

Federal Support for Graduate Medical Education

August 19, 2025

Congressional Research Service

<https://crsreports.congress.gov>

R48636



Federal Support for Graduate Medical Education

Access to health care is, in part, determined by the availability of physicians, a function of the number of practicing physicians. Policymakers have demonstrated a long-standing interest in access to health care, both for the population in general and for specific populations. Federal support for medical residency training (i.e., graduate medical education [GME]) is the largest source of federal support for health care workforce training. The health workforce includes various professions, but the size of the federal investment in GME for physicians make it an impactful policy lever to support or alter the health care workforce and health care access. This report includes estimates of GME funding from numerous federal programs. The last comprehensive estimates of federal spending on GME are from FY2012 (when it was estimated at \$16 billion). In the most recent year available for the programs discussed in this report, CRS estimates approximately \$29 billion was provided for GME, an amount that has increased in recent years. Estimated spending for Medicare alone was \$21.2 billion in FY2023.

This report describes federal programs that provide GME support. Although these programs may also support training for other health professions, this report focuses on training for physicians, who receive the bulk of GME support. The report examines GME support under Medicare, Medicaid, the Department of Veterans Affairs, the Department of Defense, and programs administered by the Health Resources and Services Administration, such as the Children's Hospital and Teaching Health Center GME payment programs. The report details the mechanisms that various federal programs use to support GME and provides data, when available, on funding and the number of trainees. As noted in the table below, the data available vary by program.

R48636

August 19, 2025

Elayne J. Heisler,
Coordinator
Specialist in Health Services

Michele L. Malloy
Acting Head Research and Library Services - 02

Bryce H. P. Mendez
Specialist in Defense Health Care Policy

Alison Mitchell
Specialist in Health Care Financing

Sidath Viranga Panangala
Specialist in Veterans Policy

Marco A. Villagrana
Analyst in Health Care Financing

Program Name Control over trainees	Total Funding	Number of Trainees	Amount Paid Per Trainee
MANDATORY FUNDING			
Medicare Graduate Medical Education (GME) Payments <i>The number of Medicare-supported residents and per-resident payment amount is capped for each hospital, but hospitals determine staffing needs and types of residents with the exception of certain primary care residents.</i>	FY2023 (est.): \$21.2 billion	FY2023 (est.): Allopathy & Osteopathy DGME: 112,230 FTEs ^a Allopathy & Osteopathy IME: 119,328 FTEs Podiatry & Dentistry DGME: 4,201 ^b Podiatry & Dentistry IME: 4,706	FY2023 (est.): Average per-resident amount (PRA): \$133,000 primary care \$131,000 non-primary care Maximum PRA: \$307,000 primary care \$290,000 non-primary care Minimum PRA: \$17,000 primary care \$14,000 non-primary care

Program Name Control over trainees	Total Funding	Number of Trainees	Amount Paid Per Trainee
Medicaid GME Payment <i>States are permitted to make these payments using their own criteria to determine which providers are eligible for payments.</i>	Data for Medicaid GME payments are limited, but estimates of Medicaid GME expenditures from different sources range from \$4.7 billion to \$7.4 billion (FY2023 and SFY2022).	N/A. The Medicaid program does not require states to report these data.	N/A. The Medicaid program does not require states to report these data.
Teaching Health Centers GME Payment Program <i>Funding to applicant teaching health centers that meet the program's eligibility requirements.</i>	FY2023: \$119.3 million	AY2022-AY2023: 81 programs 969 FTE slots 1,096 total residents trained	FY2025: \$160,000 per FTE (amount included in funding announcement)
DISCRETIONARY FUNDING			
Veterans Affairs GME Payments <i>VA facilities determine their staffing needs and the number and type of residents supported.</i>	FY2023: \$2.04 billion	AY2022-AY2023: 11,300 FTE slots and 50,620 residents spent part of their training at a VA facility	FY2023 (est.): \$176,699 per FTE
Children's Hospital GME Payment Program <i>Grant funding awarded to applicant children's hospitals that meet the program's eligibility requirements. Hospitals determine staffing needs and types of residents.</i>	FY2023: \$390 million	AY2022-AY2023: 59 hospitals received payments to support 8,390 FTE slots	N/A
Department of Defense GME Payments <i>Divisions of the armed forces determine their staffing needs and the number and type of residents supported.</i>	N/A most recent estimate is from FY2012	FY2024: 3,218 FTE residents and fellows	FY2018 (est.): \$199,000 to \$387,000 per trainee

Sources: CRS analysis of agency data, including Centers for Medicare & Medicaid Services. Medicare hospital cost report data and review of various agency budget justification and Government Accountability Office (GAO), *Health Care Workforce: Federally Funded Training Programs in Fiscal Year 2012*, 13-709R, August 15, 2013.

Notes: AY = academic year (e.g., Academic year 2022-2023 began on July 1, 2022, and concluded on June 30, 2023). DGME = direct graduate medical education. Est. = estimate. FTE = full time equivalent. FY = fiscal year. IME = Indirect Medical Education. N/A = not available. SFY = state fiscal year. VA = the Department of Veterans Affairs. Medicare estimates include allopathy, osteopathy, podiatry, and dentistry. Medicare hospital cost reports do not contain GME payments by discipline. The Department of Defense was unable to estimate more recent GME amounts than GAO's estimate from 2012.

- a. Allopathic medicine is a system in which medical doctors treat symptoms and diseases using drugs, radiation, or surgery. Allopathic medicine physicians are known as doctors of medicine (MDs). (See National Cancer Institute Dictionary of Cancer Terms, <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/allopathic-medicine>.) Osteopathic medicine is a distinctive branch of medical practice in the United States that emphasizes a "whole-person" approach to diagnosis, treatment, and patient care. Osteopathic physicians are known as doctors of osteopathic medicine (DOs). (See American Medical Association, "What is osteopathic medicine?" <https://www.ama-assn.org/medical-students/preparing-medical-school/what-osteopathic-medicine#:~:text=Learn%20More-,What%20experts%20are%20saying%20about%20osteopathic%20medicine,own%20and%20be%20proud%20of.%E2%80%9D>.)
- b. Podiatric medicine involves the diagnosis and treatment of conditions affecting the foot, ankle, and related structures of the leg. A podiatrist is a doctor of podiatric medicine (DPM). (See American Association of Colleges of Podiatric Medicine, <https://aacpm.org/becoming-a-podiatric-physician/>.) Dentistry is the evaluation, diagnosis, prevention, and/or treatment (nonsurgical, surgical or related procedures) of diseases, disorders, and/or conditions of the oral cavity, maxillofacial area, and/or the adjacent and associated structures and their impact on the human body. A dentist is a doctor of dental surgery (DDS) or a doctor of medicine in dentistry (DMD). (See American Dental Association, <https://www.ada.org/publications/cdt/glossary-dental-terms>; and <https://www.ada.org/resources/careers/licensure>.)

Contents

Introduction	1
GME Overview	3
Federal Role in GME	6
GME Policy and Health Workforce Data	10
Federal GME Support	12
Medicare.....	12
Medicare Cap on Allopathic and Osteopathic Residencies.....	14
Medicare FTE Growth.....	15
Medicare GME Payments.....	16
Medicaid.....	19
Department of Veterans Affairs (VA)	21
Veterans Access, Choice, and Accountability Act of 2014 GME Expansion.....	23
VA MISSION Act of 2018 Pilot Program on Graduate Medical Education and Residency (PPGMER)	25
Health Resources and Services Administration	29
Children’s Hospitals GME.....	30
Teaching Health Center GME.....	33
HRSA Grant Programs.....	36
Department of Defense (DOD)	39
Selected Challenges of Current GME Programs	41
Fragmented Medical Residency Programs and Support	41
Lack of Standardized Cost and Outcomes Data and Information	42
Considerations for Congress.....	44

Figures

Figure 1. Number of Medicare Allopathy and Osteopathy Direct Graduate Medical Education Full-Time Equivalents, 2015-2023.....	15
Figure 2. Medicare DGME Payment Formula	18
Figure 3. Medicare IME Operating and Capital Adjustment Formulas.....	19
Figure 4. VA GME Disbursement Process	23
Figure 5. Geographic Distribution of Veterans Access, Choice, and Accountability Act of 2014 GME Full-Time Equivalent (FTE) Positions	25
Figure 6. Resident Stipends and Benefits Under Model A of PPGMER.....	28
Figure 7. Reimbursement of New GME Sponsor Under Model B of PPGMER	29
Figure 8. HRSA Grant Program Training Locations	37

Tables

Table 1. Estimates of Medicare Graduate Medical Education Payments and FTEs FY2023.....	16
Table 2. Medicaid GME Payments Data from Different Sources	20

Table 3. Graduate Medical Education (GME) Residency Expansion Under the Veterans Access, Choice, and Accountability Act of 2014	24
Table 4. Pilot Program for GME and Residency (PPGMER)—Model A Results	26
Table 5. Teaching Health Center Residents and Program Funding	33
 Table C-1. GME Program Information.....	57

Appendixes

Appendix A. Additional Resources	48
Appendix B. Congressional Activity	54
Appendix C. GME Program Information	57

Contacts

Author Information.....	61
-------------------------	----

Introduction

Access to health care is, in part, determined by the supply of physicians available to provide treatment. Physician supply is a function of the number of physicians trained, how long they remain in practice, their productivity, and the hours they work. Policymakers have demonstrated a long-standing interest in access to care (in general and for specific populations). Policymakers are also interested in improving the quality of care that patients receive, and a body of research has found that an adequately sized and well-trained workforce affects quality.¹ The federal government has identified certain health workforce concerns and creates programs that seek to address these concerns. For example, the Bureau of Health Workforce within the Health Resources and Services Administration in the Department of Health and Human Services (HHS) administers multiple health workforce programs,² including those that recruit and retain primary care physicians to address identified concerns about the number of primary care physicians relative to the number of physician specialists.³

Federal programs also exist to recruit and retain physicians in rural areas because of concerns that the populations that reside in these areas lack access to care. Specifically, the federal government designates some areas as medically underserved or as health professional shortage areas (HPSA) and provides incentives (e.g., higher Medicare payment rates) to providers who practice in these areas.⁴

In addition to these programs and policies, the federal government supports medical residency training (i.e., graduate medical education [GME]). Medical residency training after completing medical school is generally required for State licensure to practice medicine independently (see “State Licensure Pathways” text box). Medical residency consists of a supervised clinical training period, which is generally considered to be an intensive, full-time job that provides residents (also called trainees) with hands-on experience and increasing autonomy in delivering health care under the guidance of experienced attending physicians. Federal support for GME involves payments that are generally made to hospitals—the setting in which most medical residents spend at least part of their residency. The federal government pays some of the costs that hospitals and other health providers incur when training residents. Such costs include, but are not limited to residents’ and supervisors’ salaries, and the higher costs of furnishing health care in a teaching hospital/setting compared to a non-teaching hospital/setting. This is often referred to as the cost

¹ MedPAC, *Medicare Payment Policy*, Report to the Congress, Washington, DC, March 2025, pp. 29-33, https://www.medpac.gov/wp-content/uploads/2025/03/Mar25_MedPAC_Report_To_Congress_SEC.pdf. Hereinafter, MedPAC, Report to Congress, March 2025.

² Health Resources and Services Administration (HRSA), Health Workforce, “Our Work,” <https://bhwh.hrsa.gov/about-us>. On March 27, 2025, HHS issued a press release and fact sheet announcing that HHS was being restructured. The fact sheet indicated that this restructuring would consolidate HRSA and other agencies into a new entity. At the time of this report’s publication, the potential effect of this restructuring on HRSA’s Bureau of Health Workforce programs and their administration is unknown. U.S. Department of Health and Human Services, “HHS Announces Transformation to Make America Healthy Again,” press release, March 27, 2025, <https://www.hhs.gov/press-room/hhs-restructuring-doge.html>.

³ HRSA, Health Workforce, “Our Work,” <https://bhwh.hrsa.gov/about-us>. and Department of Health and Human Services (HHS), Office of the Assistant Secretary for Planning and Evaluation, *Building the Nation’s Health Care Workforce*, Washington, DC, July 2, 2015. Hereinafter, Assistant Secretary for Planning and Evaluation, *Building the Nation’s Health Care Workforce*.

⁴ Assistant Secretary for Planning and Evaluation, *Building the Nation’s Health Care Workforce*. See also, HHS, HRSA, “What is Shortage Designation,” <https://bhwh.hrsa.gov/workforce-shortage-areas/shortage-designation> and HHS, Centers for Medicare & Medicaid Services (CMS), “Physician Bonuses,” <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HPSAPSAPhysicianBonuses/index.html?redirect=/hpsapsaphysicianbonuses/>.

of less efficient care furnished by medical residents, which may include longer consultations and ordering extra tests. Some of the payment formulas for federal GME programs include an adjustment factor that accounts for this inefficiency.⁵

The federal government makes a significant investment in GME—Medicare’s share of GME was estimated as \$21.2 billion in FY2023⁶—and GME may be a strong policy lever to impact access because (with some exceptions noted in the text box “State Licensure Pathways”) the number of medical school graduates who obtain and complete a residency determines the size of the physician workforce, and the types of residencies they complete determine its specialty composition. Additionally, where physicians complete their residencies often affects where they practice.⁷ Given the influence of residency training on the physician population, policies that address federal funding for GME may affect future physician supply and could be used to address identified workforce concerns.

State Licensure Pathways

States license physicians and some states have enacted laws that provide provisional medical licenses to foreign-trained physicians and certain other medical school graduates who meet certain criteria and practice in specific geographic areas.

Generally, states require medical school graduates to complete a U.S.-based residency to be eligible to be licensed. This includes foreign trained physicians who were fully licensed and practicing abroad. Since 2023, at least nine states have created alternate licensure pathways for foreign-trained physicians who were fully licensed outside of the United States. Generally, these licenses require individuals to demonstrate that their residency training is equivalent to U.S.-based training, to pass the U.S. Medical Licensing Exam, and to practice in a shortage area or at specific types of health facilities that serve underserved populations. The Federation of State Medical Boards—the umbrella organization for state medical boards—tracks enacted and pending legislation on this new licensure pathway. The states that issue licenses for foreign-trained and licensed physicians who have not completed a U.S. residency are Florida, Iowa, Idaho, Illinois, Louisiana, Massachusetts, Tennessee, Virginia, and Wisconsin. States create these licenses pursuant to state laws. The individuals eligible for licensure, whether such licensure is provisional, the supervision, and practice requirements for these licenses vary by state.

Eleven states have also created a new license category for “Associate Physicians” (or similar), which allows medical school graduates who have not completed a residency to provide care under supervision of a fully licensed physician. In some cases, this is intended to be a temporary licensure category with a bridge to residency training. The states that have this licensure category are Alabama, Arizona, Arkansas, Florida, Idaho, Kansas, Louisiana, Maryland, Missouri, Tennessee, and Utah. Other states have considered legislation to create this licensure pathway.

⁵ See Table 1 in U.S. Government Accountability Office (GAO), Physician Workforce: Caps on Medicare-Funded Graduate Medical Education at Teaching Hospitals, GAO-21-391, May 21, 2021, <https://www.gao.gov/products/gao-21-391>.

⁶ CRS analysis of FY2023 Medicare hospital cost report data, as reported to the CMS Healthcare Cost Report Information System.

⁷ For example, one study found that more than half of physicians who complete their residency in family medicine (a type of primary care) practice within 100 miles of where they trained. See E. Blake Fagan et al., “Migration After Family Medicine Residency: 56% of Graduates Practices Within 100 Miles of Training,” *American Family Physician*, vol. 88, no. 10 (November 15, 2013), p. 704. The Association of American Medical Colleges (AAMC) collects data on residents and found that between 2009 and 2018 more than half of residents practice in the state where they complete their residency. The American Medical Association (AMA) examined these data by specialty and found variation in rates by specialty, with more than 60% of family medicine, pediatric, and psychiatry residents remaining in the state where they completed their training, while residents in a number of surgical specialties were less likely to remain in the state where they completed their residency. For example, less than 40% of residents in colon and rectal surgery, thoracic surgery, and plastic surgery remained in the state where they completed their training. Brendan Murphy, “Where to practice after residency: Your specialty can tell the tale,” *AMA Transition from Resident to Attending*, July 7, 2020, <https://www.ama-assn.org/medical-residents/transition-resident-attending/where-practice-after-residency-your-specialty-can>.

Three organizations have formed an advisory committee to look at additional licensing models. These organizations are the Federation of State Medical Boards, which represents states licensing boards; Intealth, an organization that represents internationally trained health providers and certifies international medical graduates for participation in U.S. based medical residency; and the Accreditation Council for Graduate Medical Education (ACGME), which accredits medical residencies. The advisory committee released its first set of recommendations in February 2025 and has solicited feedback on these recommendations. The overall goal is to standardize state-level policies going forward. The committee's recommendations also highlighted some of the drawbacks of this new licensure pathway, which include that completing a residency is generally a prerequisite to be eligible to be board certified and being board certified is often a requirement to obtain hospital privileges. The advisory group also noted that these licensure pathways may not align with immigration policies.

These licensure pathways are relatively new, and their impact on GME and on physician supply in general is not yet known and is beyond the scope of this report.

Sources: Federation of State Medical Boards, "States with Enacted and Proposed Additional Licensure Pathways," last updated April 2025, [states-with-enacted-and-proposed-additional-img-licensure-pathways-key-issue-chart.pdf](https://www.fsb.org/siteassets/advocacy/policies/associate-physician-legislation-by-state-key-issue-chart.pdf). Arielle Zionts, "States Facing Doctor Shortages Ease Licensing Rules for Foreign-Trained Physicians," *KFF Health News*, March 3, 2025, <https://kffhealthnews.org/news/article/doctor-shortages-foreign-licensing-requirements-loosened-states/>. Association of Medical Doctor Assistant Physicians, "Assistant Physicians & Associate Physicians: The Future of Health Care," <https://assistantphysicianassociation.com/>; and Federation of State Medical Boards, "States with Enacted and Proposed Association Physician Legislation," last Updated April 2025, <https://www.fsb.org/siteassets/advocacy/policies/associate-physician-legislation-by-state-key-issue-chart.pdf>; Federation of State Medical Boards, Intealth, Accreditation Council for Graduate Medical Education, "Advisory Commission on Additional Licensing Models: Guidance Document," <https://www.fsb.org/siteassets/communications/acalm-guidance-draft.pdf>. For more information on immigration pathways for health professionals, see CRS Report R47528, *Immigration Options and Professional Requirements for Foreign Health Care Workers*.

GME Overview

This report provides an overview of federal GME support; it discusses whether a particular source of federal GME support is actively used to further workforce goals such as altering the geographic or specialty distribution of residents trained. A number of GME critiques have raised concerns about the data that the federal government collects on these programs; for example, are the data available sufficient to determine program effectiveness,⁸ and can these data be linked to undertake longitudinal research tracking GME outcomes by program and institutions.⁹ This report details programmatic data gaps where they have been identified. It does not summarize recent GME critiques in detail; for readers interested in such critiques, **Appendix A** provides some sources for further reading.

Some federal programs use GME to support training for non-physician health providers; however, this report focuses only on physician training.¹⁰ With some limited exceptions (see text box "State Licensure Pathways"), to be licensed to practice independently in a state, physicians in the United States must complete a minimum of three years of GME, with additional years required

⁸ For example, Committee on the Governance and Financing of Graduate Medical Education; Board on Health Care Services; Institute of Medicine, *Graduate Medical Education That Meets the Nation's Health Needs*, ed. Jill Eden, Donald Berwick, and Gail Wilensky (Washington, DC: National Academies Press, 2014); hereinafter, *2014 IOM GME Report*.

⁹ Council on Graduate Medical Education (COGME), "Issue Brief: Measuring the Impact and Improving the Stewardship of Graduate Medical Education: A Call for Coordination and Collaboration on Data," April 2024, Rockville, MD, <https://web.archive.org/web/20241120215426/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-issue-brief-gme-data.pdf>. Hereinafter COGME, Issue Brief, 2024.

¹⁰ For example, Medicare's GME payments can be used to support hospital-based training of dentists, podiatrists, nurses, and some allied health professionals.

depending on their specialty.¹¹ In Academic Year (AY) 2023-2024, approximately 158,000 individual residents were in training.¹² (See text box “Selected Definitions” for definitions.) GME generally takes place in hospitals that sponsor residency programs in specific specialties (e.g., pediatrics or surgery). Hospitals choose the number and specialties of the residents they train, but must meet accrediting body standards that attempt to assure that hospitals have the facilities, staffing, and patient load necessary to ensure that residents will receive adequate training in their chosen specialty (see text box “Selected Definitions”).¹³ During their residency, residents rotate to outpatient facilities or other hospitals to gain experience treating different populations in different settings. Specific residency training requirements vary by specialty and are determined by the Accreditation Council for Graduate Medical Education, which accredits medical residency programs.¹⁴

Selected Definitions

Allopathic Medicine: A system in which medical doctors treat symptoms and diseases using drugs, radiation, or surgery. Allopathic medicine physicians are known as doctors of medicine (MDs).

Dentistry: The evaluation, diagnosis, prevention and/or treatment (nonsurgical, surgical or related procedures) of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body. A dentist is a doctor of dental surgery (DDS) or a doctor of medicine in dentistry (DMD). The Commission on Dental Accreditation (CODA) accredits dental training programs, including dental residency programs.

Medical Resident: An individual who has completed medical school and is in training to become a licensed physician. Residents generally train in a specialty for three to five years (although some specialties require a preliminary year of general medical training before specialty training commences). Obtaining a medical residency is competitive; medical students in their final year apply to residency programs in a particular location and specialty. Medical residents are paid a salary during residency, but this salary is generally a fraction of what they will earn after completing their residency.

Osteopathic Medicine: A branch of medical practice in the United States that emphasizes a “whole-person” approach to diagnosis, treatment, and patient care. Osteopathic physicians are known as doctors of osteopathic medicine (DOs).

¹¹ GAO, Graduate Medical Education: Trends in Training and Student Debt, 09-438R, May 4, 2009; hereinafter, *GAO GME Report*.

¹² John S. Andrews and Chris Mathews, “Graduate Medical Education, 2023-2024,” *Journal of the American Medical Association*, vol. 332, no. 24, Appendix December 24/31, 2024, pp. 2127-2153.

¹³ On April 23, 2025, President Trump released an executive order “Reforming Accreditation to Strengthen Higher Education,” which specifically called out the work of the Accreditation Council for Graduate Medical Education (ACGME) as the sole accreditor of medical residency education and critiqued the accreditor’s standards related to increasing the recruitment and retention of individuals underrepresented in medicine (among other critiques). The executive order characterized these standards as requiring unlawful discrimination. For executive order, see Executive Order, “Reforming Accreditation to Strengthen Higher Education,” April 23, 2025, <https://www.whitehouse.gov/presidential-actions/2025/04/reforming-accreditation-to-strengthen-higher-education/>. On May 9, 2025, ACGME announced that it would be reevaluating its common program requirements related to diversity in response to concerns that the council had heard from constituents with regard to their ability to comply with ACGME program requirements and state and federal laws. See ACGME, “ACGME Executive Committee Action,” <https://www.acgme.org/newsroom/2025/5/acgme-board-executive-committee-action/>.

¹⁴ The ACGME accredits the majority of residency programs; the remaining programs are accredited by the American Osteopathic Association (AOA). The two organizations are transitioning to a single accreditation system. See “Single Accreditation System for AOA-Approved Programs,” at <http://www.acgme.org/acgmeweb/>. In ACGME’s Academic Year 2022-2023 Databook, they reported accrediting a total of 13,393 programs (some programs may still be accredited by the AOA and some programs may be jointly accredited). They reported that the number of accredited programs is increasing, but that this increase is primarily driven by programs formerly accredited by AOA seeking ACGME accreditation. ACGME, *Data Resource Book: Academic Year 2023-2024*, Chicago, IL, 2024, p. 11.

Podiatric Medicine: The diagnosis and treatment of conditions affecting the foot, ankle and related structures of the leg. A podiatrist is a doctor of podiatric medicine (DPM). The Council of Podiatric Medical Education accredits podiatric medical education, including residency training.

Primary Care Residents: Generally, refers to physicians who are in training in family medicine, internal medicine, and pediatrics. Other definitions may also include geriatrics and obstetrics and gynecology.

Residency: After completion of medical school, a supervised clinical training period and an intensive, full-time job that provides physicians, also referred to as residents or trainees, with hands-on experience and increasing autonomy in delivering health care under the guidance of experienced attending physicians.

Specialty Residents: Physicians who are in training in a medical specialty that is not considered primary care (e.g., anesthesiology).

Fellows: Physicians who have completed an initial residency in primary care or a specialty and are pursuing additional specialty training. For example, an internal medicine resident who pursues additional training in cardiology would be considered to be a cardiology fellow.

Initial Residency Period (IRP): The minimum number of years required for a resident to become board-eligible in the specialty in which the resident first begins training. The IRP for a specialty is based on the minimum accredited length of a residency program, as determined by the Accreditation Council for Graduate Medical Education (ACGME) and the American Osteopathic Association (AOA) (see also entry for “Accredited Program”). The IRP period generally refers to the residency period while the time beyond the IRP is generally fellowship training.

Board-Eligible: A physician who has completed the requirements for admission to a medical specialty board, but has not passed the required board examination. For example, a resident must complete three-years of training in an internal medicine residency program to be eligible for certification by the American Board of Internal Medicine.

Teaching Hospital: A hospital that offers one or more accredited residency (or fellowship) programs; and is therefore, eligible to receive GME payments from federal programs. Teaching hospitals are often affiliated with a medical school.

Accredited Program: A residency or fellowship program that meets certain standards set by the accrediting body (ACGME or the AOA). The two systems merged to create a single accreditation system that went into effect in 2020.

Academic Year (AY): The year beginning July 1 when residents either begin their training or move up to the next year within their training. For example, AY2024-AY2025 began on July 1, 2024, and will end on June 30, 2025.

Sources: Association of American Medical Colleges, “The Road to Becoming a Doctor,” <https://www.aamc.org/download/68806/data/road-doctor.pdf>; Association of American Medical Colleges, “Medicare Payments for Graduate Medical Education: What Every Medical Student, Resident, and Advisor Needs to Know,” <https://members.aamc.org/eweb/upload/Medicare%20Payments%20for%20Graduate%20Medical%20Education%202013.pdf>; American Association of Colleges of Osteopathic Medicine, “Single Accreditation System,” <http://www.aacom.org/news-and-events/single-gme>; Medicare Payment Advisory Commission’s June 2009 Report to Congress: Improving Incentives in the Medicare Program, Chapter 1, at http://www.medpac.gov/documents/reports/Jun09_Ch01.pdf?sfvrsn=0; 42 U.S.C. 2931-1(f)(2); National Cancer Institute, Dictionary of Cancer Terms, <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/allopathic-medicine>; American Dental Association, <https://www.ada.org/publications/cdt/glossary-dental-terms> and <https://www.ada.org/resources/careers/licensure>; American Medical Association, “What is Osteopathic Medicine?,” <https://www.ama-assn.org/medical-students/preparing-medical-school/what-osteopathic-medicine>; American Association of Colleges of Podiatric Medicine, <https://aacpm.org/becoming-a-podiatric-physician/>; American Medical Association, “What is residency?,” <https://www.ama-assn.org/medical-students/preparing-residency/what-residency>; Commission on Dental Accreditation, “About CODA,” <https://coda.ada.org/>; and Council on Podiatric Medical Education, “CPME Mission Statement,” <https://www.cpme.org/>.

Federal Role in GME

The federal government makes significant investments in GME funding through various programs.¹⁵ Comprehensive data of federal GME expenditures are not routinely collected; this report estimates total federal spending at more than \$29 billion, but estimates are based on the most current year available by program. As such, this estimate includes data from FY2012 to FY2023. The most authoritative source of same year data is from FY2012, when the federal government spent an estimated \$15 billion on GME.¹⁶ In 2015, the U.S. Government Accountability Office (GAO) found that GME programs administered by the Department of Health and Human Services (HHS) and the Department of Veterans Affairs (VA) spent \$14.5 billion on GME, but their work did not analyze Department of Defense (DOD) GME spending. As such, 2012 remains the most recent year of a total federal GME estimate. Using their 2012 estimate, GAO found that 78% of government-wide health workforce funding was for GME; with Medicare payments accounting for 85% of this funding.¹⁷ Similarly, a GAO analysis of HHS programs in FY2014, found that HHS supported 72 health workforce programs and that nearly three-quarters of all spending was from Medicare GME payments.¹⁸

This report examines multiple sources of federal GME spending. The federal government supports GME¹⁹

- through payments made by the Medicare and Medicaid programs, both administered by the Centers for Medicare & Medicaid Services (CMS) located in HHS;
- by training medical residents at VA and DOD health care facilities;
- and by funding programs administered by HHS's Health Resources and Services Administration (HRSA) that support primary care training in outpatient facilities, addiction medicine subspecialty training, preventive medicine training, rural GME program development, and training in children's hospitals.

¹⁵ Federal funds are not the only source available for GME. For example, state and local governments could pay for GME and hospitals could use their revenue for GME. GME may also be supported by private sources; see discussion in the "Selected Sources of Nonfederal GME Support" text box in this report. Data are not available on the full amount expended for GME (i.e., no data exist that aggregate the cost paid for GME by the federal government and other payers).

¹⁶ 2014 IOM GME Report and GAO, *Health Care Workforce: Federally Funded Training Programs in Fiscal Year 2012*, 13-709R, August 15, 2013; hereinafter, *GAO Health Care Workforce Report*. The IOM's estimates are for physician residency and fellowship training. This report uses data from multiple years because more recent data are available for some, but not all, GME programs.

¹⁷ GAO Health Care Workforce Report, p. 5.

¹⁸ U.S. Government Accountability Office (GAO), *Health Care Workforce: Comprehensive Planning by HHS Needed to Meet National Needs*, 16-17, December 11, 2015, <http://www.gao.gov/products/GAO-16-17>; hereinafter, *GAO Health Workforce Planning Report*.

¹⁹ The Indian Health Service, the federal agency that provides or pays for health care for American Indians and Alaska Natives, does not have a formal GME program. As such, it is not included in this report. The agency proposed developing a Division of Graduate Medical Education in its FY2024 Budget Justification, but this proposal was not enacted. See IHS, *Justification of Estimates for Appropriations Committees, FY2024*, Rockville, MD, https://www.ihs.gov/sites/ofa/themes/responsive2017/display_objects/documents/FY2024-IHS-CJ32223.pdf, p. 57. In the 119th Congress, legislation has been introduced to create this office (H.R. 3670). This legislation was discussed at a committee meeting and as of the date of this report's publication has not been enacted. IHS's involvement in GME is limited, specifically, in the justification for the new division. IHS noted that there are two residency programs at IHS-operated health facilities, both operated in partnership with a larger teaching hospital. Tribally operated health centers have also received funding through the teaching health center GME program discussed in this report. In addition, IHS and Tribal facilities have received GME support through a VA pilot program (see **Table 4**).

The federal government's primary role in GME has been as a payer. In this role, it has a significant influence on the physician workforce, but this role has generally been passive, because, with some exceptions, the federal government has little involvement in the content of training, the specialties it pays for, or the geographic location of training.²⁰ In its 2025 report, the Medicare Payment Advisory Commission (MedPAC), an independent congressional agency that is tasked with advising Congress on the Medicare program, examined the role of Medicare's payments on the health workforce. MedPAC found that Medicare's role is indirect as a payor and that it does not attempt to influence the specialties or geographic distribution of medical residents. Furthermore, MedPAC found that Medicare's role in shaping the health workforce is limited, and that Medicare payment rates have a limited effect on the number of individuals who attend medical school. MedPAC suggested that Medicare could consider implementing more targeted policies aimed at increasing specific medical specialties or the number of clinicians working in specific geographic areas, but noted that Medicare is one payer among many, and that these strategies are long-term given the number of years it takes to train a physician. MedPAC also noted that Medicare has limited funding for non-physician training and does not provide funding for training certain types of providers, such as advance practice nurses and pharmacists.²¹ MedPAC, among others, has also previously noted that federal investment in GME has generally not been linked to other federal health workforce investments, such as investments made to train non-physician providers whose work could complement or, where appropriate, replace that of physicians and who could be trained at a lower cost.²²

MedPAC is tasked with evaluating the Medicare program, but GAO and the Institute of Medicine (now National Academy of Medicine) have critiqued Medicare's nondirective GME support. Medicare has been a focus of critiques because it is the largest source of federal GME support; estimated Medicare GME payments are approximately \$21.2 billion in FY2023.²³ Medicare is also frequently discussed because, unlike other sources of GME support, it explicitly limits the number of residents it will pay for at the hospital-level (this is referred to as a cap and is discussed further in "Medicare Cap on Allopathic and Osteopathic Residencies").²⁴ Briefly, hospitals that were training residents in 1996, may not receive additional Medicare support to train additional residents. Hospitals that were not training residents can receive Medicare support if they begin to train residents, as can hospitals that were established since 1996. Despite these exceptions, the Medicare cap is often a focus of policy discussions. For example, some argue that this hospital-level cap makes increasing the number of residents and changing the locations where they train difficult. This argument generally does not take into account GME growth that occurred

²⁰ Generally, the federal government leaves the content of training to the accrediting bodies. However, see footnote 13 about a 2025 executive order that focuses on reforming accreditation, including the work of AGME on medical residency accreditation. Though the federal government has previously not directed the content of training, it has made recommendations on training content through various advisory groups. As examples, the Council on Graduate Medical Education (COGME) has recommended that medical residents learn how to work in a medical home model (see, e.g., COGME, *The Role of Graduate Medical Education in the New Health Care Paradigm*, Twenty Second Report, Rockville, MD, November 2014, <http://www.hrsa.gov/advisorycommittees/bhpradvisory/cogme/Reports/22report.pdf>), and HRSA has awarded grants for training in geriatrics (see <https://bhwh.hrsa.gov/programs/geriatrics-academic-career-award-program-gaca>).

²¹ MedPAC, Report to Congress, March 2025.

²² The Medicare Payment Advisory Commission (MedPAC) June 2009 Report to Congress: Improving Incentives in the Medicare Program, Chapter 1, at http://www.medpac.gov/chapters/Jun09_Ch01.pdf; hereinafter *2009 MedPAC Report*. GAO also noted that Medicare's support of GME was not linked to other workforce programs and did not have the oversight and infrastructure to track the outcome of its GME investments; see *GAO Health Workforce Planning Report*.

²³ Estimates based on CRS analysis of FY2022 Medicare hospital cost report data as reported to the CMS Healthcare Cost Report Information System.

²⁴ For more information on Medicare GME limits, see "Medicare DGME Payments" section of this report.

despite the Medicare cap. For example, GAO examined data on the total number of residents and found that the number of residents in training grew by 27% over the 10-year period it examined (2005 to 2015), although the geographic areas where residents trained remained largely unchanged.²⁵ CRS examined the change in the number of residents that Medicare supported and found that despite the hospital-level cap, the overall number of positions that Medicare supported had increased from 2015 through 2022 (see **Figure 1**). Though there have been limited increases in Medicare supported positions in recent years (see “Medicare FTE Growth”), the overall growth in GME positions occurs in part because the Medicare hospital-level cap is a cap on Medicare’s GME support and it does not limit a hospital from using other sources of funding to support GME. For example, other federal programs, state and local government funds, or hospital funds can be used to expand or alter the number and types of residents in training (see text box “Selected Sources of Nonfederal GME Support”). In addition, as noted above, new hospitals or existing hospitals that have not historically trained medical residents can begin training residents and receive Medicare payment for doing so.²⁶

Selected Sources of Nonfederal GME Support

Hospitals have also used nonfederal sources to support residency training, such as hospital revenue or state and local funds. These sources have increased GME spending, despite the Medicare cap enacted in 1997 (see “Medicare Cap on Allopathic and Osteopathic Residencies”). Generally, these increases have been in subspecialties (i.e., for fellowship training); subspecialty services tend to generate higher revenue or impose lower cost burden on hospitals.

States have also supported GME generally focusing on primary care and rural training, which hospitals may be less likely to support with their own funds. State GME initiatives vary but include state funding for new primary care residency positions, state support for rural rotations, and state tax credits to encourage physicians to serve as preceptors, among others. Private foundations or other organizations can also support GME as some physician specialty groups have done. This has been controversial because pharmaceutical companies and medical device makers have been sources of funding, which has raised concerns about conflict of interest. As such, private support for GME has traditionally been limited.

Sources: Edward Salsberg et al., “U.S. Residency Training Before and After the 1997 Balanced Budget Act,” *Journal of the American Medical Association*, vol. 300, no. 10 (September 10, 2008), pp. 1174-1180, and GAO, *Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, GAO-17-411, May 25, 2017; Barbara O. Wynn, “Is the Teaching Health Center Graduate Medical Education Program a Model for GME Reform?,” *Journal of Graduate Medical Education*, vol. 10, no. 2 (April 2018), pp. 165-167. For discussion of state GME initiatives, see American Medical Association (AMA), *Compendium of Graduate Medical Education Initiatives*, Report: 2020, pp. 8-12, and National Conference of State Legislatures, “Graduate Medical Education,” January 9, 2024, <https://www.ncsl.org/health/graduate-medical-education-funding>. For discussion of private foundation support for GME, see American Medical Association (AMA), *Compendium of Graduate Medical Education Initiatives*, Report: 2020, pp. 2-13.

Some argue that Medicare’s residency limit should be partially or fully removed to address physician shortages in certain geographic areas and medical specialties.²⁷ Some Members of Congress have introduced legislation that would do so.²⁸ In addition, as discussed in “Medicare FTE Growth” section below, from time-to-time, legislation has been enacted to increase the

²⁵ GAO, *Physician Workforce: Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, 17-411, May 25, 2017.

²⁶ Edward Salsberg et al., “U.S. Residency Training Before and After the 1997 Balanced Budget Act,” *Journal of the American Medical Association*, vol. 300, no. 10 (September 10, 2008), pp. 1174-1180.

²⁷ For example, the Association of American Medical Colleges (AAMC), the organization that represents medical schools and teaching hospitals, has argued that the Medicare GME cap is detrimental to medical training and leads to geographic and specialty shortages. See AAMC, “Medicare Resident Limits (‘Caps’),” https://www.aamc.org/advocacy/gme/71178/gme_gme0012.html.

²⁸ For example, in the 119th Congress, legislation has been introduced that would expand Medicare GME support; see, for example, H.R. 3890.

number of GME slots that Medicare will support. Appropriations laws enacted in FY2021 and FY2023 increased the number of Medicare-supported slots. These laws directed the use of these slots, which is a departure from prior Medicare policies wherein hospitals determined the type of residency programs they operated and Medicare paid for accredited slots up to the Medicare cap (see discussion in “Medicare Cap on Allopathic and Osteopathic Residencies”). These additional slots are new, and at the time of this report’s publication, few if any newly supported trainees have completed their training. As such, it is too soon to determine whether these new slots will alter the geographic or specialty distribution of the physician workforce.

In addition to there being critiques about Medicare’s GME cap, there are also critiques about how Medicare’s support for GME begins when residents start training, despite hospitals incurring costs prior to the residents beginning training, such as costs for hiring faculty, gaining accreditation, and recruiting residents. While faculty costs, and recruitment costs among others, could be paid for existing programs, Medicare’s support does not start until residents begin their training. As such, hospitals need to have funding to start up a program before they can become eligible for Medicare (and some other) sources of GME payments. GAO has found that rural hospitals, which may be able to receive additional Medicare support to increase the number of residents they train despite the Medicare GME cap, were less likely to make use of these Medicare incentives because they lacked the financial ability to incur the start-up costs associated with starting a new or expanding an existing residency program.²⁹ To address this challenge, Congress created a discretionary grant program (Rural Residency Development Program) through HRSA to provide infrastructure costs for hospitals to start rural residency training programs. See “HRSA Grant Programs” section in this report for further discussion.

As discussed throughout this report, federal GME programs pay different amounts per resident, and not all programs provide data on the amount paid per resident. The amount paid and the “cost” per resident are two distinct concepts. Program rules, available funding, and, in some cases, empirical evidence may guide the amount that a particular program pays per resident. In general, researchers have found that determining the amount that a resident “costs” a program is challenging. Researchers have examined the various factors involved that determine the program’s “cost” for training residents—these include the residents’ salaries, medical malpractice insurance, and faculty salaries. They have also attempted to quantify the benefits that residents provide, including covering on-call time, the medical services that residents provide, and increased efficiency for services that residents provide (particularly in later years of training). In general, researchers have found that the “cost” of residents differs by year of resident in training, the size of the program, the number of programs that the hospital operates, the specialty of the resident, and the setting of training.³⁰ As discussed throughout this report, federal programs generally pay a fixed per resident amount, often at a hospital level; the amount paid generally does not differ by specialty or the year of resident in training, both factors that prior research has found affect resident “costs.”

²⁹ GAO, *Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, 17-411, May 25, 2017.

³⁰ See, for example, RAND for MedPAC, *Does It Cost More to Train Residents or to Replace Them?* September 2013, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/contractor-reports/sept13_residents_gme_contractor.pdf, and HRSA, *HRSA, Report to Congress: Teaching Health Center Graduate Medical Education Direct and Indirect Training Expenses Report*, 2019, <https://bhwh.hrsa.gov/sites/default/files/bureau-health-workforce/about-us/reports-to-congress/report-to-congress-thcgme-2019.pdf>.

GME Policy and Health Workforce Data

The federal government supports workforce data collection and projections of future needs; in addition, researchers and advocates also collect and disseminate such data.³¹ Such data are necessary inputs to support the formulation of GME policy but are not sufficient. Determining the appropriate GME policy is inherently challenging because training a new physician is a long process; as such, attempting to change the physician workforce through changes to GME requires a long-time horizon and good initial data to project the future need for physicians. This process of projection is particularly challenging because policy changes may occur in the interim that modify the assumptions used in the projections.

The National Center for Health Workforce Analysis, at HRSA, projects the supply and demand of the health workforce under different scenarios. Overall, it projects a deficit of more than 124,000 physicians in 2027, increasing to 187,000 physicians in 2037.³² Further, it expects that this deficit will be more common in nonmetropolitan areas, where 60% of these areas will have physician shortages.³³ HRSA's model discusses the complexity of projecting supply and demand. It notes the challenges of obtaining an accurate baseline of available health workers, challenges with modeling hours worked, attrition, and retirement patterns.³⁴ It also notes that for physician supply specifically, modelling specialties is challenging because physicians can change specialties—at times without completing a new formal training program, or can restrict their practice to certain settings (e.g., primary care physicians who work primarily in hospitals [i.e., work as hospitalists] and do not provide community-based primary care services).³⁵ Further, modeling demand for services is also complicated because it may be influenced by outside events. For example, recent baseline data are affected by the increased demand for certain specialties because of the COVID-19 pandemic, and modeling future demand is affected by the assumptions made around the prevalence of COVID-19 and the need for services. Specifically, HRSA assumed that the disease becomes endemic and generates 110 million annual cases, with 10% of cases seeking outpatient treatment. Their estimates also include cases of long-COVID and the increased need for services for these patients.³⁶ All of these assumptions and limitations of the input data make projecting future physician supply challenging.

MedPAC, among others, notes that the roles of physicians and advance practice nurses and physician assistants have become less differentiated.³⁷ To the extent that an advance practice clinician can substitute for a physician, some of the projected shortfalls of physicians would be less. For example, in earlier projections, the HRSA model was used to examine various scenarios based on assumptions about the use of advance practice clinicians. The model that predicted the greatest shortages had projected a shortage of 20,400 primary care physicians in 2020. However,

³¹ See, for example, HRSA, Bureau of Health Workforce, Health Workforce Analysis. "Health Workforce Projections," <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand>. In addition, private organizations such as the American Medical Association collect data on the number of physicians.

³² HSRA, "Physician Workforce Projects, 2022-2037," November 2024, Physician Workforce: Projections, 2022-2037.

³³ HRSA, Bureau of Health Workforce, Health Workforce Analysis. "Health Workforce Projections," <https://bhw.hrsa.gov/data-research/projecting-health-workforce-supply-demand>.

³⁴ HRSA, Bureau of Health Workforce, "Technical Documentation of HRSA's Health Workforce Simulation Model: II. Supply Modeling Overview," II. Supply Modeling Overview | Bureau of Health Workforce.

³⁵ HRSA, Bureau of Health Workforce, "Technical Documentation of HRSA's Health Workforce Simulation Model: V: Physician Model Component," V. Physician Model Components | Bureau of Health Workforce.

³⁶ HRSA. Bureau of Health Workforce, "Technical Documentation of HRSA's Health Workforce Simulation Model: V: Physician Model Component," V. Physician Model Components | Bureau of Health Workforce.

³⁷ MedPAC, Report to Congress, March 2025.

HRSA model projected smaller shortages when making different assumptions about the role of nurse practitioners and physicians assistants. Under a model that includes full use of nurse practitioners and physician assistants, the projected physician shortage would be 6,400 in 2020.³⁸ HRSA's 2022 projections find primary care physician shortages in 2035 but also surpluses of primary care nurse practitioners and physician assistants. Its estimates do not discuss substitution and whether the potential surplus of advanced practice clinicians could ameliorate some of the projected physician shortages. HRSA did note that advanced practice clinicians were more common in non-metro areas, which they suggest could help meet the health care needs of residents in these areas.³⁹

Estimates commissioned by the American Association of Medical Colleges (AAMC)—a private, nonprofit organization that represents U.S.-accredited medical schools and some teaching hospitals—vary depending on assumptions made about the ability of nurse practitioners and physician assistants to augment physician supply. Specifically, in projections to 2036, the total shortage of primary care physicians ranged between 17,800 and 48,000. AAMC also found that compared with prior projections, surveys of physicians after the COVID-19 pandemic indicated that physicians were intending to retire at earlier ages than they indicated in their 2019 survey. It found that earlier physician retirement (should that occur) would worsen projected shortages.⁴⁰

Experts also project geographic shortages both overall and of specific provider types and specialties. As noted, some areas are currently designated as being in shortage.⁴¹ GAO also found that there has been little change in the areas where GME training occurs, which may affect where physicians ultimately practice.⁴² As with general estimates of physician supply, the role of nurse practitioners and physician assistants may alter predicted geographic area shortages. It is also possible that targeted policy changes either already enacted or if enacted at the federal or state levels could alleviate geographic shortages in the areas they target.⁴³

The uncertainty inherent in projecting supply and demand under changing conditions demonstrates the utility of regularly updating these projections to incorporate the latest data and policy conditions. The general uncertainty about the future need for physicians makes it challenging to develop and implement GME policy. However, it is relatively clear that better data would be useful, both to examine the overall health workforce and to determine how GME investments can be better aligned to achieve overall health workforce goals. Improved data collection has also been recommended in several of GAO's recent reports that examine GME spending.⁴⁴ In addition, the most recent publication (2024) from the Council on Graduate Medical Education (COGME), which is tasked with reviewing the federal government's GME

³⁸ HRSA, Bureau of Health Workforce, Health Workforce Analysis "Projecting the Supply and Demand for Primary Care Practitioners Through 2020: In Brief," November 2013.

³⁹ HRSA, Bureau of Health Workforce, "Primary Care Workforce Projects, 2020-2035," November 2022, <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/Primary-Care-Projections-Factsheet.pdf#:~:text=This%20brief%20contains%20highlights%20of%20workforce%20projections%20for,with%20the%20year%202020%20and%20go%20through%202035.>

⁴⁰ GlobalData PLC. *The Complexities of Physician Supply and Demand: Projections from 2021 to 2036*, Washington, DC, Association of American Medical Colleges; 2024.

⁴¹ In FY2024, there were 7,543 areas designated as having a primary care shortage. See HRSA, "HRSA Fact Sheet: FY2012- Nation" at <https://data.hrsa.gov/data/fact-sheets>.

⁴² GAO, *Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, 17-411, May 25, 2017.

⁴³ See, for example, simulations undertaken using the FutureDocs Forecasting tool described at https://physiciansfoundation.org/wp-content/uploads/2017/12/FutureDocs_Forecasting_Tool_Fact_Sheet.pdf.

⁴⁴ GAO, *Health Care Workforce: Comprehensive Planning by HHS Needed to Meet National Needs*, 16-17, December 11, 2015, <http://www.gao.gov/products/GAO-16-17> and GAO 2018 GME Information.

investments, focused on the need for data collection and longitudinal analysis. Specifically, it recommended standardized data collection across GME programs and investments in longitudinal research tracking GME outcomes by program and institutions. COGME suggests that HRSA's National Center for Health Workforce Analysis be the entity tapped with this undertaking.⁴⁵

Federal GME Support

The federal government supports the health workforce generally, and the physician workforce specifically, through a number of programs, including those that provide loan repayment or scholarships to physicians for the costs of attending medical school.⁴⁶ More than three-quarters of federal workforce support is through GME for support of medical residency training post-medical school.⁴⁷ Hospitals may also use nonfederal sources to support GME (see text box “Selected Sources of Nonfederal GME Support”). The programs below are organized by relative size, as determined by the amount that the program spends annually. These programs are also briefly summarized in **Appendix C**.

Medicare

Medicare is by far the largest source of GME support.⁴⁸ Medicare began supporting GME when the program was enacted in 1965. Congress stated that educational activities enhance the quality of care at a medical institution and therefore education costs should be borne by Medicare to an appropriate extent.⁴⁹

Medicare primarily supports hospital-based residency training in allopathic and osteopathic medicine, dentistry, and podiatry disciplines. (Medicare also supports some nursing and allied health education. See text box “Medicare Support for Nursing and Allied Health Education” for a brief overview.) Medicare support for allopathic and osteopathic residency is “capped” by statute. The number of medical residency positions is based on a statutory formula that establishes a hospital-specific cap. The cap is not an aggregate (national) or state-level cap. Dentistry and podiatry residency Full-time equivalents (FTEs) are not capped.

Medicare Support for Nursing and Allied Health Education

Medicare also supports *hospital-based* nursing and allied health education (NAHE). Although most nursing and allied health professions training today is *university-based* (e.g., through a college of nursing), the Medicare NAHE primarily supports approved *hospital-based* nursing and allied health professions training. Approved programs are those that are either licensed by the state, or if state law does not require licensing, are accredited or recognized by a national professional organization such as the Commission on Accreditation of Allied Health Education Programs. Hospitals that meet criteria specified in regulation are eligible for Medicare NAHE funding. Among these requirements is that an approved program is “operated by the provider.” That is, the hospital (1) directly incurs the training costs, (2) has direct control of the curriculum and the administration of the program, (3)

⁴⁵ COGME, Issue Brief, 2024.

⁴⁶ For example, see CRS Report R43571, *Federal Student Loan Forgiveness and Loan Repayment Programs*, and CRS Report R44970, *The National Health Service Corps*.

⁴⁷ GAO Health Workforce Planning Report. This estimate includes support for other health professions beyond physicians; however, support for physicians is the largest component of GME.

⁴⁸ The Medicare program is a federal program that pays for covered health care services for qualified beneficiaries. Medicare beneficiaries are individuals aged 65 and over, individuals receiving Social Security Disability Insurance benefits, and individuals with end-stage renal disease (i.e., permanent kidney failure). For more information on the Medicare Program, see CRS In Focus IF10885, *Medicare Overview*.

⁴⁹ U.S. Congress, House Committee on Ways and Means, *Social Security Amendments of 1965*, 89th Cong., 1st sess., March 29, 1965, House Report No. 213 (Washington: GPO, 1965), p. 32.

employs the teaching staff, (4) provides and controls both classroom instruction and clinical training, and (5) issues the degree, diploma, or other certificate upon successful completion of an approved education program.

Medicare NAHE also pays for nonprovider-based training. In these cases, a hospital may receive Medicare NAHE payment if the clinical training occurs in the hospital and the classroom instruction occurs in the educational institution, as long as the hospital and educational institution are related by common ownership and control. The criteria and conditions for determining whether common ownership and control exists are outlined in regulation.

In FY2023, an estimated 911 hospitals received Medicare NAHE payments. CRS was unable to estimate total NAHE costs or FTEs.

Sources: 42 U.S.C. §1395x(v)(1)(A). Note that “allied health” disciplines or professions are not specified in Statute or regulation; 42 C.F.R. §413.85(b); 42 C.F.R. §413.85(c); 42 C.F.R. §413.85(f); 42 C.F.R. §413.85(g)(2); Congressional Research Service analysis of FY2022 Medicare hospital cost report data as reported to the CMS Healthcare Cost Report Information System.

Since the enactment of Medicare, Congress has intended that Medicare would share the costs of medical education with other sources of funding. In its report accompanying the Social Security Act Amendments of 1965, the Senate Committee on Finance stated Medicare’s support of educational activities undertaken by hospitals

is intended, until the community undertakes to bear such education costs in some other way, that a part of the net cost of such activities (including stipends of trainees as well as compensation of teachers and other costs) should be considered as an element in the cost of patient care, to be borne to an appropriate extent by the hospital insurance program.⁵⁰

Medicare pays hospitals for GME based on a number of factors, including the number of FTE residents the hospital trains. For Medicare purposes, an FTE is not the same as an individual resident. An FTE represents a “slot” that different residents may occupy over time. This is because multiple residents may occupy an FTE and not all time is counted for Medicare purposes (e.g., time spent at VA facilities would not be paid by Medicare). Thus, Medicare GME payment is not tied to a specific resident but rather tied to FTEs.⁵¹ In FY2023, Medicare supported between 116,000-124,000 FTEs.⁵²

Medicare typically pays teaching hospitals two separate GME payments, each calculated using a distinct statutory formula and methodology: (1) direct graduate medical education (DGME) payments and (2) indirect medical education (IME) payments. Both payment formulae are subject to the Medicare limit on allopathic and osteopathic medical residencies. The limit or cap is described in more detail in “Medicare Cap on Allopathic and Osteopathic Residencies” below.

CMS has not considered its role to direct the physician workforce.⁵³ Specifically, except for some statutory requirements related to the use of certain “redistributed” GME slots for primary care and for sparsely populated geographic areas, CMS generally does not direct hospitals to train certain types of residents, nor does it require training to be in specific geographic areas or dictate the

⁵⁰ U.S. Congress, Senate Committee on Finance, *Social Security Amendments of 1965*, 89th Cong., 1st sess., June 29, 1965, Senate Report No. 389 (Washington: GPO, 1965), p. 36.

⁵¹ Hospitals must maintain records of specific residents and their time spent at each hospital or non-hospital setting in order to avoid double payment by multiple federal GME programs for the same resident during the same time period.

⁵² CRS analysis of FY2023 Medicare hospital cost report data as reported to CMS’s Healthcare Cost Report Information System. Reflects the range of DGME FTEs and IME FTEs, respectively, for all disciplines. This range does not include Medicare’s medical education payment adjustments for psychiatric hospitals and rehabilitation hospitals that operate teaching programs because the bulk of Medicare GME payments and the Medicare GME policies described in this report apply to general acute care hospitals that are paid under the Medicare inpatient prospective payment system (IPPS).

⁵³ MedPAC, in its 2009 report, noted that despite Medicare’s role in GME payments, it has never used these payments to affect changes in medical education or the workforce. See MedPAC 2009, p. 19.

content of training programs.⁵⁴ Rather, CMS collects some GME-related information from hospitals and uses it for payment calculation and auditing to ensure hospitals are paid according to GME statutes and regulations. CMS does not use this information to evaluate its GME investment or to otherwise direct the composition of the physician workforce.⁵⁵

Medicare Cap on Allopathic and Osteopathic Residencies

Medicare's GME support was initially open-ended, whereby Medicare would pay for additional FTE residents that hospitals trained. In 1997, graduate medical education stakeholders released a consensus statement arguing that the United States was on the verge of a serious oversupply of physicians and recommended limiting federal funding of GME positions to align with the number of graduates of accredited U.S. medical schools.⁵⁶

In response, as part of the Balanced Budget Act of 1997, (BBA97; P.L. 105-33), Congress enacted limits on the number of medical residents supported by Medicare GME. For hospitals that were training medical residents when BBA97 was enacted, their allopathic and osteopathic Medicare FTE cap was set at the number of FTEs being trained during FY1996.⁵⁷ The Medicare FTE cap is hospital-specific.⁵⁸

FTEs are occupied by residents or fellows but do not directly correspond to a specific resident or fellow because residents or fellows may spend periods of a given year at different facilities, or doing research. Thus, a hospital FTE is static but may be occupied by a different resident or fellow as they rotate to/from a hospital's residency program. To help ensure a hospital receives Medicare GME funding for all of its FTEs up to the Medicare FTE cap, a resident must occupy an FTE. Medicare does not pay GME to hospitals for unoccupied/vacant FTEs. And hospitals may count a resident in only one federal GME program at a time (i.e., may not double count).⁵⁹ For example, a hospital cannot claim Medicare GME reimbursement for a resident during the same period that the resident is also being counted for funding under another federal program, such as time spent training at a VA hospital. This prohibition on "double counting" is intended to ensure that federal funds are not used to pay twice for the same training time. Thus, most hospitals train above their Medicare FTE cap to ensure that Medicare FTEs are occupied by a resident at all times.

⁵⁴ 42 U.S.C. §1395ww(h). Generally, the federal government leaves the content of training to the accrediting bodies (see caveat in footnote 13). However, federal advisory groups have made recommendations on topics to add to training, and the federal government awards grants for certain types of training experiences. As examples, the COGME has recommended that residents learn how to work in a medical home model (see, e.g., COGME, *The Role of Graduate Medical Education in the New Health Care Paradigm*, Twenty Second Report, Rockville, MD, November 2014, <http://www.hrsa.gov/advisorycommittees/bhpradvisory/cogme/Reports/22report.pdf>), and the HRSA awards grants for training in geriatrics (see <http://bhpr.hrsa.gov/grants/geriatricsalliedhealth/index.html>). See also GAO Health Workforce Planning Report.

⁵⁵ CMS gathers resident and specialty data from teaching hospitals using the Intern and Resident Information System (IRIS). See GAO 2018 GME Information.

⁵⁶ AAMC, *Medical Education and Residency Issues*, Consensus Statement on Physician Workforce, March 3, 1997.

⁵⁷ The Medicare allopathic and osteopathic resident limit does not apply to critical access hospitals (small rural hospitals with no more than 25 inpatient beds), which are reimbursed for GME based on 101% of the reasonable costs incurred.

⁵⁸ The Medicare cap does not preclude hospitals from training residents beyond the FTE slots capped under Medicare based on 1996 levels using other funding.

⁵⁹ AAMC, *Medicare Payments for Graduate Medical Education: What Every Medical Student, Resident, and Advisor Needs to Know*, January 2013.

Medicare FTE Growth

Despite the statutory cap on Medicare-funded FTEs, the number of Medicare-supported GME residents in allopathic and osteopathic programs has continued to increase, as shown in **Figure 1**. This growth is partly attributable to hospitals that began training residents after FY1996, as these institutions are allowed to establish new Medicare FTE caps. For such hospitals, CMS uses a five-year period to determine the permanent cap based on the number of FTE residents trained.⁶⁰ In FY2023, the vast majority of teaching hospitals were operating at or above their Medicare FTE caps: 73% (788 hospitals) trained at or above their cap, while an additional 25% trained within 1 to 15 FTEs below their cap. Together, these groups represented 98.5% of all teaching hospitals, demonstrating that most eligible institutions are maximizing or nearing their Medicare-funded training capacity.⁶¹

Figure 1. Number of Medicare Allopathy and Osteopathy Direct Graduate Medical Education Full-Time Equivalents, 2015-2023



Source: Congressional Research Service analysis of Medicare hospital cost report data for FY2015-FY2023 as reported to the CMS Healthcare Cost Report Information System.

Notes: Count of Direct GME FTEs, not Indirect Medical Education (or IME) FTEs. However, IME FTEs show a similar growth trend. Note that the number DGME and IME FTEs differ due to statutory differences. Refer to **Table 1** for DGME and IME FTEs.

Another way the number of FTEs in hospitals supported by Medicare could be increased is through legislation. The most recently enacted legislation expanding the number of Medicare

⁶⁰ The Medicare cap for new residency training programs is based on the sum of the products of the highest number of FTE residents in any program year during the fifth year of the new program's existence and the number of years in which residents are expected to complete the program based on the minimum accredited length for each type of program. For more information on the cap for newly created training programs, see 42 C.F.R. §413.79(e).

⁶¹ CRS analysis of FY2023 Medicare hospital cost report data as reported to CMS's Healthcare Cost Report Information System.

FTEs were the Consolidated Appropriations Act, 2021 (CAA 2021; P.L. 116-260), and the Consolidated Appropriations Act, 2023 (CAA 2023; P.L. 117-328). CAA 2021 created 1,000 new FTEs to be distributed to hospitals meeting statutory qualification criteria and priorities. CAA 2021 also permits qualifying hospitals with Medicare FTE caps below a threshold (i.e., hospitals with “low” FTE caps) to have their caps recalculated (i.e., increased). Additionally, CAA 2023 created 200 new FTEs generally focusing on behavioral health that are to be distributed to hospitals meeting qualification statutory criteria.

In addition, Congress has enacted legislation to induce filling existing FTEs or to prevent loss, in aggregate, of FTEs due to residency program or hospital closure by redistributing FTEs from certain hospitals to other hospitals. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (P.L. 108-173) and the Patient Protection and Affordable Care Act (ACA; P.L. 111-148, as amended) each required a one-time redistribution of FTEs from hospitals that maintained unfilled FTEs for a period of time to hospitals that agreed to fill them. Additionally, the ACA gave the HHS Secretary the authority to redistribute FTEs from closed hospitals (or from closed residency programs even if the hospital remains open) to other hospitals that agree to fill the FTEs.⁶²

Medicare GME Payments

In FY2023, Medicare paid hospitals an estimated \$21.2 billion for GME for approximately 116,00-124,00 FTEs.⁶³ This payment includes allopathy, osteopathy, dentistry, and podiatry.⁶⁴ Regarding FTEs, the vast majority of Medicare-funded FTEs are for allopathy and osteopathy residents compared with dentistry and podiatry.⁶⁵

Table I. Estimates of Medicare Graduate Medical Education Payments and FTEs FY2023

Medicare GME Payments			Medicare GME FTEs ^a				
Allopathy, Osteopathy, Dentistry and Podiatry ^b			Allopathy and Osteopathy			Dentistry and Podiatry	
DGME	IME	Total	DGME		IME	DGME	IME
			Primary Care ^c	Non-Primary Care			
\$6,122,904,492	\$15,048,566,806	\$21,171,471,298	50,434	61,796	119,328	4,201	4,706

Source: Congressional Research Service analysis of FY2023 Medicare hospital cost report data as reported to the CMS Healthcare Cost Report Information System.

⁶² For example, GAO estimates that under the ACA-authorized, one-time redistribution of unused slots, 599 unused IME and 692 unused DGME resident FTEs were transferred to approximately 51 other hospitals, effective July 1, 2011. For more information about Medicare GME slot redistribution programs, see <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/DGME.html>.

⁶³ CRS analysis of FY2023 Medicare hospital cost report data as reported to the CMS Healthcare Cost Report Information System.

⁶⁴ Medicare cost report data do not permit isolating GME payments by discipline.

⁶⁵ Medicare cost report data do not permit differentiating FTEs by specialty, only by primary versus non-primary care categories.

Notes: FTEs = Full-Time Equivalents; GME = Graduate Medical Education; DGME = Direct Graduate Medical Education; IME = Indirect Medical Education. Payments include all disciplines; Medicare cost report data do not distinguish payments by discipline. FTE counts are for allopathic and osteopathic residents only.

- a. DGME and IME FTEs are not unduplicated; therefore, a total is not included.
- b. Medicare hospital cost report data do not permit isolating GME dollars by discipline. Thus, dollar estimates include allopathy, dentistry, osteopathy, and podiatry.
- c. 42 C.F.R. §413.75(b) defines primary care residency as one of the following: family medicine, general internal medicine, general pediatrics, preventive medicine, geriatric medicine, or osteopathic general practice.

Direct Graduate Medical Education (DGME) Payment

In FY2023, Medicare paid teaching hospitals \$6.1 billion in DGME payments, supporting approximately 116,431 FTEs.⁶⁶ Medicare DGME pays teaching hospitals for the Medicare portion of approved program costs directly incurred with residency programs, such as resident stipends, supervisory physician salaries, and administrative costs. However, Medicare does not pay the teaching hospital for the actual costs incurred by the residency program, but instead pays an amount equal to the product of the *total approved DGME costs* and the hospital's *Medicare patient load* percentage (see **Figure 2**). Under this methodology, Medicare pays for its share of the approved program costs associated with the residency program, whereas non-Medicare payers (e.g., a private insurer) would theoretically cover the remaining costs of the residency program based on their patient share at the teaching hospital.

In general, the *total* approved DGME cost is based on a teaching hospital's approved weighted FTE count, subject to a cap, and a prospectively determined per-resident amount. Residents in their initial residency period (IRP) are weighted as 1.0 for the FTE count, whereas residents past their IRP (e.g., fellows) are weighted as 0.5 for the FTE count. The hospital's approved FTE count is a rolling average of the hospital's FTE count over the past three years. The per-resident amount is a dollar value based on the amount of costs of the hospital's residency program for each FTE resident in a base period (a hospital's cost reporting period beginning on or after October 1, 1983, but before October 1, 1984) and is updated each year.⁶⁷ The product of these two figures represents Medicare's total approved DGME amount for a teaching hospital in a given year. The Medicare patient load is based on the teaching hospital's number of Medicare Part A inpatient days out of the total inpatient days, plus 86% of Medicare Part C (Medicare Advantage) inpatient days out of the total inpatient days.⁶⁸

⁶⁶ CRS analysis of FY2023 Medicare hospital cost report data as reported to the CMS Healthcare Cost Report Information System. Includes all disciplines.

⁶⁷ Following the enactment of the Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272), Medicare DGME payments would not be open-ended but based on the hospital's DGME costs in a base period (FY1984 for most hospitals), updated for inflation each year. If a hospital did not have an approved medical residency training program or did not participate in Medicare during the base period, the per-resident amount is established based on a hospital's costs during the first year that the hospital participates in Medicare and the residents who are on duty during the first month of that period.

⁶⁸ The 14% reduction for inpatient days associated with beneficiaries enrolled in Medicare Part C reflects Medicare expenditures that are carved out to make payments to hospitals operating approved nursing or allied health education programs (see text box). The nursing and allied health education program and funding mechanism are authorized by Section 541(b) of the Medicare, Medicaid, and SCHIP Balanced Budget Refinement Act of 1999 (P.L. 106-113).

Figure 2. Medicare DGME Payment Formula

$$\text{DGME Payment} = \left(\frac{\text{Adjusted Rolling Average FTE Count}}{\text{Total Approved DGME Amount}} \right) \times \left(\frac{\text{Per Resident Amount}}{\text{Medicare Patient Load}} \right)$$

The Medicare Patient Load is calculated as:

$$\left[\frac{\text{Medicare Part A Inpatient Days}}{\text{Total Inpatient Days}} + \frac{\text{Medicare Part C Inpatient Days}}{\text{Total Inpatient Days}} \times \% \text{ reduction to fund NAHE} \right]$$

Sources: CRS analysis of 42 U.S.C. §1395ww(h)(3) and 42 C.F.R. §§413.76-413.88.

Notes: Medicare uses a rolling average FTE count, subject to the GME cap, to mitigate large year-to-year changes in FTE counts. Also, the rolling average FTE count is adjusted for residents in the initial residency period (IRP) = 1.0 FTEs residents outside of the IRP = 0.5 FTEs. DGME = Direct Graduate Medical Education; FTE = Full-Time Equivalent; NAHE=Nursing and Allied Health Education.

Indirect Medical Education (IME) Payment

In FY2023, Medicare paid teaching hospitals \$15.0 billion in IME payments, supporting approximately 124,034 FTEs.⁶⁹ Medicare IME payments support the indirect costs associated with residency programs, such as the higher patient care costs from additional testing that residents may order as part of their training.⁷⁰ Because Medicare's inpatient payment method, the Inpatient Prospective Payment System (IPPS), does not typically provide separate payment for additional testing, teaching hospitals may be disadvantaged by training residents under this payment method. To adjust for this possibility, Medicare IME payments are provided as a percentage increase to Medicare's IPPS payment (a sum payment amount of separate operating and capital components) for each discharge based on a statutory payment formula.

Medicare's formula for IME payment adjustment to the operating component of the IPPS payment is explicitly constructed in statute and is based primarily on an intern and resident-to-bed

⁶⁹ CRS analysis of FY2023 Medicare hospital cost report data as reported to the CMS Healthcare Cost Report Information System. Includes all disciplines.

⁷⁰ In contrast to research that suggests DGME payments do not adequately cover direct costs, MedPAC, among others, contends that IME payments are too high and estimates that IME payments are nearly twice the amount that can be empirically justified. For more information, see MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2007, p. 45, http://www.medpac.gov/documents/reports/Mar07_Ch02a.pdf?sfvrsn=0 and MedPAC, *Report to the Congress: Medicare Payment Policy*, March 2016, <http://www.medpac.gov/docs/default-source/reports/march-2016-report-to-the-congress-medicare-payment-policy.pdf?sfvrsn=0>; MedPAC, *Report to Congress: Medicare and the Health Care Delivery System*, June 2021, p. 214, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/default-document-library/jun21_ch6_medpac_report_to_congress_sec.pdf.

(IRB) ratio (see **Figure 3**).⁷¹ The IME operating adjustment is the percentage increase to Medicare’s IPPS operating per-discharge payment.

IPPS payments also include a relatively smaller component that reflects the capital costs of the hospital.⁷² CMS constructed the IME capital adjustment formula and uses a residents-to-average daily census ratio (RADC) (not to exceed 1.5) to increase the teaching hospital’s capital payment component under the IPPS (see **Figure 3**). Residents are counted in the same manner as in the IME operating adjustment formula. The addition of the IME percentage increases to Medicare IPPS operating and capital per-discharge payments amounts reflects Medicare’s IME payments.

Figure 3. Medicare IME Operating and Capital Adjustment Formulas

$$\text{IME Operating Adjustment} = 1.35 \times [(1 + \text{IRB})^{0.405} - 1]$$

$$\text{IME Capital Adjustment} = [e^{(0.2822 \times \text{RADC})} - 1]$$

Sources: CRS analysis of 42 U.S.C. §1395ww(d)(5)(B) and 42 C.F.R. §412.322(b).

Notes: IRB = an intern and resident-to-bed (IRB) ratio; RADC = residents-to-average daily census ratio. “e” is Euler’s number which is a mathematical constant that is equal to approximately 2.71828. Both the IRB and RADC are subject to the Medicare GME cap. Other limits and restrictions to the formula may apply.

Medicaid

Medicaid provides the second-largest source of GME support.⁷³ Medicaid is a joint federal-state program. States must follow broad federal rules to receive federal matching funds, but they have flexibility to design their own versions of Medicaid within the federal statute’s basic framework. The federal statute does *not* require states to make Medicaid GME payments, but states are allowed to make Medicaid GME payments, and most states have historically made these payments.⁷⁴

Unlike for Medicare or other federal GME payment systems, there is no federal guidance for Medicaid GME, so, states have significant flexibility in designing and administering their Medicaid GME payments.⁷⁵ As a result, states’ Medicaid GME payments vary substantially.

⁷¹ See Section 1886(d)(5)(B) of the Social Security Act.

⁷² Medicare IPPS payments consist of two components, one covers hospital operating costs—primarily labor and supply costs—the other covers capital costs such as costs for depreciation, interest, rent, and property-related insurance and taxes.

⁷³ Medicaid is a means-tested entitlement program that finances the delivery of primary and acute medical services, as well as long-term services and supports. For more information about the Medicaid program, see CRS Report R43357, *Medicaid: An Overview*.

⁷⁴ Tim M. Henderson, *Medicaid Graduate Medical Education Payments: Results from the 2022 50-State Survey*, AAMC, 2023.

⁷⁵ While no federal guidance speaks to Medicaid GME payments, federal regulations specify upper payment limits (UPLs) for Medicaid payments to hospitals, which prohibit using federal matching funds for Medicaid fee-for-service payments in excess of what would have been paid under Medicare payment principles (42 C.F.R. §447.272). Also, states are allowed to include Medicaid GME payments in managed care capitation payments (42 C.F.R. §438.6).

States make Medicaid GME payments through the fee-for-service (FFS) delivery system, managed care delivery system, or both systems.⁷⁶

Data for Medicaid GME payments are limited. CMS does not track GME spending by state Medicaid programs,⁷⁷ but CMS began collecting information about Medicaid GME payments made through the FFS delivery system in FY2010 through the CMS-64 data.⁷⁸ Other information about Medicaid GME payments is available from the AAMC, which conducts a 50-state survey about Medicaid GME payments every two to three years.⁷⁹ The information from these sources differs in scope, methodology, and reporting periods, and each source has limitations.

Table 2 shows the information about Medicaid GME payments from the two sources for different years.⁸⁰ The CMS-64 data reported only FFS GME payments made to hospitals for federal FY2023,⁸¹ while the AAMC data included total GME payments including both FFS and managed care payments for state FY2022.⁸²

Table 2. Medicaid GME Payments Data from Different Sources

Source	Number of States with Medicaid GME Payments			Amount of Medicaid GME Payments		
	FFS	Managed Care	Total	FFS	Managed Care	Total
CMS-64 Data (FY2023)^a	33 states	NA	NA	\$4.7 billion	NA	NA
AAMC Medicaid Survey (SFY2022)^b	41 states	27 states	44 states	\$3.1 billion	\$4.0 billion	\$7.4 billion ^c

Sources: Congressional Research Service (CRS) analysis of Centers for Medicare & Medicaid Services (CMS), FY2023 CMS-64 data as reported by states to the Medicaid Budget and Expenditure System, as of May 29, 2024; Tim M. Henderson, *Medicaid Graduate Medical Education Payments: Results from the 2022 50-State Survey*, Association of American Medical Colleges, 2023.

Notes: The District of Columbia is counted as a state. The amounts of GME payments are total funds, which include both the federal and state share of the Medicaid GME payments.

AAMC = Association of American Medical Colleges; FFS = fee-for-service; FY = fiscal year; NA = not available; SFY = state fiscal year.

⁷⁶ Under the fee-for-service delivery system, health care providers are paid by the state Medicaid program for each service provided to a Medicaid enrollee. Under the managed care delivery system, Medicaid enrollees get most or all of their services through an organization under contract with the state.

⁷⁷ GAO, *Graduate Medical Education: Programs and Residents Increased during Transition to Single Accreditor: Distribution Largely Unchanged*, GAO-21-329, April 2021.

⁷⁸ States submit the CMS-64 form to the Centers for Medicare & Medicaid Services through the Medicaid Budget and Expenditure System on a quarterly basis, and the CMS-64 form is a statement of expenditures for which states are entitled to federal Medicaid matching funds. States are required to provide supporting documentation for total Medicaid expenditures.

⁷⁹ Tim M. Henderson, *Medicaid Graduate Medical Education Payments: Results from the 2022 50-State Survey*, AAMC, 2023.

⁸⁰ For most states, the state fiscal year begins on July 1 and ends on June 30 of the following calendar year, whereas a federal fiscal year begins on October 1 and ends on September 30 of the following calendar year.

⁸¹ For the CMS-64 data, the Medicaid GME payments include only fee-for-service payments made to hospitals. Medicaid GME payments made through managed care or made to non-hospital providers are not disaggregated from the total managed care expenditures of the total Medicaid expenditures to the non-hospital providers.

⁸² Under risk-based managed care, states contract with managed care organizations (MCOs), which are private health insurers. States usually pay the MCOs on a capitated basis, which means the states prospectively pay the MCOs a fixed monthly rate per enrollee to provide or arrange for most health care services.

- a. For the CMS-64 data, the Medicaid GME payments include only FFS payments made to hospitals. Medicaid GME payments made through managed care or made to non-hospital providers are not disaggregated from the total managed care expenditures of the total Medicaid expenditures to the non-hospital providers.
- b. Ten states have AAMC-estimated payment amounts or reported data from a different state fiscal year. Also, two states were unable to report Medicaid GME payments made through FFS versus payments made through managed care, but were able to report a total Medicaid GME payment amount
- c. Maryland and Texas reported total Medicaid GME payment on the AAMC survey, but these states did not identify whether these payments were FFS or Managed Care. The payments for Maryland and Texas are in the total but not under FFS or MMC.

With respect to the number of states with FFS Medicaid GME payments, **Table 2** shows the CMS-64 data and the AAMC survey reported different numbers of states making Medicaid FFS GME payments, with the CMS-64 data reporting 33 states for FY2023 and AAMC reporting 41 states for SFY2022. These sources also differed with respect to the amount of the FFS GME payments, with the CMS-64 data reporting \$4.7 billion and the AAMC survey reporting \$3.1 billion in FFS GME payments.

The Medicaid GME payments (including both the FFS and managed care payments) from the AAMC survey reports \$7.4 billion in Medicaid GME payments for SFY2022, with 44 states making either FFS and/or MMC GME payments.⁸³

Beyond payment totals, AAMC provided additional information about Medicaid GME payments that is not included in the CMS-64 data. For instance, there is information about how the Medicaid GME payments were calculated. Some states used the Medicare methodology or a similar method, while other states used a per-Medicaid hospital discharge method, a per-resident method, or another method.⁸⁴

AAMC also reported information about the types of professions eligible for Medicaid GME payments. Most states supported training programs for physician residents, and some states supported training programs for other health professions, such as nursing, dental, podiatry, and paramedical (i.e., emergency medical services or radiology technology) programs.⁸⁵

Department of Veterans Affairs (VA)

Training health care professionals—including physicians—is part of VA’s statutory mission. It does so to provide an adequate supply of health professionals overall and for VA’s health system.⁸⁶ In AY2022-AY2023, 50,620 individual physician residents received their clinical training by rotating through about 11,300 VA-funded FTE residency positions at VA medical facilities.⁸⁷ In general, one FTE position will provide three or four trainees to rotate through that position. For example, if one trainee rotates to a VA medical facility for three one-month rotations over a year, the FTE position is calculated as 0.25 FTE.⁸⁸ In FY2023, VA spent approximately

⁸³ Tim M. Henderson, *Medicaid Graduate Medical Education Payments: Results from the 2022 50-State Survey*, AAMC, 2023 (hereinafter, Henderson, Medicaid GME, 2022).

⁸⁴ Henderson, Medicaid GME, 2022.

⁸⁵ Henderson, Medicaid GME, 2022. Table 4 of the AAMC report shows that the following states reported making Medicaid GME payments to non-physicians in state FY2022: California, Indiana, Iowa, Michigan, Minnesota, New York, Ohio, Oregon, Pennsylvania, South Carolina, Texas, and Virginia.

⁸⁶ 38 U.S.C. §7302.

⁸⁷ Data provided by Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations (OAA), based on OAA databases, ACGME Accreditation Data System and AAMC 2023 Report on Residents. Personal communication with CRS on September 25, 2024, via VA Office of Congressional and Legislative Affairs.

⁸⁸ Kathleen A. Klink et al., “Veterans Affairs Graduate Medical Education Expansion Addresses U.S. Physician Workforce Needs,” *Academic Medicine*, vol. 97, no. 8 (August 2022), p. 1145.

\$2.04 billion for GME, which was 78.1% of all VA stipend support for clinical training programs.⁸⁹ VA estimates it spent \$0.85 billion in direct GME costs and \$1.19 billion on indirect medical costs and an estimated \$176,699 per FTE resident, which was higher than the Medicare amount spent per resident.⁹⁰ VA payments are determined by the specific agreements between the VA facility and the academic sponsor; as such, VA payments are a total and encompass both types of GME payments (IME and DGME).

Generally, VA does not operate its own GME programs because accrediting bodies require that medical residents see a diverse population in terms of age, sex, and medical conditions throughout their training, which VA's patient population generally does not provide. Instead, VA partners with teaching hospitals (i.e., the GME-sponsoring institution, also known as VA academic affiliates), and residents from those GME-sponsoring institutions rotate to a VA medical facility for a period of time during the academic year to provide care to veterans under the supervision of VA physicians.⁹¹ About 99.9% of VA's GME programs (that is 13,056 out of 13,066 ACGME-accredited programs) are sponsored by VA academic affiliates.⁹² VA estimates that it partners with over 3,765 ACGME-accredited programs in 119 different specialties or subspecialties.⁹³ When VA partners with GME-sponsoring institutions that operate a residency program, it shares the costs of faculty and residents when the residents are training at the VA medical facility (see **Figure 4**).⁹⁴ During the time that residents are at a VA facility, they are not counted for the purposes of the Medicare GME cap (and are not paid using Medicare funds). This permits hospitals to train additional residents above their Medicare FTE cap to account for the time that residents are at VA facilities and therefore being paid by VA.

Unlike Medicare and Medicaid, VA does control the type of residents it trains and where these residents are located. Each VA medical facility may determine its staffing needs and the types of programs it partners with academic affiliates to operate.⁹⁵ As a result, VA has data on the residents

⁸⁹ Data provided by Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations (OAA), based on OAA databases, ACGME Accreditation Data System and AAMC 2023 Report on Residents. Personal communication with CRS on September 25, 2024, via VA Office of Congressional and Legislative Affairs.

⁹⁰ Data provided by Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations (OAA), based on OAA databases, ACGME Accreditation Data System, and AAMC 2023 Report on Residents. Personal communication with CRS on September 25, 2024, via VA Office of Congressional and Legislative Affairs.

⁹¹ Department of Veterans Affairs, *Veterans Access, Choice, and Accountability Act: Increase of Graduate Medical Education Residency Positions*, Report to Congress, August 2023, p. 2. Residents appointed under 38 U.S.C. §7406 are paid (indirectly via a disbursement agreement) "only for such time as they are in training, assigned, and on VA duty at a VA medical facility." Department of Veterans Affairs, *Pay Administration*, VA HANDBOOK 5007/41, PART II APPENDIX E, September 30, 2011, pp. II-E-1, and Department of Veterans Affairs, Veterans Health Administration, *Disbursement Agreements for Health Professions Trainees Appointed Under 38 U.S.C. § 7406*, VHA DIRECTIVE 1400.05, June 2, 2021.

⁹² VA is affiliated with 153 of the 160 allopathic medical schools (MDs) and 37 of the 40 osteopathic medical schools (DOs). Data are current for academic year 2022-2023 and may change from year to year. (Source: Department of Veterans Affairs, *Congressionally Mandated Report: Veterans Access, Choice, and Accountability Act: Increase of Graduate Medical Education Residency Positions*, August 2023, p. 2.) Residency positions do not actually match with VA medical facilities. They match at programs that include the VA medical facility as a participating site.

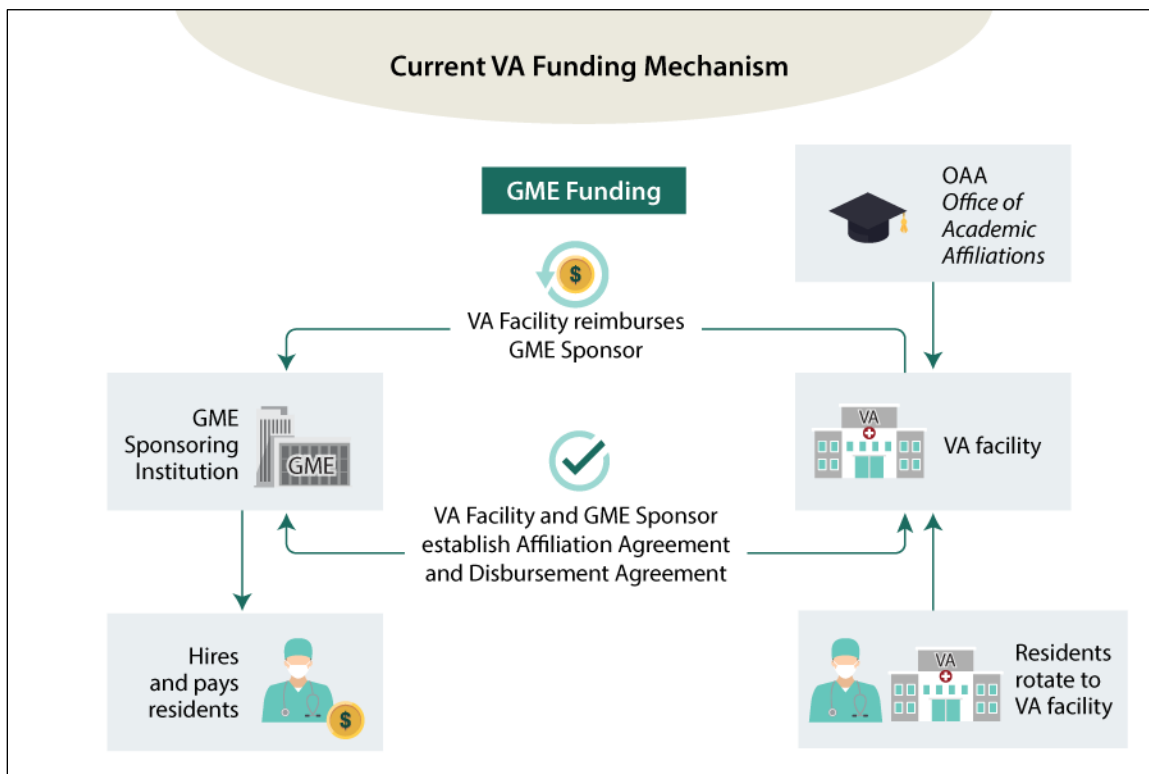
⁹³ Data provided by Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations (OAA), based on OAA databases, ACGME Accreditation Data System, and AAMC 2023 Report on Residents. Personal communication with CRS on September 25, 2024, via VA Office of Congressional and Legislative Affairs.

⁹⁴ Department of Veterans Affairs, Veterans Health Administration, *Educational Relationships*, VHA DIRECTIVE 1400.03, February 23, 2022.

⁹⁵ Department of Veterans Affairs, Veterans Health Administration, *VHA Handbook*, 1400.01, December 19, 2012.

it trains and makes attempts to track whether its physician employees spent part of their residency training at VA.⁹⁶

Figure 4.VA GME Disbursement Process



Source: CRS graphic based on Department of Veterans Affairs, “Graduate Medical Education Update” presentation at the 2024 HRSA Annual Grantee Meeting by Dr. Ryan Scilla, Director of Medical and Dental Education, VA Office of Academic Affiliations, August 21, 2024.

Notes: GME=graduate medical education; OAA=Office of Academic Affiliations; VA=Department of Veterans Affairs.

Veterans Access, Choice, and Accountability Act of 2014 GME Expansion

The Veterans Access, Choice, and Accountability Act of 2014 (P.L. 113-146, as amended), among other things, included a requirement for VA to expand the number of residents it trains by up to 1,500 positions in primary care, mental health, and other high-priority areas for VA over a period of five years commencing on the day that is one year after the date of enactment. Subsequently, the Jeff Miller and Richard Blumenthal Veterans Health Care and Benefits Improvement Act of 2016 (P.L. 114-315) extended the time period during which training of the 1,500 residents must occur by five years, to be a total of 10 years (i.e., to 2025).⁹⁷ VA allocated all 1,500 positions FTE positions between AY2015 and AY2022, as shown in **Table 3**.

⁹⁶ Department of Veterans Affairs, Veterans Health Administration, *VHA Handbook*, 1400.01, December 19, 2012.

⁹⁷ CRS Report R43704, *Veterans Access, Choice, and Accountability Act of 2014 (H.R. 3230; P.L. 113-146)*; P.L. 114-315; and 38 U.S.C. §7302 note.

Table 3. Graduate Medical Education (GME) Residency Expansion Under the Veterans Access, Choice, and Accountability Act of 2014

Fiscal Year (FY)	Academic Year (AY)	Number of Approved GME Positions (FTEs) ^a
2016	2015-2016	204.22
2017	2016-2017	167.99
2018	2017-2018	175.20
2019	2018-2019	226.04
2020	2019-2020	282.73
2021	2020-2021	247.09
2022	2021-2022	121.46
2023	2022-2023	75.27
Total Approved GME Positions		1,500.00

Source: Department of Veterans Affairs, *Veterans Access, Choice, and Accountability Act Increase of Graduate Medical Residency Positions*, Report to Congress, October 2024, pp-3-4.

Notes: FTE=Full-time equivalent.

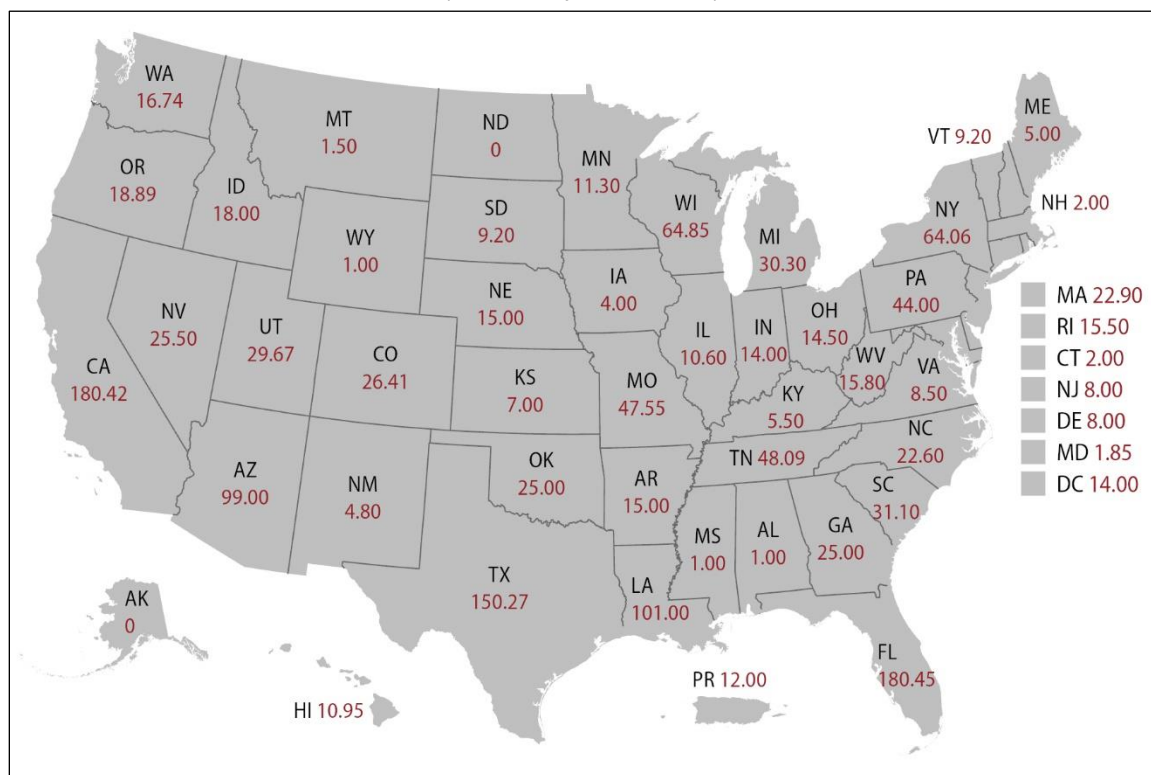
- a. FTE positions represent the proportion of a medical resident's time in VA position over the course of the academic year. Fractional FTEs represent a fraction of VA supported position.

Of the 1,500 approved positions, 41% (622.9 FTEs) were allocated for primary care (such as family medicine, and internal medicine), 25% (372.02 FTEs) were allocated for mental health care (such as addiction medicine, general psychiatry, and geriatric psychiatry), and 34% (505.08 FTEs) were allocated medical specialties of critical need to VA (such as emergency medicine, neurology, and anesthesiology, among others).⁹⁸ **Figure 5** provides GME FTE distribution among states, Washington, DC, and Puerto Rico.

⁹⁸ Department of Veterans Affairs, *Veterans Access, Choice, and Accountability Act Increase of Graduate Medical Education Residency Positions*, Report to Congress, October 2024, pp. 4-5.

Figure 5. Geographic Distribution of Veterans Access, Choice, and Accountability Act of 2014 GME Full-Time Equivalent (FTE) Positions

(Data as of June 30, 2024)



Source: CRS map developed based on data in the Department of Veterans Affairs, *Veterans Access, Choice, and Accountability Act Increase of Graduate Medical Education Residency Positions*, Report to Congress, October 2024, p. 7.

Notes: FTE=Full-time equivalents. FTE positions are calculated based on the percentage of time residents are assigned to a VA medical facility.

VA MISSION Act of 2018 Pilot Program on Graduate Medical Education and Residency (PPGMR)

The John S. McCain III, Daniel K. Akaka, and Samuel R. Johnson VA Maintaining Internal Systems and Strengthening Integrated Outside Networks Act of 2018, or the “VA MISSION Act of 2018” (P.L. 115-182), enacted on June 6, 2018, included a provision to establish a new pilot program for GME in underserved areas.⁹⁹ Section 5107 of the Continuing Appropriations Act of 2021 and Other Extensions Act (P.L. 116-159) amended the sunset date of August 7, 2024, and authorized the program until August 7, 2031.

On November 13, 2023, VA issued final regulations effective December 13, 2023, establishing PPGMR.¹⁰⁰ The new pilot program will allow VA to place no fewer than 100 physician residents (that is, unique individual residents and not individual residency positions or “slots”) in facilities

⁹⁹ CRS Report R45390, *VA Maintaining Internal Systems and Strengthening Integrated Outside Networks Act of 2018 (VA MISSION Act; P.L. 115-182)*. (38 U.S.C. §7302 note).

¹⁰⁰ Department of Veterans Affairs, “VA Pilot Program on Graduate Medical Education and Residency,” 88 *Federal Register* 77514 - 77522, November 13, 2023. Codified at 38 C.F.R. §§17.243-17.248.

operated by the Indian Health Service (IHS), or by Indian Tribes or Tribal organizations, a federally qualified health center (FQHC),¹⁰¹ a DOD facility, a facility located in the same area where a VA facility that has been designated by VA as an underserved facility under criteria developed based on Section 401 of P.L. 115-182, or another facility that the VA Secretary deems appropriate.¹⁰² In selecting facilities where residents would be placed, VA would consider such factors as counties with a low ratio of VA providers to veterans, counties with a low ratio of specialists, HRSA-designated HPSAs, rural areas as designated by the U.S. Census Bureau, and frontier or remote areas as designated as by the Economic Research Service, among other factors.¹⁰³

Under PPGMER, VA will administer two reimbursement models. Under Model A, VA will reimburse, through a contract mechanism, a resident physician's sponsoring institution for the proportionate cost of the resident's salary and benefits during the time the physician resident spends in clinical and educational activities at covered facilities (see **Figure 6**).¹⁰⁴ VA disbursement agreements as shown in **Figure 4** will not be used under PPGMER.¹⁰⁵ VA issued request for proposals (RFPs) for funding under Model A on July 1, 2024, and proposals were due by September 30, 2024. VA distributed acceptance notifications in December 2024 and finalized contractual agreements with accepted sponsoring institutions between May and June 2025, for resident rotations that started in July 2025 (AY2025-AY2026).¹⁰⁶ As seen in **Table 4**, for the Model A, there are 8 ACGME sponsoring institutions that cover seven Indian Tribe or Tribal Organization (IT/TO) or Indian Health Service (IHS) facilities, in six clinical specialties, that include a total of 61 individual residents.¹⁰⁷

Table 4. Pilot Program for GME and Residency (PPGMER)—Model A Results

Sponsoring Institution	Covered Facility	Covered Facility State	Covered Facility Type	Clinical Specialty	Total Residents
Healthy Rural California, Inc.	Northern Valley Indian Health	California	Indian Tribe or Tribal Organization	Psychiatry	4

¹⁰¹ Federally qualified health centers (FQHCs) are often referred to interchangeably with grantees of the federal health center program (health centers or community health centers). These are outpatient primary care-focused facilities that are located in health professional shortage areas. FQHCs may also operate teaching health centers. For more information on these facilities, see CRS Report R43937, *Federal Health Centers: An Overview*.

¹⁰² 38 C.F.R. §17.246. According to the request for proposals (RFP) published on July 1, 2024, VA facilities are not considered a covered facility for PPGMER (Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations, *Request for Proposals Pilot Program for Graduate Medical Education and Residency Under Mission Act Section 403 Academic Year 2025-2026*, Program Announcement, July 1, 2024).

¹⁰³ 38 C.F.R. §17.246. The Economic Research Service is part of the U.S. Department of Agriculture that provides information on, among other things, rural America.

¹⁰⁴ Note that this does not include the indirect costs of training residents or those expenses that are traditionally included in IME payments.

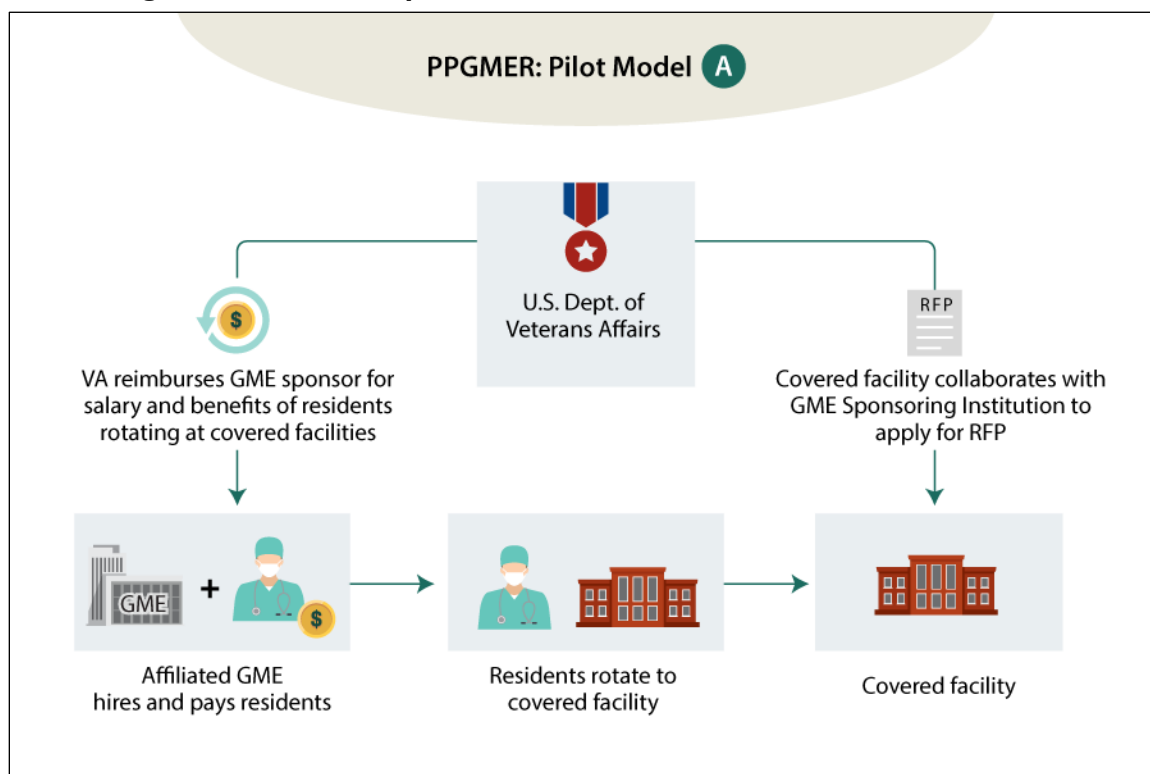
¹⁰⁵ Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations, *Request for Proposals Pilot Program for Graduate Medical Education and Residency Under Mission Act Section 403 Academic Year 2025-2026*, Program Announcement, July 1, 2024, and 38 C.F.R. §17.248.

¹⁰⁶ Department of Veterans Affairs, "MISSION Act Section 403" presentation by Ryan Scilla, Director of Medical and Dental Education, Office of Academic Affiliations, Veterans Health Administration, to VA's National Academic Affiliations Council (NAAC) meeting held on March 26-27, 2025.

¹⁰⁷ Department of Veterans Affairs, "MISSION Act Section 403" presentation by Ryan Scilla, Director of Medical and Dental Education, Office of Academic Affiliations, Veterans Health Administration, to VA's National Academic Affiliations Council (NAAC) meeting held on March 26-27, 2025.

Sponsoring Institution	Covered Facility	Covered Facility State	Covered Facility Type	Clinical Specialty	Total Residents
Icahn School of Medicine at Mount Sinai	Cheyenne River Health Center	South Dakota	Indian Health Service	Emergency Medicine	10
Louisiana State University	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Emergency Medicine	5
University of Minnesota	White Earth Indian Health Service	Minnesota	Indian Health Service	Internal Medicine	8
University of New Mexico	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Family Medicine	4
University of New Mexico	Gallup Indian Medical Center	New Mexico	Indian Health Service	Emergency Medicine	4
University of Utah	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Internal Medicine-Pediatrics	4
University of Utah	Chinle Comprehensive Health Care Facility	Arizona	Indian Health Service	Internal Medicine-Pediatrics	2
University of Utah	Chinle Comprehensive Health Care Facility	Arizona	Indian Health Service	Emergency Medicine	2
University of Utah	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Internal Medicine	2
University of Utah	Ilanka Community Health Center	Alaska	Indian Tribe or Tribal Organization	Family Medicine	1
University of Utah	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Emergency Medicine	2
University of Washington	Gallup Indian Medical Center	New Mexico	Indian Health Service	Emergency Medicine	4
Washington University	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Internal Medicine	1
Washington University	Shiprock - Northern Navajo Medical Center	New Mexico	Indian Health Service	Pulmonary-Critical Care	8

Source: Based on Department of Veterans Affairs, “MISSION Act Section 403” presentation by Ryan Scilla, Director of Medical and Dental Education, Office of Academic Affiliations, Veterans Health Administration, to VA’s National Academic Affiliations Council (NAAC) meeting held on March 26-27, 2025.

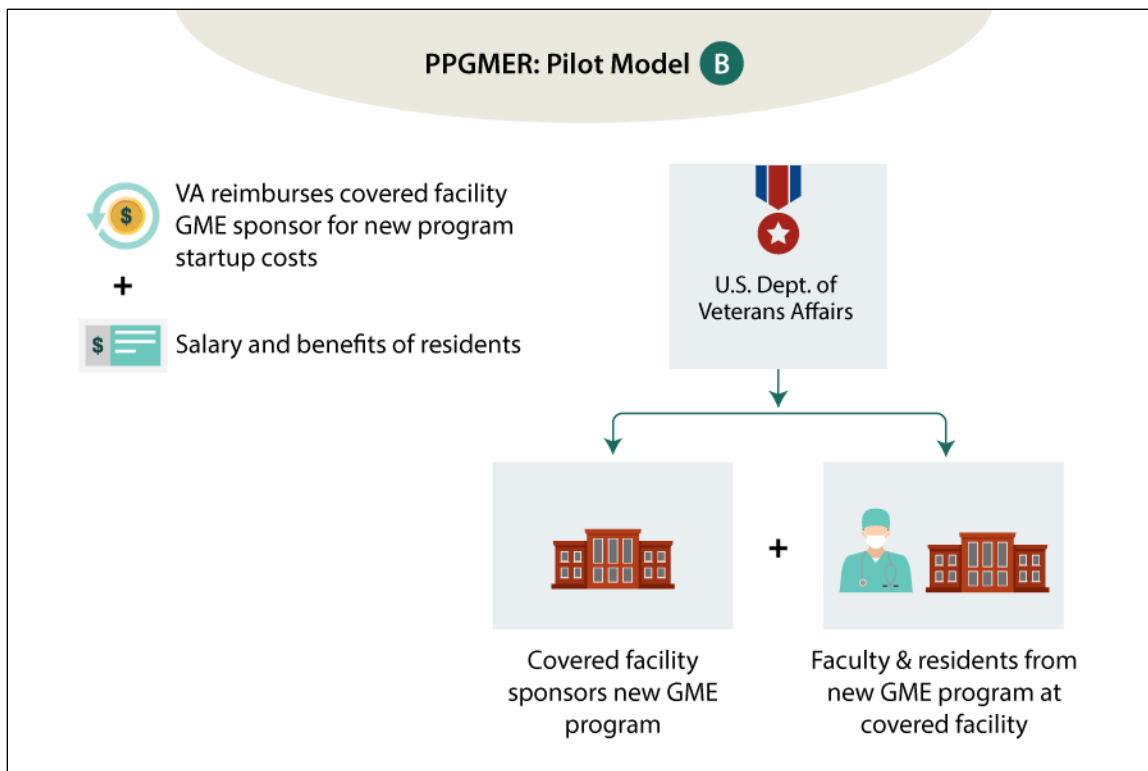
Figure 6. Resident Stipends and Benefits Under Model A of PPGMER

Source: CRS graphic based on Department of Veterans Affairs, “Pilot Program Graduate Medical Education and Residency (PPGMER), Request for Proposals Information Session,” summer 2024, presentation by Ryan Scilla, Director of Medical and Dental Education, Office of Academic Affiliations, Veterans Health Administration, August 21, 2024.

Notes: RFP = request for proposals; GME=graduate medical education; PPGMER=Pilot Program on Graduate Medical Education and Residency; VA=Department of Veterans Affairs.

Under Model B, for eligible facilities that establish new GME programs, VA will pay for the costs associated with doing so including curricula development, faculty salaries, faculty and resident recruitment and retention, costs associated with the program becoming accredited (such as administrative fees for initial ACGME accreditation), and resident educational expenses, as well as the proportionate cost of the resident’s salary and benefits during the time a physician resident spends in clinical and educational activities at covered facilities (see **Figure 7**). Since establishing new GME programs could be a complex endeavor and require lead time, VA anticipated funding RFPs under Model B would be issued sometime in July 2025.¹⁰⁸ As of the date of this report’s publication, CRS cannot determine if this funding was issued in July 2025.

¹⁰⁸ Department of Veterans Affairs, *Pilot Program on Graduate Medical Education and Residency*, Report to Congress, May 2024, p 5.

Figure 7. Reimbursement of New GME Sponsor Under Model B of PPGMER

Source: CRS graphic based on Department of Veterans Affairs, "MISSION 403 National Academic Affiliations Council Meeting March 2024," presentation by John M. Byrne, Senior Advisor VA Office of Academic Affiliations, March 13, 2024.

Notes: GME=graduate medical education; PPGMER=Pilot Program on Graduate Medical Education and Residency; VA=Department of Veterans Affairs.

Health Resources and Services Administration

The Health Resources and Services Administration (HRSA) supports GME primarily through two programs: Children's Hospital GME (CHGME) and teaching health center GME (THCGME). The CHGME program trains both general pediatricians and pediatric subspecialists, while the THCGME trains residents in outpatient settings in primary care and psychiatry. In addition to these ongoing programs, HRSA also has a number of grant programs that award competitive grants that can be used to support GME.¹⁰⁹ See **Figure 8** for an overview of all HRSA training sites in the United States.

¹⁰⁹ For a description of these programs and program data, this report section draws on information from the U.S. Department of Health and Human Services, FY2025: Health Resources and Services Administration: Justification of Estimates for Appropriations Committee," <https://web.archive.org/web/20250308124649/https://www.hrsa.gov/sites/default/files/hrsa/about/budget/budget-justification-fy2025.pdf> (hereinafter HRSA FY2025 CJ). In many cases, this is the most up-to-date and comprehensive program information. Note that the HRSA Budget website states, "HRSA FY 2025 Congressional Justifications were developed during the prior administration and no longer reflect HHS budget policy." See <https://www.hrsa.gov/about/budget>.

Children's Hospitals GME¹¹⁰

The Children's Hospitals GME (CHGME) payment program is a discretionary program created in 1999¹¹¹ and most recently reauthorized through FY2023 in P.L. 115-241.¹¹² The program received an appropriation of \$390 million in FY2024¹¹³ to provide direct financial support to 59 free-standing children's hospitals¹¹⁴ to train pediatricians and pediatric subspecialists. CHGME was created because children's hospitals typically received limited, if any, Medicare GME payments because Medicare's GME payments are made based on a hospital's Medicare patient volume, which is generally low at children's hospitals.¹¹⁵

At the time the CHGME program was created, advocates argued that the lack of direct federal support for GME in children's hospitals impeded the development of the pediatric workforce because children's hospitals, rather than general hospitals, are more likely to have the patient volume necessary to train pediatric subspecialists.¹¹⁶ Since the CHGME program's creation, the overall size of the pediatric and pediatric subspecialty workforce has increased, whereas it had been declining in the 1990s before the program began. Advocates argue that this reversal can be attributed to the CHGME program, because nearly half of all pediatric residents and nearly two-thirds of all pediatric subspecialty fellows train at children's hospitals.¹¹⁷ Others argue that children's hospitals do not need these subsidies because they have fewer uninsured patients than do general hospitals so they should be able to support training without these subsidies.¹¹⁸

The CHGME program makes both DGME and IME payments to children's hospitals for residents and fellows in training. It allocates one-third of its appropriation to DGME payments and the remaining two-thirds to IME payments. During academic year 2022-2023, the program supported

¹¹⁰ More detailed information about this program, including extensive program data, can be found in CRS Report R45067, *Children's Hospitals Graduate Medical Education (CHGME)*.

¹¹¹ *Healthcare Research and Quality Act of 1999* (P.L. 106-129).

¹¹² The Children's Hospital GME (CHGME) payment program is authorized in PHS §340E (42 U.S.C. §256e). As of the date of this report's publication, authorizations of appropriations were through FY2023 and have not been extended. Legislation has been introduced in the 119th Congress (H.R. 2107 and H.R. 2960) to reauthorize the program but has not been enacted as of the date of this report's publication. The CHGME program continued to be funded in FY2024 when it received an appropriation of \$390 million. See HRSA, "FY2024 Operating Plan," <https://web.archive.org/web/20250319093217/https://www.hrsa.gov/about/budget/operating-plan>. FY2025 funding is provided in P.L. 119-4, which provided a full-year continuing resolution for FY2025. The amount allocated to the CHGME program was not available at the time of this report's publication. The FY2026 President's Budget for the Administration for a Healthy America (which would be responsible for administering health workforce programs) proposes to eliminate the CHGME program and not provide funding in FY2026. See HHS, Administration for a Healthy America, "Justification of Estimates for Appropriations Committees FY2026," <https://www.hhs.gov/sites/default/files/fy-2026-aha-cj.pdf>, p. 366.

¹¹³ P.L. 118-47.

¹¹⁴ PHS §340E defines a children's hospitals as "a hospital with a Medicare payment agreement and which is excluded from the Medicare inpatient prospective payment system pursuant to section 1886(d)(1)(B)(iii) of the Social Security Act and its accompanying regulations."

¹¹⁵ Medicare beneficiaries are individuals aged 65 and over, individuals receiving Social Security Disability Insurance benefits, individuals with Amyotrophic lateral sclerosis (ALS), and individuals with end-stage renal disease (i.e., permanent kidney failure).

¹¹⁶ The American Academy of Pediatrics, the major professional association for pediatricians, released a 2000 report detailing shortages in pediatric subspecialties and calling for additional financial support for training and research. See Alan Gruskin et al., "Final Report of the FOPE II Pediatric Subspecialists of the Future Workgroup," *Pediatrics*, vol. 106, no. 5 (November 2000), pp. 1224-1244.

¹¹⁷ See, for example, the policy positions of the Children's Hospital Association, "Children's Hospitals Graduate Medical Education Program Overview," <https://www.childrenshospitals.org/Issues-and-Advocacy/Graduate-Medical-Education/Issue-Briefs-and-Reports/Childrens-Hospitals-Graduate-Medical-Education-Program-Overview>.

¹¹⁸ See discussion in CRS Report R45067, *Children's Hospitals Graduate Medical Education (CHGME)*.

8,390 FTE slots.¹¹⁹ This includes support for 6,146 general pediatric residents, including residents from combined pediatrics programs (e.g., internal medicine/pediatrics). In addition, the program supported training 3,163 pediatric medical subspecialty residents, 375 pediatric surgical subspecialty residents, and 510 adult and pediatric dentistry residents. The program's funds also supported 5,666 adult medical and surgical specialty residents, such as those training in family medicine residents who rotate through children's hospitals for pediatrics training.¹²⁰ To provide GME payments to Children's Hospitals, HRSA determines a cap for each hospital and sets a PRA for each participating hospital using Medicare DGME payment methodology. Similar to other GME programs, CHGME counts residents' time only when they train at the children's hospital; time spent rotating elsewhere would not be counted for CHGME purposes.¹²¹

HRSA does not provide data on hospital-level PRAs; however, outside organizations have estimated the average amounts paid by the CHGME program, generally, to argue that these amounts are insufficient. For example, in 2022, the Children's Hospital Association—which represents children's hospitals—commissioned a study that found that the average CHGME PRA was \$79,813, which the association contrasted to the average Medicare GME PRA of \$156,128 (in FY2022). These analyses argue that the CHGME level is insufficient and should be increased.¹²²

Under the CHGME statute, the program must make payments to all children's hospitals that meet the program's definition and have an eligible training program. This means that HRSA does not have the authority to use this program to affect the geographic distribution of pediatric trainees. The CHGME program is discretionary funding, and its size and ability to increase PRAs is limited by its appropriation. As noted above, HRSA has set FTE caps on eligible hospitals through its application processes. With the exception of hospitals that were added to the program in the 2013 reauthorization,¹²³ CHGME hospital FTE caps are not required in statute but have been set by the agency to limit hospitals from training additional residents who would then be eligible for CHGME payment. Absent such an FTE cap, if the number of children's hospitals or eligible training programs were to increase, the program would have to provide lower payment levels per resident, unless the amount of funding appropriated to the program were to increase.

The CHGME program requires that grantee hospitals report programmatic data and financial data, which differs from CMS programs that generally only report financial data to ensure proper payments. Similar to CMS programs, CHGME hospitals must report financial data and must detail the support they receive from other sources to prevent duplication of payment, and programs are required to return any duplicate payments.¹²⁴ CHGME programs are also required to report programmatic data, including data on the number of residents they train, the specialties they train in, and whether individuals who complete their training care for children within the

¹¹⁹ HRSA FY2025 CJ pp. 162-165.

¹²⁰ HRSA FY2025 CJ pp. 162-165.

¹²¹ HRSA, Notice of Funding Opportunity: Fiscal Year 2025: Children's Hospital Graduate Medical Education (CHGME) Payment Program, <https://www.hrsa.gov/grants/find-funding/HRSA-25-079>. Full document can be accessed at <https://www.grants.gov/search-results-detail/354643>.

¹²² Dobson DaVanzo & Associates, *Comparative Analysis of GME Funding Programs for Children's Hospitals and General Acute Care Teaching Hospitals*, Final Report, updated March 24, 2022, Vienna, VA, March 24, 2022, https://www.childrenshospitals.org/-/media/files/public-policy/chgme_workforce/reports/chgme_dobson_davanzo_report_032422.pdf.

¹²³ PHSA §340E(h) added new hospitals to the CHGME program, and PHSA §340E(h)(2)(B) established a cap for these newly eligible hospitals. For more information on the four newly added hospitals, see U.S. Government Accountability Office, *Physician Workforce: Expansion of the Children's Hospital Graduate Medical Education Payment Program*, 18-66R, October 31, 2017, <https://www.gao.gov/assets/gao-18-66r.pdf>.

¹²⁴ PHSA §340E(b)(3).

hospital's service area or state.¹²⁵ HRSA also uses these data to track former trainees as they progress in their careers to examine outcomes such as whether these trainees serve patients who are covered by Medicaid.¹²⁶

The 2013 program reauthorization also includes an authority for HRSA to develop a quality bonus system (QBS) wherein a percentage of the program's appropriation is reserved and then allocated to hospitals that meet specified quality targets. In statute, the program authorizes the Secretary to establish a QBS for hospitals that meet standards specified by the Secretary in areas such as quality measures and improvement.¹²⁷ In practice, the system requires reporting on resident-level characteristics, as discussed below.

Hospitals began reporting under this system in FY2019, with hospitals initially reporting information about their trainees. Based on these reports in FY2020 and FY2021, a subset of hospitals received bonus payments—29 of 59 hospitals in FY2020.¹²⁸ Since that time, all participating hospitals (59) received these payments, in AY2021-AY2022, by completing individual-level documentation of all the residents that the program supported.¹²⁹ Data on AY2022-AY2023 were not available at the time of this report's publication. The FY2024 CHGME Notice of Funding Opportunity required that hospitals submit the following data as part of their annual performance report to be eligible for award payments and meet the following data collection metrics:

To qualify for the QBS payment,

- individual-level data for all residents supported in AY2023-AY2024;
- have a 90% or greater response rate on residents' demographic characteristics, including their ethnicity, race, and rural and disadvantaged background and at the same response rate on residency training in telehealth and working on interprofessional teams;
- have a 50% or greater response rate on post-residency employment of residents who completed their training; and
- (new for FY2024) report training in at least one of the following topic areas: resilience training; medication assisted treatment (MAT); medications for opioid use disorder (MOUD); substance use treatment; opioid use treatment; and/or integrated behavioral health in primary care.¹³⁰

¹²⁵ PHS §340E(b)(3) and Jim Kaufman, "Understanding the Costs and Financing of GME," Institute of Medicine, panel titled Understanding the Costs and Financing of GME, Washington, DC, December 20, 2012, <http://iom.nationalacademies.org/~media/Files/Activity%20Files/Workforce/GMEGovFinance/2012-DEC-19/Kaufman.pdf>.

¹²⁶ National Academy of Medicine, *Graduate Medical Education Outcomes and Metrics: Proceedings of a Workshop*, Washington, DC, March 27, 2018.

¹²⁷ 42 U.S.C. §256e(h)(6).

¹²⁸ HHS, HRSA, *Justification of Estimates for Appropriations Committees*, FY2022, <https://web.archive.org/web/20250309125341/https://www.hrsa.gov/sites/default/files/hrsa/about/budget/budget-justification-fy20220.pdf>, pp. 175-176.

¹²⁹ HHS, HRSA, *Justification of Estimates for Appropriations Committee*, Justification of Estimates for Appropriations Committees, FY2024, <https://web.archive.org/web/20250309114854/https://www.hrsa.gov/sites/default/files/hrsa/about/budget/budget-justification-fy2024.pdf>, pp. 175.

¹³⁰ HHS, HRSA, Bureau of Health Workforce, Division of Medicine and Dentistry, "Children's Hospital Graduate Medical Education (CHGME) Payment Program," Funding Opportunity Number: HRSA-24-020. The FY2025 CHGME Funding Application did not include specific information about the quality bonus payment reporting requirements.

Teaching Health Center GME

HRSA administers the teaching health center GME program (or THCGME), which provides payments to outpatient facilities to support the training of primary care medical and dental residents at these facilities.¹³¹ The program was developed in response to concerns that residency training had generally been hospital-based; experts had raised concerns that physicians were not prepared to treat patients in outpatient settings, where care is increasingly being delivered.¹³² Under the THCGME program, HRSA provides DGME and IME payments to outpatient facilities, such as federal qualified health centers (FQHCs),¹³³ to support the costs associated with residency training. The program started in FY2011, supporting residents who began their training in AY2012. The program has been funded by direct appropriations (i.e., it receives mandatory funding, unlike most of HRSA's other health workforce programs). The THCGME program initially received appropriations in the ACA that have subsequently been extended in subsequent legislation. As of the date of this report, direct funding is available under P.L. 119-4, which provided funding through September 30, 2025.¹³⁴ The program also received \$330 million in supplemental funding under the American Rescue Plan Act of 2021 (ARPA, P.L. 117-2); this funding was to be used for GME payments, including funds to increase the amount programs were able to provide per-resident, to maintain or expand the number of residents at existing programs, to make GME payments to newly approved THCGME programs and to provide grants to entities to develop teaching health centers.¹³⁵

Table 5 shows the program's funding and number of residents trained since its inception. HRSA awards THCGME funds to all facilities eligible for payments under the statutory definition of a teaching health center.¹³⁶ In statute, the program's funds must be used to support primary care residents (defined as residents training in family medicine, internal medicine, pediatrics, combined training in internal medicine-pediatrics, obstetrics and gynecology, psychiatry, general dentistry, pediatric dentistry, or geriatrics).¹³⁷

Table 5. Teaching Health Center Residents and Program Funding

Academic Year	Number of Residents (Full-Time Equivalents) Funded	Total Number of Residents Trained	Number of Residency Programs Funded	Funding Source
2011-2012	63	N/A	11	ACA ^a
2012-2013	143	158	22	ACA ^a
2013-2014	327	361	44	ACA ^a
2014-2015	556	600	60	ACA ^a
2015-2016	660	758	60	MACRA ^b

¹³¹ The program is authorized in PHSA §340H (42 U.S.C. 256h).

¹³² 2009 MedPAC Report.

¹³³ For information about federal health centers, see CRS Report R43937, *Federal Health Centers: An Overview*.

¹³⁴ §2101 Division B, Title I, of P.L. 119-4.

¹³⁵ CRS Report R46834, *American Rescue Plan Act of 2021 (P.L. 117-2): Public Health, Medical Supply Chain, Health Services, and Related Provisions*.

¹³⁶ PHSA §749A defines a teaching health center is a community based, ambulatory patient care center that operates a primary care residency program. The definition explicitly includes federal health centers, community mental health centers, rural health clinics, facilities operated by the Indian Health Service, and Title X Family Planning clinics.

¹³⁷ 42 U.S.C. §293k.

2016-2017	742	771	59	MACRA ^b
2017-2018	713	847	57	BBA2018 ^c
2018-2019	728	858	56	BBA2018 ^c
2019-2020	738	883	60	CARES Act ^d
2020-2021	769	912	59	CAA, 2021 ^e
2021-2022	792	932	72 ^f	CAA, 2021 ^e
2022-2023	969	1,096	81	CAA, 2021 ^e
Total	7,200	8,176^g	—^h	

Source: CRS Analysis of various years of Budget Justifications from the Health Resources and Services Administration (HRSA).

Notes: ACA = The Patient Protection and Affordable Care Act (P.L. 111-148, as amended). MACRA = Medicare Access and CHIP Reauthorization Act of 2015 (P.L. 114-10). BBA 2018 = Bipartisan Budget Act of FY2018 (P.L. 115-123); CARES Act = Coronavirus Aid, Relief, and Economic Security Care (P.L. 116-136). CAA 2021 = Consolidated Appropriations Act, 2021 (P.L. 116-260). N/A = not available.

- a. ACA provided \$230 million for FY2011-FY2015.
- b. MACRA provided \$60 million for each of FY2016-FY2017. The FY2017 amount was reduced to \$55.9 million.
- c. BBA 2018 provided \$126.5 million for each of FY2018 and FY2019.
- d. The CARES Act provided funding for \$126.5 million FY2020; it superseded prior laws that had provided partial funding for parts of FY2020. It also provided partial funding for FY2021. See discussion in CRS Report R46331, *Health Care-Related Expiring Provisions of the 116th Congress, Second Session*.
- e. The Consolidated Appropriations Act, 2021, provided \$126.5 million FY2021 through FY2023. For FY2024 and partial year for FY2025 (not included in table), funding was provided by Consolidated Appropriations Act, 2024 (P.L. 118-42), and the remainder of FY2025 funding was provided in P.L. 119-4.
- f. The American Rescue Plan Act of 2021 (ARPA, P.L. 117-2) provided \$330 million in FY2021, available through FY2023, to be used for additional GME payments for existing trainees, to expand the number of trainees, and to expand the number of teaching health center programs.
- g. Total for years where data are available.
- h. Given that medical residency training is a multiyear process, the same program participates in the THCGME program in multiple years. As such, the data in the table should not be summed to obtain a total number of programs that have participated in the program. In addition, some grantees may operate multiple training program (e.g., a training program in family medicine and another in psychiatry).

The amount that HRSA has paid per resident (i.e., the THCGME PRA) has varied over time. Programs were paid \$150,000 per FTE under the ACA funding and \$95,000 per FTE using the MACRA funds. This decrease occurred because the number of trainees increased while funding levels did not. In FY2025, HRSA pays \$160,000 per resident.¹³⁸ This payment amount is similar to the estimated cost in a 2015 survey of active programs by HRSA, which found that the cost of training a resident at a teaching health center was \$157,602 per resident.¹³⁹ As discussed earlier in this report, determining the “costs” to train a resident is challenging, and this estimate is specific to THCGME programs that are small and provide training in outpatient settings. To determine the direct and indirect cost of training at THCs, HRSA contracted with George Washington University to develop a THCGME cost-reporting instrument to better reflect the costs that THCs incur when operating GME programs. The instrument includes both the costs that THCs incur

¹³⁸ HRSA, “Teaching Health Center Graduate Medical Education (THCGME) Program: Opportunity number HRSA-25-077; Opportunity number: HRSA 25-091,” <https://grants.gov/search-results-detail/355511> (see related documents tab).

¹³⁹ HRSA, “Cost Estimates for Training Residents in a Teaching Health Center,” <https://bhw.hrsa.gov/sites/default/files/bhw/grants/thc-costing-fact-sheet.pdf>.

while training and the revenues that residents generate. Though some THCs had challenges reporting all of the data elements, this information provided a more comprehensive accounting of costs than are available for most federally support GME programs.¹⁴⁰ The GWU team updated their estimates for AY2024-AY2025 and estimated that the PRA was \$227,162—their estimate included \$328,507 in total expenses for residents less \$101,343 in revenue that the residents generated. They noted that more than half of resident costs were for salaries for the residents and faculty, the rest of the costs were for educational and administrative expenses. Revenue was derived from patient services and they were unable to reliably estimate IME costs.¹⁴¹

The THCGME program is required to collect data on various aspects of the residents it trains and the BBA 2018 included additional data collection requirements. Specifically, it required HRSA to report on (1) the number of patients treated by THC residents; (2) the number of visits by patients treated by THC residents; and (3) the number of THC residents who completed a residency in the reporting year, and the number and percentage of these residents who entered primary care practice and entered practice at a health care facility in a HPSA or a rural area. Finally, the law required the HHS Secretary to submit a report to Congress, by March 31, 2019, on the costs that THCs incur while training residents.¹⁴²

This HRSA report answered these questions among others. It examined AY2016-AY2017 and found that

- 80% of THCs were located at facilities that provide primary care services in an underserved area;
- THC residents provided more than 795,000 hours of patient care in AY2016-AY2017; and
- 69% of THC graduates (who completed their program and provided employment data) practice primary care and 55% were doing so in a medically underserved or rural community.

This builds on research examining the career choices of initial THCGME classes. Specifically, data examining the first few classes found that THCGME residents were more likely to enter into primary care practice at safety net facilities (such as the facility types that are eligible to sponsor a THCGME program).¹⁴³ Follow-up studies showed that 65% of all THCGME graduates were currently practicing in a primary care setting and 56% were in a medically underserved community and/or rural setting.¹⁴⁴

¹⁴⁰ Marsha Regenstein et al., “Comprehensive Revenue and Expense Data Collection Methodology for Teaching Health Centers: A Model for Accountable Graduate Medical Education Financing,” *Journal of Graduate Medical Education*, vol. 10, no. 4 (April 2018), pp. 157-164, and Barbara O. Wynn, “Is the Teaching Health Center Graduate Medical Education Program a Model for GME Reform?” *Journal of Graduate Medical Education*, vol. 10, no. 2 (April 2018), pp. 165-167.

¹⁴¹ Marsha Regenstein et al., “A New Formula for Teaching Health Center Graduate Medical Education Payments Based on a Comprehensive Cost Evaluation,” *Academic Medicine*, vol. 100, no. 5 (May 2025), pp. 628-634.

¹⁴² HRSA, HRSA, *Report to Congress: Teaching Health Center Graduate Medical Education Direct and Indirect Training Expenses Report*, 2019, <https://bhwh.hrsa.gov/sites/default/files/bureau-health-workforce/about-us/reports-to-congress/report-to-congress-thcgm-2019.pdf>.

¹⁴³ Andrew Bazemore et al., *Graduates of Teaching Health Centers are More Likely to Enter Practice in the Primary Care Safety Net*, Robert Graham Center, One Pagers, Washington, DC, November 15, 2015, <http://www.graham-center.org/rgc/publications-reports/publications/one-pagers/thc-graduates-safety-net-2015.html>.

¹⁴⁴ HRSA, Health Workforce, “Teaching Health Centers Graduate Medical Education Program: Academic Year 2021-2022,” <https://bhwh.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/teaching-health-center-graduate-medical-education-annual-report-2021-2022.pdf>.

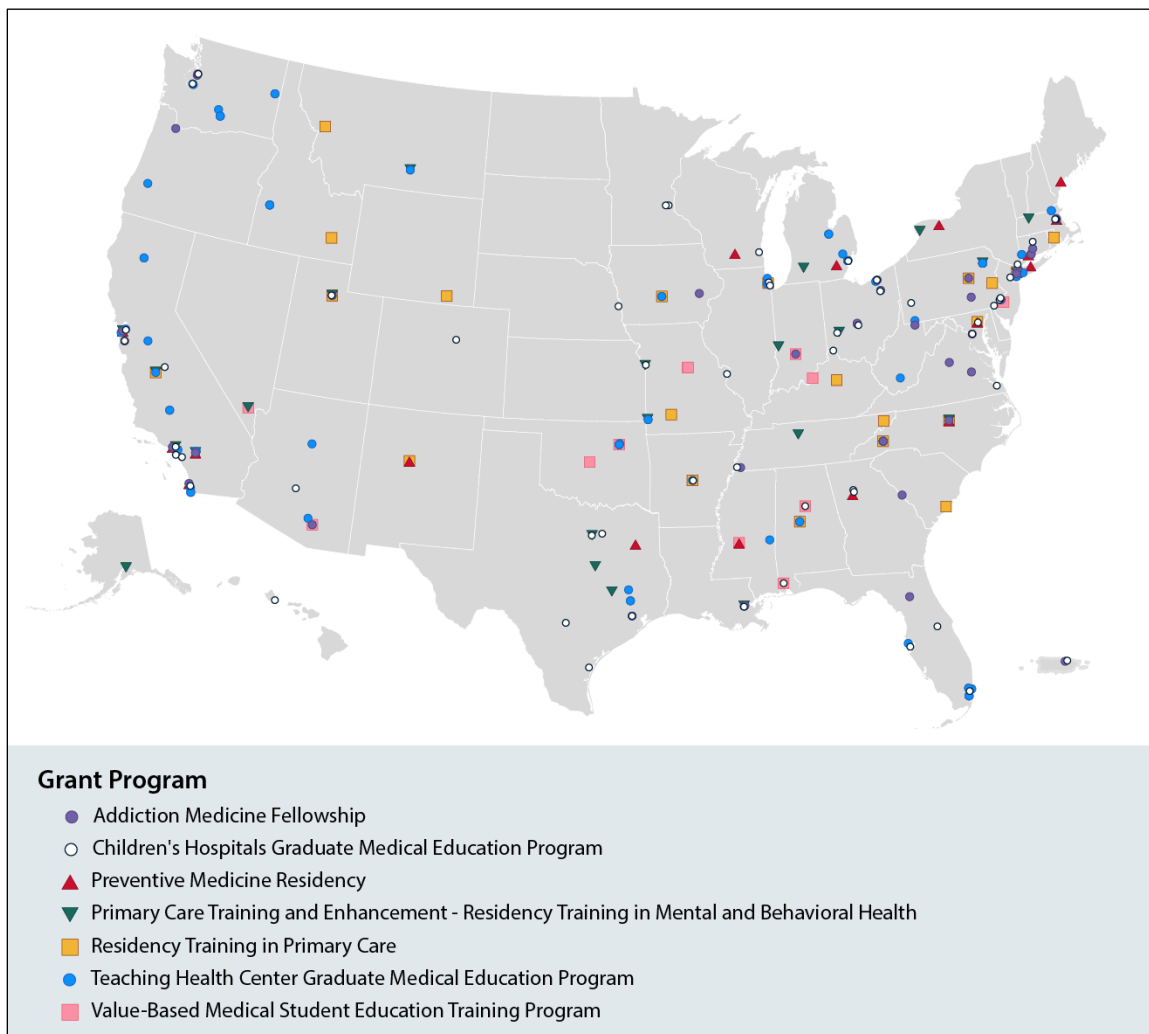
In addition to confirming the prior finding about THCGME graduates entering primary care, the 2019 report examined the costs associated with GME training.¹⁴⁵ To do so, they examined prior literature on DGME and IME costs and summarized these findings. Among the findings are that THCGME DGME costs may be particularly difficult to estimate because of differing financial arrangements between THCs and their academic partners. Prior research also found that DGME costs varied based on inpatient or outpatient focused care and the size of the program, and found that programs focused on primary care tended to be smaller, which made them more expensive because there were fewer economies of scale. Studies on IME were relatively rare, and there was little consensus on IME costs in outpatient settings. HRSA examined the THCGME program, examining both the costs of training and the revenue that trainees generated. To do so they developed a cost instrument and conducted site visits with experts. Their estimates of the cost of training a resident varied by size of program and by rural and non-rural with smaller programs and rural programs having higher costs on average. They estimated that small program's cost was \$163,046 per resident and rural programs (size not specified) median PRA was slightly higher at \$169,161. The variation between the per resident costs between the 25th percentile and 75th percentile programs was approximately \$60,000 per year.

HRSA Grant Programs

HRSA also awards grant to institutions to support medical education including residency training in specific fields. Some of these programs support new trainees, while others support specific training experiences for existing trainees. Grant programs that support residency training vary over time; this report discusses grants awarded in FY2024 (i.e., parts of AY2023-AY2024)—the last year of final grant awards available—to support residency training. This section discusses grant programs that support additional trainees first and then programs that support training in specific topics or location. Funding information for FY2024 is provided where available. **Figure 8** shows training locations by program.

¹⁴⁵ This paragraph summarizes findings included in HRSA, HRSA, *Report to Congress: Teaching Health Center Graduate Medical Education Direct and Indirect Training Expenses Report*, 2019, <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/about-us/reports-to-congress/report-to-congress-thcme-2019.pdf>.

Figure 8. HRSA Grant Program Training Locations
(Parts of Academic Year 2023-2024)



Source: CRS Analysis of data <https://data.hrsa.gov/data/download>.

Notes: Of the U.S. territories, only Puerto Rico is included in this map above because other territories did not have relevant training programs.

HRSA Grants that Support Additional Residents

HRSA's grant programs support residency training in specific specialties. One HRSA grant program has supported the development of ACGME-accredited addiction medicine or addiction psychiatry fellowship programs. Grant funds supported 134 new fellows in FY2022.¹⁴⁶ HRSA established this program in FY2020 and examined the program's outcomes through FY2023. It found that the program supports nearly 60% of addiction medicine and addiction psychiatry specialists and that it increased both of these workforces compared with their size prior to the program's inception. The program was created in recognition of the need for more providers to address the ongoing opioid crisis to increase the workforce able to provide addiction care. The

¹⁴⁶ HRSA FY2025 CJ, pp. 132-138. Public Health Service Act (PHSA) §760 (42 U.S.C. §294) authorizes funding for addiction medicine fellowship training.

program has also focused on providing care in underserved areas and in community-based settings (which is in line with the overall focus of HRSA's programs).¹⁴⁷

Another HRSA grant program supports preventive medicine residents. In FY2024, HRSA also provided \$8 million in grants to accredited schools of public health, medical schools, hospitals, and state, local, and tribal public health departments to support preventive medicine residency training.¹⁴⁸ FY2024 funding supported 19 programs, which included support for clinical training at FQHCs and/or in rural or medically underserved areas. In AY2022-AY2023, 118 residents were supported under this program, with 52 completing training.¹⁴⁹

HRSA grants also support medical student training (see "HRSA's Medical Student Education Program" text box).

HRSA'S Medical Student Education Program

Since FY2019, HRSA has received discretionary appropriations to support the Medical Student Education Program. Under this program, HRSA provides grants to public institutions of higher education in the states of Mississippi, Alabama, Kentucky, Oklahoma, Utah, Arkansas, Missouri, and Indiana, because these states have been identified to have the greatest primary care shortages. These funds can be used to recruit medical residents from rural, tribal, or underserved areas and to increase the number of medical school graduates selecting primary care or develop partnerships to train medical students at outpatient facilities, including teaching health centers. This program is proposed for elimination in FY2026.

Sources: CRS analysis of historical Health Resources and Services Administration (HRSA) budget document; HRSA, "Medical Student Education Program," <https://www.hrsa.gov/grants/find-funding/HRSA-23-124>. The FY2026 President's Budget for the Administration for a Healthy America proposes to eliminate the Medical Student Education Program and not provide funding in FY2026. See HHS, Administration for a Healthy America, "Justification of Estimates for Appropriations Committees FY2026," <https://www.hhs.gov/sites/default/files/fy-2026-aha-cj.pdf>, p. 366.

HRSA Grants that Support Training in Topics or Specific Locations

As an example of programs that provide training in specific topics, in FY2024, HRSA awarded grants to support Residency Training in Mental and Behavioral Health through its Primary Care Training and Enhancement Program. The program provided funds to primary care residency programs for rotations focused on mental and behavioral health conditions.¹⁵⁰ HRSA reported that 400 physicians completed a residency or fellowship through this program and that in AY2022-AY2023, 1,146 residents were trained through this program.¹⁵¹ Funding information for this

¹⁴⁷ For numbers trained, see HRSA, Health Workforce, "Addiction Medicine Fellowship Program Evaluation: Academic Years 2020-2023," <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/amf-evaluation.pdf> and HRSA CJ FY2025, p. 137.

¹⁴⁸ Preventive medicine is a medical specialty that focuses on preventive health care and improving patient well-being. See American College of Preventive Medicine (ACMP) "About Preventive Medicine," <https://www.acpm.org/about-acpm/what-is-preventive-medicine/>.

¹⁴⁹ HRSA CJ FY2025, pp. 139-142. The FY2026 President's Budget for the Administration for a Healthy America proposes to eliminate the Public Health/Preventative Medicine Program and not provide funding in FY2026. See HHS, Administration for a Healthy America, "Justification of Estimates for Appropriations Committees FY2026," <https://www.hhs.gov/sites/default/files/fy-2026-aha-cj.pdf>, p. 366.

¹⁵⁰ HRSA, "Type 7: Primary Care Training and Enhancement-Residency Training in Mental and Behavioral Health," <https://www.hrsa.gov/node/7519> and "Primary Care Training and Enhancement-Residency Training in Mental and Behavioral Health (PCTE-RTMB)" <https://www.hrsa.gov/grants/find-funding/HRSA-23-099>.

¹⁵¹ HRSA CJ FY2025, p. 112. The FY2026 President's Budget for the Administration for a Healthy America proposes to eliminate the Primary Care Training and Enhancement Program and not provide funding in FY2026. See HHS, Administration for a Healthy America, "Justification of Estimates for Appropriations Committees FY2026," <https://www.hhs.gov/sites/default/files/fy-2026-aha-cj.pdf>, p. 366.

specific program is not available. This program provided training opportunities for existing residents but would not create new trainees; it would, however, be an example of federal support that seeks to direct the competencies that residents have before they enter practice.

Under the Rural Residency Development program, which received \$12.7 million in FY2024 and FY2025, HRSA awards grants to entities to develop new rural residency programs, including new “rural training tracks.”¹⁵² Rural track programs are residency programs wherein residents spend a portion of their early training at an urban hospital and then complete their training in a rural area. Programs meeting certain criteria may be exempt from the Medicare GME cap, which could provide an incentive for hospitals to create these programs. Despite the cap exception, GAO found that few rural hospitals started these programs because they could not afford the start-up costs associated with gaining accreditation, hiring faculty, and recruiting residents.¹⁵³ As noted earlier in this report, Medicare pays for residents in training; as such, Medicare funds are available only after residents begin training. The Rural Residency Planning and Development Program provides start-up funds that would not otherwise be available to rural hospitals (among others) to develop training programs. FY2024 funding was awarded to support family medicine programs that included obstetric training and to support family medicine, internal medicine, preventive medicine, general surgery, and psychiatry programs in rural areas. HRSA reports that this program has supported the development of 521 new positions in various primary care fields, including family medicine, psychiatry, internal medicine, and general surgery.¹⁵⁴

HRSA also supports residency training through several smaller programs that do not focus explicitly on residency training but permit residency support as one of the allowable uses of funds. For example, some residents may receive training in community-based settings supported by the Area Health Education Center (AHEC) Program or may receive specialized training in geriatrics through the Geriatric Workforce Enhancement Program. Data on the number of medical or dental residents trained through the AHEC and geriatrics program are not available; rather, available data are on all post-graduate health professionals trained in these programs.¹⁵⁵

Department of Defense (DOD)

The Department of Defense trains residents and fellows who have acquired a uniformed service obligation through a DOD physician training program. Examples include the Uniformed Services University of the Health Sciences (USUHS) and the Armed Forces Health Professions Scholarship.¹⁵⁶ Typically, USUHS students enter active uniformed service as medical students and

¹⁵² HRSA, “FY2024 Operating Plan,” <https://web.archive.org/web/20250319093217/https://www.hrsa.gov/about/budget/operating-plan>. For FY2025 funding, see HHS, Administration for a Healthy America, “Justification of Estimates for Appropriations Committees FY2026,” <https://www.hhs.gov/sites/default/files/fy-2026-aha-cj.pdf>, p. 72.

¹⁵³ GAO, *Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, 17-411, May 25, 2017.

¹⁵⁴ HRSA FY2025 CJ, pp. 347-350.

¹⁵⁵ HRSA CJ FY2025, pp. 124-127. The Area Health Education Centers and the Geriatric Workforce programs are proposed for elimination in the FY2026 President’s Budget for the Administration for a Healthy America (which would be responsible for administering health workforce programs). See HHS, Administration for a Healthy America, “Justification of Estimates for Appropriations Committees FY2026,” <https://www.hhs.gov/sites/default/files/fy-2026-aha-cj.pdf>, p. 366.

¹⁵⁶ DOD administers a health professions institution of higher education called USUHS. For more on USUHS, see CRS In Focus IF11385, *The Uniformed Services University of the Health Sciences*. For more on Armed Forces health professions scholarships and financial assistance, see DOD Instruction 6000.13, *Accession and Retention Policies, Programs, and Incentives for Military Health Professions Officers (HPOs)*, updated May 3, 2016, <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/600013p.pdf>.

receive the pay and benefits of an officer in the pay grade of O-1.¹⁵⁷ USUHS graduates incur a military service obligation (MSO) that requires a period “not less than seven years, unless sooner released” on active duty.¹⁵⁸ Under the scholarship program, DOD pays tuition and fees,¹⁵⁹ plus a monthly stipend for students enrolled in civilian medical schools.¹⁶⁰ In return, students typically incur an eight-year MSO that includes at least two years on active duty.¹⁶¹ Upon graduation, scholarship program participants (regular program participants) generally serve on active duty and begin GME in military hospitals (referred to as military treatment facilities).¹⁶² A secretary of a military department may also authorize scholarship program participants to be deferred from active duty service “while undergoing a civilian residency program” (i.e., deferred program participants).¹⁶³

DOD policy assigns overall responsibility for GME programs to the Under Secretary of Defense for Personnel and Readiness and delegates oversight authority to the Assistant Secretary of Defense for Health Affairs.¹⁶⁴ In accordance with 10 U.S.C. §1073c(c)(4)(b), the policy further assigns responsibilities to the Defense Health Agency (DHA) to administer DOD’s GME programs in military treatment facilities.¹⁶⁵ DHA policy requires DOD GME programs to “seek and maintain” ACGME accreditation.¹⁶⁶ In addition, DHA generally partners with other federal (e.g., Department of Veterans Affairs) and civilian teaching hospitals to offer additional sites for residents to train in clinical areas or on populations not typically seen in a military treatment facility.¹⁶⁷ Residents from civilian partner facilities may also rotate to DOD facilities.¹⁶⁸

DOD governs the type of residents it trains and the facilities where they train. Each of the military services determines how many GME positions would be needed to meet “operational medical force requirements.”¹⁶⁹ The services coordinate these requirements with DHA to ensure that DOD GME programs “assure adequate training opportunities either with the Military Health System or

¹⁵⁷ 10 U.S.C. §2114(b)(1). For more on military compensation, see CRS In Focus IF10532, *Defense Primer: Regular Military Compensation*.

¹⁵⁸ CRS analysis of 10 U.S.C. §2114(c) and USUHS, “Commissioning,” accessed June 16, 2025, <https://medschool.usuhs.edu/academics/md-program/commissioning>. The uniformed services typically determine the number of years required as part of the active duty service obligation. By law (10 U.S.C. §2114(d)), time spent in “military intern or residency training” is not creditable toward the incurred active duty service obligation.

¹⁵⁹ 10 U.S.C. §2127(a).

¹⁶⁰ 10 U.S.C. §2121(d).

¹⁶¹ CRS analysis of 10 U.S.C. §2123(a) and DOD Instruction 6000.13, *Accession and Retention Policies, Programs, and Incentives for Military Health Professions Officers (HPOs)*, pp. 23-24.

¹⁶² By law (10 U.S.C. §2123(b)), time spent in “military intern or residency training” is not creditable toward the incurred active duty service obligation.

¹⁶³ CRS analysis of DOD Instruction 6000.13, *Accession and Retention Policies, Programs, and Incentives for Military Health Professions Officers (HPOs)*, p. 29.

¹⁶⁴ DOD Instruction 6015.24, *DOD Graduate Medical Education Program*, April 9, 2021, p. 4, <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/601524p.pdf>.

¹⁶⁵ DOD Instruction 6015.24, *DOD Graduate Medical Education Program*, p. 4.

¹⁶⁶ DHA Procedural Instruction 1025.04, *Graduate Medical Education*, May 18, 2022, p. 11, <https://www.health.mil/Reference-Center/DHA-Publications/2022/05/18/DHA-PI-102504>.

¹⁶⁷ DHA Procedural Instruction 1025.04, *Graduate Medical Education*, pp. 23-24; and Linda C. Degutis, Arthur L. Kellermann, Kevin Jackson, et al., “Graduate Medical Education in the Military Health System: Strategic Analysis and Options,” *Military Medicine*, vol. 188, no. Supp 1 (March-April 2023), pp. 1-7.

¹⁶⁸ DHA Procedural Instruction 1025.04, *Graduate Medical Education*, pp. 15-16; and Linda C. Degutis, Arthur L. Kellermann, Kevin Jackson, et al., “Graduate Medical Education in the Military Health System: Strategic Analysis and Options,” *Military Medicine*, vol. 188, no. Supp 1 (March-April 2023), pp. 1-7.

¹⁶⁹ DOD Instruction 6015.24, *DOD Graduate Medical Education Program*, p. 5.

with civilian GME programs.”¹⁷⁰ The Joint GME Selection Board, composed of representatives from each military service, meets annually to select applicants to fill DOD residency slots.¹⁷¹ Military residency slots are generally not listed in nor are they part of the National Resident Matching Program.¹⁷²

In FY2024, DOD administered residency programs at 25 military hospitals and trained a total of 3,218 FTE residents in 72 medical specialties.¹⁷³ Congress funds DOD GME programs in the annual DOD Appropriations Act through several accounts (e.g., Defense Health Program account and the Operation & Maintenance and Military Personnel accounts of the military departments).¹⁷⁴ For FY2024, Congress appropriated \$336.1 million to the Defense Health Program account for DOD health care education and training.¹⁷⁵ The actual cost of DOD GME programs is unclear. In FY2012, GAO estimated that DOD spent \$16.5 million on GME.¹⁷⁶ In 2024, in response to a CRS request for information on GME program costs, DOD provided an estimate (using FY2018 data) on the cost per trainee per year ranging between \$199,000 to \$387,000.¹⁷⁷ DOD did not provide data on the actual total costs expended and stated that “calculating how much the DoD spent on GME in FY21-FY23 would require months of effort and may not yield a reliable cost assessment.”¹⁷⁸

Selected Challenges of Current GME Programs

Fragmented Medical Residency Programs and Support

The federal government funds a number of programs that support medical residency training. These programs are operated by different departments and agencies across the federal government, and each has its own stated program goals. The rules governing these programs and the purposes of federal support vary. These programs have generally not been examined in conjunction with one another and may have goals that are contrary, duplicative, or otherwise not aligned. For example, in a 2015 report, GAO specifically noted that CMS’s GME programs (i.e., Medicare and Medicaid) do not target areas that other agencies within HHS have identified as workforce needs, nor do they align with workforce goals included in HHS’s strategic plan.¹⁷⁹ A

¹⁷⁰ DOD Instruction 6015.24, *DOD Graduate Medical Education Program*, p. 6.

¹⁷¹ DOD Instruction 6015.24, *DOD Graduate Medical Education Program*, p. 6.

¹⁷² Edwin Williamson, Caroline Soane, and J. Brian Carmody, “The US Residency Match at 70: What Was, What Is, and What Could Be,” *Journal of Graduate Medical Education*, vol. 14, no. 5 (October 2022), pp. 519-521. For more on the National Resident Matching Program, see <https://www.nrmp.org/about/>.

¹⁷³ DOD GME data provided to CRS, August 2024.

¹⁷⁴ For example, see Defense Health Program, Fiscal Year (FY) 2025 President’s Budget (Volumes I and II), March 2024, p. 95, https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/budget_justification/pdfs/09_Defense_Health_Program/00-DHP_Vols_I_and_II_PB25.pdf; and “medical education and training” budget activities in Defense Health Program, Fiscal Year (FY) 2025 President’s Budget (Volume III), March 2024, https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/budget_justification/pdfs/09_Defense_Health_Program/00-DHP_Vol_III_PB25.pdf.

¹⁷⁵ Defense Health Program, Fiscal Year (FY) 2025 President’s Budget (Volumes I and II), March 2024, p. 98.

¹⁷⁶ *GAO Health Care Workforce Report*.

¹⁷⁷ Email communication with DOD officials, August 2024. DOD described two methodologies used to estimate the costs per trainee per year: (1) Centers for Medicare and Medicaid Services methodology to calculate direct and indirect costs, and (2) DOD methodology to calculate direct and indirect costs and a return on investment.

¹⁷⁸ Email communication with DOD officials, August 2024.

¹⁷⁹ *GAO Health Workforce Planning Report*. GAO’s critiques also included nonphysician training through Medicare and Medicaid GME payment programs.

2018 GAO report reconfirmed this finding.¹⁸⁰ The Council on Graduate Medical Education (COGME), the federal advisory group tasked with examining GME policy, also noted a lack of alignment across programs and in its 2017 report called for “a national strategic plan for graduate medical education” to be created by a non-partisan strategic planning committee.¹⁸¹ No such committee has been created; however, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136), enacted in 2020, included a requirement for HHS to enact a strategic plan to evaluate its health workforce development programs. This report was provided to Congress in 2022 and generally examined HRSA’s health workforce investments overall. It was not focused on GME, but it did discuss GME as an example of HHS’s workforce investment and noted that GME remained the largest investment the federal government makes in the physician workforce but that it remained uncoordinated and that Medicare’s statutory formulas were such that it was not flexible enough to use Medicare funding to create a physician workforce aligned with the nation’s health care needs.¹⁸²

Lack of Standardized Cost and Outcomes Data and Information

One of the major challenges for GME policymakers is that data to evaluate programs are lacking. This lack of program transparency has been a consistent theme in more than a decade of GME evaluations.¹⁸³ Most recently, in 2024, COGME restated many of the concerns about GME data and recommend investments in longitudinal research tracking GME outcomes by program and institutions.¹⁸⁴ This is in line with recommendations made by GAO among others, in the 2018 GAO report noted above, GAO found that HHS and VA GME programs did not collect sufficient data to properly evaluate the federal government’s GME investments. This report did not evaluate DOD GME. GAO recommended that HHS and VA identify information needed to evaluate their GME investments and improve the quality and consistency of data collected.¹⁸⁵ Their study found among HHS and VA GME programs that the data collection was generally done at the individual program level and was generally collected to determine hospital compliance with program statute and were not sufficient to determine program costs. In addition, because the data collected were to determine compliance with different program statutes, these data were not consistent across programs. GAO noted (as others have before)¹⁸⁶ that collecting GME data may be difficult because some aspects of the costs of GME training are difficult to quantify (e.g., faculty teaching salaries) and that GME costs vary by site (e.g., costs would differ between a hospital and a clinic where residents rotate for training). Despite these challenges, GAO has consistently recommended better data collection for GME programs.¹⁸⁷ The HRSA THCGME supported the development of a data collection instrument to quantify both teaching costs and revenue

¹⁸⁰ GAO 2018 GME Information.

¹⁸¹ COGME, *Towards the Development of a National Strategic Plan for Graduate Medical Education*, 23rd Report, Rockville, MD, April 2017.

¹⁸² HHS, Report to Congress: Implementation of the Health Workforce Strategic Plan, 2022, <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/about-us/reports-to-congress/hhs-health-workforce-report-to-congress-2022.pdf>.

¹⁸³ For example, the need for more data was among the recommendations in the 2014 IOM GME Report.

¹⁸⁴ COGME, “Issue Brief: Measuring the Impact and Improving the Stewardship of Graduate Medical Education: A Call for Coordination and Collaboration on Data,” April 2024, Rockville, MD, <https://web.archive.org/web/20241120215426/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-issue-brief-gme-data.pdf>.

¹⁸⁵ GAO 2018 GME Information.

¹⁸⁶ See, for example, RAND for MedPAC, Does It Cost More to Train Residents or to Replace Them? September 2013, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/contractor-reports/sept13_residents_gme_contractor.pdf.

¹⁸⁷ GAO 2018 GME Information.

generated by residents. As part of this analysis, they surveyed THC programs to attempt to identify these data elements (including services and space that were donated to programs). Overall, they found that most programs were able to quantify the expenses associated with training, but that examining the revenue generated was more difficult.¹⁸⁸ Despite these challenges, the THCGME data collection instrument might be useful to apply to other GME programs as a way to better quantify the costs of residency training at other facility types and by other payers.¹⁸⁹

Although efforts are underway to improve data collection, they are largely at beginning stages and are not coordinated across programs. As mentioned, the CHGME program is collecting data for its quality bonus system. The data collected are largely process data (e.g., number of residents in training and curriculum content) and are bonus payments that have been awarded to all programs that report these data. As such, the CHGME program is providing payments for reporting, but it is not clear that this is encouraging improved quality of training. In part, this is due to lack of accepted measures to assess the quality of training, an issue that was raised by commenters in the development of the CHGME quality bonus system. In general, the commenters noted that there were no generally accepted standards for measuring residency program quality, and that the lack of accepted measures made it difficult to judge relative program performance or change over time.¹⁹⁰ Another effort in its early stages is being undertaken by the National Academy of Medicine, which sought expert input about how to develop metrics to evaluate individual residency program outcomes at a meeting held in 2017. Although workshop participants overall agreed that GME quality measures are needed, most noted that developing and collecting these measures would be challenging. For example, if one of the outcomes of interest is the quality of care that a training program's graduates provide, it is difficult to attribute whether a program graduate's ability to provide quality care is due to the training received during medical school, residency, or from peers while in practice.¹⁹¹ Some academic research has been undertaken in this area, which has shown that residency training can affect the quality of care its residents deliver and the cost of that care.¹⁹² Despite progress in this area, efforts are generally preliminary and data available are limited. As discussed in this report, the programs administered by HRSA and VA have more robust data than do the CMS administered programs. HRSA's programs in particular are required by their authorizing statute to collect and report certain data elements. In contrast, Medicare has relatively little data collection, and Congress would have to amend program statute to require hospitals to collect and report additional data.

A 2024 issue brief from COGME restated many of the concerns about GME data, noted the prior efforts, and made recommendations to build on them. COGME specifically noted that the federal

¹⁸⁸ Marsha Regenstien et al., "Comprehensive Revenue and Expense Data Collection Methodology for Teaching Health Centers: A Model for Accountable Graduate Medical Education Financing," *Journal of Graduate Medical Education*, vol. 10, no. 4 (April 2018), pp. 157-164.

¹⁸⁹ Marsha Regenstien et al., "Comprehensive Revenue and Expense Data Collection Methodology for Teaching Health Centers: A Model for Accountable Graduate Medical Education Financing," *Journal of Graduate Medical Education*, vol. 10, no. 4 (April 2018), pp. 157-164, and Barbara O. Wynn, "Is the Teaching Health Center Graduate Medical Education Program a Model for GME Reform?" *Journal of Graduate Medical Education*, vol. 10, no. 2 (April 2018), pp. 165-167.

¹⁹⁰ HRSA, "Proposed Standards for the Children's Hospitals Graduate Medical Education Payment Program's Quality Bonus System," 83 *Federal Register* 29796-29798, June 26, 2018.

¹⁹¹ National Academy of Medicine, *Graduate Medical Education Outcomes and Metrics: Proceedings of a Workshop*, Washington, DC, March 27, 2018.

¹⁹² David A. Asch et al., "Evaluating Obstetrical Residency Programs Using Patient Outcomes," *JAMA*, vol. 302, no. 12 (September 23, 2009), pp. 1277-1283, and Candice Chen et al., "Spending Patterns in Region of Residency Training and Subsequent Expenditures for Care Provided by Practicing Physicians for Medicare Beneficiaries," *JAMA*, vol. 312, no. 22 (December 10, 2014), pp. 2385-2393.

government's substantial investment in GME is an implicit contract for physicians to meet the health needs of the American people but noted that data are lacking to assess whether it meets this mission. COGME followed up on the concern that it identified in its 2017 report with regard to lack of data and highlighted the need for better GME coordination and measurement to assess whether GME funding meets societal needs. COGME noted that standardized data are needed across programs and highlighted the types of data that are needed. COGME's work highlighted that much of the data that would be needed to evaluate GME exist but are collected by disparate entities and for different purposes, and may be either not broadly accessible or not interoperable. COGME highlighted existing data sources that can be used and provided some examples of institutions that are examining programs at their institutions or in discrete geographic areas. COGME also recommend investments in longitudinal research tracking GME outcomes by program and institution.¹⁹³ That much of the data to evaluate GME exist, but are not coordinated or linked, may provide some options for policymakers who are interested in encouraging improved GME data collection and analysis.

The current lack of data (overall or for specific programs) makes it difficult for policymakers seeking to amend GME payments, because data are not available to evaluate the relative success or weakness of the current payment systems. This may be particularly challenging for those who seek to expand payments, because the limited data that do exist indicate that payments—in particular, Medicare's IME payments—are higher than can be empirically justified.¹⁹⁴ As such, some argue that Medicare payments should be reduced; this was suggested by the National Commission on Fiscal Responsibility and Reform,¹⁹⁵ by CBO in their Options for Reducing the Deficit,¹⁹⁶ and in various years of the President's budget, including a proposal in the FY2019 President's Budget.¹⁹⁷ Others argue that payments should be expanded to reduce or avert physician shortages,¹⁹⁸ though the size of such shortages are debated.¹⁹⁹

Considerations for Congress

Congress may consider using federal GME support to encourage training in specific specialties and may consider doing so by amending how payments are allocated through existing federal

¹⁹³ COGME, "Issue Brief: Measuring the Impact and Improving the Stewardship of Graduate Medical Education: A Call for Coordination and Collaboration on Data," April 2024, Rockville, MD, <https://web.archive.org/web/20241120215426/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-issue-brief-gme-data.pdf>.

¹⁹⁴ MedPAC conducted these analyses, which have since been used to recommend that IME payments be reduced with savings used for other needs either within GME or for overall deficit reduction.

¹⁹⁵ See National Commission on Fiscal Responsibility and Reform, "The Moment of Truth," December, 2010, <https://www.fiscalcommission.gov/news/>; see recommendation 3.35.

¹⁹⁶ See Congressional Budget Office (CBO) section in **Appendix A** for CBO recommendations on GME cuts.

¹⁹⁷ The President's budget for FY2019 proposes to consolidate and reduce the size of federal support for GME over time. Specifically, the proposal would combine Medicare, Medicaid, and CHGME GME spending in 2019 and redistribute these funds to hospitals based on the number of residents that the hospital trained (up to a hospital's existing Medicare or CHGME cap) and the proportion of the hospital's patients who are Medicare or Medicaid beneficiaries. This amount would increase for inflation over time, less than 1% annually. See HRSA, Justification of Estimates for Appropriations Committees, FY2019, Rockville, MD, p. 149.

¹⁹⁸ For example, in the 118th Congress a bipartisan Senate group put forth a proposal to increase residency training. See Senator Bennett: Press Releases, "Bennet, Cortez Masto, Cassidy, Cornyn Announce Bipartisan Effort to Help Train More Doctors and Address Health Care Workforce Shortages," December 20, 2024, <https://www.bennet.senate.gov/2024/12/20/bennet-cortez-masto-cassidy-cornyn-announce-bipartisan-effort-to-help-train-more-doctors-and-address-health-care-workforce-shortages/>.

¹⁹⁹ See discussion in "GME Policy and Health Workforce Data" section.

programs, as some of these programs (e.g., Medicare and Medicaid) exercise little direction over the specialties they support. Researchers have found that when hospitals expand residency training, they tend to do so in specialties where the benefits derived from residents' labor exceed the cost of their training (i.e., it is profitable for the hospital to train additional residents).²⁰⁰ Current data collected on federal programs make it difficult to determine when a hospital requires an incentive (e.g., a payment from a federal program) to operate a residency program or when it is profitable for a hospital to train residents without a federal GME incentive.²⁰¹ Researchers have found that it may cost less for a hospital to use resident services than to hire nonphysician providers to replace resident labor and that the outcomes provided by resident were similar or better.²⁰²

Congress could pursue policy options to encourage additional training in specific specialties, as it has in the past (see "Medicare FTE Growth"). The most recent adjustment added an additional 1,200 Medicare-supported slots, which is approximately 1% of Medicare's supported slots, estimated at 112,000 to 119,000 in this report. As such, the scope of these additions is small relative to the overall size of GME support, so their outcomes may have limited effects on the specialty composition of the physician workforce. In addition to the small size of recent changes, adding federal support for slots may not successfully affect the physician workforce, because these incentives are generally given to a hospital and often designate the medical specialty when the resident begins training, which may miss residents who choose to later subspecialize.²⁰³ Designing policies to affect the specialty composition of the future workforce may be also challenging, because residents may move to a different hospital to pursue further training, because GME incentives are given to the hospital but not to residents, and because current specialty needs, shortages, and surpluses may change.

A related challenge is that currently most federal programs pay the same amount for residents across specialties and by year of training (with the exception of fellows). Some have speculated that a hospital's cost of training a resident may differ by specialty or by the year that the resident is in training. The relative cost to a hospital for operating a residency program may also vary by a number of factors, such as the size of the residency program, the specialty of the program, the total number of residency programs that the hospital operates, and the availability and cost of alternative providers who would be needed to replace the resident's labor. Residents may also generate revenue for a hospital directly (e.g., because they provide additional labor) or may do so

²⁰⁰ Edward Salsberg et al., "U.S. Residency Training Before and After the 1997 Balanced Budget Act," *Journal of the American Medical Association*, vol. 300, no. 10 (September 10, 2008), pp. 1174-1180 and Barbara O. Wynn, "Is the Teaching Health Center Graduate Medical Education Program a Model for GME Reform?" *Journal of Graduate Medical Education*, vol. 10, no. 2 (April 2018), pp. 165-167.

²⁰¹ A 2013 report by MedPAC examined this issue; see MedPAC, "Does It Cost More to Train Residents or to Replace Them?" September 2013, http://www.medpac.gov/documents/contractor-reports/sept13_residents_gme_contractor.pdf?sfvrsn=0.

²⁰² Jose A. Perez et al., "Comparison of Direct Patient Care Costs and Quality Outcomes of the Teaching and Non-Teaching Hospitalist Service at a Large Academic Medical Center," *Academic Medicine*, vol. 93, no. 3 (February 2018), pp. 491-497 and Michael C. Iannuzzi et al., "Comparing Hospitalist-Resident to Hospitalist-Midlevel Practitioner Team Performance on Length of Stay and Direct Patient Care Cost," *Journal of Graduate Medical Education*, vol. 7, no. 1 (March 2015), pp. 65-69. In addition, see MEDPAC's June 2009 Report and June 2010 Report to Congress, and 2014 IOM GME Report. All of these reports note the possibility that, in some cases, residents (particularly those in later years of training) may generate revenue for the hospital where they are training. Other research has also found that hospitals using residents may have lower costs per case with similar outcomes when compared to similar cases that did not have residents participating in their care.

²⁰³ Stephen Petterson, Matthew Burke, Robert Phillips, et al., "Accounting for Graduate Medical Education Production of Primary Care Physicians and General Surgeons: Timing of Measurement Matters," *Academic Medicine*, vol. 86, no. 5 (May 2011).

indirectly (e.g., because the prestige of a teaching hospital may make it more attractive for some patients). Determining these “costs,” should they exist, is challenging. In some cases, federal GME program payments may undercompensate a hospital while in other cases program payments may exceed the hospital’s costs.²⁰⁴ GAO attempted to examine the cost of training in a 2018 report and found that measuring these costs was difficult and that some costs were difficult to identify. They also noted that the current data collected were not sufficient to identify these costs or to compare them across GME programs.²⁰⁵ In general, the data collected are not sufficient to determine if or when these scenarios occur nor are data available to determine the factors that may affect hospital training costs. Better data on these “costs” may be useful to better target federal GME support.

Congress may also consider policy options that seek to influence the geographical distribution of residents. As mentioned, the Medicare GME additional slots include priorities for states with low physician-to-population ratios and states with new medical schools. These 1,000 slots, as noted, are a small fraction of Medicare’s overall GME support, so will only have a relatively small impact on the overall distribution of residency training. GAO notes that “Medicare GME funding is disbursed based on historical patterns. Therefore, the Medicare-supported residency slots, supported by this Medicare GME funding, are most highly concentrated in northeastern states.”²⁰⁶ GAO confirmed this finding in a 2017 report, which examined residency training from 2005 through 2015 and found that the locations remained largely unchanged despite uneven population growth across regions during this time period.²⁰⁷ Given that training sites have been largely static, successful policy options would either need to add total residents (i.e., expand overall support), which involves a trade-off of increasing federal expenditures, or would need to implement a drawdown in support in some geographic areas to increase training in others. Any such reduction in support may be unpopular and may also be a lengthy process because some residents are currently supported in training programs that last a number of years.

Many prior GME critiques have focused on Medicare because it is the largest source of GME support;²⁰⁸ however, many of the critiques noted also are true for other federal GME programs. For example, Medicaid also has limited data available on its GME support and HRSA GME programs are required to provide support to hospitals and teaching health centers that meet the

²⁰⁴ For example, one study found that Medicare’s DGME per resident amounts were “76% of actual fiscal year 2011 per-resident costs,” see RAND for MedPAC, “Does It Cost More to Train Residents or to Replace Them?” September 2013, http://www.medpac.gov/documents/contractor-reports/sept13_residents_gme_contractor.pdf?sfvrsn=0. Other operators of GME programs have also contended that DGME costs are too low and do not reflect the direct costs that a hospital incurs when operating a residency program. For example, one hospital president estimated that DGME was nearly \$40,000 too low per-resident per-year and that IME payments were used to (among other things) offset the DGME underpayment. See Marc L. Bloom, “Graduate Medical Education,” Institute of Medicine, “Understanding the Costs and Financing of GME,” Washington, DC, December 20, 2012, <http://iom.nationalacademies.org/~media/Files/Activity%20Files/Workforce/GMEGovFinance/2012-DEC-19/Boom.pdf>. The AAMC also analyzed FY2009 Medicare hospital cost reports and noted that DGME payments reimbursed less than one-quarter of the total direct costs incurred by the teaching hospital. See U.S. Congress, Senate Committee on Health, Education, Labor, and Pensions, Subcommittee on Primary Health and Aging, *30 Million New Patients and 11 Months to Go: Who Will Provide Their Primary Care?*, Statement for the Record by the Association of American Medical Colleges, 113th Cong., 1st sess., January 29, 2013, p. 2.

²⁰⁵ GAO 2018 GME Information.

²⁰⁶ GAO Health Workforce Planning Report, p. 20.

²⁰⁷ GAO, *Locations and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, 17-411, May 25, 2017.

²⁰⁸ For example, the 2014 IOM GME Report.

program's statutory definitions.²⁰⁹ As these programs all seek to train physicians and are, at times, training the same physicians, policymakers may be interested in examining these programs in concert to minimize duplication and maximize program alignment.

²⁰⁹ In its 2018 report, GAO specifically noted that because Medicaid is administered by states CMS has little program information. GAO 2018 GME Information.

Appendix A. Additional Resources

This appendix provides additional resources addressing graduate medical education (GME) from major groups that have published on this topic. Publications include evaluations, policy options, statistics, etc. Core groups that issue GME reports, primarily federal, are listed alphabetically. Descriptions of each group are provided, followed by applicable reports between 2005 and July 2025, arranged from newest to oldest. Some nongovernmental groups are included for reference, but CRS has not evaluated their positions. This section is not intended to be comprehensive, but was based on searches of selected core publishers on this topic.

Accreditation Council for Graduate Medical Education (ACGME)

The Accreditation Council for Graduate Medical Education and the American Osteopathic Association (AOA) were previously two separate accrediting organizations for GME programs. In 2020, they completed an integration, with the AOA and the American Association of Colleges of Osteopathic Medicine (AACOM) becoming member organizations of ACGME, with representation on the Board of Directors. The ACGME now oversees all accreditation of GME programs and institutions. ACGME publishes a number of reports, with the annual *Data Resource Book* (<https://www.acgme.org/about/publications-and-resources/graduate-medical-education-data-resource-book>) as the highlight. The most recent data books are listed below, and previous years can be accessed through the link. For more information, see <https://www.acgme.org/about/overview/>.

Selected Publications

- Accreditation Council for Graduate Medical Education (ACGME), *GME Data Resource Book: Academic Year 2023-2024*, 2024, <https://www.acgme.org/globalassets/pfassets/publicationsbooks/dataresourcebook2023-2024.pdf>.
- ACGME, *GME Data Resource Book: Academic Year 2022-2023*, 2023, https://www.acgme.org/globalassets/pfassets/publicationsbooks/2022-2023_acgme_databook_document.pdf.
- ACGME, *GME Data Resource Book: Academic Year 2021-2022*, 2022, https://www.acgme.org/globalassets/pfassets/publicationsbooks/2021-2022_acgme_databook_document.pdf.
- ACGME, *GME Data Resource Book: Academic Year 2020-2021*, 2021, https://www.acgme.org/globalassets/pfassets/publicationsbooks/2020-2021_acgme_databook_document.pdf.
- ACGME, *GME Data Resource Book: Academic Year 2019-2020*, 2020, https://www.acgme.org/globalassets/pfassets/publicationsbooks/2019-2020_acgme_databook_document.pdf.

Congressional Budget Office (CBO)

The Congressional Budget Office, a federal legislative support agency, issues cost estimates, budget options, and broader reports on a number of topics, including GME. This section highlights applicable budget options; it does not include cost estimates for specific proposed legislation. For additional information, see <https://www.cbo.gov/about/overview>.

Selected Publications

- Congressional Budget Office (CBO), *Options for Reducing the Deficit: 2025 to 2034: Consolidate and Reduce Medicare Payments for Graduate Medical Education at Teaching Hospitals*, December 12, 2024, <https://www.cbo.gov/budget-options/60906>.
- CBO, *Options for Reducing the Deficit, 2023 to 2032 – Volume II: Smaller Reductions: Consolidate and Reduce Federal Payments for Graduate Medical Education at Teaching Hospitals*, December 7, 2022, <https://www.cbo.gov/budget-options/58649>.
- CBO, *Options for Reducing the Deficit: 2017 to 2026: Consolidate and Reduce Federal Payments for Graduate Medical Education at Teaching Hospitals*, December 8, 2016, <https://www.cbo.gov/budget-options/2016/52240>.

Congressional Research Service (CRS)

In addition to this report, CRS has addressed GME in a number of other products. Additional publications, not included in this section, analyze broader health workforce and education issues, beyond GME. For more CRS reports, see <https://www.crs.gov>.

Selected Publications

- CRS In Focus IF13088, *Medicare Graduate Medical Education, 2025*, by Marco A. Villagrana
- CRS In Focus IF11385, *The Uniformed Services University of the Health Sciences*, by Bryce H. P. Mendez
- CRS Report R45067, *Children's Hospitals Graduate Medical Education (CHGME)*, by Elayne J. Heisler
- CRS In Focus IF10960, *Medicare Graduate Medical Education Payments: An Overview*, by Marco A. Villagrana

Council on Graduate Medical Education (COGME)

The Council on Graduate Medical Education, a federal executive branch advisory council, provides ongoing assessment of physician workforce trends and training. COGME holds meetings, produces reports, and issues recommendations to the Secretary of the Department of Health and Human Services (HHS), the Senate Committee on Health, Education, Labor, and Pensions (HELP), and the House Committee on Energy and Commerce. For more information and access to publications, see <https://www.hrsa.gov/advisory-committees/graduate-medical-edu>.

Selected Publications²¹⁰

- Council on Graduate Medical Education (COGME), *Measuring the Impact and Improving the Stewardship of Graduate Medical Education: A Call for Coordination and Collaboration on Data*, April 2024, <https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-issue-brief-gme-data.pdf>.

²¹⁰ Some COGME publications are archived. This report links to the archived website with verified links as of July 2025.

- COGME, *Strengthening the Rural Health Workforce to Improve Health Outcomes in Rural Communities*, Twenty-Fourth Report, April 2022, <https://web.archive.org/web/20241120220000/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/cogme-april-2022-report.pdf>.
- COGME, *Training Needs to Prepare the Healthcare Workforce for Rural Practice*, COGME Rural Health Issue Brief #3, June 2021, <https://web.archive.org/web/20241120211231/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-rural-health.pdf>.
- COGME, *Investing in a Health Workforce that Meets Rural Needs*, COGME Rural Health Issue Brief #2, February 2021, <https://web.archive.org/web/20241120211231/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-rural-health-issue-brief.pdf>.
- COGME, *Special Needs in Rural America: Implications for Health Workforce Education, Training, and Practice*, COGME Rural Health Issue Brief #1, July 2020, <https://web.archive.org/web/20241120211231/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/cogme-rural-health-policy-brief.pdf>.
- COGME, *Towards the Development of a National Strategic Plan for Graduate Medical Education*, Twenty Third Report, April 2017, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/april-2017.pdf>.
- COGME, *Supporting Diversity in the Health Professions*, May 2016, <https://web.archive.org/web/20241120211231/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/publications/may-2016.pdf>.
- COGME, *The Role of Graduate Medical Education in the New Health Care Paradigm*, Twenty-Second Report, November 2014, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/nov-2014.pdf>.
- COGME, *Improving Value in Graduate Medical Education*, Twenty-First Report, August 2013, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/aug-2013.pdf>.
- COGME, *Advancing Primary Care*, Twentieth Report, December 2010, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/2010.pdf>.
- COGME, *Enhancing Flexibility in Graduate Medical Education* Nineteenth Report, September 2007, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/sept-flexibility-2007.pdf>.
- COGME, *New Paradigms for Physician Training for Improving Access to Health Care*, Eighteenth Report, September 2007, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/sept-paradigms-2007.pdf>.

- COGME, *Minorities in Medicine: An Ethnic and Cultural Challenge for Physician Training, an Update*, Seventeenth Report, April 2005, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/april-2005.pdf>.
- COGME, *Physician Workforce Policy Guidelines for the United States, 2000–2020*, Sixteenth Report, January 2005, <https://web.archive.org/web/20241120211433/https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/graduate-medical-edu/reports/jan-2005.pdf>.

Government Accountability Office (GAO)

The U.S. Government Accountability Office, a federal legislative branch agency, evaluates federal programs including those that finance health care and support the physician workforce. For additional information, see www.gao.gov.

Selected Publications

- U.S. Government Accountability Office (GAO), *Physician Workforce: Caps on Medicare-Funded Graduate Medical Education at Teaching Hospitals*, GAO-21-391, May 21, 2021, <https://www.gao.gov/products/gao-21-391>.
- GAO, *Graduate Medical Education: Programs and Residents Increased during Transition to Single Accreditor; Distribution Largely Unchanged*, GAO-21-329, April 13, 2021, <https://www.gao.gov/products/gao-21-329>.
- GAO, *VA Health Care: Actions Needed to Improve Oversight of Graduate Medical Education Reimbursement*, GAO-20-553, July 17, 2020, <https://www.gao.gov/products/gao-20-553>.
- GAO, *Health Care Workforce: Views on Expanding Medicare Graduate Medical Education Funding to Nurse Practitioners and Physician Assistants*, GAO-20-162, December 18, 2019, <https://www.gao.gov/products/gao-20-162>.
- GAO, *Defense Health Care: DOD's Proposed Plan for Oversight of Graduate Medical Education Programs*, GAO-19-338, March 28, 2019, <https://www.gao.gov/products/gao-19-338>.
- GAO, *Physician Workforce: HHS Needs Better Information to Comprehensively Evaluate Graduate Medical Education Funding*, GAO-18-240, March 9, 2018, <https://www.gao.gov/products/gao-18-240>.
- GAO, *Military Personnel: Additional Actions Needed to Address Gaps in Military Physician Specialties*, GAO-18-77, February 28, 2018, <https://www.gao.gov/products/gao-18-77>.
- GAO, *Physician Workforce: Expansion of the Children's Hospitals Graduate Medical Education Payment Program*, GAO-18-66R, October 31, 2017, <https://www.gao.gov/products/gao-18-66r>.
- GAO, *Physician Workforce: Location and Types of Graduate Training Were Largely Unchanged, and Federal Efforts May Not Be Sufficient to Meet Needs*, GAO-17-411, May 25, 2017, <https://www.gao.gov/products/gao-17-411>.
- GAO, *Health Care Workforce: Comprehensive Planning by HHS Needed to Meet National Needs*, GAO-16-17, December 11, 2015, <https://www.gao.gov/products/gao-16-17>.

- GAO, *Health Care Workforce: Federal Investments in Training and the Availability of Data for Workforce Projections*, GAO-14-510T, April 9, 2014, <https://www.gao.gov/products/gao-14-510t>.
- GAO, *Health Care Workforce: Federally Funded Training Programs in Fiscal Year 2012*, GAO-13-709R, August 15, 2013, <https://www.gao.gov/products/gao-13-709r>.
- GAO, *Graduate Medical Education: Trends in Training and Student Debt*, GAO-09-438R, May 4, 2009, <http://www.gao.gov/new.items/d09438r.pdf>.

Medicaid and CHIP Payment and Access Commission (MACPAC)

The Medicaid and CHIP Payment and Access Commission, a legislative branch agency, provides policy and data analysis and makes recommendations to Congress involving the Medicaid and State Children's Health Insurance Program (CHIP). For additional information, see <https://www.macpac.gov/>.

Selected Publications

- Medicaid and CHIP Payment and Access Commission (MACPAC), *Medicaid Levers to Address Concerns about the Primary and Specialty Care Workforce*, September 23, 2021, <https://www.macpac.gov/wp-content/uploads/2021/09/Medicaid-Levers-to-Address-Concerns-about-the-Primary-and-Specialty-Care-Workforce.pdf>.

Medicare Payment Advisory Commission (MedPAC)

The Medicare Payment Advisory Commission, a federal legislative branch advisory agency, evaluates Medicare payment policy, including Medicare's financing of physician training. It publishes payment basics, data books, and reports with recommendations. For additional information, see <https://www.medpac.gov/>.

Selected Publications

- Medicare Payment Advisory Commission (MedPAC), "Context for Medicare Payment Policy, *Report to the Congress: Medicare Payment Policy*, March 2025, https://www.medpac.gov/wp-content/uploads/2025/03/Mar25_Ch1_MedPAC_Report_To_Congress_SEC.pdf. See "The health care workforce and Medicare's role in shaping it," pp. 29-33.
- MedPAC, "Revising Medicare's Indirect Medical Education Payments to Better Reflect Teaching Hospitals' Costs," *Report to the Congress: Medicare and the Health Delivery System*, June 2021, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/default-document-library/jun21_ch6_medpac_report_to_congress_sec.pdf.
- RAND for MedPAC, *Does It Cost More to Train Residents or to Replace Them?* September 2013, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/contractor-reports/sept13_residents_gme_contractor.pdf.
- MedPAC, "Graduate Medical Education Financing: Focusing on Educational Priorities," *Report to the Congress: Aligning Incentives in Medicare*, June 2010,

https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/Jun10_Ch04.pdf.

- MedPAC, “Medical Education in the United States: Supporting Long-Term Delivery System Reforms,” *Report to the Congress: Improving Incentives in Medicare Program*, June 2009, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/Jun09_Ch01.pdf.

National Academies of Sciences, Engineering, and Medicine (NASEM): Health and Medicine Division (HMD)

The National Academies of Sciences, Engineering, and Medicine are private, nonprofit institutions that provide independent, objective advice to inform policy. Work can be funded by governmental and nongovernmental entities. NASEM holds workshops and issues in-depth publications on various policy topics, including health workforce issues. The Health and Medicine Division (HMD) was previously called the Institute of Medicine (IOM), so older publications list this name. For additional information, see <https://www.nationalacademies.org/hmd/about>.

Selected Publications

- National Academies of Sciences, Engineering, and Medicine (NASEM), *Graduate Medical Education Outcomes and Metrics: Proceedings of a Workshop*, 2018, <https://nap.nationalacademies.org/catalog/25003/graduate-medical-education-outcomes-and-metrics-proceedings-of-a-workshop>.
- Institute of Medicine (IOM), *Graduate Medical Education That Meets the Nation’s Health Needs*, 2014, <https://nap.nationalacademies.org/catalog/18754/graduate-medical-education-that-meets-the-nations-health-needs>.
- IOM, *Resident Duty Hours: Enhancing Sleep, Supervision, and Safety*, 2009, <https://nap.nationalacademies.org/catalog/12508/resident-duty-hours-enhancing-sleep-supervision-and-safety>.

Appendix B. Congressional Activity

This appendix provides selected examples of congressional activity during the 115th-119th Congresses involving graduate medical education (GME). This list is not intended to be comprehensive.

Bipartisan Medicare GME Working Group (Senate Finance)

In the 118th Congress, this Senate Finance Committee working group released a draft proposal outline and draft legislation. See below for related press releases and documents.

- Senator Bennett: Press Releases, “Bennet, Cortez Masto, Cassidy, Cornyn Announce Bipartisan Effort to Help Train More Doctors and Address Health Care Workforce Shortages,” December 20, 2024, <https://www.bennet.senate.gov/2024/12/20/bennet-cortez-masto-cassidy-cornyn-announce-bipartisan-effort-to-help-train-more-doctors-and-address-health-care-workforce-shortages/>.
- Senator Cassidy: Press Releases, “Cassidy, Cortez Masto, Cornyn, Bennet Introduce Bipartisan Draft Legislation to Help Teaching Hospitals Train More Doctors and Address Workforce Shortages,” December 18, 2024, <https://www.cassidy.senate.gov/newsroom/press-releases/cassidy-cortez-masto-cornyn-bennet-introduce-bipartisan-draft-legislation-to-help-teaching-hospitals-train-more-doctors-and-address-workforce-shortages/>.
- Bipartisan Medicare GME Working Group, *Draft Proposal Outline and Questions for Consideration*, May 24, 2024, https://www.finance.senate.gov/imo/media/doc/052424_bipart_gme_policy_outline_for_feedback.pdf.
- Chairman’s News, “Wyden, Bipartisan Finance Members Outline Proposal to Improve Medicare Physician Training to Reduce Workforce Shortages,” May 24, 2024, <https://www.finance.senate.gov/chairmans-news/wyden-bipartisan-finance-members-outline-proposal-to-improve-medicare-physician-training-to-reduce-workforce-shortages>.
- Senator Cassidy: Press Releases, “Cassidy, Wyden, Bipartisan Finance Members Outline Proposal to Improve Medicare Physician Training to Reduce Workforce Shortages,” May 24, 2024, <https://www.cassidy.senate.gov/newsroom/press-releases/cassidy-wyden-bipartisan-finance-members-outline-proposal-to-improve-medicare-physician-training-to-reduce-workforce-shortages/>.

Congressional Hearings

Selected congressional committee hearings on GME are included below; these do not include markups of specific legislation or appropriations hearings.

- U.S. Congress, House Committee on the Judiciary, Subcommittee on Administrative State, Regulatory Reform, and Antitrust, *The MATCH Monopoly: Evaluating the Medical Residency Antitrust Exemption*, 119th Cong., 1st sess., May 14, 2025, <https://www.govinfo.gov/content/pkg/CHRG-119hhr60419/pdf/CHRG-119hhr60419.pdf>.
- U.S. Congress, House Committee on Energy and Commerce, Subcommittee on Health, *Examining Existing Federal Programs to Build a Stronger Health Workforce and Improve Primary Care*, 118th Cong., 1st sess., April 19, 2023,

- Serial No. 118-24, <https://www.govinfo.gov/content/pkg/CHRG-118hhr55100/pdf/CHRG-118hhr55100.pdf>.
- U.S. Congress, Senate Committee on Health, Education, Labor, and Pensions, *Examining Health Care Workforce Shortages: Where Do We Go from Here?*, 118th Cong., 1st sess., February 16, 2023, S. Hrg. 118-187, <https://www.govinfo.gov/content/pkg/CHRG-118shrg54460/pdf/CHRG-118shrg54460.pdf>.
 - U.S. Congress, House Committee on the Judiciary, Subcommittee on Immigration and Citizenship, *Is There a Doctor in the House? The Role of Immigrant Physicians in the U.S. Healthcare System*, 117th Cong., 2nd sess., February 15, 2022, Serial No. 117-55, <https://www.govinfo.gov/content/pkg/CHRG-117hhr47614/pdf/CHRG-117hhr47614.pdf>.
 - U.S. Congress, House Committee on Energy and Commerce, Subcommittee on Health, *Reauthorization of the Children's Hospital Graduate Medical Education Program*, 115th Cong., 2nd sess., May 23, 2018, Serial No. 115-135, <https://www.govinfo.gov/content/pkg/CHRG-115hhr33535/pdf/CHRG-115hhr33535.pdf>.
 - U.S. Congress, House Committee on Energy and Commerce, Subcommittee on Health, *Supporting Tomorrow's Health Providers: Examining Workforce Programs Under the Public Health Service Act*, 115th Cong., 1st sess., September 14, 2017, Serial No. 115-57, <https://www.govinfo.gov/content/pkg/CHRG-115hhr27336/pdf/CHRG-115hhr27336.pdf>.

Legislative Searches

Many of the topics discussed in this report have associated legislative proposals. CRS has conducted a series of searches focused on the primary elements of this report. Note that these searches are extensive, but may not be comprehensive; using additional or alternative terms can produce different results.

To locate applicable legislation, CRS searched Congress.gov using the search strings listed below. These searches were then limited to bills and joint resolutions (legislation that can become law) that were introduced during the 115th-119th Congresses. These searches use operators such as OR to search for multiple terms or phrases and a tilde with a number (e.g., ~20), which searches for terms within the specified proximity of each other. The links below will run the searches and include the most recent results from the 119th Congress. Users can filter (e.g., by Congress, Chamber of Origin, Status of Legislation, Party), save, and download Congress.gov search results.

- **GME Legislation:** “graduate medical education” OR “GME” OR “medical resident” OR “medical residents” OR “medical residency” OR “medical residencies” Link: <https://www.congress.gov/u/j6jX-9ZiDCyia-N9k8-ko>
- **Rural GME Legislation:** “rural graduate medical education”~20 OR “rural GME”~20 OR “rural medical resident”~20 OR “rural medical residents”~20 OR “rural medical residency”~20 OR “rural medical residencies”~20 Link: https://www.congress.gov/u/tJCL-Ao5PBKcav_3a3WQD
- **Medicare GME Legislation:** “graduate medical education medicare”~20 OR “1395ww graduate medical education”~20 OR “medicare medical resident”~20

- OR “medicare medical residents”~20 OR “medicare medical residency”~20 OR “medicare medical residencies”~20 Link: <https://www.congress.gov/u/TvxRSIex1Kt-HPT5YTn2d>
- **Veterans GME Legislation:** “veteran medical education”~20 OR “veteran medical resident”~20 OR “veteran medical residents”~20 OR “veteran medical residency”~20 OR “veteran medical residencies”~20 Link: <https://www.congress.gov/u/gzGBNYdZdtNdWgBVTBaIz>
 - **Children’s Hospitals GME Legislation:** “children’s hospitals graduate medical education”~20 OR “children’s hospitals medical residency”~20 OR “children’s hospitals medical residencies”~20 OR “children’s hospital medical resident”~20 OR “children’s hospital medical residents”~20 OR “256e” OR “CHGME” Link: <https://www.congress.gov/u/KEXYP0JaxFedbLEsAVeH7>
 - **Teaching Health Centers Legislation:** “teaching health center” OR “256h” Link: https://www.congress.gov/u/o1nWL4_-SMP-3s96ZhiGv

Appendix C. GME Program Information

Table C-1. GME Program Information

Program Name	Program Description	Funding Type	Program Controls Over Trainees	Total Funding	Uses of Funding	Number of Trainees	Amount Paid Per Trainee
Medicare GME Payments SSA §1886h [42 U.S.C. §§1395ww(d)(5)(B), 1395ww(h), (k)] (HHS/CMS)	Medicare payments to teaching hospitals and certain other training sites to cover the direct teaching costs (such as resident salary and fringe benefits, supervisory physician salaries, and space) and the indirect teaching costs (such as the costs of additional services that residents may order, and other expenses).	Mandatory.	The number of Medicare-supported residents and per-resident payment amount is capped for each hospital but hospitals determine staffing needs and types of residents with the exception of certain primary care residents.	FY20223 (est.): \$21.2 billion. ^a	Resident salary, supervisory physician salaries, and space, along with indirect teaching costs (such as the costs of additional services that residents may order and other expenses).	FY2022 (est.): Allopathy & Osteopathy DGME 109,748 FTEs Allopathy & Osteopathy IME 116,605 FTEs Podiatry & Dentistry DGME 4,343 Podiatry & Dentistry IME 4,738 ^b	FY2023 (est.): Average per-resident amount (PRA): \$133,000 primary care \$131,000 non-primary care Maximum PRA: \$307,000 primary care \$290,000 non-primary care Minimum PRA: \$17,000 primary care \$14,000 non-primary care
Medicaid GME Payment (HHS/CMS)	Medicaid GME payments may also be included as part of capitation rates under managed care. The availability of these payments varies by state.	Mandatory.	States are permitted to make these payments to providers using their own criteria.	Data for Medicaid GME payments are limited, but estimates of Medicaid GME expenditures from different sources range	States are permitted to determine a provider's appropriate uses of Medicaid GME funding.	N/A. The Medicaid program does not require states to report these data.	N/A. The Medicaid program does not require states to report these data.

Program Name	Program Description	Funding Type	Program Controls Over Trainees	Total Funding	Uses of Funding	Number of Trainees	Amount Paid Per Trainee
Veterans Affairs GME Payments [38 U.S.C. §7302]. (VHA/VA)	Training of medical residents at facilities operated by VA.	Discretionary.	VA facilities determine their staffing needs and the number and type of residents supported.	from \$4.7 billion to \$7.4 billion. (FY2023 and SFY2022). \$2.04 billion in FY2023.	Resident salary, supervisory physician salaries, and space.	11,300 FTE slots and 50,620 residents spent part of their training at a VA facility in AY2022-AY2023.	\$176,699 per resident (estimated in FY2023). ^c
Children's Hospital GME Payment Program PHSA §340E [42 U.S.C. §256e] (HHS/HRSA)	Payments to freestanding children's hospitals that sponsor medical residency training programs in pediatrics and pediatric medical and surgical subspecialties in order to increase the number of physicians practicing in those specialties.	Discretionary.	Grant funding awarded to applicant children's hospitals that meet the program's eligibility requirements.	\$390 million in FY2024. ^d	Funds to hospitals to support trainee stipends, faculty salaries, and program administrative expenses. IME costs associated with operating a program (expenditures associated with reduced hospital efficiency).	59 hospitals received payments to support 8,390 FTE slots in AY2022-AY2023.	N/A
Teaching Health Centers GME Payment Program PHSA §340H [42 U.S.C.	Payments to qualified teaching health centers (i.e., community-based facilities that sponsor medical residency programs in primary care or psychiatry or	Mandatory (funding authorized through FY2025).	Funding to applicant teaching health centers that meet the	\$119.3 million in FY2019. ^e	Funds to support trainee stipends, faculty salaries, and program	81 programs; 969 FTE slots and 1,096 total residents trained in	FY2025: \$160,000 per FTE ^f

Program Name	Program Description	Funding Type	Program Controls Over Trainees	Total Funding	Uses of Funding	Number of Trainees	Amount Paid Per Trainee
§256e] (HHS/HRSA)	primary care dental residency programs) to support residency training programs.		program's eligibility requirements.		administrative expenses. IME costs associated with operating a program (expenditures associated with reduced health center efficiency).	AY2022-AY2023.	
Department of Defense GME Payments [10 U.S.C. §§2001 et. seq.]	Training of medical residents at facilities operated by the DOD.	Discretionary.	Branches of the Armed Forces determine their staffing needs and the number and type of residents supported.	\$16.5 million in FY2012. ⁸	Resident salary, supervisory physician salaries, and space.	3,218 FTE residents in FY2024.	DOD estimates of average annual cost per trainee (est. 2018): \$199,000 to \$387,000

Sources: CRS analysis of agency data, including review of various agency budget justification and CMS Medicare hospital cost report data. AY = Academic year; academic year 2022-2023 began on July 1, 2022, and concluded on June 30, 2023; CMS = Centers for Medicare & Medicaid Services; DGME = direct graduate medical education; DOD = Department of Defense; FTE = full time equivalent; FY = fiscal year; HHS = Department of Health and Human Services; HRSA = Health Resources and Services Administration; IME = Indirect Medical Education; N/A = not available; PHSA = Public Health Service Act; PRA = per resident amount; SFY = State Fiscal Year; U.S.C. = U.S. Code; VA = Department of Veterans Affairs; VHA = Veterans Health Administration.

- a. Estimates inclusive of allopathy, osteopathy, podiatry, and dentistry. Medicare hospital cost reports do not contain GME payments by discipline.
- b. Trainee numbers are not unduplicated (i.e., DGME and IME payments support the same residents). The total number of FTEs supported differs because DGME and IME count residents differently. For example, DGME payments, but not IME payments, take into account whether or not a resident is in an initial residency program or a fellowship program when counting residents.
- c. Data provided by Department of Veterans Affairs, Veterans Health Administration, Office of Academic Affiliations (OAA), based on OAA databases, ACGME Accreditation Data System and AAMC 2023 Report on Residents. Personal communication with CRS on September 25, 2024, via VA Office of Congressional and Legislative Affairs.

- d. HRSA, “FY2024 Operating Plan,” <https://web.archive.org/web/20250319093217/https://www.hrsa.gov/about/budget/operating-plan>. FY2025 funding is provided in P.L. 119-4, which provided a full-year continuing resolution for FY2025. The amount allocated to the CHGME program was not available at the time of this report’s publication.
- e. Amount from HRSA’s FY2024 Budget Justification; full year funding for FY2024 and FY2025 are not available.
- f. Amount included in FY2025 funding announcement. HRSA, “Teaching Health Center Graduate Medical Education (THCGME) Program: Opportunity number HRSA-25-077; Opportunity number: HRSA 25-091,” <https://grants.gov/search-results-detail/355511> (see related documents tab).
- g. Amount from Government Accountability Office (GAO), *Health Care Workforce: Federally Funded Training Programs in Fiscal Year 2012*, 13-709R, August 15, 2013. As discussed in “Department of Defense (DOD)” section of this report, GAO’s estimates are the most recent available.

Author Information

Elayne J. Heisler, Coordinator
Specialist in Health Services

Alison Mitchell
Specialist in Health Care Financing

Michele L. Malloy
Acting Head Research and Library Services - 02

Sidath Viranga Panangala
Specialist in Veterans Policy

Bryce H. P. Mendez
Specialist in Defense Health Care Policy

Marco A. Villagrana
Analyst in Health Care Financing

Acknowledgments

Joe Angert, Research Assistant, assisted with the Medicare cost report analysis included in this report. Mari Lee, Visual Information Specialist, assisted with the graphics included in this report, and Molly Cox, Geospatial Analyst, assisted with the maps included in this report.

Key Policy Staff

Area of Expertise	Name
Health Workforce (General)	Elayne Heisler Michele Malloy
Medicare GME	Marco Villagrana
Medicaid GME	Alison Mitchell
VA GME	Sidath Panangala
DOD GME	Bryce Mendez
HRSA GME Programs (grants program, Children's Hospital GME and Teaching Health Centers GME)	Elayne Heisler

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.