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Medicaid Graduate Medical Education Payments: Results From the 2018 50-State Survey

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Medicaid Graduate Medical Education Payments: Results From the 2018 50-State Survey

July 2019

Association of American Medical Colleges
Washington, D.C.

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Tim M. Henderson, MSPH, health workforce consultant, conducted the survey and wrote this report under a contract with the AAMC.

Please direct questions about this publication to Merle Haberman, Senior Director of Health System Economics, Data, and Research, AAMC, at mhaberman@aamc.org.

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EXECUTIVE SUMMARY

Jointly administered by the federal government and states, Medicaid provides health insurance to about 75 million low-income people and finances nearly one-fifth of all personal health care spending in the United States.[1] Medicaid also represents the single largest budget item in the states, amounting to 29% of all spending (including federal and state funds).[2] Behind Medicare, Medicaid is the second largest explicit source of funding for GME and the other missions and services of teaching hospitals.[3] States are always pressured to control costs given that Medicaid is such a large part of their budgets; however, a stronger economy helped slow enrollment growth and stabilize spending increases in fiscal year (FY) 2018.[4] In FY 2019, states participating in the Affordable Care Act's Medicaid expansion saw Medicaid spending increase modestly as they began to pay a higher share of the expansion costs.[5]

In 2018, the AAMC (Association of American Medical Colleges) contracted with a consultant to survey state Medicaid programs to examine their policies for financing graduate medical education (GME). The AAMC and its consultant developed an online questionnaire and distributed it to Medicaid agencies in all 50 states and the District of Columbia to identify each program's current policies and issues associated with GME payments. The AAMC routinely conducts research about Medicaid GME payments. This study updates earlier AAMC studies of state Medicaid GME policies and sets a foundation for future analyses.[6]

Key Findings

- Forty-three states, including the district, made GME payments under their Medicaid program in 2018, the same number as in 2015. Two of the eight states that reported not making GME payments, California and Massachusetts, are among the 10 states with the largest number of medical residents. Moreover, two states reported in 2018 that they had recently considered ending Medicaid GME payments.
- Medicaid continues to be a major source of funding for GME. In 2018, the overall level of support for GME continued to grow, reaching $5.58 billion. This represents a nearly 50% increase since 2009, when Medicaid GME support totaled $3.78 billion.[7] However, four states reported their total 2018 GME payments decreased by more than 15% over 2015 levels.
- About one-half of states (21) that made Medicaid GME payments recognized both direct graduate medical education (DGME) and indirect medical education (IME) costs in 2018. Another 13 states recognized and paid for only DGME costs.
- The most common source of state financing for GME payments was state general revenue (37 states), followed by local government contributions (16 states).
- In 2018, the proportion of Medicaid GME payments made under managed care (52%) continued to exceed the proportion of such payments made under fee-for-service (48%), a trend that began in 2015.
- Under Medicaid fee-for-service, 41 states (including the district) reported making GME payments in 2018, equaling the number of states that have reported making such payments since 2009.
- Of the 39 states (including the district) that have risk-based Medicaid managed care programs,[8] 72% — 28 states (including the district) — made GME payments in 2018 under Medicaid managed care. Of those 28 states, 16 (including the district) made Medicaid GME payments explicitly and directly to teaching hospitals; 13 states recognized and included such payments in managed care organization (MCO) capitation rates. One state, Illinois, made direct GME payments to teaching hospitals and included GME payments in MCO rates.

- Although teaching hospitals are the predominant recipients of Medicaid GME support, medical schools in three states, ambulatory care centers in two states, and individual teaching physicians in five states also received GME payments directly in 2018.
- In 13 states, programs that educate graduate nurses and other health professions trainees, in addition to programs that educate medical residents, are eligible to receive Medicaid GME payments.
- As of July 2019, five states operate a federal Section 1115 demonstration waiver that governs GME payments associated with approved changes in their Medicaid managed care program.[9]
- Policymakers and stakeholders are increasingly concerned with the financial and social accountability of public GME funding. In 2018, 35 states collected data on the DGME costs of teaching programs (14 of these states required teaching programs to report this information), and 14 states routinely audited their GME payments to teaching programs. Also, three states in 2018 documented (and were required to report) the impact of Medicaid GME payments on their state's health care workforce.[10]

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INTRODUCTION

States are a long-standing source of support for physician training. State and local governments, as well as parent universities of medical schools in these states, appropriate funds for undergraduate medical education.[11] Medicaid programs in most states help offset a portion of graduate medical education (GME) costs incurred by teaching hospitals and other entities.[12]

Medicaid provides health insurance to about 75 million low-income people and finances nearly one-fifth of all personal health care spending in the United States.[1] Medicaid is the largest source of federal funds to states. It represents the single largest program (including federal and state funds) in most states, amounting to 29% of all spending in fiscal year (FY) 2016.[2] States are always pressured to control costs given that Medicaid is such a large part of their budgets; however, according to findings from the Kaiser Family Foundation, a stronger economy helped slow enrollment growth and stabilize spending increases in FY 2018.[4] In FY 2019, states participating in the Patient Protection and Affordable Care Act's Medicaid expansion saw Medicaid spending increase modestly as they began to pay a higher share of the expansion costs.[5]

Behind Medicare, Medicaid is the second largest explicit source of funding for GME and the other missions and services of teaching hospitals.[3] Contrary to the treatment of Medicare by the federal government, states are given no explicit guidelines about whether and how their Medicaid programs should or could make GME payments.[13]

Although Medicaid programs are not obligated to pay for GME, most states historically have made such payments under their fee-for-service programs. In many states, Medicaid risk-based managed care systems also provide a significant amount of GME support. In 2018, two-thirds of all Medicaid enrollees were served by comprehensive, risk-based managed care organizations (MCOs) that operate in 39 states.[14] With the predominance of risk-based managed care, Medicaid support for GME continues to be vulnerable. While Medicaid managed care capitation rates include GME payments in several states, MCOs are often not bound to distribute these dollars to hospitals with clinical training programs or to sponsor training programs themselves.

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ABOUT THE SURVEY

In 2018, the AAMC (Association of American Medical Colleges) contracted with an independent health workforce consultant to survey state Medicaid programs to examine their policies for financing GME. The AAMC routinely conducts research about Medicaid GME payments. This study updates earlier AAMC studies of state Medicaid GME policies.[6]

In fall 2018, the AAMC and its consultant developed an online questionnaire and distributed it to Medicaid agencies in all 50 states and the District of Columbia to identify each program's current policies and issues associated with GME payments (see the survey instrument on **page 35**). All but two state Medicaid agencies responded to the survey; however, corresponding data from the nonresponding states were obtained through another source.[15] The district is counted as a state for the purposes of this report; thus, the final count of state responses is 51.[16]

This report reflects the climate for state Medicaid GME support as of 2018 and sets a foundation for future analyses. Consequently, its content may not reflect any fiscal or policy changes that have occurred since completion of the survey.

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FINDINGS

As of 2018, 43 states (including the district) provided GME payments under their Medicaid program (Table 1). When asked why they pay for GME, states most frequently cited their desire to use Medicaid funds to advance state policy goals and to help train the next generation of physicians who will serve Medicaid beneficiaries. In 2015, 43 states also reported making Medicaid GME payments (Table 16).

Two states — Connecticut and Tennessee — reported having recently considered ending Medicaid GME payments. Both states identified current budget shortfalls or cost controls as the rationale for considering discontinuation of GME payments. Those states that did not pay for GME in 2018 typically reported that making GME payments was not necessary or was not a pressing policy issue among competing issues.

Twenty-one states recognized direct graduate medical education (DGME) and indirect medical education (IME) costs in making Medicaid GME payments in 2018. Another 13 states recognized and paid only for DGME costs. Twelve states did not distinguish between DGME and IME costs in their Medicaid GME payments (Table 1).[17]

State Financing of GME Payments

States finance their share of Medicaid GME payments from three recognized sources: (1) general revenue appropriated by their state legislature to the Medicaid agency; (2) contributions from local governments (including hospitals and other providers they operate) through intergovernmental transfers and certified public expenditures; and (3) mandatory assessments (taxes) on hospitals.[18]

In 2018, the most common source of state financing for GME payments was state general revenue (37 states), followed by local government contributions (16 states). Ten states received support from both sources. Six states also use provider taxes on hospitals to help finance GME payments (Table 2).

Teaching Entities and Professions Eligible for GME Payments

Teaching hospitals are the primary training institutions that receive Medicaid GME payments in all states.[19] **In 2018, eight states also made Medicaid GME payments to other teaching entities.** Two states (Florida and Idaho) paid ambulatory care centers with teaching programs for their GME costs. Three states (Florida, Minnesota, and Tennessee) made Medicaid GME payments directly to medical school faculty practice plans. Five states (Florida, Iowa, Nevada, South Carolina, and Vermont) made enhanced payments to individual teaching physicians employed by a state university hospital for their GME-related costs associated with instructing residents and interns (Table 3).[20]

Resident physicians are the predominant medical trainees who benefit from Medicaid GME support in all states.[21] **In 2018, trainees in other health professions in 13 states were also eligible for Medicaid GME payments.** Ten of these states explicitly included the education of graduate nurses as eligible for these payments (Table 3).

GME Payments Under Fee-for-Service

Forty-one states (including the district) reported making GME payments under their Medicaid fee-for-service (FFS) programs in 2018 (Table 1).

Calculation of Payments. In calculating FFS GME payments, 11 states used a method to pay per Medicaid discharge. Ten states followed a Medicare methodology, and 10 states made GME payments using a per-resident method. Most states (23) calculated GME payments using another method. Thirteen states used more than one of these methods (Table 4).

Distribution of Payments. States distribute FFS GME payments to hospitals or other teaching entities in two ways. **Twenty-one states paid for GME as part of the hospital's Medicaid base rate. Thirty states made a separate or supplemental payment for GME to hospitals or other teaching entities.** Ten states made GME payments using both forms of distribution (Table 5).

Supplemental payments for GME are distributed according to various federal authorizations.[22] Most states (28) made these payments to hospitals and freestanding clinics under the federal upper payment limit (UPL) rule. Five states made payments to qualified individual teaching physicians using a separate UPL identified by the federal government.[23] Four states made payments to teaching hospitals deemed disproportionate share hospitals by federal statute.[24] Also, one state (Florida) continues to make supplemental GME payments to hospitals and other providers as part of an uncompensated care pool authorized by the state's Section 1115 demonstration waiver (Table 5).[25]

GME Payments Under Risk-Based Managed Care[26]

Of the 39 states with comprehensive risk-based Medicaid managed care programs,[8] 72% (28 states including the district) provided some level of GME support under these programs in 2018. States made GME payments either directly to teaching programs or indirectly as part of the risk-based MCO capitation rates (Table 6).[27]

Direct Payments. **Sixteen states (including the district) made GME payments directly to teaching hospitals (or other teaching entities)** (Table 6). The following methods were used to calculate direct GME payments: six states paid per Medicaid managed care discharge; five states applied a Medicare FFS methodology; and five states paid per resident physician. Five states determined GME payments using another method. Four states used more than one method (Table 7).

Indirect Payments. **Thirteen states recognized and included GME payments in their capitated payment rates to MCOs** (Table 6). Six of these states (Florida, Iowa, Kansas, Kentucky, Michigan, and Mississippi) required MCOs to distribute these implicit payments in their negotiated rates to teaching hospitals; all of them provided MCOs a specific methodology for determining GME add-on payments to hospitals. The other seven states assumed the MCOs would distribute the payments to teaching programs (Table 8).[28]

The balance of states (eight) with a Medicaid risk-based managed care program in 2018 did not leave GME historical payments in the base used for calculating MCO payments but did support GME under FFS.[29] The most common reasons reported by these states were that (1) Medicaid payment for GME under managed care was not necessary or was not a pressing policy issue among competing issues and (2) there was difficulty in determining a methodology to pay for GME under managed care (Table 9).

States With Federal Waivers Governing GME Payments

Federal waivers provide state Medicaid programs with an avenue to test new approaches otherwise not permissible under federal law. **As of July 2019, five states (Florida, Minnesota, New Jersey, North Carolina, and Tennessee) operate an approved Section 1115 demonstration waiver that governs GME payments associated with changes in the state's Medicaid managed care program** (Table 10).[9]

Financial and Social Accountability of GME Payments

Many policymakers and stakeholders are concerned that public GME funding lacks financial and social accountability.[30] The survey addressed financial accountability by asking states about their reporting requirements regarding GME costs and their practices regarding auditing GME payments; it addressed social accountability by asking states about the impact of their Medicaid GME payments on the state's health care workforce.

Financial Accountability. Fourteen states required teaching programs to report their direct GME costs in 2018. Furthermore, 21 of the 28 states that did not require teaching programs to report these costs said they obtained DGME costs of teaching programs from another source; consequently, this brings the **total number of states able to collect DGME costs to 35.** Also, **14 states in 2018 routinely audited their Medicaid GME payments to teaching programs.** The most frequent reasons these states gave for doing so were to identify overpayments and underpayments and to document that payments were made only for specified allowable costs (Table 11).

Social Accountability. **In 2018, three states (Michigan, New Jersey, and Virginia) documented (and were required by state authorities to report) the impact of Medicaid GME payments on their state's health care workforce.**[10] These states disclosed that they use a combination of measures and means, including definitive objectives, measurable outcomes, supporting data, and evaluation plans, to document and report the impact of their GME payments.

GME Payment Amounts

Medicaid continues to be a significant source of GME support. However, the amount of Medicaid GME payments is difficult to quantify precisely in some states. A few states that pay for IME costs may find it burdensome to identify these costs and tabulate payment amounts. Also, certain states that use a hospital-specific, diagnosis-related group case-based methodology to pay hospitals for GME costs as part of their Medicaid base rate may find it challenging to update prices separately for GME costs that vary widely per case. One state (Washington) uses such a methodology, which prohibited them from tabulating and reporting GME payment amounts in 2018.

With these limitations, **total Medicaid GME payments reported by the states and the district amounted to $5.58 billion in 2018.** These total state-reported GME payments reflect the following: (1) payments made under FFS ($2.59 billion); (2) payments made under managed care explicitly (directly) to teaching programs ($2.15 billion); and (3) payments made under managed care implicitly (included in capitated rates to MCOs) to teaching programs ($760 million) (Table 12).[31] With the exception of six states that require MCOs to distribute these payments for teaching costs in their negotiated rates to teaching hospitals, the GME amounts in MCO capitation were not necessarily funneled to teaching hospitals.

For the first time in 2015, the proportion of Medicaid GME payments made under managed care exceeded the proportion of such payments made under FFS. **In 2018, 52% of all Medicaid GME payments were made under managed care** (Table 16).

In those states (34) that recognize both DGME and IME costs or only DGME costs, **the proportions of Medicaid payments made for DGME costs (49%) and IME costs (51%) were nearly even.** Six states (excluding Washington) were unable to provide a breakdown of these costs in their reported payment amounts.

Medicaid support for GME nationwide continued to rise in 2018; since 2009 alone, total Medicaid GME payments have increased almost 50%.[32] However, four states (Arkansas, the District of Columbia, Nebraska, and Oklahoma) reported 2018 GME payment amounts that were more than 15% lower than those reported in 2015. Oklahoma discontinued all GME payments made under managed care effective FY 2018, resulting in a 61% reduction in total GME payments from 2015.

Payment amounts differed widely across the states, ranging from $1.69 billion in New York to $65,000 in Hawaii (Table 12). **The 15 states with the highest levels of Medicaid GME spending represented 86% of total payments in 2018.** New York remained the dominant payer — spending about 30% of the national total of state Medicaid GME payments. Payments in six other states (Arizona, Florida, New Jersey, Ohio, South Carolina, and Virginia) exceeded $200 million; another eight states each reported spending between $100 and $200 million (Table 13).

Medicaid GME Payments and State Teaching Hospital and Medical Resident Capacity

The states ranking highest in Medicaid GME support mirror only partly the ranking of states with the largest number of teaching hospitals and medical residents (Tables 14 and 15). **In 2018, just five of the top 10 states (Florida, Michigan, New York, Ohio, and Texas) with the highest total number of both teaching hospitals and medical residents had a similarly high ranking in the amount of total Medicaid GME payments.** Meanwhile, two other states — California and Massachusetts — that rank among the 10 states with the highest number of teaching hospitals and medical residents provided no Medicaid payments for GME.

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NOTES

1. Jointly financed by the federal government and the states (federal government pays at least half the costs), Medicaid is run by the states within broad federal guidelines. States can determine key elements of their Medicaid programs, including what benefits or services are offered (beyond those mandated by federal law) and how much providers are paid. If a state administers its Medicaid program within federal requirements, it is entitled to receive federal matching funds or federal financial participation (FFP) toward allowable state expenditures. To receive FFP to support services included in their Medicaid state plan, states must ensure that they can fund their share of expenditures. Medicaid and CHIP Payment and Access Commission. The Impact of State Approaches to Medicaid Financing on Federal Medicaid Spending. Washington, DC: MACPAC; July 2017. https://www.macpac.gov/wp-content/uploads/2017/07/The-Impact-of-State-Approaches-to-Medicaid-Financing-on-Federal-Medicaid-Spending.pdf. Accessed Dec. 8, 2018. Rudowitz, R, Garfield, R, Hinton, E. *10 Things to Know About Medicaid: Setting the Facts Straight.* San Francisco, CA: Kaiser Family Foundation; 2019. https://www.kff.org/medicaid/issue-brief/10-things-to-know-about-medicaid-setting-the-facts-straight/. Accessed March 13, 2019.
2. The state-financed share of Medicaid accounted for 16% of state-funded budgets in FY 2016. State and federal Medicaid spending has more than doubled in the past decade, estimated in FY 2017 at $557 billion. Rudowitz R, Hinton E, Antonisse L. *Medicaid Enrollment & Spending Growth: FY 2018 & 2019.* San Francisco, CA: Kaiser Family Foundation; 2019. http://files.kff.org/attachment/Issue-Brief-Medicaid-Enrollment-and-Spending-Growth-FY-2018-2019. Accessed Dec. 8, 2018. Medicaid and CHIP Payment and Access Commission. MACStats: Medicaid and CHIP Data Book. Washington, DC: MACPAC; December 2018. https://www.macpac.gov/wp-content/uploads/2018/12/December-2018-MACStats-Data-Book.pdf. Accessed Dec. 8, 2018.
3. Inpatient care payments by private insurers to teaching hospitals (that are greater than costs) indirectly help support clinical training.
4. Rudowitz R, Hinton E, Antonisse L. *Medicaid Enrollment & Spending Growth: FY 2018 & 2019.* San Francisco, CA: Kaiser Family Foundation; 2019. http://files.kff.org/attachment/Issue-Brief-Medicaid-Enrollment-and-Spending-Growth-FY-2018-2019. Accessed Dec. 8, 2018.
5. For those states choosing to participate in the Medicaid expansion, the federal government financed 100% of the costs during the period 2014-16; federal funding began to be phased out in 2017. As of March 2019, 36 states and the District of Columbia had adopted the Medicaid expansion. Rudowitz R, Hinton, E Antonisse L. *Medicaid Enrollment & Spending Growth: FY 2018 & 2019.* San Francisco, CA: Kaiser Family Foundation; 2019. http://files.kff.org/attachment/Issue-Brief-Medicaid-Enrollment-and-Spending-Growth-FY-2018-2019. Accessed Dec. 8, 2018. Kaiser Family Foundation. Status of State Medicaid Expansion Decisions: Interactive Map. April 9, 2019. https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/. Accessed March 25, 2019.
6. This study examines payments that state Medicaid programs make to teaching hospitals and other entities related to their clinical care and teaching missions. Previous studies (published in 1999, 2003, 2006, 2010, 2013, and 2016) were conducted by the author and the National Conference of State Legislatures.
7. This figure has not been adjusted for inflation.
8. Gifford K, Ellis E, Edwards BC, et al. *States Focus on Quality and Outcomes Amid Waiver Changes: Results From a 50-State Medicaid Budget Survey for State Fiscal Years 2018 and 2019.* San Francisco: Kaiser Family Foundation; 2018. http://files.kff.org/attachment/Report-States-Focus-on-Quality-and-Outcomes-Amid-Waiver%20Changes-Results-from-a-50-State-Medicaid-Budget-Survey-for-State-Fiscal-Years-2018-and-2019. Accessed Dec. 13, 2018.
9. Section 1115 of the Social Security Act provides broad authority to the secretary of the U.S. Department of Health and Human Services to approve any demonstration likely to assist in promoting the objectives of a state Medicaid program. This includes the authority to provide federal matching funds for costs that would not otherwise be eligible for matching funds under a state's Medicaid plan, such as supplemental payments in managed care delivery systems. States have used Section 1115 to waive requirements related to eligibility, benefits, service delivery, and payment methods they employ to administer their managed care programs. Medicaid and CHIP Payment and Access Commission. Waivers. https://www.macpac.gov/topics/waivers/. Accessed April 3, 2019. Hinton, E, Mesumeci, M, Rudowitz, R, Antonisse, L, Hall, C. *Section 1115 Medicaid Demonstration Waivers: The Current Landscape of Approved and Pending Waivers.* San Francisco, CA: Kaiser Family Foundation; 2019. https://www.kff.org/medicaid/issue-brief/section-1115-medicaid-demonstration-waivers-the-current-landscape-of-approved-and-pending-waivers/. Accessed Jan. 19, 2019.
10. In addition, 4% of Tennessee's GME payments are used to recruit and retain physicians, mid-level practitioners, and dentists for the state's medically underserved areas.
11. In FY 2017, states appropriated $6.5 billion to MD-granting medical schools alone. AAMC. Liaison Committee on Medical Education (LCME) Part I-A Annual Medical School Financial Questionnaire (AFQ), FY 2017. Table 1. Washington, DC: AAMC. https://www.aamc.org/data/finance/2017-tables/. Accessed Jan. 3, 2019.
12. A few states also appropriate non-Medicaid funds to support GME.
13. Consequently, states have significant flexibility in designing and executing their Medicaid GME payments, including determining which professions and which settings and organizations are eligible to receive support. Medicaid programs seeking to pay for GME, or alter how they pay for GME, must obtain approval from the Centers for Medicare and Medicaid Services (CMS) through either an amendment to their Medicaid state plan or a waiver of current federal program rules. Congressional Research Service. *Federal Support for Graduate Medical Education: An Overview.* Washington, DC: CRS; 2016-18. https://www.everycrsreport.com/reports/R44376.html. Accessed Nov. 5, 2018.

14. Includes the District of Columbia. Medicaid MCO spending represented almost half of total Medicaid spending in FY 2017. Managed care enrollees not served by MCOs are covered by limited benefit plans or primary care case management programs. In 2018, three states (Alaska, Connecticut, and Wyoming) had no form of Medicaid managed care. Medicaid and CHIP Payment and Access Commission. *MACStats: Medicaid and CHIP Data Book.* Washington, DC: MACPAC; December 2018. https://www.macpac.gov/wp-content/uploads/2018/12/December-2018-MACStats-Data-Book.pdf. Accessed Dec. 8, 2018. Gifford K, Ellis E, Edwards BC, et al. *States Focus on Quality and Outcomes Amid Waiver Changes: Results From a 50-State Medicaid Budget Survey for State Fiscal Years 2018 and 2019.* San Francisco: Kaiser Family Foundation; 2018. http://files.kff.org/attachment/Report-States-Focus-on-Quality-and-Outcomes-Amid-Waiver%20Changes-Results-from-a-50-State-Medicaid-Budget-Survey-for-State-Fiscal-Years-2018-and-2019. Accessed Jan. 12, 2019. Kaiser Family Foundation. Medicaid Managed Care Market Tracker. https://www.kff.org/data-collection/medicaid-managed-care-market-tracker/. Accessed Jan. 12, 2019.
15. The Illinois and North Carolina Medicaid programs did not respond to the AAMC survey. However, at the consultant's request, corresponding survey data were obtained by each state's hospital association from the Medicaid agency for use in this report.
16. No attempt was made to independently verify the results of this study.
17. Three states — Florida, Oregon, and Washington — did not distinguish between DGME and IME costs in their Medicaid GME payments under managed care. Medicaid GME payments under FFS in Oregon and Washington recognized DGME and IME costs; Florida recognized only DGME costs in its Medicaid GME payments under FFS.
18. Federal statute requires that at least 40% of the state share of Medicaid be financed from state governments. Up to 60% of the needed funds may come from local governments; such contributions are made to the Medicaid agency either (1) as an intergovernmental transfer (IGT) from eligible entities operated by state or local governments (e.g., counties, hospital taxing districts) or (2) through state certification of public expenditures by a local public provider (e.g., county hospital) used to cover the full cost of delivering a Medicaid-covered service. Medicaid and CHIP Payment and Access Commission. Non-federal financing. https://www.macpac.gov/subtopic/non-federal-financing/. Accessed Jan. 27, 2019. State and local financing may be used to draw down federal matching funds by Medicaid programs that make supplemental GME payments (see Table 5).
19. A few states specify the type of teaching hospital (and affiliated residencies in some cases) eligible to receive Medicaid GME payments. Florida makes GME payments to state-statutory teaching hospitals (hospitals with at least 100 full-time-equivalent resident physicians in seven or more GME programs) and designated family practice teaching hospitals (freestanding, community-based hospitals with three-year family practice residency programs). New Mexico requires teaching hospitals to be enrolled as Medicaid providers and have Medicaid inpatient utilization rates of at least 5% during their most recently concluded fiscal year. Texas makes payments to urban Medicare-accredited teaching hospitals under FFS and managed care and to five state-owned teaching hospitals (and nine non-state-owned teaching hospitals effective October 2018) under a special initiative not linked to FFS or managed care. In Wisconsin, teaching hospitals eligible to receive supplemental GME payments must serve rural or medically underserved communities and have at least 30% of their resident physicians upon graduation practice in such communities within the state.
20. At least eight additional states (Alabama, Colorado, Georgia, Louisiana, New Mexico, New York, North Carolina, and Virginia) have provisions in their Medicaid state plans requiring Medicaid to make enhanced payments to qualified medical practitioners associated with public academic medical centers. However, these states currently do not consider such Medicaid payments to practitioners who instruct residents (individual teaching physicians) to be explicit GME payments.
21. In most states, this includes residents in all medical specialties. However, in New Mexico, only residents in primary care and obstetrics, and residents trained in rural settings, are eligible for Medicaid GME payments. In Wisconsin, residents eligible for Medicaid GME payments include those in family medicine, general internal medicine, general surgery, pediatrics, and psychiatry. Also eligible are residents being trained in team-based care, prevention and public health, cost-effectiveness, and health economics and in settings with new service delivery models (e.g., Accountable Care Organizations, patient-centered medical homes). In addition, some or all Medicaid GME payments in Florida, Idaho, Michigan, and Tennessee are weighted proportionally in support of primary care residents (see Table 7).
22. Supplemental payments are made to providers above what they may have received for services under their Medicaid base rate and are intended to offset any uncompensated costs for the care of Medicaid patients. Typically, these payments are made as a lump sum for a fixed period (month, quarter, or year) and are not directly tied to a particular service or visit. Supplemental payments are generally prohibited under managed care, except in states that have received a federal waiver authorizing them to continue making these "pass-through" payments when they expand their use of managed care. In November 2018, CMS proposed a Medicaid managed care rule that would allow all states transitioning to managed care to continue making these supplemental payments for a limited time. Office of the Federal Register. Medicaid Program; Medicaid and Children's Health Insurance Plan (CHIP) Managed Care. 83 FR 57264. Document number 2018-24626. Published Nov. 14, 2018. https://www.federalregister.gov/documents/2018/11/14/2018-24626/medicaid-program-medicaid-and-childrens-health-insurance-plan-chipmanaged-care. Accessed Nov. 22, 2018.
23. Federal regulations (42 Code of Federal Regulations § 447.272 - Inpatient services: Application of upper payment limits and 42 Code of Federal Regulations § 447.321 - Outpatient hospital and clinic services: Application of upper payment limits) prohibit states from receiving federal matching funds for Medicaid FFS payments in excess of a UPL, which is intended to prevent Medicaid from paying more than Medicare would pay for the same services. Under UPL, payments are tied to services rendered by an entire class of providers rather than individual providers. States make most UPL supplemental payments to hospitals, but they may also pay other institutions and qualified physicians under UPL. No federal regulation establishes a UPL for noninstitutional providers; however, CMS has indicated that Medicare rates and average commercial rates for physician services may be used as upper limits. Medicaid and CHIP Payment and Access Commission. *Report to Congress on Medicaid and CHIP: March 2019.* Chapter 2: Oversight of Upper Payment Limit Supplemental Payments to Hospitals. Washington, DC: MACPAC; 2019. https://www.macpac.gov/wp-content/uploads/2019/03/Oversight-of-Upper-Payment-Limit-Supplemental-Payments-to-Hospitals.pdf. Accessed March 15, 2019.

24. States are required under federal law to make supplemental Medicaid payments to hospitals deemed Disproportionate Share Hospitals (DSHs) to help offset their uncompensated costs for serving a high proportion of Medicaid and other low-income, uninsured patients. State Medicaid payments for this class of hospitals are limited by a state's annual federal DSH allotment. In 2014, 68% of all teaching hospitals were designated as DSHs, and DSH teaching hospitals represented nearly three-fourths of total DSH spending. MACPAC includes GME as one of 10 essential community services that DSH hospitals may provide. Medicaid and CHIP Payment and Access Commission. *Report to Congress on Medicaid and CHIP: March 2019.* Chapter 3: Annual Analysis of Disproportionate Share Hospital Allotments to States. Washington, DC: MACPAC; 2019. https://www.macpac.gov/wp-content/uploads/2019/03/Annual-Analysis-of-Disproportionate-Share-Hospital-Allotments-to-States.pdf. Accessed March 15, 2019.

25. See Table 10. Florida is one of nine states in FY 2017 that had instituted uncompensated care pools authorized under a Section 1115 federal demonstration waiver they received. As these states expand their use of managed care, these pools are used to preserve FFS supplemental payments (not just for GME) to hospitals and other providers that deliver large amounts of charity care or are generally paid less by Medicaid than private insurance. Medicaid and CHIP Payment and Access Commission. *Report to Congress on Medicaid and CHIP: March 2019.* Chapter 3: Annual Analysis of Disproportionate Share Hospital Allotments to States. Washington, DC: MACPAC; 2019. https://www.macpac.gov/wp-content/uploads/2019/03/Annual-Analysis-of-Disproportionate-Share-Hospital-Allotments-to-States.pdf. Accessed March 15, 2019.

26. Risk-based managed care is defined as Medicaid's use of capitated payments under contract to MCOs (and prepaid health plans in some states). MCOs are health plans that contract with states to provide comprehensive benefits to enrolled Medicaid beneficiaries for a pre-set, per-member-per-month premium (capitation payment). MCOs are at financial risk for the Medicaid services specified in their contracts.

27. One state, Illinois, made GME payments both directly to teaching programs and indirectly as part of the capitation rates to MCOs.

28. In these states, MCOs (not the state) are responsible for establishing methods and negotiating rates with teaching providers to pay for their GME costs. Also, CMS does not review the rates that MCOs pay providers. Marks T, Gifford K, Perlin S, Byrd M, Berger T. *Factors Affecting the Development of Medicaid Hospital Payment Policies: Findings from Structured Interviews in Five States.* Washington, DC: Medicaid and CHIP Payment and Access Commission; 2018. https://www.macpac.gov/wp-content/uploads/2018/10/Factors-Affecting-the-Development-of-Medicaid-Hospital-Payment-Policies.pdf. Accessed Jan. 6, 2019.

29. Oklahoma operated a risk-based Medicaid managed care program that paid medical schools directly for GME costs until 2017. In November 2019, North Carolina is expected to begin paying hospitals directly for their GME costs under a risk-based Medicaid managed care program approved as part of a section 1115 federal demonstration waiver effective July 2019 (see Table 10).

30. U.S. Government Accountability Office. *Physician Workforce: HHS Needs Better Information to Comprehensively Evaluate Graduate Medical Education Funding.* GAO-18-240. https://www.gao.gov/assets/700/690581.pdf. Published March 2018. Accessed April 3, 2019. Institute of Medicine. *Graduate Medical Education That Meets the Nation's Health Needs.* Washington, DC: The National Academies Press; 2014. https://www.nap.edu/catalog/18754/graduate-medical-education-that-meets-thenations-health-needs. Accessed Dec. 2, 2018.

31. Georgia, Illinois, Maryland, and Texas reported a total GME payment amount but provided no breakdown of specific amounts for some or all of their GME payments under FFS or managed care. See Table 12.

32. This figure has not been adjusted for inflation.

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Table 1. Medicaid Payments for Graduate Medical Education, 2018

State[1]	Under Medicaid Fee-for-Service	Under Medicaid Managed Care[2]
Alabama	No	No risk-based managed care
Alaska	No	No comprehensive managed care
Arizona	DGME and IME	No
Arkansas	DGME	No risk-based managed care
California	No	No[3]
Colorado	DGME	DGME
Connecticut	DGME and IME	No comprehensive managed care
Delaware	Does not distinguish between DGME and IME	Does not distinguish between DGME and IME
District of Columbia	DGME and IME	DGME
Florida	DGME	Does not distinguish between DGME and IME
Georgia	DGME and IME	IME
Hawaii	Does not distinguish between DGME and IME	No
Idaho	DGME	DGME[4]
Illinois	DGME and IME	DGME and IME
Indiana	DGME	DGME
Iowa	DGME and IME	DGME and IME
Kansas	DGME and IME	DGME and IME
Kentucky	DGME and IME	DGME and IME
Louisiana	DGME	DGME
Maine	DGME and IME	No risk-based managed care
Maryland	Does not distinguish between DGME and IME	Does not distinguish between DGME and IME
Massachusetts	No	No
Michigan	Does not distinguish between DGME and IME	Does not distinguish between DGME and IME
Minnesota	Does not distinguish between DGME and IME	Does not distinguish between DGME and IME
Mississippi	DGME	DGME
Missouri	DGME	No
Montana	Does not distinguish between DGME and IME	No risk-based managed care
Nebraska	DGME and IME	DGME and IME
Nevada	Does not distinguish between DGME and IME	Does not distinguish between DGME and IME
New Hampshire	No	No
New Jersey	No	DGME and IME
New Mexico	DGME and IME	No
New York	DGME and IME	DGME and IME
North Carolina	DGME and IME	No risk-based managed care[5]
North Dakota	No	No
Ohio	Does not distinguish between DGME and IME	Does not distinguish between DGME and IME
Oklahoma	DGME and IME	No risk-based managed care[6]
Oregon	DGME and IME	Does not distinguish between DGME and IME
Pennsylvania	DGME	No
Rhode Island	No	No
South Carolina	DGME and IME	DGME and IME
South Dakota	Does not distinguish between DGME and IME	No risk-based managed care
Tennessee[7]	No	DGME
Texas[8]	DGME and IME	IME
Utah	DGME	No
Vermont	DGME and IME	No risk-based managed care
Virginia	DGME and IME	IME
Washington	DGME and IME	Does not distinguish between DGME and IME
West Virginia	DGME	No
Wisconsin	DGME	DGME
Wyoming	No	No comprehensive managed care

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Note: GME = graduate medical education; DGME = direct graduate medical education (payment for the direct costs of GME); IME = indirect medical education (payment for the indirect costs of GME).

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1. In 2018, Alaska, Alabama, California, Massachusetts, New Hampshire, North Dakota, Rhode Island, and Wyoming did not make explicit payments for GME under Medicaid fee-for-service or managed care.
2. As of July 2018:
   - Alaska, Connecticut, and Wyoming had no comprehensive Medicaid managed care program in place.
   - Alabama, Arkansas, Maine, Montana, North Carolina, Oklahoma, South Dakota, and Vermont operated chiefly a primary care case management form of managed care, which typically does not include payment for hospital-based costs and services.

   Gifford K, Ellis E, Edwards BC, et al. *States Focus on Quality and Outcomes Amid Waiver Changes: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2018 and 2019.* San Francisco, CA: Kaiser Family Foundation; 2018. http://files.kff.org/attachment/Report-States-Focus-on-Quality-and-Outcomes-Amid-Waiver%20Changes-Results-from-a-50-State-Medicaid-Budget-Survey-for-State-Fiscal-Years-2018-and-2019. Accessed Jan. 12, 2019.
3. At press time, California was awaiting federal approval of a proposed amendment to its Medicaid state plan that would allow the state to pay designated public hospitals for their GME costs under the state's risk-based managed care program. If approved, GME payments would be effective retroactively from January 2017.
4. Idaho operates a Medicare-Medicaid Coordinated Plan, a form of risk-based managed care that covers inpatient and outpatient hospital services for those dually eligible.
5. Effective July 2019, North Carolina will operate a risk-based Medicaid managed care program under a recently approved Section 1115 federal demonstration waiver. The state is expected to begin paying hospitals directly for their GME costs in November 2019 (see Table 10).
6. Oklahoma operated a risk-based Medicaid managed care program until 2017, under which they paid medical schools directly for their GME costs.
7. Tennessee Medicaid does not operate a fee-for-service program.
8. Texas makes payments for DGME and IME costs to five state-owned teaching hospitals (and payments for DGME costs to nine non-state-owned teaching hospitals effective October 2018); it makes supplemental payments for IME costs to urban, Medicare-accredited teaching hospitals. Medicaid GME payments to the five public teaching hospitals (and nine non-state-owned teaching hospitals effective October 2018) are considered a special initiative not linked to either fee-for-service or managed care, because the state legislature, not Medicaid's rate analysis, determines the rationale for inclusion or exclusion of GME payments.

Table 2. Sources for State Financing of Medicaid Graduate Medical Education Payments, 2018

State	State General Revenue	Local Government Contributions	Provider (Hospital) Taxes
Arizona		X	
Arkansas		X	
Colorado	X		
Connecticut	X		
Delaware	X		
District of Columbia	X		
Florida	X	X	
Georgia	X		X
Hawaii	X		
Idaho	X		
Illinois	X	X	X
Indiana	X		
Iowa	X		
Kansas	X		
Kentucky	X		
Louisiana	X		
Maine	X		
Maryland	X		
Michigan	X		
Minnesota	X	X	
Mississippi	X		
Missouri	X	X	X
Montana		X	
Nebraska	X		
Nevada		X	
New Jersey	X		
New Mexico	X	X	
New York	X		
North Carolina	X	X	
Ohio	X		
Oklahoma		X	
Oregon	X	X	
Pennsylvania	X		X
South Carolina	X	X	X
South Dakota	X		
Tennessee	X		
Texas	X	X	
Utah	X		
Vermont		X	
Virginia	X	X	
Washington	X		
West Virginia	X		
Wisconsin	X		X
Total States	37	16	6

Note: Recognized sources of state funding for Medicaid graduate medical education (GME) payments include: (1) state general revenue appropriated to the Medicaid agency, (2) contributions from local governments (including hospitals and other providers they operate) through intergovernmental transfers and certified public expenditures, *and/or* (3) mandatory assessments (taxes) on health care-related providers (mainly hospitals).

Table 3. Nonhospital Teaching Entities and Health Professions Trainees Other Than Resident Physicians Eligible to Receive Medicaid Graduate Medical Education Payments, 2018

State	Nonhospital Teaching Entities			Health Professions Trainees Other Than Resident Physicians	
	Medical Schools[1]	Ambulatory Care Centers[2]	Individual Teaching Physicians[3]	Graduate Nurses	Other Professions
Florida	X	X	X		
Idaho		X			
Indiana				X	X[4]
Iowa			X	X	
Louisiana				X	X[5]
Minnesota	X			X	X[6]
Mississippi				X	
Nebraska					X[7]
Nevada			X		
New York					X[8]
Ohio				X	X[9]
Oregon				X	
Pennsylvania				X	
South Carolina			X	X	X[10]
Tennessee	X				
Vermont			X		
Virginia					X[11]
West Virginia				X	

1. Graduate medical education (GME) payments to medical schools are made only under managed care in all three states. In Florida, these GME payments are made according to federal Medicaid managed care regulations (42 CFR § 438.6) that allow a state to continue requiring a managed care organization or prepaid ambulatory health plan to make a pass-through payment to faculty practice plans using a capitated, per-member per-month, minimum-fee schedule. In Minnesota and Tennessee, GME payments to medical schools are authorized under the special terms and conditions of each state's Section 1115 federal demonstration waiver.
2. GME payments to ambulatory care centers in Florida and Idaho are made under fee-for-service explicitly to Federally Qualified Health Centers (FQHCs) with approved training programs and are allowed under an amendment to each state's Medicaid state plan. California is awaiting approval of a similar amendment to its Medicaid state plan that would allow the state to pay FQHCs and Rural Health Clinics for their GME costs.
3. Individual teaching physicians (ITPs) are deemed by the Centers for Medicare and Medicaid Services to be "qualified practitioners associated with academic medical centers or safety net hospitals," and thus are eligible to receive an enhanced Medicaid payment (considered a GME payment in Florida, Iowa, Nevada, South Carolina, and Vermont) associated with the cost of instructing medical residents and interns. GME payments to ITPs by all five states are made under fee-for-service. Nevada and South Carolina also make GME payments to ITPs under managed care.
4. Students in paramedical programs (e.g., Emergency Medical Service, Clinical Pastoral Education, Radiology Technology).
5. Allowable technology programs per Medicare: Medical Technologists, Radiology Technologists.
6. Medical students; dental, doctor of pharmacy, chiropractic, and physician assistant students.
7. Approved interns.
8. Interns, fellows.
9. Nursing and paramedical students.
10. Laboratory personnel.
11. Dental and podiatric students.

Table 4. Methods for Calculating Medicaid Graduate Medical Education Payments Under Fee-for-Service, 2018

State[1]	Follow Medicare Methodology	Per Medicaid Discharge	Per-Resident Method	Other
Arizona			X	
Arkansas				X[2]
Colorado		X		
Connecticut	X			
Delaware	X	X[3]		
District of Columbia				X[4]
Florida			X	X[5]
Georgia[6]	X			X
Hawaii				X[7]
Idaho	X			X[8]
Illinois		X[9]		X[10]
Indiana				X[11]
Iowa				X[12]
Kansas				X[13]
Kentucky	X	X		
Louisiana				X[14]
Maine	X			
Maryland			X	
Michigan				X[15]
Minnesota			X	
Mississippi		X		
Missouri				X[16]
Montana			X	
Nebraska	X	X		
Nevada			X	X[17]
New Mexico				X[18]
New York		X		
North Carolina	X	X		
Ohio		X[19]		
Oklahoma			X	
Oregon	X			
Pennsylvania				X[20]
South Carolina		X		X[21]
South Dakota			X	
Texas	X[22]		X[23]	
Utah				X[24]
Vermont			X	X[25]
Virginia		X		X[26]
Washington				X[27]
West Virginia				X[28]
Wisconsin				X[29]
Total States	10	11	10	23

1. New Jersey Medicaid does not pay hospitals for graduate medical education (GME) under its fee-for-service program. Tennessee Medicaid does not operate a fee-for-service (FFS) program.
2. Payments in the base rate follow Medicare reasonable cost rules plus the inclusion of nursery cost in calculating the cost per resident. For supplemental payments, payments are equal to the product of (1) the direct graduate medical education (DGME) costs as reported in the State Operated Teaching Hospital's Medicare cost report, and (2) the Medicaid ratio (total of Medicaid patient days plus patient days for Medicaid private-option beneficiaries divided by total hospital patient days).
3. A hospital-specific prospective rate is calculated for each accommodation type based on the percentage of total costs for each hospital represented by medical education costs.

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4. Indirect medical education (IME) costs are included in the prospective base rate multiplied by the case mix index. DGME costs are paid as a fixed amount per discharge.
5. As part of the Low Income Pool program approved by a federal waiver, GME payments are made to teaching hospitals, qualified individual teaching physicians (ITPs), and Federally Qualified Health Centers (FQHCs) eligible for funding under the state's Statewide Medicaid Residency Program and Graduate Medical Education Startup Bonus Program. The calculation of payments to eligible hospital residency programs is done using a formula that employs each hospital's allocation fraction based on state funds appropriated for the aforementioned programs and the hospital's total number of full-time equivalent (FTE) residents, in which residents in designated primary care specialties are counted as 1.0 FTE and all other residency specialties are counted as 0.5 FTE. Payments to ITPs employed by or under contract with a state medical school physician practice that meet participation requirements are allocated based on historical Medicaid volume and designated cost limits. FQHCs that instruct medical residents are paid according to a Statewide Medicaid Residency Program formula that employs each health center's allocation fraction based on state funds appropriated for the aforementioned programs and the FQHC's total number of FTE residents, in which residents in designated primary care specialties are counted as 1.0 FTE and all other residency specialties are counted as 0.5 FTE. Refer to Section 409.909 (2-4) of the 2018 Florida State Statutes for more information.
6. A Medicare methodology is used to pay for IME costs. DGME costs are reimbursed from a separate pool of funds based on the 2011 Medicare hospital cost report.
7. Percentage add-on to routine per diem and ancillary per-discharge rate.
8. An alternative payment methodology (alternative to the Medicare prospective payment system rate) is used for GME payments to FQHCs. The formula used is: number of hours worked by primary care residents multiplied by resident hourly rate (training costs, benefits, direct overhead costs) multiplied by the ratio of the Medicaid patient visits to all patient visits served by the resident for the period.
9. Payment reflects increase to base diagnosis-related group (DRG) rate, which then flows through a weighting process to reflect acuity.
10. The GME payment amount is based on each hospital's cost of interns and residents multiplied by the hospital's Medicaid utilization rate to determine the total Medicaid allocation; 33% of the total allocated Medicaid GME cost is paid. This annual payment is based on a fixed point in time (state fiscal year 2015) and is updated periodically.
11. Cost per day (per diem) is calculated as follows: routine and ancillary medical education costs divided by total patient days multiplied by the DRG average length of stay.
12. For both DGME and IME costs in inpatient and outpatient settings, the following formula is used: (a) Multiply the total of all DRG weights for claims paid from the GME/Disproportionate Share Hospital fund apportionment claim set for each hospital reporting direct medical education costs that qualify for payment as medical education costs under the Medicare program in the hospital's base-year cost report by each hospital's direct medical education rate to obtain a dollar value. (b) Sum the dollar values for each hospital, then divide each hospital's dollar value by the total dollar value to get a percentage. (c) Multiply each hospital's percentage by the amount allocated for direct medical education to determine the payment to each hospital. Qualified ITPs are paid based on a comparison of Medicaid rates to average commercial rates for such professionals.
13. Public teaching hospitals are paid as a percentage of charges not to exceed the federal upper payment limit (UPL) based on review of Medicare cost reports. All other teaching hospitals are paid according the following formula: hospital-specific medical education rate (Medicaid DRG rate multiplied by one plus direct medical education cost percent plus indirect medical education cost percent) multiplied by the number of Medicaid discharges multiplied by the average case mix rate.
14. Prospective peer group per diem rate is calculated using a hospital-specific medical education add-on. A cost settlement process is used for public-private partnership and children's hospitals.
15. GME is paid from two funding pools. In pool one, a hospital's GME share is based on its portion total adjusted FTE residents (FTE residents multiplied by case mix multiplied by Medicaid utilization). In pool two, a hospital's share is based on its portion of total adjusted primary care resident FTEs (FTEs multiplied by Medicaid outpatient charges divided by total charges).
16. GME payments are made by determining the Medicaid GME cost per patient day based on the fourth-quarter prior fiscal year cost report and trending to the current state fiscal year, and then multiplying by the estimated patient days for the state fiscal year. The annual amount is divided by four and paid quarterly. Qualifying hospitals can also receive an enhanced GME payment, paid annually, which represents the difference between the Consumer Price Indices used by Missouri Medicaid for the basis for its trends and the Medicare indices.
17. Enhanced payment rate for outpatient services delivered in a teaching environment.
18. Rate is determined by number of FTE residents (in primary care, obstetrics, rural health, and other approved residents) who worked at a qualifying hospital during the preceding year and is subject to an upper limit on total payments.
19. Payment is case mix adjusted by the DRG/Severity of Illness relative weight.
20. DGME costs are reimbursed using the sum of a hospital's total Medicaid FFS GME costs reported in the 2008 Medicaid cost report and the estimated total Medicaid managed care GME costs as determined by calculating a ratio of Medicaid FFS acute care days to Medicaid managed care acute care days and applying this ratio to Medicaid FFS GME costs from the Medicaid cost report. Payment is 75% of the total Medicaid GME costs.
21. Comparison of Medicaid rates to average commercial rates paid to qualified ITPs.
22. Medicare IME factor used to calculate add-on payment for IME costs to qualifying urban teaching hospitals.
23. For DGME costs.
24. Based on most recent Medicare cost reports adjusted for inflation and utilization trends.
25. Comparison of Medicaid rates to average commercial rates paid to qualified ITPs.
26. Inflated per-resident amount (from 1998) multiplied by current resident FTEs.
27. The hospital-specific DGME payment is calculated by dividing the DGME cost reported on worksheet B, part 1, of the Centers for Medicare and Medicaid Services (CMS) cost report by the adjusted total costs from the CMS cost report. For IME costs, the IME adjustment is equal to the "IME adjustment factor for Operating PPS," available in the most recent CMS final rule impact file on the CMS website as of May 1 of the rate-setting year.
28. Modified Medicare methodology.
29. GME payments are calculated as: (1) a percentage add-on to the hospital DRG rate prospectively established based on the ratio of GME costs to total hospital operating costs and (2) a supplemental payment based on annual competitive applications that funds the direct costs of new residents in family medicine, general internal medicine, general surgery, pediatrics, and psychiatry up to $180,462 per resident based in hospitals that serve rural and underserved communities in the state.

Table 5. Methods for Distributing Medicaid Graduate Medical Education Payments Under Fee-for-Service, 2018

State[1]	Part of Hospital Base Rate	Supplemental Payments Under Federal Authority[2]			
		UPL for Institutions	UPL for Physicians (ITP)	DSH	UCP
Arizona		X			
Arkansas	X	X			
Colorado	X	X			
Connecticut		X			
Delaware	X				
District of Columbia	X				
Florida			X	X	X[3]
Georgia	X	X			
Hawaii	X				
Idaho		X[4]			
Illinois	X	X			
Indiana	X				
Iowa		X	X		
Kansas		X			
Kentucky	X	X			
Louisiana	X	X		X	
Maine	X				
Maryland		X			
Michigan		X			
Minnesota		X			
Mississippi	X				
Missouri		X			
Montana		X			
Nebraska	X				
Nevada		X	X		
New Mexico		X			
New York	X				
North Carolina	X	X		X	
Ohio	X				
Oklahoma		X			
Oregon		X			
Pennsylvania		X			
South Carolina	X		X		
South Dakota		X			
Texas	X	X			
Utah		X			
Vermont		X	X		
Virginia		X		X	
Washington	X				
West Virginia	X				
Wisconsin	X	X			
Total States	21	28	5	4	1

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Note: UPL = upper payment limit; ITPs = Qualified Individual Teaching Physicians; DSH = Disproportionate Share Hospital; UCP = Uncompensated Care Pool.

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1. New Jersey Medicaid does not pay hospitals for graduate medical education (GME) under its fee-for-service program. Tennessee Medicaid does not operate a fee-for-service program.
2. States make four types of supplemental Medicaid payments for GME costs to eligible providers allowed under federal authority: (1) payments to institutions (hospitals and freestanding nonhospital clinics), whose payments cannot exceed the institution's designated UPL; (2) payments to qualified ITPs, whose UPL is deemed by the Centers for Medicare and Medicaid Services to be Medicare rates and average commercial rates for physician services (see Table 3); (3) payments to federally designated DSHs; and (4) waiver-approved UCPs that pay hospitals and other providers for costs associated with delivery of uncompensated services to the uninsured.
3. Florida's Low Income Pool distributes supplemental payments to reimburse uncompensated GME costs to eligible non-DSH state-statutory teaching hospitals, ITPs contracted by faculty practice plans of public medical schools, and Federally Qualified Health Centers (FQHCs) with approved teaching programs.
4. Idaho distributes supplemental UPL payments to FQHCs with approved teaching programs through a quarterly settlement process.

Table 6. States Making Medicaid Graduate Medical Education Payments Under Managed Care, 2018

State	Direct Payment to Hospitals or Other Teaching Entity	Payment Part of Capitated Rates Paid to MCOs
Colorado	X	
Delaware		X
District of Columbia	X	
Florida		X
Georgia		X
Idaho	X	
Illinois[1]	X	X
Indiana	X	
Iowa		X
Kansas		X
Kentucky		X
Louisiana	X	
Maryland	X	
Michigan		X
Minnesota	X	
Mississippi		X
Nebraska	X	
Nevada	X	
New Jersey	X	
New York	X	
Ohio		X
Oregon	X	
South Carolina	X	
Tennessee	X	
Texas		X
Virginia	X	
Washington		X
Wisconsin		X
Total States	16	13

Notes: MCOs = managed care organizations. Effective July 2019, North Carolina has federal approval to operate a risk-based managed care program that will pay hospitals directly for graduate medical education.

1. Illinois pays private teaching hospitals as part of the capitation rates paid to MCOs and makes payments directly to public teaching hospitals (University of Illinois and Cook County).

Table 7. Methods for Calculating Medicaid Graduate Medical Education Payments Made Directly to Teaching Programs Under Managed Care, 2018

State	Follow Medicare FFS Methodology	Per Medicaid Managed Care Discharge	Per-Resident Method	Other
Colorado		X		
District of Columbia	X			
Idaho	X[1]			
Illinois		X		
Indiana				X[2]
Louisiana				X[3]
Maryland			X	
Minnesota			X	
Nebraska		X		
Nevada			X	X[4]
New Jersey[5]	X		X	
New York		X		
Oregon	X			
South Carolina	X	X		X[6]
Tennessee			X	X[7]
Virginia		X		

Note: FFS = fee-for-service.

1. Based on inpatient and outpatient time Medicare coverage database (MCD) utilization.
2. Graduate medical education (GME) payments are made on a cost per day (per diem) calculated by dividing routine and ancillary medical education costs by total inpatient days multiplied by the Diagnosis-Related Group average length of stay.
3. Prospective peer group per diem rate calculated with hospital-specific medical education add-on. Cost settlement process used for public-private partnership and children's hospitals.
4. An enhanced payment based on the average commercial rate for qualified professionals for services delivered in an outpatient teaching environment.
5. Direct graduate medical education (DGME) payments are calculated as follows: Using 2013 as the base year, percentage of Medicaid HMO days is multiplied by the total median cost per resident (total GME costs) divided by total DGME costs. Indirect medical education (IME) payments are calculated as follows: Using 2013 as the base year, total inpatient Medicaid managed care payments for 24 months is multiplied by an IME factor of 0.1219 divided by total IME costs.
6. An enhanced payment based on the average commercial rate methodology for qualified teaching physicians for services delivered in a teaching environment.
7. Fixed annual amount of money divided among the state's four medical schools using a calculation factoring in the ratio of the number of primary care residents to the total number of residents.

Table 8. State Oversight of Medicaid Graduate Medical Education Payments in Capitation Rates to Managed Care Organizations, 2018

State	Medicaid *Requires* MCOs to Distribute GME Payments to Teaching Hospitals or Other Teaching Entities	Medicaid *Assumes* MCOs Distribute GME Payments to Teaching Hospitals or Other Teaching Entities
Delaware		X
Florida	X[1]	
Georgia		X
Illinois		X
Iowa	X[2]	
Kansas	X[3]	
Kentucky	X[4]	
Michigan	X[5]	
Mississippi	X[6]	
Ohio		X[7]
Texas		X
Washington		X
Wisconsin		X

Note: GME = graduate medical education; MCOs = managed care organizations.

1. MCOs are provided with a specific methodology for determining GME payments to medical schools.
2. MCOs are provided with a specific methodology, which follows Medicaid fee-for-service (FFS), for determining GME add-on payments.
3. MCOs are provided with a specific methodology for determining GME add-on payments. Medicaid FFS provides the GME factors to apply to the peer group hospital rate. Payment is calculated as the peer group rate multiplied by the Medicare Severity Diagnosis Related Group weight for Diagnosis Related Group.
4. MCOs are provided with a methodology for determining GME add-on payments.
5. MCOs are provided with a specific methodology for determining GME add-on payments.
6. MCOs are provided with a specific methodology for determining GME add-on payments. Teaching hospitals are paid on a per-case basis using the same methodology for making GME payments under FFS.
7. The contracts between MCOs and hospitals generally state that the MCO "pays like FFS." Therefore, the assigned GME rate to a teaching hospital is also paid on claims for managed care enrollees.

Table 9. Reasons for Not Making Medicaid Graduate Medical Education Payments Under Managed Care, by State, 2018

State[1]	Rationale for *Not* Making GME Payments Under Managed Care
Arizona	No rationale reported
Hawaii	No rationale reported
Missouri	Medicaid payment for GME under managed care is not a pressing policy issue among many competing issues; difficulty determining methodology to pay for GME under managed care
New Mexico	Medicaid payment for GME under managed care is not necessary or appropriate
Oklahoma	Medicaid historically paid for GME, but recent policy issues no longer allow payment[2]
Pennsylvania	An amount was added to fee-for-service GME payments to compensate for no longer including payment of GME costs under capitated managed care
Utah	Medicaid payment for GME payment under managed care is not necessary or appropriate
West Virginia	No rationale reported

Note: GME = graduate medical education.

1. Only states that make Medicaid GME payments directly to teaching programs under their fee-for-service programs *and* have a risk-based managed care program were included. Oklahoma operated a risk-based Medicaid managed care program that paid medical schools for GME costs until 2017.
2. Effective Dec. 31, 2016, Oklahoma Medicaid no longer received federal financial participation to support GME managed care payments under the state's section 1115A waiver. In FY 2018, the state discontinued GME payments under Medicaid managed care.

Table 10. States With a Federal Waiver Governing Graduate Medical Education Payments Under Medicaid Managed Care, 2018

Section 1115 Approved Federal Demonstration Waivers
FLORIDA Title: Managed Medical Assistance *Original Approval: 2005* *Expiration: 2022* The demonstration allows the state to operate a capitated Medicaid managed care program and creates a Low Income Pool (LIP) to fund safety-net providers that furnish uncompensated care to Medicaid, uninsured, and underinsured populations. The uncompensated care pool replaced the Medicaid Upper Payment Limit supplemental payment program that supported safety-net hospitals under fee-for-service (FFS) payment models. The waiver allows LIP to continue making Medicaid supplemental FFS graduate medical education (GME) payments to eligible non-Disproportionate Share Hospital state-statutory teaching hospitals, individual teaching physicians employed by physician practices of public medical schools, and Federally Qualified Health Centers with approved teaching programs. LIP: http://www.fdhc.state.fl.us/Medicaid/Finance/finance/LIP-DSH/LIP/background.shtml
MINNESOTA Title: Prepaid Medical Assistance Project Plus *Original Approval: 1995* *Expiration: 2020* The demonstration supports health services delivered through a statewide prepaid, capitated managed care system. The waiver authorizes the state to make Medicaid GME payments directly to teaching hospitals and other approved clinical training programs under managed care (outside of capitation rates) under the auspices of the state Department of Health's Medical Education and Research Costs (MERC) trust fund. Payments are limited to the amount claimed for federal financial participation under the demonstration. MERC: https://www.health.state.mn.us/facilities/ruralhealth/merc/index.html
NEW JERSEY Title: Family Care Comprehensive Demonstration *Original Approval: 2011* *Expiration: 2022* The demonstration builds on reforms in existing managed acute and primary care programs and provider networks. Effective July 2013, an amendment to the Medicaid state plan established a new method of distributing GME payments authorized under the demonstration's special terms and conditions approved in 2012. The amendment requires that (1) Medicaid GME payments to teaching hospitals be distributed only under managed care using a methodology that makes GME payments directly to teaching hospitals (outside of capitation rates paid to managed care organizations) and (2) the Medicaid program receives federal approval under the waiver for periodic increases in such payments as amendments to its state plan. The demonstration establishes that the medical education component under Medicaid managed care be administered by the state Department of Health's Hospital Care Payment Assistance Program (HCPAP). HCPAP: https://www.nj.gov/health/charitycare/
NORTH CAROLINA Title: Medicaid Reform Demonstration *Original Approval: 2019 (July)* *Expiration: 2024* The demonstration supports the transition of Medicaid managed care to a risk-based program that contracts with prepaid health plans (PHPs) and authorizes the state to make GME payments under managed care directly to teaching hospitals outside of the capitation rates paid to PHPs. In addition, the state proposes to establish an Innovation Workforce Fund that would support an assessment to identify gaps in the state's Medicaid provider workforce and, based on the assessment results, provide education and practice financial incentives that target high-need types of Medicaid providers. Medicaid Transformation: https://files.nc.gov/ncdhhs/CMS-1115-Approval-FactSheet-FINAL-20181024.pdf https://files.nc.gov/ncdhhs/medicaid/Medicaid-Factsheets-PHP-2.4.19.pdf

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Section 1115 Approved Federal Demonstration Waivers
TENNESSEE Title: TennCare I and II *Original Approval: 1994* *Expiration: 2021* The demonstration has the twin goals of controlling rising Medicaid costs and increasing public access to affordable health care by enrolling the state's entire Medicaid population in managed care. Authority is granted for the indirect payment of GME (by directly paying four university medical schools instead of their associated teaching hospitals or clinics) from a supplemental pool that favors support of primary care residents and promotes the waiver's objective to increase access to and strengthen providers who serve Medicaid and low-income populations in the state. GME Pool (pgs. 25–26): https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/tn/TennCare-II/tn-tenncare-ii-supp-pool-rpt-03042016.pdf

Sources: Henderson TM. *Medicaid Graduate Medical Education Payments: Results From the 2018 50-State Survey.* Washington, DC: AAMC; 2019. Centers for Medicare and Medicaid Services. State Section 1115 Demonstration Waivers. https://www.medicaid.gov/medicaid/section-1115-demo/demonstration-and-waiver-list/index.html. Accessed Feb. 3, 2019.

Notes: Effective Dec. 31, 2016, Oklahoma Medicaid stopped receiving federal financial participation to support GME payments under the state's Section 1115 demonstration waiver. Payments to medical schools under managed care were discontinued in FY 2018 as required by the Centers for Medicare and Medicaid Services.

Table 11. State Medicaid Programs With Financial Accountability Measures Governing Graduate Medical Education Payments, 2018

State	Teaching Programs Required to Report DGME Costs	GME Payments Routinely Audited[1]
Arizona	No*	No
Arkansas	No*	Yes[2]
Colorado	No*	No
Connecticut	No*	No
Delaware	No	No
District of Columbia	No*	No
Florida	Yes	Yes[3]
Georgia	No*	No
Hawaii	Yes	No
Idaho	Yes	No
Illinois	No*	No
Indiana	No*	No
Iowa	Yes	Yes[4]
Kansas	Yes	No
Kentucky	No*	No
Louisiana	No*	Yes[5]
Maine	Yes	Yes[6]
Maryland	No	No
Michigan	No	No
Minnesota	No*	Yes[7]
Mississippi	No*	No
Missouri	No*	No
Montana	No*	No
Nebraska	No	Yes[8]
Nevada	Yes	Yes[9]
New Jersey	Yes	No
New Mexico	No	No
New York	Yes	No
North Carolina	No*	Yes
Ohio	Yes	Yes[10]
Oklahoma	No	No
Oregon	No*	No
Pennsylvania	No*	No
South Carolina	No*	No
South Dakota	No*	No
Tennessee	Yes	No
Texas	Yes	Yes[11]
Utah	No	No
Vermont	No*	Yes[12]
Virginia	Yes	Yes[13]
Washington	Yes	No
West Virginia	Yes	Yes[14]
Wisconsin	No*	No

(continued on next page)

Notes: * = The state obtains DGME costs of teaching programs from another source (e.g., Medicare cost report).
GME = graduate medical education; DGME = direct graduate medical education.

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1. If a state answered "Yes" to the survey question "Does Medicaid routinely audit its GME payments to teaching programs?" (third column), then the purpose(s) the state specified for auditing GME payments is noted in the endnote adjacent to its answer in the third column.
2. Document that payments were made only for specified allowable costs.
3. Identify overpayments and underpayments and verify the number of resident FTEs via the Medicaid GME payment methodology.
4. Identify overpayments and underpayments and document that payments were made only for specified allowable costs.
5. Determine if GME payments are paid through lump sum adjustment as prospective amount review claims to ensure that they are valid. If paid in interim rate and subject to cost settlement, actual direct GME costs are identified and verified through the cost report settlement process.
6. Identify overpayments and underpayments.
7. Identify overpayments and underpayments.
8. Identify overpayments and underpayments and investigate integrity concerns.
9. Identify overpayments and underpayments.
10. DGME costs reported in the Medicare Cost Report are used to determine if a hospital is operating a teaching program. For hospitals that no longer report teaching or allied professions medical education costs on the Medicare Cost Report, the Medicaid program will reduce GME payments to zero.
11. Identify overpayments and underpayments.
12. Document that payments were made only for specified allowable costs.
13. Identify overpayments and underpayments and document that payments were made only for specified allowable costs.
14. Document that payments were made only for specified allowable costs.

Table 12. Medicaid Graduate Medical Education Payment Amounts, 2018[1]

State[2]	GME Payments Under Fee-for-Service (Millions of Dollars)	GME Payments Under Managed Care (Millions of Dollars)		Total Explicit GME Payments[3] (Millions of Dollars)	Total GME Payments[4] (Millions of Dollars)
		Explicit Payments[5]	Implicit Payments[6]		
Arizona	$274.0	$0	$0	$274.0	**$274.0**
Arkansas	$9.1	$0	$0	$9.1	**$9.1**
Colorado	$14.9	$1.1	$0	$16.1	**$16.1**
Connecticut	$121.1	$0	$0	$121.1	**$121.1**
Delaware	$2.2	$0	$11.4	$2.2	**$13.6**
District of Columbia	$37.4	$16.3	$0	$53.7	**$53.7**
Florida	$233.7	$0	$209.5	$233.7	**$443.2**
Georgia[7]	$46.0	$0	Unreported	$46.0	**$46.0**
Hawaii	$0.065	$0	$0	$0.065	**$0.065**
Idaho	$0.88	$2.8	$0	$3.6	**$3.6**
Illinois	$105.3	Unreported[8]	$3.2	$105.3	**$108.5**
Indiana	$7.0	$25.0	$0	$32.0	**$32.0**
Iowa	$13.0	$0	$22.1	$13.0	**$35.1**
Kansas	$0.86	$0	$13.9	$0.86	**$14.8**
Kentucky	$6.0	$0	$18.4	$6.0	**$24.4**
Louisiana	$2.3	$24.9	$0	$27.2	**$27.2**
Maine	$12.2	$0	$0	$12.2	**$12.2**
Maryland[9]	Unreported	Unreported	$0	$52.2	**$52.2**
Michigan	$62.9	$0	$100.0	$62.9	**$162.9**
Minnesota	$8.6	$72.3	$0	$80.9	**$80.9**
Mississippi	$9.7	$0	$24.4	$9.7	**$34.1**
Missouri	$141.7	$0	$0	$141.7	**$141.7**
Montana	$9.3	$0	$0	$9.3	**$9.3**
Nebraska	$0[10]	$10.1	$0	$10.1	**$10.1**
Nevada	$20.1	$11.7	$0	$31.8	**$31.8**
New Jersey	$0	$218.0	$0	$218.0	**$218.0**
New Mexico	$98.8	$0	$0	$98.8	**$98.8**
New York	$380.9	$1,307.2	$0	$1,688.1	**$1,688.1**
North Carolina	$100.0	$0	$0	$100.0	**$100.0**
Ohio	$6.6	$0	$273.1	$6.6	**$279.8**
Oklahoma	$39.8	$0	$0	$39.8	**$39.8**
Oregon	$75.6	$37.0	$0	$112.6	**$112.6**
Pennsylvania	$117.9	$0	$0	$117.9	**$117.9**
South Carolina	$70.2	$169.0	$0	$239.1	**$239.1**
South Dakota	$2.9	$0	$0	$2.9	**$2.9**
Tennessee	$0	$50.0	$0	$50.0	**$50.0**
Texas[11]	$53.5	$0	$55.7	$83.5	**$139.3**
Utah	$6.2	$0	$0	$6.2	**$6.2**
Vermont	$30.0	$0	$0	$30.0	**$30.0**
Virginia	$433.2	$201.5	$0	$634.7	**$634.7**
Washington[12]	Unreported	$0	Unreported	Unreported	**Unreported**
West Virginia	$10.1	$0	$0	$10.1	**$10.1**
Wisconsin	$26.1	$0	$27.9	$26.1	**$54.0**
Totals[13]	**$2.59 billion**	**$2.15 billion**	**$760 million**	**$4.74 billion**	**$5.58 billion**

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Note: GME = graduate medical education.

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1. The start and end dates for each state's fiscal year vary. Not all states were able to report payment amounts for state fiscal year (SFY) 2018. Illinois reported payment amounts for SFY 2019. States reporting payment amounts for SFY 2017 are Arizona, District of Columbia, Idaho, Kansas, North Carolina, Texas, and Wisconsin. Maine and Nebraska reported payment amounts for SFY 2016.
2. In 2018, Alaska, Alabama, California, Massachusetts, New Hampshire, North Dakota, Rhode Island, and Wyoming did *not* make explicit Medicaid payments for GME.
3. The total amount of GME payments made directly to teaching programs under both fee-for-service (FFS) and managed care.
4. Payment amounts (unless indicated otherwise) include reimbursement for direct and indirect GME costs by those state Medicaid programs that distinguish and pay for one or both these costs (see Table 1).
5. Explicit GME payments are those made directly to teaching hospitals and other teaching entities under managed care.
6. Implicit GME payments are those recognized and included in capitation rates to managed care organizations.
7. In Georgia, GME payments include only payments for direct graduate medical education (DGME) costs under FFS. Payments for indirect medical education (IME) costs under both FFS and managed care were not readily available.
8. In Illinois, GME payment amounts made directly to public teaching hospitals at the University of Illinois and in Cook County under managed care were not readily available.
9. Maryland reported a total GME payment amount but provided no specific breakdown amounts for FFS or managed care GME payments.
10. FFS GME payments made by Nebraska were infinitesimal.
11. Texas reported its supplemental payments for IME costs to urban, Medicare-accredited teaching hospitals under FFS and managed care. However, its Medicaid payments for DGME and IME costs to five state-owned teaching hospitals are considered a special initiative not linked to either FFS or managed care, and thus are included only in the total GME payment amount.
12. GME payment amounts were not readily available from the Washington Medicaid program. Determining an actual statewide GME amount under both FFS and managed care is quite burdensome for the agency. Medicaid has no identifiable pool of GME funds; instead, it pays individual hospitals a separate GME amount that varies widely per case.
13. National amounts do not precisely reflect the total of individual state amounts due to rounding.

Table 13. Medicaid Graduate Medical Education Payment Amounts by the Top 15 States, 2018[1]

State	Total GME Payments Under Fee-for-Service and Managed Care[2] (Millions of Dollars)	GME Payments Under Fee-for-Service (Millions of Dollars)	GME Payments Under Managed Care (Millions of Dollars)	
			Explicit Payments[3]	Implicit Payments[4]
New York	$1,688.1	$380.1	$1,307.2	$0
Virginia	$634.7	$433.2	$201.5	$0
Florida	$443.2	$233.7	$0	$209.5
Ohio	$279.8	$6.6	$0	$273.1
Arizona	$274.0	$274.0	$0	$0
South Carolina	$239.1	$70.2	$169.0	$0
New Jersey	$218.0	$0	$218.0	$0
Michigan	$162.9	$62.9	$0	$100.0
Missouri	$141.7	$141.7	$0	$0
Texas[5]	$139.3	$53.5	$0	$55.7
Connecticut	$121.1	$121.1	$0	$0
Pennsylvania	$117.9	$117.9	$0	$0
Oregon	$112.6	$75.6	$37.0	$0
Illinois	$108.5	$105.3	Unreported[6]	$3.2
North Carolina	$100.0	$100.0	$0	$0

Note: GME = graduate medical education.

1. The start and end dates for each state's fiscal year vary. Not all states were able to report payment amounts for state fiscal year (SFY) 2018. Illinois reported payment amounts for SFY 2019. States reporting payment amounts for SFY 2017 are Arizona, North Carolina, and Texas.
2. Payment amounts (unless indicated otherwise) include reimbursement for direct and indirect GME costs by those state Medicaid programs that distinguish and pay for one or both of these costs (see Table 1). Amounts do not precisely reflect the total of state payments due to rounding.
3. Explicit GME payments are those made directly to teaching hospitals and other teaching entities under managed care.
4. Implicit GME payments are those recognized and included in capitation rates to managed care organizations.
5. Texas reported its supplemental payments for indirect medical education (IME) costs to urban, Medicare-accredited teaching hospitals under fee-for-service (FFS) and managed care. However, its Medicaid payments for direct graduate medical education and IME costs to five state-owned teaching hospitals are considered a special initiative not linked to either FFS or managed care and thus are included only in the total GME payment amount.
6. GME payment amounts made directly under managed care in Illinois were not readily available but were made to public teaching hospitals at the University of Illinois and in Cook County.

Table 14. Medicaid Graduate Medical Education Payments in States With the Largest Number of Teaching Hospitals, 2018

State	Number of Teaching Hospitals[1]	Total Medicaid GME Payments[2] (Millions of Dollars)
New York	85	**$1,688.1**
California	77	**$0**
Pennsylvania	62	**$117.9**
Florida	54	**$443.2**
Michigan	53	**$162.9**
Ohio	51	**$279.8**
Texas	51	**$139.3**
Illinois	42	**$108.5**[3]
New Jersey	40	**$218.0**
Massachusetts	23	**$0**

Sources: Centers for Medicare & Medicaid Services. Healthcare Cost Report Information System. https://www.cms.gov/research-statistics-data-and-systems/downloadable-public-use-files/cost-reports/. Accessed March 22, 2019. Henderson TM. *Medicaid Graduate Medical Education Payments: Results From the 2018 50-State Survey.* Washington, DC: AAMC; 2019.

Note: GME = graduate medical education.

1. A "teaching" hospital is defined as a hospital that reports resident full-time equivalents (FTEs) on its Medicare hospital cost report. Hospitals with fewer than five FTE residents and interns were excluded.
2. In each state, all teaching hospitals may not receive Medicaid GME payments.
3. GME payment amounts made directly to public teaching hospitals at the University of Illinois and in Cook County under managed care were not readily available.

Table 15. Medicaid Graduate Medical Education Payments in the 10 States With the Largest Number of Medical Residents, 2018

State	Number of Medical Residents[1]	Number of Medical Residents Per 100,000 State Population	Total Medicaid GME Payments[2] (Millions of Dollars)
New York	16,869	85	**$1,688.1**
California	11,705	30	**$0**
Pennsylvania	8,597	67	**$117.9**
Texas	8,417	30	**$139.3**
Ohio	6,458	55	**$279.8**
Michigan	6,404	64	**$162.9**
Illinois	6,261	49	**$108.5**[3]
Massachusetts	5,687	83	**$0**
Florida	5,521	26	**$443.2**
North Carolina	3,522	34	**$100.0**

Sources: Brotherton SE, Etzel SI. Graduate Medical Education, 2017-2018. Appendix II, Table 4. *JAMA.* 2018;320(10):1059-1060. Henderson TM. *Medicaid Graduate Medical Education Payments: Results From the 2018 50-State Survey.* Washington, DC: Association of American Medical Colleges; 2019.

Note: GME = graduate medical education.

1. Number of resident physicians on duty as of Dec. 31, 2017.
2. In each state, the cost of all medical residents may not be included in Medicaid GME payments.
3. GME payment amounts made directly to public teaching hospitals at the University of Illinois and in Cook County under managed care were not readily available.

Table 16. Trends in State Medicaid Graduate Medical Education Payments, 1998-2018

Indicator	Year						
	2018	2015	2012	2009	2005	2002	1998
Number of states and the District of Columbia making GME payments	43	43	43	42[1]	48	48	46
Number of states and the district making GME payments under fee-for-service	41	41	41	41	47	47	44
Number of states and the district making GME payments explicitly and directly to teaching hospitals under managed care	16	17	15	13	15	18	17
Number of states and the district recognizing and including GME payments in the capitated payment rates to managed care organizations	13	12	9	11	10	10	17
GME payments: proportion made under fee-for-service/managed care[2]	48%/52%	39%/61%	59%/41%	63%/37%	NC	NC	NC

Sources: Henderson TM. *Direct and Indirect Graduate Medical Education Payments by State Medicaid Programs.* Washington, DC: AAMC; 2006, 2009. Henderson TM. *Medicaid Graduate Medical Education Payments: Results From the 2018 50-State Survey.* Washington, DC: AAMC; 2012, 2016. National Conference of State Legislatures. *Medicaid Payment Survey.* Washington, DC: AAMC; 1999; 2003.

Notes: GME = graduate medical education; NC = data not collected.

1. Alabama did not respond to the survey.
2. The below states, for the years noted, reported a total GME payment amount but provided no specific breakdown amounts for some (noted) or all of their GME payments under FFS or managed care.

   As such, these specific payments by these states are not included in the calculation of the reported percentages.
   2018: Georgia (some), Illinois (some), Maryland, and Texas (some)
   2015: Arizona, Florida, Georgia (some), Maryland, Ohio, and Texas (some)
   2012: Arizona, Colorado, Hawaii, Maryland, and Ohio
   2009: Arizona, Colorado, Hawaii, Maryland, and Ohio

AAMC

MEDICAID GME SURVEY INSTRUMENT

***MEDICAID PAYMENT POLICY*: GRADUATE MEDICAL EDUCATION**

State____________ Name Of Respondent____

Email_______________________________________ Phone____________________________

FEE-FOR-SERVICE PAYMENTS

1. Under your fee-for-service (FFS) system, does Medicaid pay hospitals *(or other entities that incur teaching costs)* for graduate medical education (GME), or otherwise provide explicit added payments to these hospitals or other teaching entities?

___ YES **_(Answer 1a)_**

___ NO **_(Answer 1b)_**

___ We do NOT operate a Fee-for-Service System. *(If you answered this response, proceed to **Question 5**.)*

1a. If YES, describe the rationale as you understand it for making these GME payments:
(Check all that apply)

___ GME seen as a public good;

___ Follow Medicare's decision to make explicit GME payments to teaching hospitals for Medicare beneficiaries;

___ Desire to use Medicaid funds to advance state health policy goals;

___ Desire to help train the next generation of physicians who will serve Medicaid beneficiaries;

___ Other (Describe: ____)

1b. If NO, describe the rationale as you understand it for *not* making GME payments:
(Check all that apply)

___ Medicaid payment for GME is not necessary or appropriate;

___ GME payments are not a pressing policy issue among many competing issues;

___ Medicaid historically paid for GME, but budget shortfalls or cost controls have necessitated ending payments;

___ Other (Describe: ____)

*If you answered **Question 1b**, proceed to **Question 5**.*

2. What entities are eligible to receive GME payments?
(Check all that apply)

___ Teaching Hospitals;

___ Teaching Sites in Non-hospital Patient Care Settings (Specify: ________________________________);

___ Medical Schools;

___ Individual Teaching Physicians (for services associated with the cost of instructing residents at a state university hospital/medical school);

___ Other Entities (Specify: ____);

3. Does your Medicaid FFS system pay for:
(Check all that apply)

___ Direct Costs of GME;

___ Indirect Costs of GME;

___ Do Not Distinguish Between Direct and Indirect GME Costs.

4. In making payments for GME costs, how does your Medicaid FFS system:

4a. Finance Payments (state share)
(Check all that apply)

___ State General Revenue (appropriation to Medicaid agency);

___ Local Government Contributions (using IGT or CPE);

___ Provider (Hospital) Taxes;

___ Other (Specify: ____)

4b. Calculate Payments
(Check all that apply)

___ Follow Medicare methodology;

___ Per Medicaid discharge;

___ Per resident method based on an entity's share of total Medicaid revenues, costs or patient volume;

___ A methodology that recognizes differences among various hospital training programs based on specialty, etc.;

___ Other (Describe: ____).

4c. Distribute Payments
(Check all that apply)

___ As part of the hospital's base rate (per diem, case, bundle, episode, etc.);

___ As a supplemental (lump sum) payment in accordance with federal policy governing payments:
(Check all that apply)

 ___ Allowed under a hospital's upper payment limit (UPL);

 ___ To disproportionate share hospitals (DSH);

 ___ As part of an uncompensated care (low-income) pool.

___ As a supplemental payment to individual teaching physicians (employed by a state university hospital or medical school);

___ Other (Specify: ____)

MANAGED CARE PAYMENTS

5. Does your Medicaid program operate a comprehensive, risk-based managed care system?

___ YES ___ NO
(If you answered NO, proceed to ***Question 10****.)*

6. Under your managed care system, does Medicaid make GME payments either directly to hospitals *(or other teaching programs)* or to managed care organizations (MCOs) as part of their capitated rates?

___ YES ___ NO

(Answer 6a) ***(Answer 6b)***

6a. If YES, describe the rationale as you understand it for making these GME payments:
(Check all that apply)

___ GME seen as a public good;

___ Follow Medicare's decision to make explicit GME payments to teaching hospitals for managed care enrollees;

___ Concern from teaching hospitals about losing GME payments;

___ Desire to use Medicaid funds to advance state policy goals;

___ Desire to help train the next generation of physicians who will serve Medicaid beneficiaries;

___ Other (Describe: ____)

6b. If NO, describe the rationale as you understand it for *not* making GME payments:
(Check all that apply)

___ Medicaid payment for GME under managed care is not necessary or appropriate;

___ GME payments under managed care are not a pressing policy issue among many competing issues;

___ Difficulty determining methodology to pay for GME under managed care;

___ Opposition by MCOs to having GME payments go to teaching hospitals;

___ Medicaid historically paid for GME, but recent budget shortfalls or cost controls no longer allow payment;

___ Other (Describe: ____)

*If you answered **Question 6b**, proceed to **Question 10**.*

7. What entities are eligible to receive GME payments under Medicaid managed care?
(Check all that apply)

___ Teaching Hospitals;

___ Teaching Sites in Non-hospital Patient Care Settings (Specify: ______________________________);

___ Medical Schools;

___ Individual Teaching Physicians (for services associated with the cost of instructing residents at a state university hospital or medical school);

___ Other Entities (Specify: ____)

8. Does your Medicaid managed care program pay for:
(Check all that apply)

___ Direct Costs of GME;

___ Indirect Costs of GME;

___ Do Not Distinguish Between Direct and Indirect GME Costs.

9. In making payments for GME costs, how does your Medicaid managed care program:

9a. Finance GME Payments (state share)
(Check all that apply)

___ State General Revenue (appropriation to Medicaid agency);

___ Local Government Contributions (using IGT or CPE);

___ Provider (Hospital) Taxes;

___ Other (Specify: ____)

9b. Calculate GME Payments
(Check all that apply)

___ Payment included in MCO capitation and negotiated by provider;

___ Follow Medicare FFS methodology;

___ Per Medicaid managed care discharge;

___ Per resident method based on an entity's share of total Medicaid revenues, costs or patient volume;

___ Other (Specify: ____)

9c. Distribute GME Payments
(Check all that apply)

___ As a direct payment (add-on to service ***or*** lump sum) to the hospital or other teaching entity;

___ As part of the capitated rates paid to MCOs, **for which**:

- ___ Medicaid **requires** MCOs to pay the hospital or other teaching entity for GME costs;
  If so, check one of the following:
  - ___ Medicaid provides MCOs a specific methodology for determining GME add-on payments;
  - ___ Medicaid does not provide MCOs a methodology for determining GME add-on payments Explain:____
- ___ Medicaid **assumes** MCOs reflect GME costs in their payments to hospitals or other teaching entity, but does **not** require them to do so;
- ___ Other (Specify: ____)

___ As a direct supplemental payment to individual teaching physicians (employed by a state university hospital or medical school).

___ Other (Specify: ____)

PAYMENTS UNDER FFS AND/OR MANAGED CARE

10. In the past year, has your Medicaid program considered discontinuing payments for GME?

___ YES ___ NO ___ No GME Payments Are Made Under FFS or Managed Care.

(Answer 10a) ***(If you answered this last response, you have completed the survey. Thank you.)***

10a. If YES, describe the rationale for considering discontinuation of GME payments:
(Check all that apply)

___ Medicaid payment for GME is no longer necessary or appropriate;

___ GME payments are no longer an important policy issue among many competing issues;

___ Current budget shortfalls or cost controls may necessitate ending payments;

___ Opposition by MCOs to having GME payments go to teaching hospitals;

___ Other (Describe: ____)

11. In the past year, has your Medicaid program explicitly reduced payments for GME?

___ YES ___ NO

12. Medicaid GME payments help cover training costs for:
(Check all that apply)

___ Physician Residents;

___ Graduate Nursing Students;

___ Other Health Professional Trainees (Specify: ____)

13. Does your Medicaid program have a (pending or approved) **state plan amendment or federal waiver that governs the design and execution of GME payments?**
(Check all that apply)

___ State Plan Amendment ***(Answer 13a)***

___ Federal waiver ***(Answer 13a)***

___ No, we have neither.

13a. Explain: ____

____

14. Does your Medicaid program document and report the impact of Medicaid GME payments on the state's health care workforce?

___ YES ___ NO

(Answer 14a and 14b)

14a. If YES to *Q14,* is your program required to do so by the state?

___ YES ___ NO

14b. If YES to *Q14,* identify the means and metrics your program uses to document/report the impact of GME payments:
(Check all that apply)

___ Definitive objectives;

___ Measurable outcomes;

___ Supporting data;

___ Plan for evaluation;

___ Other (Specify: ____)

15. Does your Medicaid program require teaching programs to routinely report their allowable direct GME costs?

___ YES ___ NO

(Answer 15a)

15a. If NO, does your program obtain this information from other sources such as the Medicare cost report?

___ YES ___ NO

16. Does your Medicaid program routinely audit its GME payments to teaching programs?

___ YES ___ NO

(Answer 16a)

16a. If YES, describe the purpose for conducting these audits:
(Check all that apply)

___ Identify overpayments and underpayments;

___ Document that payments were made only for specified allowable costs;

___ Investigate integrity concerns (Specify: ______________________________________);

___ Other (Describe: ____)

PAYMENT AMOUNTS

17. Provide an accounting or best dollar estimate of your state's Medicaid GME payment amounts for FY 2018:

PLEASE **INCLUDE** AMOUNTS:

- For the federal **and** state share
- For direct **and** indirect GME costs *(depending on your response to Questions 3 and 8)*
- To public **and** private teaching programs.

*(Complete **all** that apply)*

Payments under Fee for Service (FFS): $ ____________________

Payments under Managed Care (MC): $ ____________________

TOTAL Payments (FFS and MC): $ ____________________

Total Payments for Direct Costs $ ____________________

Total Payments for Indirect Costs $ ____________________

For FY *(if not 2018):* __________

Association of
American Medical Colleges
655 K Street, NW, Suite 100, Washington, DC 20001-2399
T 202 828 0400
aamc.org

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