount of actual Medicaid payments for GME is not readily available, recent estimates indicate that the combined payments for DME and IME are substantial. HCFA does not track individual states' or nationwide Medicaid expenditures on GME. However, the Intergovernmental Health Policy Project (IHPP) and the National Association of Children's Hospitals estimated

fiscal year 1995 expenditures for Medicaid GME. These estimates differ considerably: they are about \$1.3 and \$2.2 billion, respectively.<sup>4</sup>

TOP 10 STATES' MEDICAID  
GME PAYMENTS

We contacted the 10 states with the highest overall Medicaid expenditures in fiscal year 1995 and asked them to provide us with the amount of Medicaid funds paid to teaching hospitals for GME. We found that eight states reimbursed teaching hospitals for a portion of their resident training costs; their estimates of GME payments for their most recently available calendar or fiscal year ranged from at least \$17 million to \$870 million. These amounts, however, typically represented rough estimates, and officials from these states were often unable to identify their Medicaid programs' total GME expenditures. (The enclosure that accompanies this letter describes the amounts of, and methods used for, determining the 10 states' Medicaid GME payments.)

Estimating state-specific or nationwide Medicaid GME expenditures is difficult for several reasons. First, neither Medicaid law nor regulations requires states to report the amount paid for GME. Also, a number of states include GME with other costs when determining their payment rates to hospitals treating Medicaid patients. Thus, states may be unable to identify the portion of their payment attributable solely to GME. Further complicating efforts to compile such an estimate is the fact that some states have recently changed their Medicaid GME payment systems.

Most of the eight states that paid Medicaid GME based their reimbursement at least in part on Medicare GME payment principles. Medicare makes separate DME and IME payments to teaching hospitals according to uniformly applied formulas. The Medicare DME payment is calculated using each hospital's fiscal year 1984 DME cost per resident, adjusted for inflation.<sup>5</sup> The payment is further adjusted to reflect the hospital's current number of full-time-equivalent residents and Medicare's share of total inpatient days. The Medicare IME

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<sup>4</sup>An official associated with the IHPP survey characterized its \$1.3 billion estimate as conservative because of the methodology used. Further, neither estimate includes the amount of GME payments typically made to managed care organizations as part of their capitated payment.

<sup>5</sup>Payments are determined for the hospital's cost-reporting period beginning on or after October 1, 1983, but before October 1, 1984.

payment is an adjustment to the rates paid under Medicare's prospective payment system that is based on a formula that includes a hospital's ratio of total medical residents to total beds.<sup>6</sup>

Several of the states we reviewed modify the Medicare formulas to determine their Medicaid GME payments. For example, in lieu of using the DME cost per resident from fiscal year 1984, New York and Michigan use 1981 and 1989, respectively, as their base years. Similarly, Ohio modifies the Medicare IME formula by substituting a higher multiplier when calculating its Medicaid IME payment. This change results in a higher IME payment than if the Medicare formula were followed exactly. Further, not all states make specific payments for both types of GME. Seven of the eight states reimburse teaching hospitals for both DME and IME costs, while one state reimburses these hospitals for DME costs only.

The two states we contacted that do not specifically recognize GME in their Medicaid hospital payment methods may support teaching hospitals in other ways. California's Medicaid program does not make separate GME payments to teaching hospitals. However, because Medicaid reimbursement rates are negotiated with each hospital on the basis of its costs, those hospitals that may have higher costs because of teaching programs could receive higher Medicaid reimbursements. Also, although Illinois eliminated specific Medicaid GME payments to hospitals in state fiscal year 1996, it continues to support the higher costs of teaching hospitals by paying some of these hospitals higher rates for certain procedures or through lump sum payments for a number of specialty services.

#### COORDINATION WITH MEDICARE GME

Officials from the eight states that paid Medicaid GME told us that their states' Medicaid payments were intended to pay for Medicaid's share of the costs associated with training physicians. This is similar to Medicare GME payments, which are intended to compensate hospitals for Medicare's share of these costs. Because some beneficiaries qualify for both Medicaid and Medicare,

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<sup>6</sup>In 1989, we reported on problems with the IME formula (Medicare: Indirect Medical Education Payments Are Too High, GAO/HRD-89-33). The Prospective Payment Assessment Commission has since reported that Medicare IME payments are still too high.

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however, it is possible that they could be counted twice in arriving at the amount of a hospital's GME payments.

HCFA's review of state Medicaid reimbursement plans does not include a determination of whether Medicaid GME payments duplicate those made by Medicare. Rather, HCFA reviews state reimbursement plans that include GME to determine whether GME reimbursement is reasonable, is linked to Medicaid services or some other proxy for Medicaid's share of hospital operations, and remains within certain statutory limitations. Because the state plans we obtained did not always include sufficient detail about counting beneficiaries eligible for both Medicaid and Medicare, we could not always determine whether Medicaid GME payments duplicated those of Medicare.

AGENCY COMMENTS

We provided a draft of this report to HCFA program-level officials, and we have incorporated their technical suggestions where appropriate.

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As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this letter until 30 days after its date. At that time, we will send copies to the Secretary of Health and Human Services and other interested parties.

If you have any questions about the matters discussed in this letter, please call me on (312) 220-7600. Staff who contributed to this review include Paul Alcocer, Susan Thillman, and Daniel Lee.

Sincerely yours,



Leslie G. Aronovitz  
Associate Director, Health  
Financing and Systems Issues

Enclosure

ENCLOSURE

ENCLOSURE

**STATE ESTIMATES OF MEDICAID GME EXPENDITURES AND RELEVANT  
REIMBURSEMENT METHODOLOGIES**

**CALIFORNIA**

California does not make specific reimbursements to teaching hospitals for GME through its Medicaid program.

FLORIDA

Period Covered: State fiscal year 1996 (07/1/95 to 06/30/96)

Estimated GME Expenditures:Fee-for-service:

Direct medical education:	No estimate
Indirect medical education:	No estimate
Disproportionate share hospital program <sup>7</sup>	\$17.9 million
Managed care:	No estimate
Total GME expenditures:	At least \$17.9 million

Payment Methodology

The Florida Medicaid program pays six teaching hospitals in the state, which must meet several qualifying criteria, quarterly payments for GME as part of its Disproportionate Share Hospital (DSH) program. The total amount these six hospitals receive is based on legislative appropriations and is allocated among them according to a statutory formula. In addition, all teaching hospitals are reimbursed for GME to the extent that direct medical education (DME) and indirect medical education (IME) costs are included in the daily rates paid to them by the state. The state, however, has never calculated the GME component of these rates. Similarly, although GME is included in the capitated payments the state makes to managed care organizations, the state has never tracked this amount and is unable to provide an estimate of what the total GME amount is.

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<sup>7</sup>Besides payments to reimburse medical providers for services rendered, states are required under DSH to make additional Medicaid payments to hospitals that serve large numbers of Medicaid and other low-income patients.

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ILLINOIS

Beginning in state fiscal year 1996 (7/1/95), the Illinois Medicaid program stopped specifically reimbursing teaching hospitals for GME. Previously, the state had reimbursed teaching hospitals for both DME and IME costs. In its last year of funding, the Medicaid program reimbursed teaching hospitals an estimated \$165 million for GME. This estimate does not include the amount of GME payments made to managed care organizations as part of their capitated payments.

MASSACHUSETTS

Period Covered: State fiscal year 1995 (10/1/94 to 9/30/95)

Estimated GME Expenditures:

Fee-for-service:

Direct medical education:	\$25.0 million
Indirect medical education:	\$0

Managed care: No estimate

Total GME expenditures: At least \$25.0 million

Payment Methodology

The Massachusetts Medicaid program specifically reimburses hospitals for DME costs only. The DME payment is calculated each year using each hospital's reported GME costs and Medicaid's share of total discharges. The state makes DME payments to hospitals as per-discharge add-ons. Although the capitated rates paid to managed care organizations are calculated using historical data that include GME costs, GME costs have never been distinctly identified.

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MICHIGAN

Period Covered: Calendar year 1995

Estimated GME Expenditures:

Fee-for-service:

Direct medical education:	\$ 84.3 million
Indirect medical education:	<u>82.0 million</u>
	\$166.3 million
Managed care:	\$45.0 million
Total GME expenditures:	\$211.3 million

Payment Methodology

The Michigan Medicaid program reimburses hospitals for both DME and IME, using an approach modeled largely on the Medicare formulas. The DME payment is based on 1989 costs, adjusted each year by a hospital market basket index, and Medicaid's share of inpatient bed-days. DME payment for recipients with dual Medicaid/Medicare eligibility is specifically excluded. The DME payment is a cost-settled, add-on that is paid twice monthly to the hospitals. The IME payment is included in the states' diagnostic-related group (DRG) and daily payment rates and is approximately 55 percent of the Medicare IME

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formula.<sup>8</sup> Capitation rates for managed care organizations incorporate all health care costs, including those for GME.<sup>9</sup>

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<sup>8</sup>Under the state's DRG system, the payment rate is based on each patient's diagnosis. Each case is classified into one of a number of diagnosis-related groups.

<sup>9</sup>Michigan has announced an entirely new GME reimbursement system that is to be implemented on 7/1/97. The new plan, which will abandon cost-based formulas, will be a prospective payment system with fixed amounts for each hospital based on costs established in the 1995 cost reports. Separate payments will be made for primary care training programs, and grant awards will be made to a consortium of teaching hospitals, universities, and health maintenance organizations (HMO) for innovative training programs that involve managed care. Michigan will also "carve out" the GME component from the capitated rates.

NEW JERSEYPeriod Covered: Calendar year 1997Estimated GME Expenditures:

Fee-for-service:

Direct medical education: \$12.8 million

Indirect medical education: 25.2 million

\$38.0 million

Managed care: \$30 million to \$40 million

Total GME expenditures: \$68 million to \$78 million

Payment Methodology

The New Jersey Medicaid program reimburses all teaching hospitals in the state for GME. To create the pool of funds from which these Medicaid GME payments are drawn, New Jersey applies DME and IME formulas to the state's major teaching hospitals.<sup>10</sup> These formulas are modeled largely on the Medicare formulas, substituting Medicaid statistics for Medicare statistics. Funds from this pool are then distributed periodically to all teaching hospitals in the state on the basis of their respective Medicaid utilization rates and number of medical residents. These funds are subject to cost settlement each year. Payment for GME is also included in the capitated rates paid to managed care organizations, but it is not specifically identified.

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<sup>10</sup>New Jersey defines a major teaching hospital as having 45 or more full-time-equivalent medical residents in the 1993 Medicare audited cost report.

NEW YORK

Period Covered: Calendar year 1996

Estimated GME Expenditures:

Fee-for-service and managed care:

Direct medical education:	\$370 million
Indirect medical education:	\$500 million
Total GME expenditures:	\$870 million

Payment Methodology

The New York Medicaid program reimburses hospitals for services on the basis of a per-discharge rate with an add-on for DME. The DME payment is based on each hospital's 1981 cost report adjusted yearly to reflect rising costs. The IME reimbursement is an adjustment to payments for Medicaid services based on the same formula used by Medicare, with one exception. The state revised its Medicaid IME formula in 1991 and now determines IME reimbursement on the basis of the number of residents and interns at each hospital in 1990, adjusted for the type of medicine they practiced. For example, primary care specialties are generally assigned a weighting factor of 1.5, while the specialties of emergency and preventive medicine are assigned a factor of 1.1. New York also subtracts a GME component from the capitation rates paid to managed care organizations and pays this amount directly to the teaching hospitals.<sup>11</sup>

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<sup>11</sup>On January 1, 1997, New York eliminated its hospital rate-setting system for Blue Cross, HMOs, commercial insurers, self-insured funds, and private payers. Under the former system of state-set hospital reimbursement rates, private payers contributed about \$1 billion to GME. The reform essentially halves the guaranteed contribution of the private payers and creates a pooling mechanism to distribute these funds. If no further changes are made to the Medicaid program, its GME payments should remain relatively steady for the next several years.

OHIO

Period Covered: State fiscal year 1995 (7/1/94 to 6/30/95)

Estimated GME Expenditures:

**Fee-for-service:**

Direct medical education:	\$52.9 million
Indirect medical education:	\$98.2 million

Managed care:	No estimate
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Total GME expenditures:	At least \$151.1 million
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Payment Methodology

The Ohio Medicaid program reimburses hospitals for both DME and IME. The DME payment is based on each hospital's Medicaid cost report from 1985-86 adjusted yearly to reflect rising costs. The IME reimbursement is an adjustment to payments for Medicaid services based on the Medicare formula, except that Ohio maintained a multiplier of 2.0 when Medicare reduced its multiplier to 1.89. Both DME and IME payments are subject to a test of reasonableness, adjusted for case mix and then by the DRG relative weight, and paid jointly as an add-on to the DRG reimbursement amount. Payment for GME is included in the capitated rates paid to managed care organizations, although an estimate of this amount was not provided.

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PENNSYLVANIA

Period Covered: Calendar year 1996

Estimated GME Expenditures:

Fee-for-service:

Direct medical education:	\$42.8 million
Indirect medical education:	No estimate

Managed care:	No estimate
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Total GME expenditures:	At least \$42.8 million
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Payment Methodology

The Pennsylvania Medicaid program reimburses acute care teaching hospitals for both DME and IME. The DME payment is based on each teaching hospital's 1984-85 Medicaid medical education costs, subject to annual limits. The payments are made monthly as prospective payments. Reimbursement for IME costs is included in the Medicaid rates paid to each teaching hospital. The state is unable to quantify the IME portion of this rate. Payment for GME was historically included in the capitated rates the state paid to managed care organizations. Beginning in calendar year 1997, however, the state has begun "carving out" the GME portion of the capitated rates and will pay this amount directly to the teaching hospitals.

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TEXAS

Period Covered: State fiscal year 1995 (9/1/94 to 8/31/95)

Estimated GME Expenditures:

**Fee-for-service:**

<b>Direct medical education:</b>	<b>\$38.2 million</b>
<b>Indirect medical education:</b>	<b>No estimate</b>

<b>Managed care:</b>	<b>\$0.5 million</b>
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<b>Total GME expenditures:</b>	<b>At least \$38.7 million</b>
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Payment Methodology

The Texas Medicaid program reimburses each hospital for Medicaid services on the basis of a hospital-specific "standard payment rate," which includes both DME and IME. The DME payment is determined using similar methods to those used for Medicare, substituting Medicaid's utilization rate for Medicare's. IME costs are not specifically identified but are included in the standard payment rate, which is based on each hospital's reported costs. Also, payment for GME is included in the capitated rates the state pays to managed care organizations.

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