

# Medicaid's Role In Financing Graduate Medical Education

Brand-new data on Medicaid's GME payments and the changes wrought by Medicaid managed care.

by *Tim M. Henderson*

**ABSTRACT:** Medicaid is the second-largest explicit payer of graduate medical education (GME). All but five states pay for GME (\$2.4 billion in 1998). As states rapidly move their Medicaid populations to managed care, Medicaid support for GME is subject to change. Just sixteen states and the District of Columbia carve out Medicaid GME payments from capitated rates to managed care plans and rechannel them to teaching programs. Concurrently, managed care has motivated several states to distribute Medicaid GME funds in ways more explicitly accountable to the public. Ten states require that GME payments be directly linked to state policy goals intended to vary the distribution of or limit the health care workforce.

**DATAWATCH** **221**

SINCE THE LATE 1940s most states have appropriated general-revenue funds for medical education. These funds (which now exceed \$3 billion annually) have been directed largely to undergraduate training.<sup>1</sup> Furthermore, since the inception of Medicaid in the mid-1960s, many states have paid what they believe to be their fair share of clinical training or graduate medical education (GME) costs. Although Medicaid programs are not obligated to pay for GME, most states historically have made these payments under their fee-for-service (FFS) program. Second to and distinct from Medicare, Medicaid is in fact the largest explicit GME payer.

Many experts believe that Medicaid's importance as a payer of GME will increase as Medicare support for GME declines and private payers, including managed care organizations (MCOs), become increasingly reluctant to fund GME. However, as states enroll their Medicaid populations in managed care, Medicaid support for GME and related costs is changing. (As of June 1998, 585 Medicaid managed care plans were in operation, more than twice the number of plans in 1993. Half of all Medicaid beneficiaries are now enrolled in managed care.)<sup>2</sup> While rates paid to Medicaid MCOs may include

*Tim Henderson is program manager and director of the Primary Care Resource Center at the National Conference of State Legislatures in Washington, D.C.*

historical payments for GME, MCOs are not bound to distribute these dollars to hospitals with GME programs or to provide GME themselves. Also, since the mid-1990s pressing issues of expanding enrollment and developing provider capitation arrangements have put GME payment policy on Medicaid's "back burner."<sup>3</sup>

## Data And Methods

■ **The survey.** To learn the impact of these and other factors on Medicaid GME payment policies, the National Conference of State Legislatures (NCSL) in late 1998 and early 1999 conducted a mail survey of Medicaid programs in all fifty states, the District of Columbia, and Puerto Rico (response rate, 100 percent).<sup>4</sup>

Medicaid GME payment amounts are difficult to quantify precisely, in part because many teaching hospitals also receive Medicaid disproportionate-share hospital (DSH) payments, which often are indistinguishable from Medicaid GME payments. In addition, for those states that include GME payments in their MCO rates, it may be difficult to separately identify these GME payments. Determining the value of GME payments even under FFS Medicaid requires an extraordinary effort in a few states. Thus, payment amounts are based on both state-reported figures and NCSL estimates in lieu of unreported data.

■ **Estimating GME payments.** The NCSL made two major assumptions in estimating GME payments. First, for those states that reported making GME payments under Medicaid but did not report amounts, an estimate of total GME payments was made, based on each state's total Medicaid inpatient hospital expenditures. For states that reported total GME payments, the proportion of those payments to total Medicaid inpatient hospital spending was calculated. This proportion was multiplied by the total Medicaid inpatient hospital spending amounts for the nonreporting states, to arrive at an estimate of total GME payments.

Second, for those states that reported making GME payments under managed care (either directly to teaching programs or as part of MCO capitation rates) but only reported GME payments made under FFS, we estimated GME payment amounts under managed care. This estimate used those states that reported GME payment amounts—both in total and under managed care—to calculate the proportion that payments under managed care represent of total payments. This proportion was used, along with FFS GME payments, to arrive at an estimate of GME managed care payments for these states.

For South Carolina and Virginia—the states that make explicit GME payments to teaching hospitals under managed care—the estimated GME payment amounts under managed care were added to

those reported under FFS to determine an estimate of total, and explicit total, GME amounts. For the remaining states, which include GME payments in managed care rates, two estimates of total payments are provided. The low estimate reflects only state-reported GME payments made under FFS and assumes that no payments included in managed care rates are distributed by the MCO to teaching programs. The high estimate includes the state-reported FFS GME payments plus estimated payments included in managed care rates, with the assumption that the MCO will distribute the payments included in these rates to teaching programs.

## Survey Findings

Forty-five states and the District of Columbia make some level of GME payment under their Medicaid programs. Medicaid agencies in just five states—Alaska, Idaho, Illinois, Montana, and South Dakota—and Puerto Rico do not pay for GME (Exhibit 1). Three of these Medicaid programs are in states that do not have a medical school (Alaska, Idaho, and Montana), but each state contains at least one residency training program.

■ **GME payment under FFS.** Forty-three states and the District of Columbia reported making GME payments under their Medicaid FFS programs. The District of Columbia and a majority of these states (twenty-four) recognize and reimburse for both direct GME and indirect medical education (IME) costs. Eleven states make no distinction in their GME payments between the two. Two states pay for GME only under managed care.

When asked how GME payments are calculated, twenty-two states that pay for GME under FFS said that they use methods similar to those used to pay for GME under Medicare. More than three-fourths of states (thirty-five) that pay for GME under FFS distribute payments through the hospital's per case or per diem rate. Sixteen states reimburse teaching hospitals for GME costs by making a separate direct payment to these institutions.

■ **GME payment under capitated managed care.** An overwhelming majority—forty-two states and the District of Columbia—reported that they now have in place a capitated Medicaid managed care program.<sup>5</sup> Of these, sixteen states and the District of Columbia make Medicaid GME payments explicitly to teaching hospitals (or other teaching programs) under capitated managed care. Another seventeen states recognize and include Medicaid GME payments in their capitated payment rates to MCOs. All but three of these states assume that MCOs distribute these implicit GME payments in these rates to teaching hospitals but do not require them to do so. The balance of states (ten) that have a Medicaid capitated

**EXHIBIT 1**  
**Medicaid Payment For Graduate Medical Education (GME), March 1999**

State	Payment under FFS	Payment under capitated managed care <sup>a</sup>
AL	Neither DGME nor IME	GME payments in MCO rates
AK	Neither	No capitated managed care
AZ	DGME, not IME	DGME, not IME
AR	DGME, not IME	No capitated managed care
CA	Does not distinguish	No capitated managed care
CO	DGME, not IME	DGME, not IME
CT	DGME, not IME	GME payments in MCO rates
DE	Does not distinguish	GME payments in MCO rates
DC	DGME and IME	Does not distinguish
FL	Does not distinguish	GME payments in MCO rates
GA	Does not distinguish	Neither DGME nor IME
HI	Does not distinguish	GME payments in MCO rates
ID	Neither	No capitated managed care
IL	Neither	Neither
IN	DGME, not IME	GME payments in MCO rates
IA	DGME and IME	DGME and IME
KS	DGME and IME	GME payments in MCO rates
KY	Does not distinguish	IME payments in MCO rates
LA	DGME, not IME	No capitated managed care
ME	DGME and IME	Neither
MD	Does not distinguish	Does not distinguish
MA	DGME, not IME	Neither
MI	Does not distinguish	Does not distinguish
MN	DGME and IME	GME payments in MCO rates <sup>b</sup>
MS	DGME and IME	GME payments in MCO rates
MO	DGME, not IME	DGME, not IME
MT	Neither	No capitated managed care
NE	DGME and IME	DGME and IME
NV	Does not distinguish	Neither
NH	DGME and IME	Neither
NJ	Does not distinguish	GME payments in MCO rates
NM	DGME and IME	DGME and IME
NY	DGME and IME	DGME and IME
NC	DGME and IME	Neither
ND	DGME and IME	Neither
OH	DGME and IME	GME payments in MCO rates
OK	DGME and IME	DGME, not IME
OR	DGME and IME	GME payments in MCO rates
PA	DGME and IME	DGME, not IME
PR	Neither	No capitated managed care
RI	DGME and IME	GME payments in MCO rates
SC	DGME and IME	DGME and IME
SD	Neither	No capitated managed care
TN	No FFS system	Does not distinguish
TX	DGME and IME	Neither
UT	Does not distinguish	GME payments in MCO rates
VT	DGME and IME	Neither
VA	DGME and IME	DGME, not IME
WA	DGME and IME	GME payments in MCO rates <sup>c</sup>
WV	DGME and IME	DGME; IME payments in MCO rates
WI	DGME and IME	GME payments in MCO rates
WY	DGME, not IME	No capitated managed care

**SOURCE:** National Conference of State Legislatures (NCSL), from a 1998-1999 survey of state Medicaid agencies sponsored by the Association of American Medical Colleges.

**NOTES:** FFS is fee-for-service. DGME is direct graduate medical education. IME is indirect medical education. MCO is managed care organization.

<sup>a</sup> Capitated managed care is defined as Medicaid's use of risk-based capitation payments and does not include any payments made under a primary care case management program.

<sup>b</sup> Pending approval of federal waiver, DGME and IME will be paid directly to teaching programs under managed care.

<sup>c</sup> Two hospitals get DGME/IME payments; for the rest, payments are in MCO rates.

managed care program are thought not to leave GME historical payments in the base used for calculating managed care payments.

Nearly all states (twenty-seven) that make GME payments under capitated managed care (either explicitly or in MCO rates) reported that teaching hospitals are the only graduate training institutions that receive GME payments. However, in two states—Tennessee and Oklahoma—medical schools are the only training programs eligible to receive Medicaid GME payments directly under managed care. In Minnesota several training institutions are eligible to receive GME payments, including teaching hospitals and schools of medicine, nursing, dentistry, and pharmacy. Across the states medical residents are the predominant health profession eligible for Medicaid GME payments, but eight states and the District of Columbia under managed care either require or allow nurses and other health professions students to have their training subsidized, or the agency makes no distinction among health professions.

■ **Medicaid GME payment amounts.** The total annual Medicaid payment amount in 1998 for GME is estimated to be \$2.3–\$2.4 billion, or between 7.4 percent and 7.8 percent of total hospital inpatient spending (Exhibit 2). FFS programs remain the predominant vehicle for distributing Medicaid GME payments. In the states that reported making GME payments under managed care, those GME payment amounts represent just 20 percent of total GME payments distributed in those states.

State Medicaid GME payments on average are about 7 percent of total Medicaid inpatient hospital expenditures. By comparison, Medicare’s more than \$6 billion in GME payments (for both DGME and IME) represent an equal proportion of its total inpatient hospital expenditures.<sup>6</sup>

■ **GME payments linked to state policy goals.** A small but growing number of Medicaid programs are making an explicit connection between distributed GME funds and training program accountability. Ten states require that some or all Medicaid GME payments be directly linked to their health care workforce goals.<sup>7</sup> Eight of the ten states use GME payments to encourage the training of physicians in certain specialties (such as primary care). Three of the states use GME payments to encourage training of physicians in certain settings (such as ambulatory sites and rural locations).

Persistent concerns with overall high levels of Medicaid spending have fueled efforts in nine states to place explicit limits on Medicaid GME support.<sup>8</sup> Four of these states limit only total GME spending; four others limit just the number of residency positions eligible.

**EXHIBIT 2**  
**Medicaid Graduate Medical Education (GME) Payment Amounts, Millions Of Dollars,**  
**FY 1998**

State	GME payments (explicit) under FFS	GME payments under managed care		Total explicit GME payments <sup>c</sup>	Total GME payments	
		Implicit <sup>a</sup>	Explicit <sup>b</sup>		Dollar amount	Percent of inpatient hospital spending
AL	\$ 0.0	\$10.0	\$ 0.0	\$ 0.0	\$ 10.0	2.4%
AK	_d	_d	_d	_d	_d	_d
AZ	Unreported	Unreported	Unreported	17.8	17.8	4.5
AR	5.7	0.0	0.0	5.7	5.7	2.8
CA	129.1	0.0	0.0	129.1	129.1	4.4
CO	5.5	0.0	2.5	8.0	8.0	4.0
CT	6.0	1.5 <sup>e</sup>	0.0	6.0	6.0/7.5 <sup>e</sup>	4.3/5.4 <sup>e</sup>
DE	1.07	0.2 <sup>e</sup>	0.0	1.07	1.07/1.3 <sup>e</sup>	7.1/8.7 <sup>e</sup>
DC	Unreported	_f	Unreported	15.2 <sup>e</sup>	15.2 <sup>e</sup>	7.4 <sup>e</sup>
FL	Unreported	Unreported	_g	_h	75.1	7.4
GA	70.0	0.0	0.0	70.0	70.0	10.1
HI	Unreported	Unreported	_g	_h	2.7 <sup>e</sup>	7.4 <sup>e</sup>
ID	_d	_d	_d	_d	_d	_d
IL	_d	_d	_d	_d	_d	_d
IN	12.0	3.0 <sup>e</sup>	0.0	12.0	12.0/15.0 <sup>e</sup>	2.8/3.5 <sup>e</sup>
IA	Unreported	Unreported	Unreported	43.8	43.8	19.6
KS	7.7	1.9 <sup>e</sup>	0.0	7.7	7.7/9.6 <sup>e</sup>	5.7/7.1 <sup>e</sup>
KY	49.7	12.4 <sup>e</sup>	0.0	49.7	49.7/62.1 <sup>e</sup>	9.2/11.5 <sup>e</sup>
LA	50.0	0.0	0.0	50.0	50.0	12.0
ME	2.4	0.0	0.0	2.4	2.4	1.2
MD	19.6	0.0	35.2	54.8	54.8	11.9
MA	25.0	0.0	0.0	25.0	25.0	6.9
MI	Unreported	Unreported	Unreported	191.0	191.0	17.0
MN	39.0	19.0	0.0	39.0	58.0	14.7
MS	12.5	3.1 <sup>e</sup>	0.0	12.5	12.5/15.6 <sup>e</sup>	2.6/3.3 <sup>e</sup>
MO	13.0	0.0	13.7	26.7	26.7	7.3
MT	_d	_d	_d	_d	_d	_d
NE	4.5	0.0	0.5	5.0	5.0	4.9
NV	8.4 <sup>e</sup>	0.0	0.0	8.4 <sup>e</sup>	8.4 <sup>e</sup>	7.4 <sup>e</sup>
NH	2.1	0.0	0.0	2.1	2.1	0.6
NJ	20.0	23.4	0.0	20.0	43.4	3.4
NM	2.3	0.0	2.1	4.4	4.4	5.9
NY	754.0	0.0	58.0	812.0	812.0	15.0
NC	102.5	0.0	0.0	102.5	102.5	13.2
ND	0.93	0.0	0.0	0.93	0.93	3.1
OH	115.7	28.9 <sup>e</sup>	0.0	115.7	115.7/144.6 <sup>e</sup>	13.3/16.6 <sup>e</sup>
OK	13.0	0.0	2.7	15.7	15.7	9.3
OR	8.6	0.0	0.0	8.6	8.6	10.3
PA	48.5	0.0	18.1	66.6	66.6	6.7
PR	_d	_d	_d	_d	_d	_d
RI	Unreported	Unreported	_g	_h	5.1 <sup>e</sup>	7.4 <sup>e</sup>
SC	46.2	0.0	11.6 <sup>e</sup>	57.8 <sup>e</sup>	57.8 <sup>e</sup>	12.9/16.1 <sup>e</sup>
SD	_d	_d	_d	_d	_d	_d
TN	0.0	0.0	46.3	46.3	46.3	7.5 <sup>e</sup>
TX	40.0	0.0	0.0	40.0	40.0	2.5
UT	4.0	1.0 <sup>e</sup>	0.0	4.0	4.0/5.0 <sup>e</sup>	4.7/5.9 <sup>e</sup>
VT	0.63	0.0	0.0	0.63	0.63	1.5
VA	12.9	0.0	3.2 <sup>e</sup>	16.1 <sup>e</sup>	16.1 <sup>e</sup>	2.6/3.3 <sup>e</sup>
WA	42.3	0.0	21.2	63.5	63.5	17.1
WV	Unreported	Unreported	Unreported	2.7	2.7	1.7
WI	25.0	12.0	0.0	25.0	37.0	14.6
WY	0.06	0.0	0.0	0.06	0.06	0.2

**EXHIBIT 2**

**Medicaid Graduate Medical Education (GME) Payment Amounts (cont.)**

**SOURCE:** National Conference of State Legislatures (NCSL), from a 1998–1999 survey of state Medicaid agencies sponsored by the Association of American Medical Colleges.

**NOTES:** The start and end dates for states’ fiscal years vary by state. For eight of the ten states that report making GME payments under managed care but only reported GME payments made under fee-for-service (FFS) (CT, DE, IN, KS, KY, MS, OH, and UT), two estimates of total GME payments are provided. The low estimate reflects only state-reported GME payments made under FFS. The higher estimate includes the state-reported FFS GME payments plus the estimated amount of GME payments included in managed care organization (MCO) rates. Refer to the data and methods discussion in the paper for more information.

<sup>a</sup> Payments recognized and included in capitation rates to MCOs.

<sup>b</sup> Payments made directly to teaching programs under managed care.

<sup>c</sup> Total amount of GME payments made directly to teaching programs under both FFS and managed care, including state-reported and NCSL-estimated amounts.

<sup>d</sup> Medicaid agency does not pay for GME.

<sup>e</sup> NCSL estimates, in lieu of unreported data.

<sup>f</sup> GME payments are separated from the capitated rates to MCOs and made directly to teaching hospitals.

<sup>g</sup> GME payments are recognized and included as part of capitated rates to MCOs.

<sup>h</sup> An estimate is not available because it is not possible to differentiate explicit GME payments under FFS from implicit GME payments found in MCO rates.

**States’ Approaches To GME Financing**

States face two major challenges or changes to Medicaid payment of GME. First, shifting opportunities for state Medicaid agencies to obtain federal matching funds will influence how and to what extent several states continue funding GME. In many states Medicaid’s payment for GME is made possible by their ability to secure matching federal dollars to support their Medicaid DSH program. Other Medicaid programs report that GME payments (particularly for IME costs) are viewed by teaching hospitals as a partial substitute for declining Medicaid DSH payments or to counter increases in uncompensated care.<sup>9</sup> These pressures, as well as the fact that efforts to “carve out” Medicaid GME payments from managed care rates make the dollar value of these payments more subject to scrutiny by cost-conscious state officials, will contribute to a complex discussion in many states of Medicaid’s role in financing GME.

Second, with the advent of managed care, more states see an opportunity to distribute Medicaid GME funds in ways more explicitly accountable to the public. Two Medicaid programs in particular—Tennessee’s and Michigan’s—have innovative strategies that link Medicaid GME funds to state workforce needs.

■ **Tennessee.** In 1996 Tennessee became the first state to stipulate that GME monies flow directly to the medical schools. GME dollars now follow residents to all training sites. Funds are distributed to the state’s medical schools to encourage primary care training in community sites and the placement of residents in underserved areas. This represents a radical departure from Medicaid’s support for GME prior to TennCare and the turmoil that followed in 1995 when it briefly stopped paying for GME altogether.

Early problems with TennCare centered on the lack of primary

*“HCFA has made it easier for states to test Medicaid innovations, but gaining approval for GME changes can be cumbersome.”*

---

care providers in many rural areas of the state. The need to change the way GME funds were distributed and set certain standards of performance became apparent as state leaders sought to restore TennCare support for GME. By 1 July 2000, 50 percent of the aggregate residency positions under the sponsorship of the state’s four medical schools must be in one of the primary care specialties.

■ **Michigan.** Medicaid GME policy in Michigan changed significantly in 1997, when the state sought to structure payments to promote three specific public policy goals: (1) to train appropriate numbers of primary care providers, (2) to enhance training in rural areas, and (3) to support education that improves the treatment of the Medicaid-eligible population. All GME funds previously included in Medicaid FFS hospital patient care payments and MCO capitation rates were carved out and directed for redistribution in two pools.

The historic-cost pool reimburses hospitals based on their 1995 costs incurred for medical education. The primary-care pool encourages the education of physicians in general practice, family practice, preventive medicine, obstetrics, and geriatrics. Payments from this pool to hospitals are based on the institution’s number of residents in primary care and share of Medicaid patients. To qualify for reimbursement from either pool, a hospital must submit a report to the state, detailing resident profiles and how the funds are being used to support specific goals and priorities.

A third pool, the Innovations in Health Professions Education grant fund, was established with GME funds formerly included in capitation payments to MCOs to foster innovations in health professions education and accelerate the pace of health care change. Grants are awarded competitively to programs that support the goals of the new GME initiative. Only consortia consisting of at least a hospital, a university, and an MCO are eligible to apply.

■ **Problems and solutions.** Many of these state approaches require federal approval, which typically has been sought under a state’s request for a waiver to operate a mandatory Medicaid managed care program. Even though the Health Care Financing Administration (HCFA) has made it easier for states to test certain innovations under their Medicaid managed care programs, gaining federal approval remains cumbersome or questionable for states that want the flexibility and incentive to distribute GME payments to nonhospital training programs, to pay for training of nonphysicians, to pool

payments, and to conduct other activities.

Such circumstances are explained in part by the fact that HCFA has no explicit guidelines on how state Medicaid programs should or could pay for GME. Instead, HCFA's response to state requests is based largely on its rules linking reimbursement to Medicaid service use and policies governing Medicare GME payment.

**A**N EXPLICIT FEDERAL MEDICAID GME POLICY could give states important resources, a process for learning from other states, and the clear flexibility to experiment with innovative approaches. Such a policy would encourage state Medicaid agencies to (1) improve training program accountability by linking GME payments to specific performance requirements, (2) shift or expand GME payments to reimburse education in nonhospital settings and training of nonphysicians, (3) pool Medicaid funds with other GME revenues, and (4) institute rigorous studies to identify and document all reimbursable costs. In addition, HCFA could acknowledge the importance of such initiatives by supporting GME payment reform demonstrations in selected states and investing sufficient resources to promote them among the states.<sup>10</sup>

.....  
 This DataWatch is based on research funded by the Association of American Medical Colleges (AAMC) and the University of California, San Francisco (UCSF).

**NOTES**

1. J. Krakower et al., "Review of U.S. Medical School Finances, 1997-1998," *Journal of the American Medical Association* 282, no. 9 (1999): 847-854.
2. B. Lyons, "Medicaid Managed Care: Emerging Trends" (Paper presented at National Conference of State Legislatures Health Care Conference, San Diego, California, 15 November 1999).
3. D. Plumb and T. Henderson, *Medicaid Funding of Graduate Medical Education: A Survey of the States* (Washington: Intergovernmental Health Policy Project, George Washington University, 1995).
4. T. Henderson, *Funding of Graduate Medical Education by State Medicaid Programs*, Report prepared for the Association of American Medical Colleges (Washington: National Conference of State Legislatures, 1999).
5. Capitated managed care is defined as Medicaid's use of risk-based capitation payments and does not include any payments made under a primary care case management program.
6. Congressional Budget Office, "March 1999 Baseline Estimates" (Washington: CBO, March 1999).
7. Georgia, Maryland, Michigan, New Jersey, New Mexico, Oklahoma, Tennessee, Texas, Washington, and West Virginia.
8. Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New Mexico, Pennsylvania, Tennessee, and West Virginia.
9. A phased-in reduction of the federal share for Medicaid DSH payments was enacted as part of the 1997 Balanced Budget Act.
10. T. Henderson, *Medicaid Support for Graduate Medical Education: Should There Be a National Policy?* (San Francisco: University of California, San Francisco, Center for the Health Professions, 1998).