

OPPAGA

Office of Program Policy Analysis and Government Accountability

Research Memorandum

December 2023

Graduate Medical Education in Florida

EXECUTIVE SUMMARY

Recent studies have found that the number of physicians in Florida is inadequate to meet projected demand. Physician supply is projected to meet only 77% of projected demand by 2035, in part because of the state's overall population growth and increasing number of elderly individuals who will need more medical care. The number of physicians in Florida has steadily increased during the review 10-year period (Fiscal Year 2012-13 through Fiscal Year 2022-23), keeping pace with population increases.

Graduate medical education (GME) programs, which provide supervised clinical experiences in the physician's specialty area, are the last step for students seeking to become board-certified physicians. Research shows that physicians are more likely to remain in the state where they completed both their medical school and their residency program.

The Agency for Health Care Administration (AHCA) is responsible for disbursing GME funding and conducting GME FTE audits and annual reports for some GME programs. The Department of Health (DOH) is responsible for physician workforce assessment and development, including creating a state strategic plan. In developing the state strategic plan, DOH engages in a variety of activities, including administering the Physician Workforce Survey, creating the Physician Workforce Annual Report, and coordinating the Physician Workforce Advisory Council.

The federal government is the largest financial supporter of GME, primarily through Medicare. The number of Florida sponsoring institutions—entities that oversee and administer one or more residency programs—has increased in the last 10 years and the number of health care facilities directly receiving GME funding has also increased; however, overall Medicare funding has consistently lagged behind actual total FTEs. Hospitals described funding challenges due to Medicare caps, which were established in 1996. As Florida's population and its GME training programs grew after 1996, Medicare funds paid for resident full-time equivalents (FTEs) in hospitals developing new training programs, but not for growth in existing programs. In federal Fiscal Year 2021-22, 33 of the 74 Florida-based healthcare facilities for which data

SCOPE

As directed by the Legislature, OPPAGA reviewed how funding changes and other state programmatic factors over the past 10 years have affected GME residency placements and physician retention in Florida and made recommendations for increasing the retention of medical doctors in the state.

was available supported some FTEs that did not receive Medicare funding. Between federal Fiscal Years 2010-11 and 2021-22, on average 24% of Florida resident FTEs were not funded by Medicare.

The Legislature changed the state's GME funding in 2013, and has since created multiple funding programs to support GME. State appropriations for GME programs have increased by 439%, from approximately \$80 million in state Fiscal Year 2013-14 to approximately \$431 million in state Fiscal Year 2023-24. Including the state Indirect Medical Education Program funding of \$613 million results in a combined total of \$1,044 million or a 1,205% increase for the same period. As state and federal funding has increased over the past 10 years, the number of residency programs and positions have also increased. From state Fiscal Year 2012-13 through state Fiscal Year 2021-22, the number of Florida-based sponsoring institutions with accredited programs increased from 42 to 52, while the number of GME programs and residents grew 60% and 80%, respectively. Despite these increases, health care facilities and sponsoring institutions reported that funding is a barrier to further GME growth.

According to the Association of American Medical Colleges, from 2017 to 2021 Florida ranked in the top five states for retention of residents to practicing physicians and in the top seven states for retention of undergraduate medical school students to licensed, practicing Florida physicians. OPPAGA analyzed several retention measures to describe the pipeline from Florida's undergraduate medical education to licensed, practicing Florida physician and to determine how the pipeline may have changed over time. Between the academic years 2012-13 and 2021-22, the number of Florida medical school graduates grew, and the number of graduates who went on to Florida GME also increased. The retention rate for Florida residents to Florida practicing physicians decreased, while the overall number of residents retained increased. Florida's retention is highest for those physicians who attended a Florida medical school and Florida GME, at 75%. Retention rates vary by hospital.

Health care facilities and sponsoring institutions reported challenges retaining medical students and residents due to factors including geographic characteristics, institution characteristics, and the limited number of residency slots. The most frequently reported reasons for physicians leaving Florida following their residency were to be closer to family (84%), to pursue additional training or fellowships outside Florida (69%), and to be in a desired location or practice setting outside of Florida (33%). Sponsoring institutions' and healthcare facilities' top recommendations for attracting and retaining physicians to practice long term in Florida were providing loan repayment/forgiveness programs and offering competitive salaries.

OPPAGA identified several recommendations for Legislative consideration, including suggestions for increasing retention, setting policy priorities, conducting ongoing analysis of GME, improving data collection and reliability, and enhancing financial transparency. For example, directing sponsoring institutions that receive state funds to prioritize match rankings for graduates of Florida-based medical schools could increase physician retention. In addition, improved state-level planning by DOH may help manage the complexity of GME funding and outcomes by identifying clear goals, metrics, and state strategies, including funding priorities. Moreover, directing OPPAGA to conduct periodic ongoing analyses of GME would allow the state to track and refine policy goals, and DOH could work with OPPAGA to enhance GME data collection to allow for ongoing analyses. Finally, improving funding transparency could allow AHCA to create a payment methodology that recognizes cost differences among residencies based on specialty and other variables.

METHODOLOGY

OPPAGA used a variety of research methods, including reviewing literature and program documentation; interviewing state agencies, a federal agency, state organizations, and two national Graduate Medical Education (GME) accreditation organizations; reviewing information from 44 accredited sponsoring institutions, 73 Florida healthcare facilities, and 2 federally qualified health centers (FQHC); analyzing survey responses from 45 health care facilities and 40 sponsoring institutions; and analyzing data from multiple state and national sources.^{1,2,3} (See Exhibit 1 and Appendix A for additional information on OPPAGA’s methodology.)

OPPAGA staff encountered several obstacles that affected data analyses, including the unavailability or incompleteness of data for some combinations of programs, entities, years, or subpopulations; open-ended data fields or incomplete Department of Health (DOH) GME data; and inconsistent reporting periods across data sources (e.g., federal versus state fiscal years).⁴

Exhibit 1

OPPAGA Used a Variety of Research Methods and Combined Data From Different Sources to Review Florida’s GME

Method	Entities/Participants
Information and data requests	Health care facilities and sponsoring institutions funding sources and amounts for all GME programs; approved and filled FTEs
	DOH licensure, physician profile, and policy information
	Agency for Health Care Administration (AHCA) GME funding and FTEs and policy information
	University medical school data
	American Osteopathic Association (AOA) and Accreditation Council for Graduate Medical Education (ACGME) data on sponsoring institution and program GME positions
Literature review	Review of academic studies and studies from national entities
Federal and state program documentation review	Review of statutes, Code of Federal Regulations, and state agency documentation
Assessment of stakeholder perspectives	Interviews with staff from the AHCA and DOH
	Interview with a representative of the Centers for Medicare and Medicaid Services (CMS)
	Interviews with representatives of three hospitals, four medical schools, and one federally qualified health center
	Interviews with representatives of two national GME accreditation groups: ACGME and AOA
	Interviews with representatives of state organizations: Florida Hospital Association, Safety Net Hospital Alliance, Council of Medical School Deans, and Florida Medical Association
Retention analyses	Surveys of 84 health care facilities and 57 sponsoring institutions
	Medical schools’ graduate data; DOH physician-in-training licensure and physician profile data; AHCA data on Statewide Medical Residency Program funded FTEs
Federal funding analyses	Analysis of CMS Medicare Hospital Cost Report data
Growth of GME positions analysis	Analysis of ACGME, AOA, and CMS Medicare Hospital Cost Report data

Source: OPPAGA analysis.

¹ Sponsoring institutions are entities that oversee, support, and administer one or more ACGME-accredited residency/fellowship programs. Sponsoring institutions may include teaching hospitals, schools of medicine, federally qualified health centers, and other types of accredited organizations.

² FQHCs are safety net providers that primarily provide outpatient clinic services and include community health centers, migrant health centers, health care centers for the homeless, public housing primary care centers, and health center program “lookalikes.”

³ Health care facilities include hospitals, FQHCs, mental health clinics, and substance abuse programs.

⁴ The federal fiscal year runs from October 1st through September 30th, while the state fiscal year runs from July 1st through June 30th.

BACKGROUND

Florida's physician workforce is relatively stable, but recent studies determined that physician supply is inadequate to meet projected demand

Overall, Florida's physician workforce per 100,000 has shown some fluctuation over time, but has been relatively stable since Fiscal Year 2017-18. In calendar year 2020, Florida had 273.9 active physicians per 100,000 population and ranked 25th in the nation for this measure.⁵ In Fiscal Year 2021-22, Florida had 1% more physicians per 100,000 population than the state did in Fiscal Year 2012-13.

In Fiscal Year 2021-22, Florida had only 1% more physicians per 100,000 population than the state did in Fiscal Year 2012-2013.

As Florida's population has grown, so too has its need for physicians.⁶ In a study commissioned by the Safety Net Hospital Alliance of Florida and the Florida Hospital Association, IHS Markit estimated that in 2019, Florida experienced a shortfall of physicians of approximately 3,835 full-time equivalent (FTE) physicians, and the physician supply may be inadequate to meet projected demand through 2035.⁷ If current trends continue, a shortfall of 17,924 physician FTEs is projected for 2035, and physician supply is estimated to meet 77% of projected demand (an unmet need of 23%).^{8,9,10,11} In 2035, physician supply of total primary care specialties is expected to meet 74% of projected demand and 77% of projected demand for non-primary care specialties.¹² The projections suggest that the shortage will be uneven across the state; of Florida's 67 counties, only Miami-Dade and Monroe are projected to meet or exceed overall demand for physicians in 2035.

According to estimates in one study, in 2030, Florida will have the second largest physician shortage among all states, second only to California.¹³ The study further projects that during the same period, Florida will be tied with Arizona for the eighth worst ranked state for physician shortage per 100,000 population. Florida's demand for physicians will increase in part because the state has an increasing

⁵ Association of American Medical Colleges. *2021 State Physician Workforce Data Report*. January 2022. www.aamc.org/data-reports/workforce/data/2021-state-profiles.

⁶ The Florida Legislature's Office of Economic and Demographic reports a 14.6% population increase in the 2010s and another 3.4% population increase since 2020.

⁷ IHS Markit. *Florida Statewide and Regional Physician Workforce Analysis: 2019-2035*. December 2021. <http://safetynetsflorida.org/wp-content/uploads/Florida-Physician-Workforce-Analysis.pdf>.

⁸ The report states that projections do not capture potential shifts in technology, state or federal policy, patient preferences, or payer or provider policies or practices, all of which may change the way care is consumed or delivered and thus impact the accuracy of the model's projections.

⁹ IHS Markit acknowledges that projections from the 2015 report underestimated supply, demand and supply sufficiency, in part because of Florida's population growing more rapidly than projected in source data, shifts in healthcare service utilization over time, and the assumption that the number of entrants into the physician workforce in the prior year would persist in the future. Given Florida's large investment in and the growth of GME and medical school graduates, using a more dynamic estimate of future workforce entry might make the model more responsive to recent trends.

¹⁰ While all projections have limitations, in part based on model assumptions and available data, these projections are relatively consistent with other identified projections of Florida physician workforce sufficiency such as those published by the University of North Carolina Sheps Center for Health Services Research and the U.S. Health Resources and Services Administration.

¹¹ The report provides additional estimates based on a limited set of alternative assumptions, all of which project substantial workforce shortages.

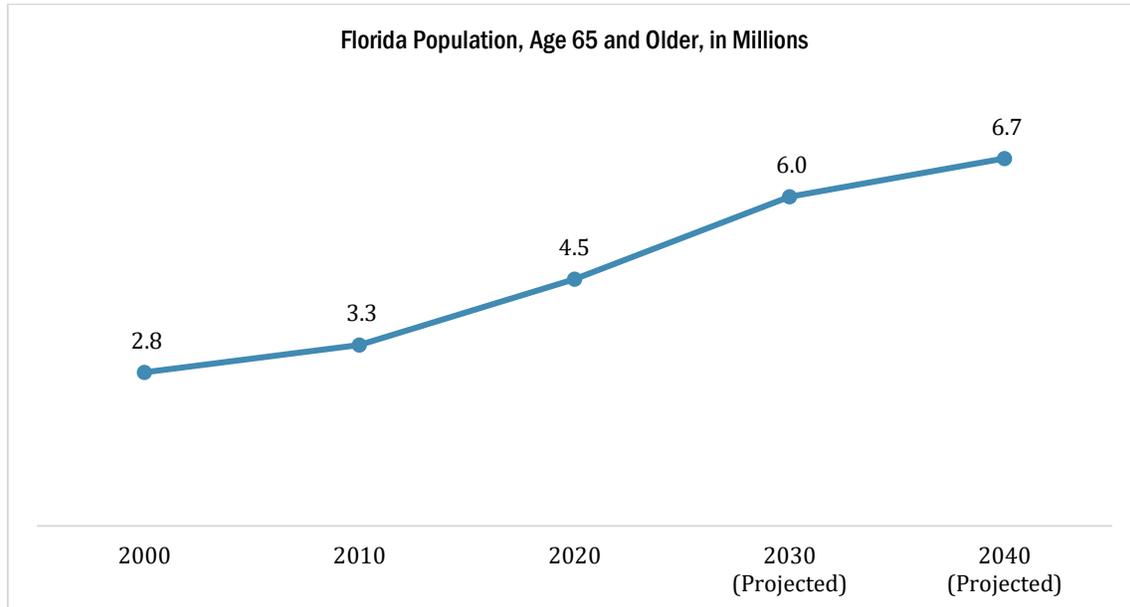
¹² Primary care specialties include family medicine, general internal medicine, pediatric medicine, geriatric medicine, emergency medicine, general surgery, and obstetrics and gynecology.

¹³ Zhang, Ziaoming, et al. "Physician workforce in the United States of America: forecasting nationwide shortages." *Human Resources for Health* (2020) 18:8. <https://doi.org/10.1186/s12960-020-0448-3>

population of individuals who are older and will need more medical care. Although Florida's overall population is projected to increase by 21% from 2019 to 2035, projected population growth for this period is higher for those age 65 to 74 (32%) and age 75 and older (74%). (See Exhibit 2.)

Exhibit 2

Florida's Elderly Population Is Estimated to Continue to Increase, Which Will Affect the State's Demand for Physicians



Source: OPPAGA analysis of Florida Office of Economic and Demographic Research and Florida Department of Health, FLHealthCHARTS, data.

Florida's supply of physicians will also be affected by an aging Florida physician workforce. In a 2021-22 survey of Florida physicians, almost 60% of respondents were 50 years old or older, and almost 10% reported planning to retire in the next five years.¹⁴ In its latest report, the Association of American Medical Colleges (AAMC) ranked Florida 5th nationally for the percentage of active physicians who are age 60 or older.¹⁵

Multiple entities are responsible for facilitating physician training and monitoring Florida's physician workforce

Multiple entities are responsible for physician training and physician workforce monitoring. These entities include sponsoring institutions, which oversee, support, and administer GME residency programs; the Accreditation Council for Graduate Medical Education (ACGME), which accredits sponsoring institutions and GME programs; the National Residency Match Program (NRMP), which matches applicants to GME programs; and the Department of Health, which is responsible for physician workforce assessment and development.

Sponsoring institutions oversee, support, and administer one or more ACGME-accredited residency programs. In general, most sponsoring institutions are universities, teaching hospitals integrated with universities, stand-alone teaching hospitals, or federally qualified health centers.

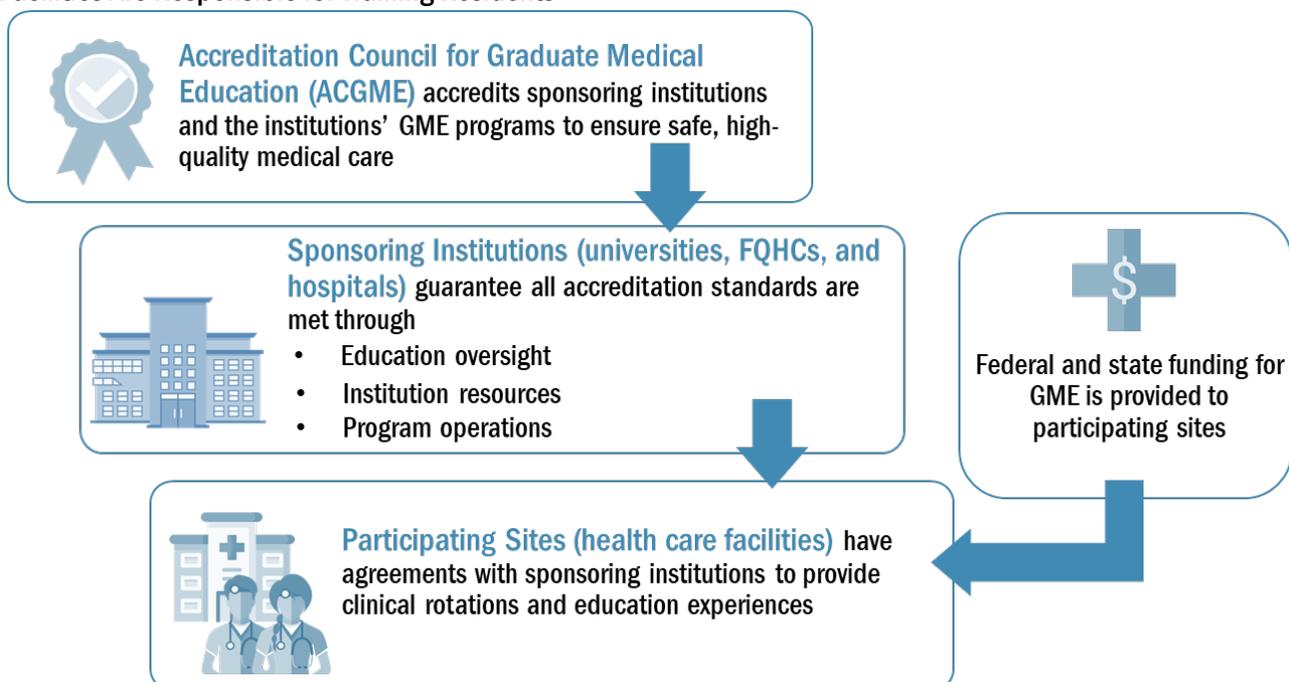
¹⁴ Florida Department of Health. *Physician Workforce Annual Report*. [Physician Workforce Development | Florida Department of Health](#).

¹⁵ Association of American Medical Colleges. *State Physician Workforce Data Report*. January 2022. www.aamc.org/data-reports/workforce/data/2021-state-profiles.

Sponsoring institutions organize the partnerships that are required to operate a residency program and apply to expand or create a new residency program. A residency program is a structured educational activity comprising a series of clinical and other learning experiences in graduate medical education, designed to prepare physicians to enter the unsupervised practice of medicine in a primary specialty. All sponsoring institutions are responsible for meeting residency program accreditation requirements. Sponsoring institutions may have agreements with participation sites (i.e., health care facilities) to provide residents with the range and breadth of experience required in a given specialty area, even when the sponsoring institution is a hospital.¹⁶ Federal and state funding for GME training goes directly to the health care facilities that train residents rather than to the sponsoring institution that maintains the accredited GME program. (See Exhibit 3.)

Exhibit 3

Sponsoring Institutions Are Responsible for GME Program Administrative and Financial Functions and Health Care Facilities Are Responsible for Training Residents



Source: OPPAGA analysis of ACGME and federal and state documents.

The Accreditation Council for Graduate Medical Education accredits sponsoring institutions and institution GME programs.¹⁷ When an accredited sponsoring institution applies to ACGME for a new residency or fellowship program, the institution specifies the number of residents the program will serve.¹⁸ Application materials include documentation demonstrating how institutions will meet program requirements, as well as any program letters of agreement for participating sites. As part of its review, ACGME conducts an initial site visit to evaluate compliance with accreditation standards.

¹⁶ Participating sites reflect the health care needs of the community as well as the common or specialty-specific education assignments/rotations of residents.

¹⁷ ACGME was created in 1981 by five major GME stakeholders: American Medical Association, American Board of Medical Specialties, American Hospital Association, Association of American Medical Colleges, and Council of Medical Specialty Societies. The AOA was the accreditation agency for osteopathically-trained physicians. As part of the move to a single accreditation system, entities that were previously AOA-accredited were required to obtain ACGME accreditation before June 30, 2020. Currently, ACGME is the only GME accreditation agency.

¹⁸ Except where otherwise specified, OPPAGA used the term resident to refer to people engaged in GME through an internship (or preliminary or transitional year program), residency, or fellowship.

Once ACGME accepts an application, programs are considered compliant for two to five years, depending upon the residency program.

ACGME continuously monitors accredited residency programs for compliance with the standards established for effective training programs. Accreditation standards are specific to specialty and subspecialty skill sets and may require unique institutional assets and experienced faculty with specialty certification; for example, a residency program in emergency medicine requires specialized care facilities and experienced physician mentors. Residency programs can also be population dependent; for example, federally-defined rural-track programs address medically underserved areas and populations and require at least one rural participating site.

In Florida, 56 sponsoring institutions administer GME programs, which can be in a specialty (e.g., internal medicine) or a subspecialty (e.g., cardiovascular disease).¹⁹ As of December 2022, general/teaching hospitals made up the largest percentage of accredited, Florida-based sponsoring institutions (25%) and contained the largest proportion of residency programs (33%) in the state. (See Exhibit 4.)

Exhibit 4

As of December 2022, General/Teaching Hospitals and Academic Medical Centers/Medical Schools Were the Most Common Types of Sponsoring Institution¹

Type of Institution	Number of Institutions	Percentage of All Institutions	Number of Programs	Percentage of All Programs
General/Teaching Hospital	14	25%	218	33%
Academic Medical Center/Medical School	7	13%	207	31%
Consortium	6	11%	141	21%
Independent Academic Medical Center	3	5%	32	5%
Children's Hospital	3	5%	27	4%
Community Hospital	7	13%	25	4%
Specialty Hospital	4	7%	6	1%
Federally Qualified Health Center	4	7%	5	1%
Other	3	5%	3	<1%
Pathology Lab / Medical Examiner's Office	2	4%	2	<1%
Ambulatory Care Clinic/Office	3	5%	1	<1%
Total	56	100%	667	100%

¹ This list includes sponsoring institutions that have received ACGME accreditation as of December 22, 2022 regardless of whether institution programs have been accredited. This does not include sponsoring institutions in other states that have GME programs in Florida, such as the Mayo Clinic.

Source: Accreditation Council for Graduate Medical Education data.

The National Residency Match Program matches the preferences of applicants seeking a position in a residency program with the preferences of residency program directors trying to fill vacancies. The NRMP Main Residency Match provides a system for the confidential selection of applicants to GME programs using an electronic algorithm and establishes a binding commitment between the applicant and the program. The application process for a July residency (after graduation from medical school) is competitive; medical school students typically apply to more than one accredited residency in their final year of medical school. For 2023, the main residency match had an overall position fill rate of 99.1%, which was consistent with prior years.

¹⁹ The total number of accredited sponsoring institutions with accredited GME programs in Florida (including those based in another state) has increased from 44 in academic year 2012-13 to 56 in academic year 2021-22.

The Florida Department of Health is responsible for physician workforce assessment and development, including creating a strategic plan; DOH also supports the Physician Workforce Advisory Council. DOH’s general function in physician workforce assessment is to maximize the use of existing programs by coordinating stakeholders and resources to develop a state strategic plan for physician workforce assessment and development and to assess plan implementation.²⁰ DOH reported that it last updated the physician workforce strategic plan in 2013 but is currently working to develop a new plan.²¹ Such a strategic plan could articulate GME goals, metrics, and state strategies, including funding priorities.

Despite having an outdated statewide plan, DOH is engaged in a variety of activities required in statute to support strategic planning. For example, the department administers the Physician Workforce Survey, creates Physician Workforce Annual Reports based on the survey, and coordinates the Physician Workforce Advisory Council. (See Exhibit 5.)

Exhibit 5

DOH Has a Variety of Statutory Requirements for Physician Workforce Assessment and Development

Statutory Requirement	How DOH Meets the Requirement
Monitor, evaluate, and report on the supply and distribution of physicians and maintain a database to serve as a statewide source of data. 381.4018 (a) , F.S.	<ul style="list-style-type: none"> • Administers the annual Physician Workforce Survey. • Requires physicians to complete the survey every two years when they renew their license to practice. • Creates Physician Workforce Annual Reports based on the survey. • Houses the database for the survey and physician licensure.
Develop a model and quantify, on an ongoing basis, the adequacy of the state’s current and future physician workforce as reliable data becomes available. Such model must take into account demographics, physician practice status, place of education and training, generational changes, population growth, economic indicators, and issues concerning the “pipeline” into medical education. 381.4018 (b) , F.S.	<ul style="list-style-type: none"> • Provided data to IHS Markit and contributed to a report for the Safety Net Hospital Alliance of Florida and the Florida Hospital Association which provided projections of future supply and demand for physicians in Florida.
Develop and recommend strategies to determine whether the number of medical school applicants will be sufficient to meet the capacity of the state’s medical schools. 381.4018 (c) , F.S.	<ul style="list-style-type: none"> • Partners with the state’s medical schools to develop and recommend strategies as required, such as working with the Council of Florida Medical School Deans on several issues related to medical school students and GME. • In 2017, facilitated a review of the pipeline programs at all the medical schools by administering a survey and publishing results.
Develop strategies to ensure that the number of graduates from the state’s medical schools is adequate to meet physician workforce needs. 381.4018 (d) , F.S.	<ul style="list-style-type: none"> • Works with the Council of Florida Medical School Deans and its GME workgroup to review opportunities for GME expansion.
Pursue strategies and policies to create, expand, and maintain GME positions in the state based on the analysis of the physician workforce data. 381.4018 (e) , F.S.	<ul style="list-style-type: none"> • Outlines strategies and policies regarding GME in the recommendations section of the Physician Workforce Annual Report.
Develop strategies to maximize federal and state programs that provide for the use of incentives to attract physicians to this state or retain physicians within the state. 381.4018 (f) , F.S.	<ul style="list-style-type: none"> • Communicates about state and federal physician incentive programs with practitioners and relevant stakeholder organizations. • Collaborates with the Health Resources and Services Administration and the National Health Service Corps Loan Repayment Program. • Implements the 2022 Florida Reimbursement Assistance for Medical Education program, which encourages qualified medical professionals to practice in underserved locations of the state by providing annual payments intended to offset the loans and educational expenses incurred.

²⁰ Section [381.4018](#), F.S.

²¹ Section [381.4018](#), F.S. specifies that the department develop a strategic plan.

Statutory Requirement	How DOH Meets the Requirement
Coordinate and enhance activities relative to physician workforce needs, undergraduate medical education, graduate medical education, and reentry of retired military and other physicians into the physician workforce. 381.4018 (g) , F.S.	<ul style="list-style-type: none"> Coordinates the Physician Workforce Advisory Council which includes a wide variety of stakeholders. The council reviews and helps to propose edits and changes to the Physician Workforce Survey.
Work in conjunction with and act as a coordinating body for governmental and nongovernmental stakeholders to address matters relating to the state's physician workforce assessment and development to ensure an adequate supply of well-trained physicians to meet the state's future needs. 381.4018 (h) , F.S.	<ul style="list-style-type: none"> Facilitates the Physician Workforce Advisory Council so relevant stakeholders may share initiatives and concerns regarding physician workforce issues.

Source: OPPAGA analysis of [381.4018](#), F.S. and information reported by the Department of Health.

Members of the 19-member Physician Workforce Advisory Council (PWAC) represent a diverse group of stakeholders, including the state's medical associations, medical schools and hospitals, GME programs, and federally qualified health centers. The PWAC's responsibilities include

- advising the State Surgeon General on the state's current and future workforce needs;
- reviewing the annual Physician Workforce Survey materials and compilation of survey information;
- reviewing the number, location, cost, and reimbursement of the GME programs and positions;
- providing recommendations to DOH regarding the survey completed by physicians;
- assisting DOH in preparing the Physician Workforce Annual Report;
- assisting DOH in preparing a strategic plan and advising it on implementation;
- monitoring and providing recommendations on current and projected health and medical services for the state; and
- monitoring and making recommendations regarding the status of the needs relating to graduate medical education in the state.

The Council of Florida Medical School Deans advises the PWAC on graduate medical education in the state. In the late 1990s, the deans of Florida's public and private osteopathic and allopathic medical schools formed the Council of Florida Medical School Deans to work on issues of mutual interest. In 2016, the council designated a GME Working Group, composed of GME deans from all of the state's medical schools, which represents 30% of Florida's accredited sponsoring institutions and oversees 65% of the state's residency programs.

The council tasked the GME Working Group with physician workforce expansion, among other issues. It assists the PWAC by creating an annual report detailing the overall expansion of GME, conversion of osteopathic-accredited programs to the ACGME, and specialty-specific data.

Completing a residency program is required to become a board-certified physician

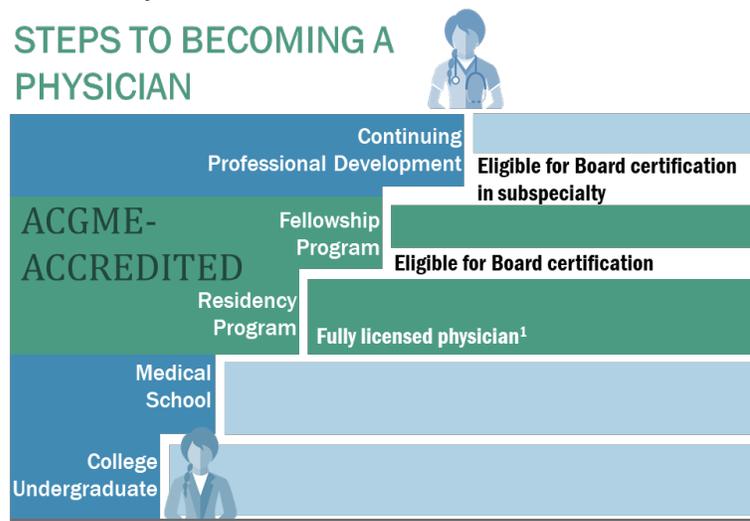
In the U.S., the pathway to becoming a physician requires graduation from a four-year college or university and an accredited U.S. osteopathic (DO) or allopathic (MD) medical school followed by acceptance into a three to five year GME residency program, which provides supervised clinical experiences in the physician's specialty area. (See Exhibit 6.) Residency programs include 33

accredited specialties of practice that lead to initial board certification.²² Medical students start the process of choosing a specialty area of practice early in their degree program, but the competitive process of obtaining a residency slot is time consuming for medical students. In a 2015 survey, medical school seniors reported completing an average of 36 residency applications and an average of 12 interviews.²³

Entering a residency program requires a license to practice through a training license.²⁴ For full licensure, all state medical boards require licensure candidates to complete at least one year of GME training (some states require two or three years) and pass a national examination.²⁵ Florida requires one year of residency and passing the national examination.²⁶

Upon completion of a residency program and passing board certification in that specialty, physicians may continue their GME in subspecialty areas by participating in a one- to three-year fellowship program. Board certification in a specialty area is not required for licensure as a medical doctor, but may be required to participate in a fellowship program.

Exhibit 6
Graduate Medical Education Trains Physicians to Practice Medicine



¹States vary in the amount of GME training required before allowing physicians to obtain full licensure. In Florida, it is one year.
 Source: Accreditation Council for Graduate Medical Education.

Increasing the number of residency positions takes time and resources, and sponsoring institutions weigh a number of factors. To increase the number of positions that are approved to fill, an accredited sponsoring institution can either apply to ACGME to start a new residency program or apply to expand the number of resident positions in one of its current accredited residency programs. Both options require the sponsoring institution to demonstrate it has the resources (e.g., equipment and facilities) to support increasing residency positions. The approval process can take from 10 to 24 months. After sponsoring institutions are approved to start a new program or to increase

²² ACGME accredits all sponsoring institutions and the over 13,000 residency and fellowship programs.
²³ Benson, Nicole M. MD et al. *Going "Fourth" From Medical School: Fourth-Year Medical Students' Perspectives on the Fourth Year of Medical School.* Academic Medicine 90(10): p 1386-1393, October 2015.
https://journals.lww.com/academicmedicine/fulltext/2015/10000/going_fourth_from_medical_school_fourth_year.32.aspx.
²⁴ This license is required for all residents until they have completed their first year of GME. DOH is responsible for licensing new residents as a physician in training.
²⁵ Both national exams are composed of three steps (step 1 and step 2 are usually completed in medical school and step 3 is completed as a resident). The Comprehensive Osteopathic Medical Licensing Examination is usually completed by physicians with a DO degree, while the U.S. Medical Licensing Examination can be taken by physicians holding an MD or DO degree.
²⁶ Section 458.311, F.S. or s. 459.005, F.S.

the number of residents in existing programs, institutions using the National Resident Matching Program to recruit residents go through an additional step to register new positions to the Main Residency Match.²⁷

Sponsoring institutions weigh multiple considerations—such as GME subsidies, market competition, potential clinical revenues, academic stature, local workforce demands, institution mission, staffing, financial reserves, educational leadership, teaching resources, and size—when considering investing in GME.²⁸ Some disincentives for increasing residency positions or programs include

- the federal Medicare cap, set in 1996;
- a local market where a similar GME program already exists;
- the high startup costs required for new GME programs;
- difficulty hiring a program director and faculty clinicians with sufficient training and available time;
- insufficient volume of patients with the appropriate variety and severity of illnesses and injuries to sustain the teaching program; and
- insufficient core infrastructure such as support personnel, program coordinators, and specialty equipment.

Incentives for investing in GME include improving the status and reputation of the institution, boosting recruitment and retention of high caliber faculty physicians and graduates who will stay and practice at the institution, and the revenue savings of having residents rather than physicians provide some patient care. Teaching hospitals can save money by recruiting program graduates, which reduces recruitment costs and allows residents to integrate into practice more quickly because of their familiarity with the institution’s culture and electronic health record system. Sponsoring institutions also take into account the available support provided by federal and state funding.

Sponsoring institutions may not submit all approved positions into the national match. The number of approved positions is an indicator of a GME program’s approved capacity to educate residents.²⁹ However, there are a number of reasons that sponsoring institutions may not want to offer an approved position to the match. Considerations for offering approved positions include the volume and variety of patients; time availability and qualifications of clinical faculty, program directors, and coordinators; and clinical and educational equipment and facilities. According to ACGME, programs consider how many positions are funded, and if the newly-approved are over the Medicare cap, the program may decide to prioritize spending elsewhere.

²⁷ Not all sponsoring institutions use the NRMP.

²⁸ Rittenhouse, Diane R., MD, MPH, Alexandra S. Ament, and Kevin Grumbach, MD, *Sponsoring Institution Interests, Not National Plans, Shape Physician Workforce in the United States*. Family Medicine. 2020; 52(8): 551-556. DOI: 10.22454/FamMed.2020.507727.

²⁹ When a program seeks accreditation, ACGME approves a specific number of positions based on the program’s capacity. The sponsoring institution then decides how many of these approved positions it wants to offer to the NRMP match process to be filled by new residents. Because there are more applicants than there are positions, the vast majority of positions offered to the NRMP are eventually filled (99.1%), which means that unfilled approved positions occur largely because the sponsoring institution did not offer it to the match.

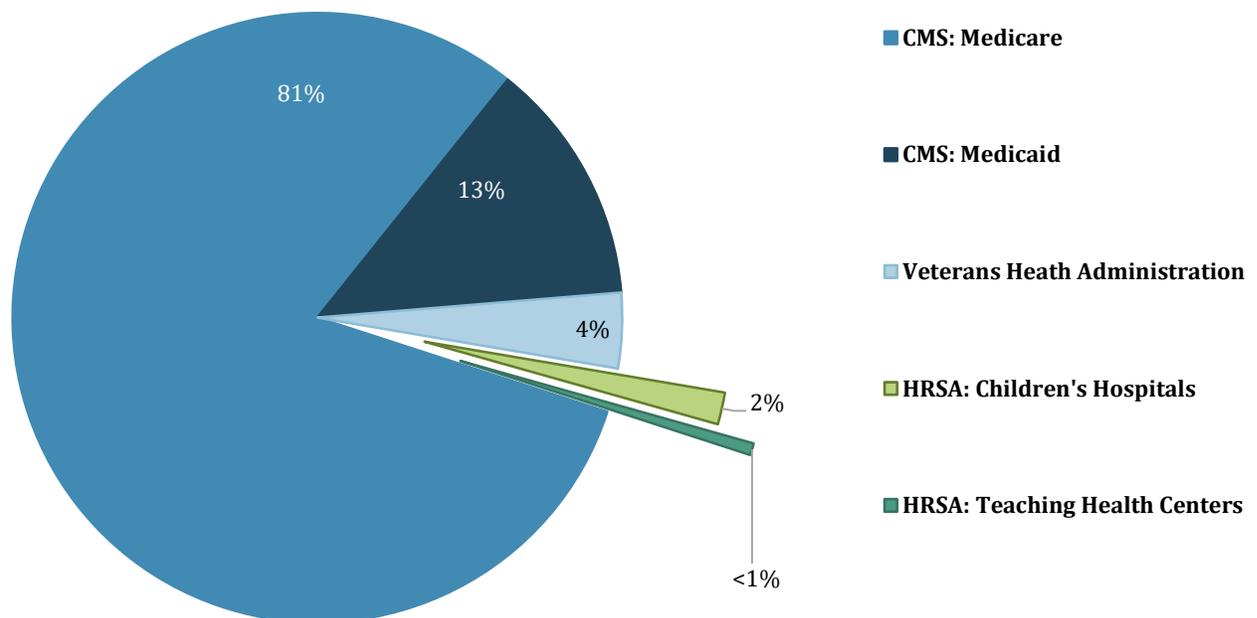
The federal government is the largest financial supporter of GME and sets limits on the number of funded positions

The U.S. Department of Health and Human Services (HHS) administers two GME programs through the Health Resources and Services Administration (HRSA)—the Children’s Hospitals GME Payment Program (CHGME) and the Teaching Health Center GME Program (THCGME). The Department of Veteran’s Affairs (VA) also administers a program through VA medical facilities.³⁰ In addition, HHS distributes Medicare and Medicaid GME funds through the Centers for Medicare and Medicaid Services (CMS). CMS established limits on the number of funded GME positions in 1996; these limits favored states in the Northeast that established programs earlier than in other parts of the country. Although federal funding increased in Florida over the past 10 years, hospitals did not receive Medicare funding for approximately 24% of all Florida resident FTEs in federal Fiscal Year 2021-22; many hospitals reported experiencing funding challenges as a result.

In 2020, the federal government spent approximately \$20 billion on GME through CHGME and THCGME and the VA. Medicare provided approximately \$16.2 billion for GME; Medicaid provided approximately \$2.6 billion for GME; the VA provided approximately \$800 million; and the CHGME Payment Program and THCGME Program provided approximately \$340 million and \$127 million, respectively. (See Exhibit 7.)

Exhibit 7

Of the \$20 Billion in Federal GME Funding Nationwide in 2020, Medicare Was the Largest Portion



Source: OPPAGA analysis of data from federal government sources.

³⁰ Not included here is the comparatively small amount of GME spending by the Department of Defense. See [Federal Support for Graduate Medical Education: An Overview](#).

The federal government supports GME through two HRSA programs and the VA. The HRSA's CHGME program funds children's hospitals that benefit low-income children. CHGME supports general pediatricians and pediatric subspecialists, training 56% of all general pediatric residents and 54% of all pediatric subspecialty residents and fellows.³¹ The THCGME program helps communities grow the health workforce by training primary care physicians in community-based settings with a focus on rural and underserved communities.³²

The VA supports approximately 11,300 VA-funded physician FTE residency positions at VA medical facilities across the country. The VA often partners with teaching hospitals to ensure that residents treat diverse populations; residents from those hospitals' training programs rotate to a VA medical facility for a specified period. The VA shares the costs of operating a residency program at its facility when it partners with a teaching hospital. During the time the residents are at a VA facility, they are not counted for the purposes of the Medicare GME cap; this allows hospitals to train more residents under the Medicare FTE cap.

Two forms of Medicare funding are provided to hospitals to help support the cost of training resident physicians in accredited GME programs: direct graduate medical education and indirect medical education. Medicare GME payments are used to partially offset costs of training a certain number of full-time equivalent residents at each hospital. Direct graduate medical education (DGME) finances resident stipends, supervisory physician salaries, and other programmatic expenses. Indirect medical education (IME) subsidizes the higher costs of delivering health care services in a teaching hospital compared to a non-teaching hospital, such as additional testing that residents may order as part of their training. Both DGME and IME payment amounts are determined by federal statutory formulas. Although these Medicare dollars are intended to support GME, CMS does not dictate how hospitals use these payments. One stakeholder reported that hospitals use the payments as part of overall revenue streams. Hospitals do not begin receiving Medicare DGME payments until the institutions begin training residents, making it necessary to use other funds for expensive startup costs such as recruiting faculty, hiring program directors, and establishing the educational and business infrastructure to train residents.

To contain costs, Congress passed the Balanced Budget Act in 1997 to freeze resident positions funded through Medicare at 1996 levels; resident FTEs above the Medicare cap do not receive DGME or IME funding.³³ Nationally, at most hospitals, Medicare funds the same number of slots for physician residents as it funded in 1996. For hospitals that first started training residents in a new GME program after 1996, the resident caps were based on the number of residents Medicare funded in the third or fifth year after the new program started, depending on when it began.³⁴ For underserved and rural hospitals, where it takes more time to recruit faculty and residents and establish a sufficient patient population, the five-year window to establish a Medicare cap for a new program can be particularly onerous. Hospitals often train more residents than the caps without additional payments from the Medicare DGME program.³⁵

³¹ See [Children's Hospitals Graduate Medical Education Payment Program](#).

³² See [Teaching Health Center Graduate Medical Education Program](#).

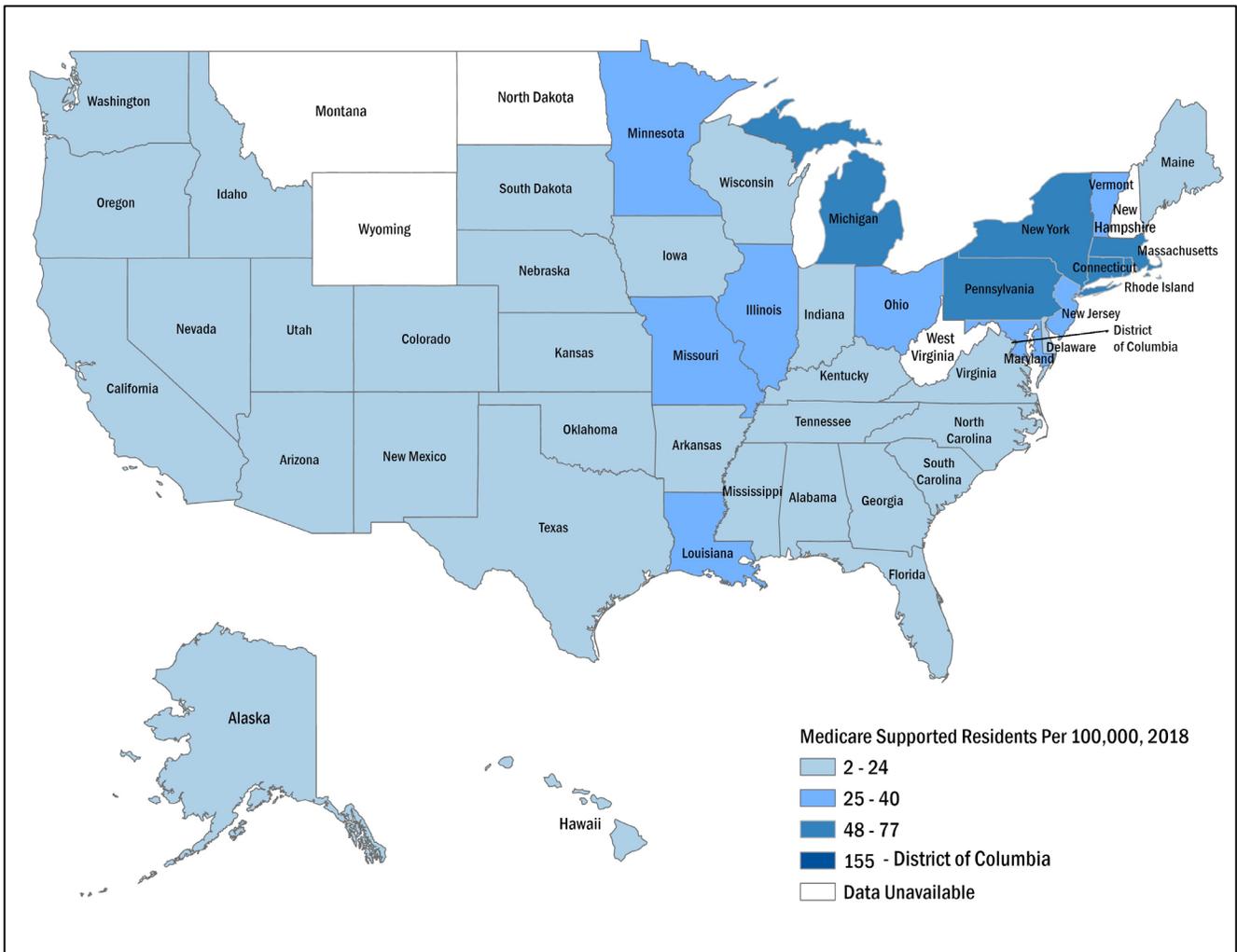
³³ Caps are set by multiplying the number of residents in the largest class for each program in the last year of the cap-establishment window by the minimum number of years needed to complete the program, adjusting for the time residents in each program spent training at different hospitals, and adding the resulting number of residents for each program together.

³⁴ The window in which new programs could establish caps was three years for hospitals that started training residents on September 30, 2012 and earlier, and five years for hospitals that started training residents on October 1, 2012 and later.

³⁵ A 2021 U.S. Government Accountability Office analysis found that in 2018, 70% of hospitals trained at least one more resident than Medicare funded. See <https://www.gao.gov/products/gao-21-391>.

While providers in all 50 states and the District of Columbia receive federal Medicare GME payments, amounts vary by state. The process of setting initial GME caps established the geography of the GME system, where most early GME programs were in states in the Northeast. These early northeastern programs had time to grow before Medicare caps were fixed. As Florida’s population and GME training programs grew after 1996, the federal cap did not allow more funding to support the growth of existing programs. Northeastern states have more physicians, more Medicare-funded GME slots, and more funding for those slots per 100,000 population than other areas of the country. In 2018, the average number of Medicare-supported residents per 100,000 population in the Northeast was approximately 55, while the average for the South was approximately 17. (See Exhibit 8.) In 2018, Medicare supported approximately 3,098 residents in Florida and 15 residents per 100,000 population; Florida’s rank is 35th nationally for residents per 100,000 out of 46 states and the District of Columbia.

Exhibit 8
In 2018, Medicare Funded More Residents Per Capita in the Northeast Than in Other Regions¹



¹The total number of residents supported by Medicare in a state is potentially less than a state’s total Medicare capped FTEs. Medicare caps are established for each hospital rather than for the state as a whole. So, although every state has unfunded residents, some individual hospitals may be below their Medicare caps.

Source: OPPAGA analysis of data from the Association of American Medical Colleges and the U.S. Census.

After federal contributions to GME, state-federal Medicaid funding is the second largest source of GME funding. Medicaid, the second largest source of GME funding, is a joint state-federal program that allows states to follow broad federal rules to receive federal matching funds for GME training costs as a part of overall hospital costs.³⁶ To receive federal matching funds to support services included in Medicaid state plans, states must ensure that the state can fund the state share of expenditures.³⁷ Public funds used as a state's share must be appropriated directly to the state Medicaid agency or transferred from other public agencies to the state agency and are under the agency's administrative control.³⁸ At least 40% of the nonfederal share of Medicaid must come from state governments; of these, up to 60% may come from local governments as an intergovernmental transfer (IGT) from eligible entities such as counties or hospital taxing districts or through state certification of public expenditures by a local public provider such as a county hospital.³⁹

Federal Medicaid spending is determined by the amount that the state spends. States' Medicaid contributions come from three sources: state general revenue (from broad-based state taxes), contributions from local governments through intergovernmental transfers or certified public expenditures, and specialized revenue sources such as health care-related taxes.⁴⁰

Although federal funding increased over the past 10 years, hospitals did not receive Medicare funding for approximately 24% of all Florida resident FTEs in federal Fiscal Year 2021-22

From federal Fiscal Years 2010-11 through 2021-22, Florida hospitals received approximately \$6.7 billion in Medicare funding to support GME programs. OPPAGA analyzed GME-related data from Medicare Hospital Cost Reports for hospitals that received funds from Florida's GME Medicaid programs.⁴¹ From federal Fiscal Years 2010-11 through 2021-22, these hospitals received approximately \$4.1 billion in DGME funds and approximately \$2.7 billion in IME funds.^{42,43} During this period, the average annual amount received by these facilities totaled \$338.7 million in DGME funds and \$223.7 million in IME funds. (See Addendum, Exhibit 1 for state and federal funding by health care facility.)

To understand the impact of state and federal funding for GME programs in Florida as well as how this funding is used, OPPAGA surveyed 84 healthcare facilities that received state funding to support GME programs during the review period. These healthcare facilities included 79 hospitals, 3 federally qualified health centers, 1 mental health facility, and 1 substance abuse facility.⁴⁴ Ninety-three percent of the healthcare facilities who responded to OPPAGA's survey reported that Medicare funding is very

³⁶ The federal share of Medicaid has varied over time but has averaged 60% of the total over the past ten years.

³⁷ Henderson, TM. "Medicaid Graduate Medical Education Payments: Results from the 2022 50-State Survey." Washington, DC: AAMC.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Health care-related taxes are defined by federal statute as taxes of which at least 85% of the burden falls on health care providers, and are permitted by federal rule for 18 separate provider classes (§ 1903(w)(3)(A) of the Act and 42 CFR 433.56).

⁴¹ Non-hospital health care facilities (e.g., federally qualified health centers) use a different form of the Medicare Hospital Cost Report. Thus, non-hospital facilities are not included in the Medicare Hospital Cost Report data analysis. Of the 86 health care facilities OPPAGA identified as having received state funding at any point from Fiscal Year 2013-14 through Fiscal Year 2021-22, 81 hospitals had records in the Medicare Hospital Cost Report data. However, not all facilities had data for all years of the cost report. Additionally, in the years for which data was available for a particular facility, not all fields contained information. For example, a facility may have data available for IME in a particular year but not for DGME in that same year.

⁴² The reported estimates likely underestimate the total Medicare funding received by these facilities due to data completeness issues. Additionally, this estimate does not include health care facilities that did not receive state Medicaid funding during OPPAGA's review period; therefore, these estimates do not reflect the total Medicare funds received by all health care facilities in Florida.

⁴³ CMS Hospital Cost Report data is available by federal fiscal year. However, the data reported by hospitals is based on the individual facility's fiscal year. Because monthly data is not available, these fiscal years cannot be reconciled for reporting purposes.

⁴⁴ OPPAGA received responses from 45 of 84 (51%) healthcare facilities.

important to supporting a facility's residency positions. Medicare funding can be used to support various aspects of GME such as covering administrative costs (e.g., the cost of hiring teaching faculty) and supporting new programs or positions. Respondents to OPPAGA's health care facility survey most frequently reported that Medicare funding is used for resident salaries (78%) and program infrastructure (64%) such as resident workrooms, conference rooms, and parking. Additionally, 53% of respondents reported using Medicare funding to create new residency positions and/or new programs.

Health care facilities and sponsoring institutions reported funding challenges because of historical Medicare FTE caps, which has resulted in some GME FTEs not being funded. As Florida's GME training programs grew following the 1996 implementation of the Medicare cap, Medicare paid for resident FTEs in hospitals that developed new training programs, but not for GME growth in existing programs. OPPAGA's analysis of Medicare Hospital Cost Report data showed that 56% of the hospitals that received state funding during the review period supported resident FTEs over the institution's DGME Medicare cap for at least one year from federal Fiscal Year 2010-11 through federal Fiscal Year 2021-22; 36% of hospitals were over the DGME Medicare cap for more than half of this period. In federal Fiscal Year 2021-22, 33 of the 74 facilities for which data was available in the Medicare Hospital Cost Report were over the DGME Medicare cap. These overages ranged from 0.46 FTE over the cap to 161.02 FTE over the cap.

Of the hospitals that received Medicare funding, those with the highest number of FTEs in the CMS data had a disproportionate share of unfunded FTEs. In federal Fiscal Year 2021-22, 10 hospitals had 52% of all FTEs in Florida and on average 29% of all FTEs at these hospitals were above the Medicare cap, while the average share of unfunded FTEs for all others was 12%. Between federal Fiscal Years 2010-11 and 2021-22, approximately 24% of Florida resident FTEs were not funded by Medicare. (See Appendix B, Exhibit B-1 for the percentage of Medicare residents not funded by year.)

Florida funds GME through multiple programs

Graduate medical education has been proven to be important to maintaining states' physician workforces. Florida has made significant investments in GME over time by creating multiple funding programs from state Fiscal Year 2013-14 through state Fiscal Year 2023-24, all funded through its Medicaid program, which receives federal matching dollars. The largest share of the state government portion of Medicaid comes from local government entities.

Research has demonstrated the importance of GME to a state's physician workforce. A 2018 U.S. Government Accountability Office report noted the importance of GME as a significant determinant for the supply and distribution of a state's physician workforce.⁴⁵ Literature reviews and information from professional organizations continue to show that residency program location is an indication of where physicians will remain in active practice. In 2021, AAMC reported that 47.6% of physicians who were actively practicing in 2020 were in the same state where they completed their most recent GME.⁴⁶ During the same period, retention rates were highest among physicians who completed both their medical degree and GME in the same state. Nearly 68% of the physicians who completed medical school and GME in the same state remained in the state to practice medicine. This research shows that

⁴⁵ Government Accountability Office. *Physician Workforce: HHS Needs Better Information to Comprehensively Evaluate Graduate Medical Education Funding*. GAO Publication 18-240. March 2018. www.gao.gov/assets/gao-18-240.pdf.

⁴⁶ Association of American Medical Colleges. *2021 State Physician Workforce Data Report*. January 2022. www.aamc.org/data-reports/workforce/data/2021-state-profiles.

expanding the number of residency positions in a state may increase the number of physicians in the state's workforce and that a state will be more successful at retaining physicians when they completed medical school and GME in the state.

Recognizing the importance of GME to the state's physician workforce, the Legislature changed Florida's system for GME funding in 2013 and has since created multiple funding programs to support GME. Florida, like 43 other states, finances GME programs under the Medicaid program. Before legislative changes in 2013, funding for GME was primarily provided on a cost-reimbursement basis. Hospitals included costs directly related to residency programs in cost reports submitted to the Agency for Health Care Administration. The costs were then included in the calculation of the per diems paid to the hospitals under the Medicaid program.⁴⁷ When the state transitioned from a cost-reimbursement basis to a Diagnostic Related Group (DRG) Inpatient Payment model in 2013, the Legislature created the Statewide Medicaid Residency Program (SMRP) to establish a separate funding source to replace the cost-reimbursement payments for GME.

Effective July 1, 2013, the SMRP was intended to improve the quality of care and access to care for Medicaid recipients, expand graduate medical education on an equitable basis, and increase the supply of highly trained physicians statewide.⁴⁸ The SMRP provides funding to hospitals and federally qualified health centers (FQHCs) for GME programs for all physician specialties based on an FTE resident rather than cost-reimbursement basis. AHCA determines the amount of each program's annual allocation using a statutory formula that considers the program's total number of FTE residents, estimated Medicaid payments for the current state fiscal year, and any adjustments necessitated by an annual reconciliation of the program's prior year SMRP payments.

After the SMRP was implemented, the Legislature established several Medicaid GME funding programs in statute and proviso to the General Appropriations Act (GAA). Two GME programs, the Graduate Medical Education Startup Bonus Program and the Slots for Doctors Program, were established to encourage the growth of GME programs in specialties that are in a statewide supply-and-demand deficit. The Mental and Behavioral Health Program and the Psychiatry Program, were established to support mental and behavioral health residencies. The Legislature also added the Primary Care Programs to fund GME in areas of the state that have low access to primary care physicians and the High Tertiary Care Program and the Severe Deficit Program to fund high-demand physician specialties.

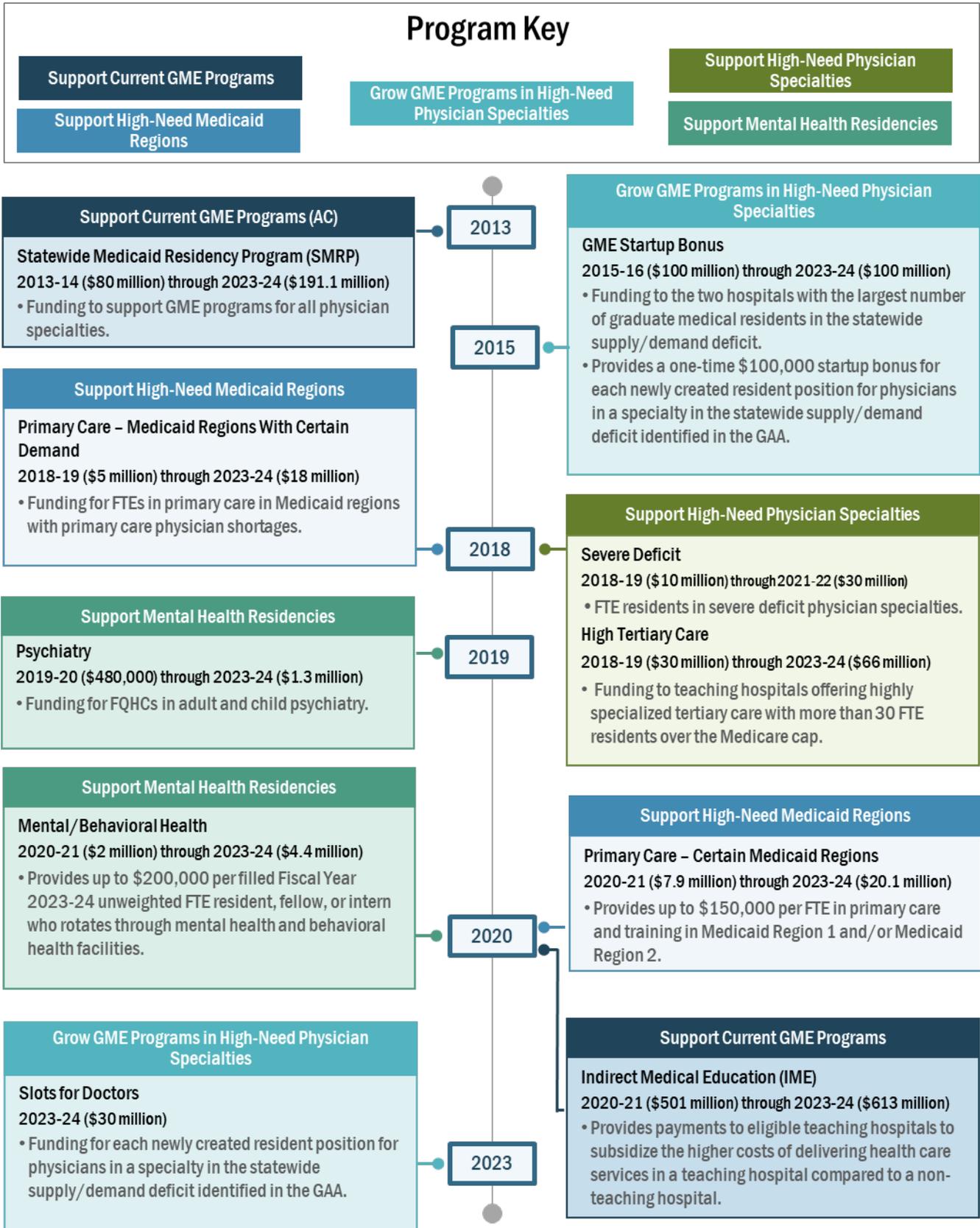
In addition to the GME funding programs, the 2022 Legislature established the Medicaid Indirect Medical Education Program to recognize the increased use of ancillary services associated with the GME process and the higher case-mix intensity of teaching hospitals. The state IME Program mirrors Medicare IME and uses a similar payment formula. (See Exhibit 9.)

⁴⁷ GME funding for the cost-reimbursement system was imbedded in state appropriations for hospital inpatient and outpatient services. As such, the amounts of funding directed to GME alone under this system cannot be discerned from the General Appropriations Act. Additionally, in some state fiscal years for the period from state Fiscal Year 1997-98 through state Fiscal Year 2012-13, funding was sometimes specifically appropriated for GME. Examples of such appropriations include: (a) \$3 million for a rural primary care residency expansion initiative for state Fiscal Year 2011-12; (b) an average of \$23.7 million appropriated for the special category titled "Graduate Medical Education" for each fiscal year from state Fiscal Year 1997-98 through state Fiscal Year 2000-01; and (c) an average of \$10,791,207 was appropriated for the special category titled "Community Hospital Education Program" for each fiscal year from state Fiscal Year 1997-98 through state Fiscal Year 2005-06. The Community Hospital Education Program (CHEP) had been established in s. 381.0403, F.S., to provide financial support for primary care specialty interns and residents based on recommendations of the Community Hospital Education Council.

⁴⁸ Section [409.909](#), F.S. (establishing the SMRP).

Exhibit 9

The Legislature Has Implemented GME Programs for a Variety of Purposes Over a 10-Year Period

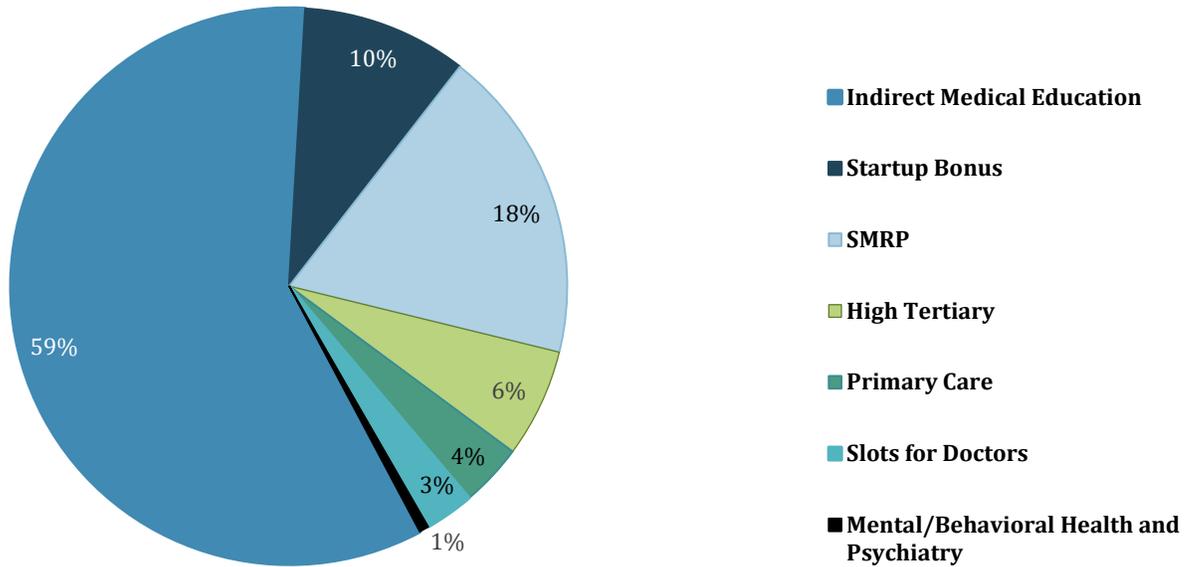


Source: OPPAGA analysis of s. 409.09, F.S., the GAAs for state Fiscal Years 2013-14 through 2023-24, information provided by AHCA, legislative budget requests, and Medicaid State Plan Amendment #: 22-0007.

In state Fiscal Year 2023-24, Florida’s IME Program was the largest of the state funding programs, at 59% of the total. The SMRP Program was 18% of the total followed by the Startup Bonus Program (10%), High Tertiary Program (6%), Primary Care Programs (4%), Slots for Doctors Program (3%), and Mental/Behavioral Health and Psychiatry Programs (1%). (See Exhibit 10.)

Exhibit 10

In State Fiscal Year 2023-24, Florida’s IME Program Was the Largest State GME Funding Program



Source: OPPAGA analysis of the GAAs for state Fiscal Year 2023-24, and information provided by AHCA.

In addition to hospitals, Florida funds FQHCs and Mental/Behavioral health facilities. While all hospitals and FQHCs are eligible for SMRP and Startup Bonus funding, only teaching hospitals are eligible for IME Program and High Tertiary Care funding. Psychiatry Program funding goes to a FQHC, Citrus Health. Mental and Behavioral Health Program funding goes to three mental/behavioral health facilities that participate in training residents. (See Exhibit 11.)

Exhibit 11

Florida Funds a Variety of Entities With GME and IME Programs¹

GME Program	All Hospitals	Teaching Hospitals ²	FQHCs	Mental/Behavioral Health Facilities
SMRP	✓		✓	
Startup Bonus	✓		✓	
IME		✓		
High Tertiary Care		✓		
Psychiatry			✓	
Mental/Behavioral Health				✓

¹The primary care programs and the Severe Deficit Program do not specify types of entities that can receive funding; rather, they specify the types of resident specialties, and, for primary care programs, also specify the Medicaid region in which training must occur.

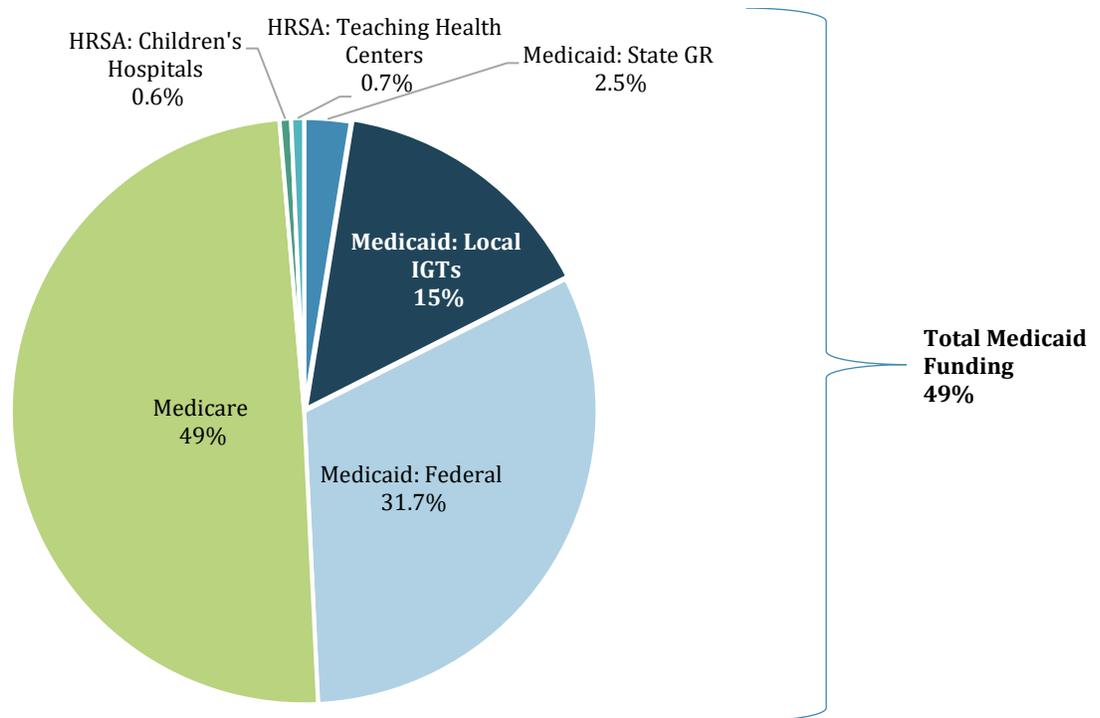
²The term “teaching hospital” means “any Florida hospital officially affiliated with an accredited Florida medical school which exhibits activity in the area of [GME] as reflected by at least seven different [GME] programs accredited by the [ACGME] or the Council on Postdoctoral Training of the American Osteopathic Association and the presence of 100 or more [FTE] resident physicians. The Director of the [AHCA] shall be responsible for determining which hospitals meet this definition.” Section 408.07(46), F.S.

Source: OPPAGA analysis of s. 409.909, F.S., the GAAs for state Fiscal Year 2023-24, information provided by AHCA, legislative budget requests, and Medicaid State Plan Amendment #: 22-0007

In Florida, local government entities contribute the largest share of the state’s required Medicaid contribution for GME. All the appropriations, except for the appropriations for the SMRP and the Slots for Doctors Program, are made contingent on the non-federal share of Medicaid being provided through intergovernmental transfers (IGT) in the Grants and Donations Trust Fund. Local government entities (e.g., counties, hospital taxing districts, or municipalities) provide the funds for IGTs to assist in funding the Medicaid Program. If an IGT is not made for an appropriation that is contingent on an IGT, AHCA may not allocate the appropriated amount for the relevant state fiscal year. The funding sources for state GME appropriations are General Revenue, the Grants and Donations Trust Fund (for the state Medicaid contribution from IGTs), and the Medical Care Trust Fund (for the federal Medicaid match). The contribution from IGTs and the federal government provide the majority of Medicaid funds available for GME programs and the IME program. Overall, for GME funding in Florida, Medicare comprises approximately 49% and Medicaid (state and federal) comprises approximately 49%. (See Exhibit 12.) GME spending equaled approximately 99% of appropriated funds. (See Addendum, Exhibit 2, for state GME funding program disbursements and FTE by healthcare facility.)

Exhibit 12

In State Fiscal Year 2021-22, Approximately Half of Florida’s GME Was Funded by Medicare and Approximately Half Was Funded by Medicaid; State General Revenue Was Only 3% of the Total¹



¹ For Medicare data not all hospitals had data available in the CMS Cost Reports, therefore Medicare’s share of total funding may be understated. CMS Hospital Cost Report data is reported based on federal fiscal year and HRSA and Medicaid are reported based on state fiscal year.

Source: OPPAGA analysis of the General Appropriations Act, CMS cost report data, and HHS data.

FINDINGS

AHCA has minimal oversight of GME programs; hospitals report combining state funds with other funding sources

While the Agency for Health Care Administration is responsible for disbursing Medicaid GME funding, it does not require hospitals to track and report expenditures based on funding source. GME disbursements are calculated using the number of FTEs in the GME program and do not reflect actual costs to operate the GME program. Hospitals report that, to maximize funding for GME, the institutions combine state and federal funds, along with endowments, foundation funding, grant funding, and internal funding. The current funding and disbursement system lacks transparency for tracking state expenditures related to GME.

While AHCA is responsible for disbursing Medicaid GME funding, the agency's oversight is limited to a GME FTE audit for the SMRP and an annual report for the Slots for Doctors program. Medicaid GME payments go directly from AHCA to healthcare facilities rather than to sponsored residents. Although AHCA programs fund GME FTEs, the agency does not require hospitals to report expenditures. Because the cost of training differs by specialty, availability and cost of alternative providers, program size, and other factors, AHCA's payments for GME do not reflect actual costs of GME.

The SMRP provides funding for GME programs for all physician specialties based on FTE resident; Slots for Doctors provides an annual \$100,000 allocation for each newly created resident position first filled after June 1, 2023 in an initial or established GME program for physicians in a specialty in the statewide supply/demand deficit as identified in the General Appropriations Act. For SMRP funding, AHCA conducts an audit to reconcile the number of funded resident FTEs using Medicare Cost Reports.⁴⁹ Based on the reconciliation, the agency adjusts payments in subsequent years if needed to correct for discrepancies. For the Slots for Doctors program, the Legislature directed AHCA to submit an annual report providing the number of supply/demand deficit resident positions created by each eligible hospital and qualifying institution.⁵⁰

Although the enacting statute for SMRP, the Startup Bonus Program, and the Slots for Doctors program granted AHCA statutory authority to adopt administrative rules, the agency has not done so to date. These rules could provide for increased oversight of GME funds, such as requiring health care facilities to submit records of GME revenues and expenditures. If AHCA received and audited financial records, it has the authority to establish rules to employ a GME payment methodology that could distinguish needed funding based on specialty and other variables.

AHCA funds hospitals for resident FTEs, but hospital representatives reported combining state funds with other funding sources for GME programs, resulting in a lack of transparency about expenditures by fund source. While most funding comes from state or federal sources, health care facilities reported also using internal funding; some health care facilities and sponsoring institutions reported combining other funding sources to support GME programs. To collect additional information

⁴⁹ Audits are conducted two years after the year for which funding is provided.

⁵⁰ According to Ch. 2023-239, *Laws of Florida*, AHCA must submit this report to the Governor's Office of Policy and Budget, the chair of the Senate Appropriations Committee, and the chair of the House Appropriations Committee by April 1, 2024, and annually thereafter.

about GME programs, OPPAGA requested data from sponsoring institutions and health care facilities for Fiscal Year 2013-14 through Fiscal Year 2021-22.^{51,52,53} Of the sponsoring institutions that responded, nine reported receiving funding for GME outside of state and federal funds through revenues such as fellowships and grants.^{54,55} One sponsoring institution reported that university departments use department and university funds to help support GME. However, some sponsoring institutions reported that funding for GME primarily happens at the healthcare facility/hospital level rather than at the sponsoring institution level. Of the health care facilities that provided responses, nine reported receiving funding for GME from non-state and non-federal sources through endowments, foundation funding, and grant funding. Additionally, 53 health care facility respondents reported using internal revenue to support GME at the facility. On average, these health care facilities reported expending \$16.3 million annually of internal revenue to support GME.⁵⁶

Healthcare facilities also reported combining funding streams for GME. For instance, one stakeholder reported that hospitals use Medicaid to supplement some of the partially funded Medicare slots and that Medicaid is the only source of funding for other slots. Other stakeholders indicated that the cost of the resident is only one part of supporting GME; the institution also has to pay for offices, conference rooms, and teaching spaces. Hospitals' funding needs can vary by the type, number, and size of residency programs; geographic location; complexity of patient services; and facility depreciation. Hospitals' current system of combining funding streams inhibits the ability to track expenditures by fund source.

Medicaid funds for Florida GME and IME increased significantly over the past 10 years; during this period, a growing number of health care facilities received these funds

Since 2013, when the SMRP was first established, state appropriations for statutory and proviso GME funding programs have increased from approximately \$80.0 million in state Fiscal Year 2013-14 to approximately \$430.9 million in state Fiscal Year 2023-24 (a 439% increase). Most recently, appropriations in state Fiscal Year 2023-24 significantly increased GME funding by approximately \$139.3 million compared to state Fiscal Year 2022-23 (a 48% increase). (See Exhibit 13.) (See Appendix D, Exhibit D-1, for additional information on how IME Program funding has increased state support for GME.)

⁵¹ OPPAGA requested information from 56 sponsoring institutions. Of the 56 institutions, 47 were in operation and had filled positions during the review period and were not military-based sponsoring institutions. Of these 47 institutions, 44 provided responses (94% response rate).

⁵² OPPAGA requested information from 84 health care facilities that had residents during the review period (Fiscal Year 2012-13 through Fiscal Year 2021-22), including 79 hospitals, 3 FQHCs, 1 mental health clinic, and 1 substance abuse program. Of the 84 health care facilities, 75 provided responses (89% response rate).

⁵³ Depending on the type of information requested, information was provided by state fiscal year, facility fiscal year, or academic year.

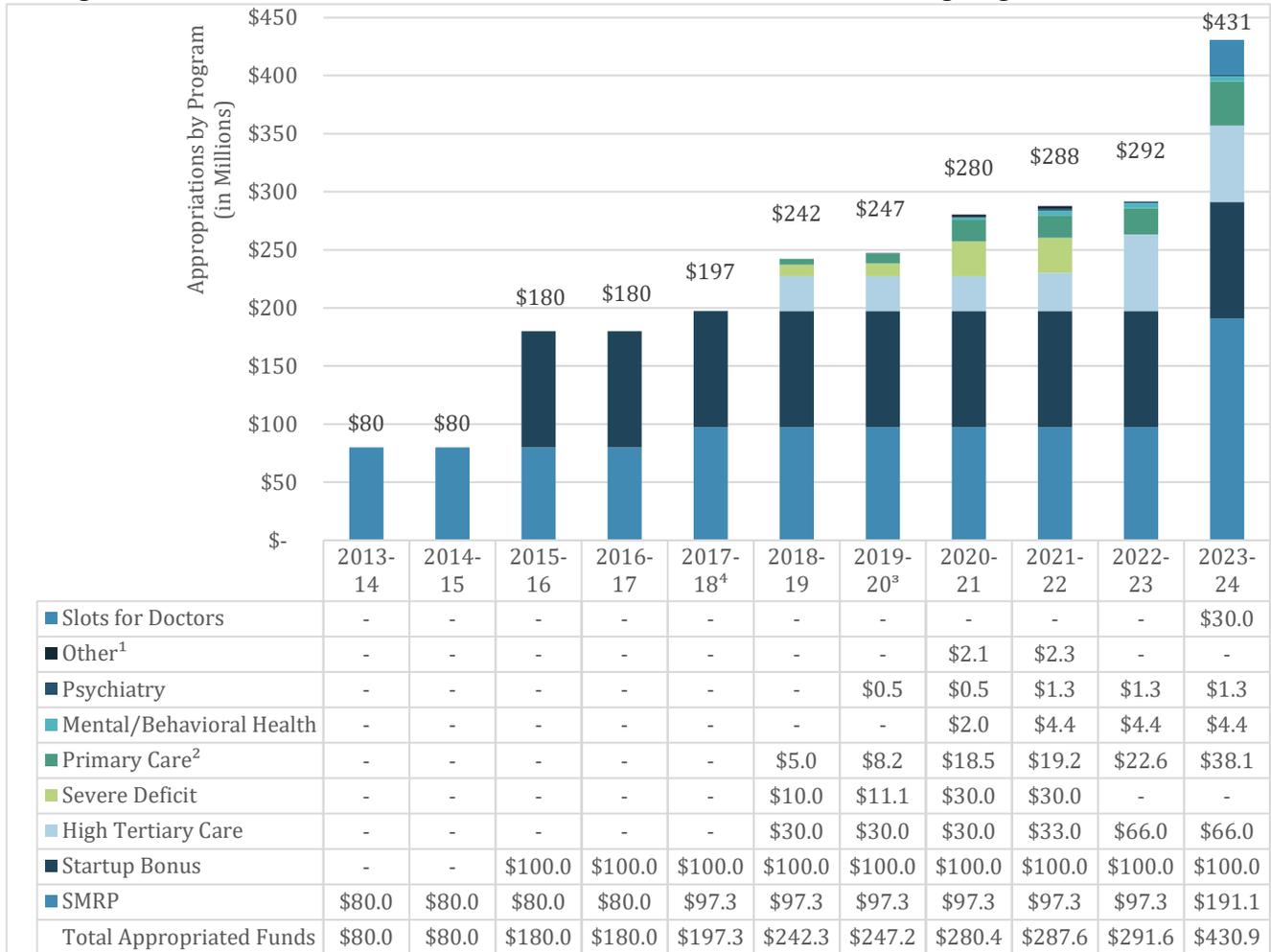
⁵⁴ Because sponsoring institutions may also be health care facilities, some sponsoring institution respondents may have reported funding information pertaining to the health care facility.

⁵⁵ Two additional sponsoring institutions reported receiving "other funding."

⁵⁶ Twenty-four percent of the health care facility respondents did not provide valid or usable internal revenue amounts.

Exhibit 13

The Legislature Has Increased the State’s Investment in GME and Added New Funding Programs Over Time



¹In state Fiscal Year 2020-21, \$2,096,436 was appropriated to fund up to \$100,000 per-FTE internal medicine residency slots for Tallahassee Memorial Healthcare. (Chapter 2020-111, s. 3, line item 206, *Laws of Florida*.) In state Fiscal Year 2021-22, \$1,210,003 was appropriated to Lakeland Regional Health to address the severe physician shortage in Polk County, \$672,224 was appropriated to fund up to \$100,000 per-FTE internal medicine residency slots for Tallahassee Memorial Healthcare, and \$457,920 was appropriated to Nemours Children’s Hospital Improving Access to Pediatric Residency & Fellowship GME. (Chapter 2021-236, s. 3, line item 201, *Laws of Florida*.)

² The appropriations for the “Primary Care – Medicaid Regions With Certain Demand” and “Primary Care – Certain Medicaid Regions” programs listed in Exhibit 8 have been combined in this exhibit.

³ In state Fiscal Year 2019-20, total appropriations for line item 202 were \$246,693,286; however, the amounts provided in proviso for GME programs under line item 202 exceeded total appropriations by \$480,000 (i.e., the amounts in proviso totaled \$247,173,286) due to proviso specifying that the Psychiatry Program would receive \$480,000. Exhibit 13 reflects the total amounts provided in proviso. Chapter 2019-115, s. 3, line item 202, *Laws of Florida*. AHCA distributed the \$480,000 to the Psychiatry Program on May 1, 2020, from funding appropriated for the GME Startup Bonus Program; accordingly, distributions based on proviso ultimately did not exceed the total of \$246,693,286 in appropriations for line item 202.

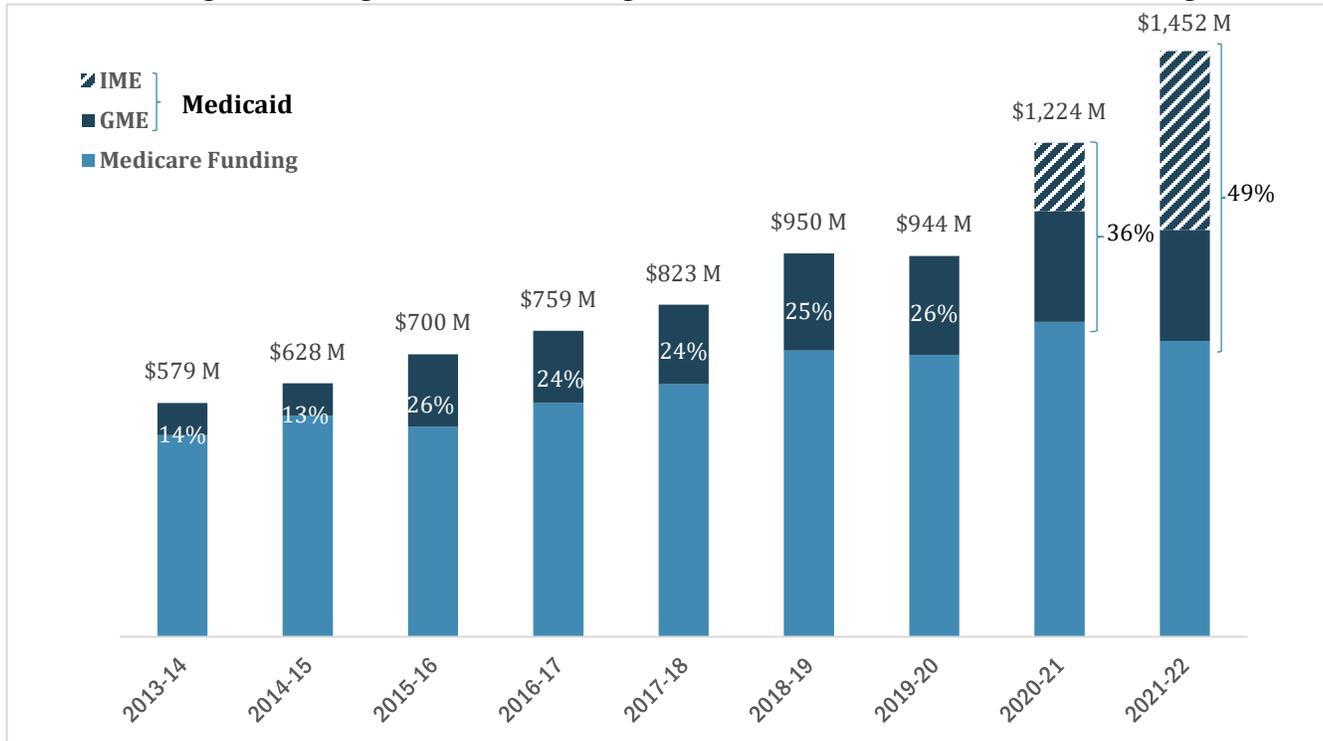
⁴ For Fiscal Year 2017-18, Ch. 2017-70, s. 3, line item 197, appropriated \$80,000,00 to the SMRP and \$117,300,000 to the GME Startup Bonus Program. Ch. 2018-9, s. 27, the Fiscal Year 2018-19 GAA, reallocated the Fiscal Year 2017-18 GME appropriations so that \$97,300,000 is provided to the SMRP with the remaining \$100,000,000 provided to the GME Startup Bonus Program.

Source: OPPAGA analysis of the GAAs for state Fiscal Years 2013-14 through 2023-24, and information provided by AHCA.

As the state has increased funding for GME, the Medicaid portion of the total amount of funding disbursed for GME has increased from approximately 14% (\$80 million of \$579 million) in 2013 to 49% (\$718 million of \$1,452 million) in 2021. Conversely, during the same period, the share of GME funding from Medicare has declined from 86% to 51%. (See Exhibit 14.)

Exhibit 14

Medicaid Funding for GME Programs and the IME Program Has Increased Relative to Medicare Funding



Source: OPPAGA analysis of AHCA GME Reports and Medicare Hospital Cost Report data.

Disbursements from state Fiscal Year 2013-14 through state Fiscal Year 2021-22 have exceeded \$2.36 billion.⁵⁷ The increase in state GME funding programs continues to target physician specialty areas identified as areas of supply and demand deficit. These funds supported 86 individual healthcare facilities through state Fiscal Year 2021-22. (See Appendix D, Exhibit D-2, for more information on the number of individual health care facilities supported by each state program.)

The number of health care facilities receiving funds has steadily increased from state Fiscal Year 2013-14 through state Fiscal Year 2021-22. The number of health care facilities that have received state funding increased from 43 recipients in state Fiscal Year 2013-14 to 79 recipients in state Fiscal Year 2021-22. These funds supported 86 individual health care facilities through state Fiscal Year 2021-22. (See Exhibit 15.)

⁵⁷ Two additional programs are not included in the follow tables. Psychiatry funds are limited to a single facility and were not part of AHCA’s proviso program planning. The Slots for Doctor’s program is new.

Exhibit 15

The Number of Unique Health Care Facilities That Received GME and IME Funding Increased Each Year

State Fiscal Year	SMRP	Startup Bonus	High Tertiary	Severe Deficit	Primary Care	Mental Behavioral Health	Indirect Medical Education	Number of Unique Facilities
2013-14	43	-	-	-	-	-	-	43
2014-15	53	-	-	-	-	-	-	53
2015-16	59	53	-	-	-	-	-	60
2016-17	60	55	-	-	-	-	-	61
2017-18	60	59	-	-	-	-	-	64
2018-19	63	58	8	14	3	-	-	65
2019-20	62	60	8	14	4	-	-	68
2020-21	73	68	8	17	5	3	33	77
2021-22	73	73	8	19		3	33	79
Total	81	79	8	20	5	3	33	86

Source: OPPAGA analysis of AHCA GME Reports.

Of the 86 health care facilities receiving GME Medicaid funds for GME and IME from state Fiscal Year 2013-14 through state Fiscal Year 2021-22, 60% (over \$1.42 billion of \$2.36 billion) of all funds went to five hospitals: Jackson Health System (\$612 million), University of Florida Health Shands (\$529 million), Tampa General Hospital (\$103 million), University of Florida Health Jacksonville (\$93 million), and Orlando Health (\$80 million). (See Appendix D, Exhibit D-6 for the number of facilities receiving GME funding, the percentage of facilities each year receiving funding, the total disbursements, and the percentage of appropriations disbursed by year.)

The state's two largest hospitals (as defined in statute) accounted for 48% of all GME and IME funding disbursed from 2013 through 2022: Jackson Health System (26%) and University of Florida Health Shands (22%). (See Addendum, Exhibit 1.)

Residency positions in Florida increased over the past 10 years

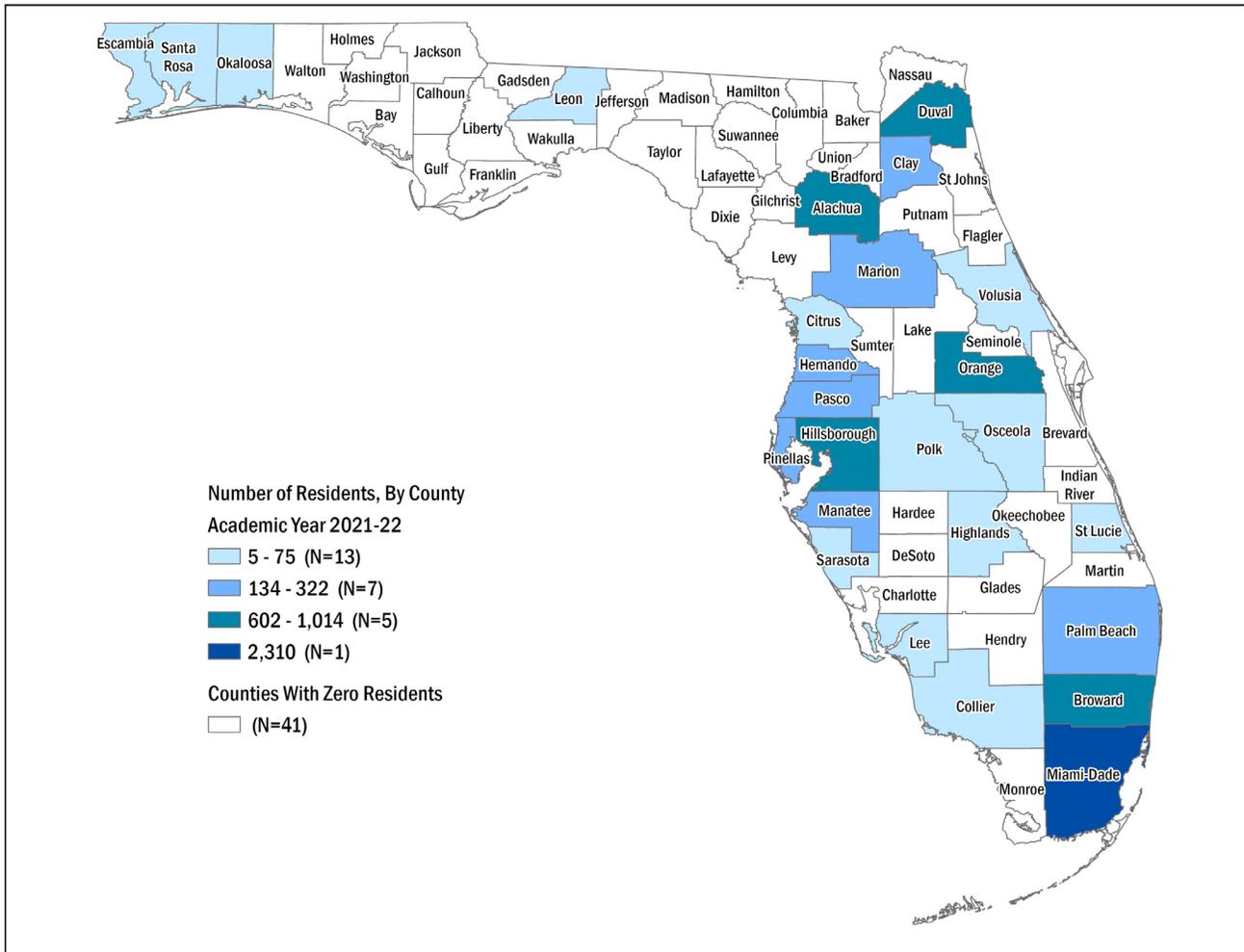
Florida ranked 21st among states for the number of GME residents per capita in academic year 2021-22.⁵⁸ Between 2010 and 2020, the state had more than four times the rate of growth (108%) in residents and fellows compared to the rest of the nation (25%). Medicaid funding supported most residents and has grown GME in the state. From state Fiscal Year 2013-14 through state Fiscal Year 2021-22, as state funding increased so did the number of residents, although the amount per FTE supported by SMRP decreased during the same period. Since the Start-Up Bonus Program began, its funding has been used to increase FTEs in supply and demand deficit specialty areas. Between academic years 2012-13 and 2021-22, approximately 15% of the total number of approved positions were not filled by a resident at the beginning of the year. Despite increases in state funding, health care facilities and sponsoring institution reported that funding is a barrier to further GME growth.

There is a strong association between the location of the physicians' GME site and the location of their eventual practice.⁵⁹ In academic year 2021-22 there were more Florida residents training in Clay, Duval, Miami-Dade, Marion, and St Johns counties than in other counties. (See Exhibit 16.)

⁵⁸ In academic year 2021-22, Florida had 37 residents per 100,000 population compared to the national average of 45.9 per 100,000.

⁵⁹ Goodfellow, Amelia, et al. "Predictors of Primary Care Physician Practice Location in Underserved Urban and Rural Areas in the United States: A Systematic Literature Review." *Academic Medicine* 91, no. 9 (September 2016): 1313-1321. doi:10.1097/ACM.0000000000001203.

Exhibit 16
The Number of Residents Training in Each County Varies



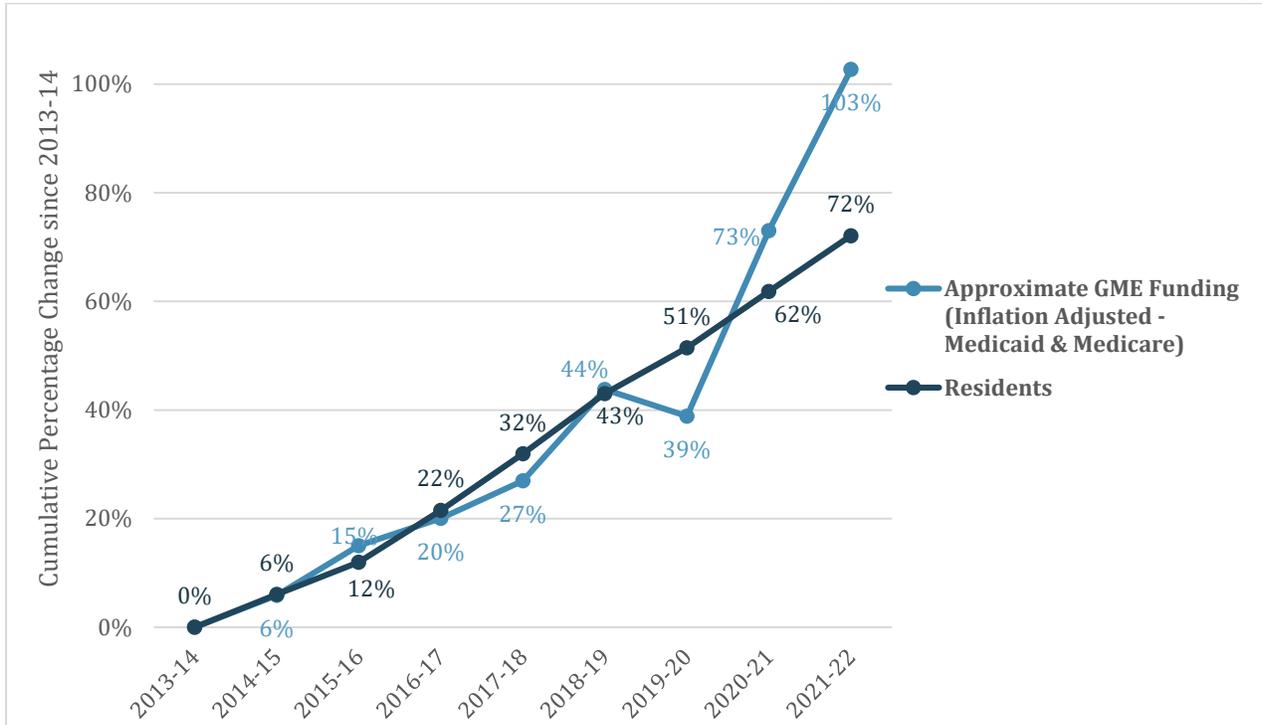
Source: OPPAGA analysis of ACGME data.

Medicaid funding supported most residency positions and grew GME in Florida. From state Fiscal Year 2013-14 through state Fiscal Year 2021-22, as state funding increased so did the number of residents. Specifically, as Florida’s Medicaid program funding for GME increased from state Fiscal Year 2013-14 (\$80 million) to state Fiscal Year 2021-22 (\$718.4 million) the number of filled GME positions steadily increased (from 4,686 to 8,065). (See Appendix E, Exhibit E-3 for the growth in number of positions filled and total Medicaid funding by year.)

Between Fiscal Years 2013-14 and 2018-19, inflation-adjusted GME Medicaid and Medicare funding growth (44% growth) and cumulative growth in the number of residents (43% growth) were similar. However, from Fiscal Year 2019-20 through Fiscal Year 2021-22, the growth in the number of residents was not as closely correlated with growth in inflation-adjusted funding. (See Exhibit 17.) Although there can be a lag between funding increases and new positions being created or filled, for most of the period, from the baseline year the growth in positions was largely in line with the growth in funding.

Exhibit 17

Between Fiscal Years 2013-14 and 2018-19, Growth in Residents Corresponded With Growth in Total Funding



Note: Funding represents the cumulative percentage growth of inflation-adjusted GME funding since 2013-14.

Source: OPPAGA analysis of AHCA Medicaid Funding Data, CMS Cost Reports, and ACGME and AOA data filled positions data.

Although the GME Startup Bonus Program prioritizes funding for increasing residency program FTEs in specialties identified as being in a statewide supply/demand deficit, the number of FTEs in these specialties grew slower than other specialties after the Startup Bonus Program was implemented.⁶⁰ Between state Fiscal Years 2015-16 and 2021-22, supply/demand deficit specialties grew by approximately 52% compared to 57% for other specialties.^{61,62} Notwithstanding, slightly more than half of filled positions in Florida are in GME programs that are in a supply/demand specialty deficit.

The amount of SMRP allocations, and thus the amounts disbursed, increased from state Fiscal Year 2013-14 through state Fiscal Year 2021-22, but the amount per FTE has decreased. From state Fiscal Year 2015-16 through state Fiscal Year 2021-22, SMRP funded approximately 99% of all residents in Florida. The number of FTEs supported by SMRP increased by 81%, from 3,562.20 in 2013-14 to 6,431.60 in 2021-22. During the same period, the amount of funding per FTE decreased

⁶⁰ For state Fiscal Year 2022-23, specialties identified in the GAA as Startup Bonus Program fundable were allergy or immunology; anesthesiology; cardiology; colon and rectal surgery; emergency medicine; endocrinology; family medicine; gastroenterology; general internal medicine; geriatric medicine; hematology; oncology; infectious diseases; neonatology; nephrology; neurological surgery; obstetrics/gynecology; ophthalmology; orthopedic surgery; pediatrics; physical medicine and rehabilitation; plastic surgery/reconstructive surgery; psychiatry; pulmonary/critical care; radiation oncology; rheumatology; thoracic surgery; urology; and vascular surgery.

⁶¹ Positions were determined to be bonus-fundable by matching ACGME and AOA specialties with the 2015 CMS list of Intern and Resident Information System specialty codes and crosswalking this against the 2019-20 through 2021-22 AHCA Bonus Application templates. OPPAGA's analyses made some assumptions about whether a position was considered to be fundable or not. These results should be interpreted with caution, as what is considered to be "bonus fundable" is subject to change over time.

⁶² Sponsoring institutions have a variety of considerations outside of community workforce need that influence the decision about which GME programs to grow. Procedure-based specialties such as orthopedics and dermatology generate more clinical income relative to primary care specialties like family medicine and psychiatry. Further, for academic health centers, prestige among peer institutions is important; despite high community demand for primary care positions, centers may choose to invest in a new field of medicine or an emerging subspecialty to enhance academic stature. Rittenhouse, Diane R., MD, MPH, Alexandra S. Ament, and Kevin Grumbach, MD. Sponsoring Institution Interests, Not National Plans, Shape Physician Workforce in the United States. *Family Medicine*. 2020; 52(8): 551-556. DOI: 10.22454/FamMed.2020.507727

33%, from \$22,452 to \$15,128. (See Appendix D, Exhibit D-3, for information on the number of FTEs, and the amount per FTE, supported by SMRP.)

Since the Start-Up Bonus Program began in state Fiscal Year 2015-16, its funding has been used to increase FTEs in supply and demand deficit specialty areas. The Startup Bonus Program prioritizes funding for increasing residency program FTEs (either by expanding capacity in existing residency programs or starting a new residency program). The Startup Bonus Program’s total annual appropriation is \$100 million. As part of this total, \$42.8 million for state Fiscal Year 2015-16 and \$42.3 million for state Fiscal Years 2016-17 through 2023-24 was allocated to the two teaching hospitals with the largest number of resident FTEs—Jackson Health System and University of Florida Health Shands. From these funds, AHCA annually disburses \$100,000 per newly approved FTE in specialty areas identified as being in short supply.⁶³ The remainder of the appropriations for each year is used to support the retention of residents in statewide supply/demand deficit specialties and disbursed to hospitals per (current) FTE in these residency programs.

From state Fiscal Year 2015-16 to state Fiscal Year 2021-22, a total of 25% of Startup Bonus Program funds have been provided to support the 1,750 newly-approved FTEs in the supply/demand deficit specialties. The number of newly-approved FTEs has varied over time, with just 85 approved in the first year of the program and 410 approved in the third year. However, the number of newly approved positions was relatively stable between 2018-19 and 2021-22. (See Appendix D, Exhibit D-4 for percentage of Startup Bonus for new FTEs by year and Appendix D, Exhibit D-5 for how much remaining Startup Bonus Program funds were available per existing FTEs by year.)

The number of sponsoring institutions in Florida has increased, as has the number of GME programs and filled resident positions. Since academic year 2012-13, the number of sponsoring institutions in Florida has increased from 44 to 56. As of academic year 2021-22, Florida had the third highest number of ACGME-accredited sponsoring institutions (56), following California (104) and New York (67). Additionally, from state Fiscal Year 2012-13 to state Fiscal Year 2021-22, the number of GME programs and the number of residents has grown substantially, increasing by 60% and 80%, respectively.⁶⁴ (See Appendix E, Exhibit E-1, for the number of approved and filled residency positions by sponsoring institution.)

Between academic years 2012-13 and 2021-22, approximately 15% of the total number of positions that were approved by ACGME and AOA were not filled by a resident at the beginning of the year.^{65,66,67} (See Appendix E, Exhibit E-2 for the total number of approved and filled positions, by year.) Some

⁶³ Section 409.909, F.S.

⁶⁴ For the purposes of these analyses, OPPAGA excluded institutions that have programs in Florida but are based out of other states (e.g., HCA Healthcare/Mercer University, Kansas City University GME Consortium, Mayo Clinic, U.S. Army School of Aviation Medicine, USA Health).

⁶⁵ According to ACGME, the term “approved positions,” means positions in a residency or fellowship program (GME program) approved based on resources available to the program. The term “approved positions filled” is not an ACGME term.

⁶⁶ This measure should not be confused with NRMP’s “fill rate” measure, which is a measure of the extent to which positions offered for match through the national resident matching process resulted in the position being filled. The NRMP measure is limited to looking at those positions offered for a match.

⁶⁷ OPPAGA obtained data about program and sponsoring institution positions filled from ACGME and AOA. However, ACGME was unable to provide complete information about approved positions for some sponsoring institutions during OPPAGA’s review period. So, this analysis is based on data provided by sponsoring institutions in response to OPPAGA’s information request. As a result, these data are incomplete and generally do not include sponsors who were no longer providing GME at the time of OPPAGA’s information request. In addition, in part due to complications resulting from the transition to a single accreditation system, the information provided by sponsoring institutions may not align with data reported by ACGME and AOA.

stakeholders reported that programs may gradually fill newly-approved positions over multiple years to have a more stable growth cohort.⁶⁸

Most positions that are put into the match are filled by the end of the match period; however, some residency positions may be unfilled at the start of the academic year or become vacant during the year. In OPPAGA's sponsoring institution survey, 33% of 40 respondents reported that since 2014, their institution has experienced having one or more unfilled residency position at the start of the academic year, while 38% reported experiencing positions becoming vacant after the start of the academic year. Survey respondents reported that position vacancies at the start of the academic year may be due to difficulty finding an appropriate candidate to fill the position (33%), residents withdrawing from the program (30%), or resident dismissal from the program (18%).

Residents may choose to discontinue their GME or may transfer to a program at a different sponsoring institution. The 48 respondents to OPPAGA's sponsoring institutions information request reported small numbers of residents who discontinued their GME; the number of residents who discontinued their GME ranged from 0 to 12 residents per institution annually. Of the sponsoring institutions that provided data, all but one reported 27 or fewer resident transfers per year.⁶⁹ For these institutions, when the transfer location of the resident was known, 62% transferred to a residency program outside of Florida.⁷⁰

Sponsoring institutions may fill these vacant positions during the academic year with off-cycle admits (i.e., students who enter the program after the start of the academic year). For the years in which sponsoring institutions provided data, 65% reported zero off-cycle program year-one admits and 75% reported zero off-cycle fellowship admits.⁷¹ The two highest numbers of off-cycle program year one admits reported were 16 and 15; these numbers were reported by only one institution for two years of the review period (academic years 2020-21 and 2021-22, respectively). All other institutions reported 0 to 12 off-cycle program year one admits. The highest number of off-cycle fellowship admits was 9; this was reported by only one institution. All other institutions reported 0 to 8 off-cycle fellowship admits.

Survey respondents reported that state Medicaid funds are crucial for supporting existing residency positions and expanding GME programs.⁷² OPPAGA's survey of healthcare facilities helps to better understand the relationship between GME funding and residency positions. Of the 45 healthcare facility respondents to OPPAGA's survey, 39 reported that they had received Statewide Medicaid Residency Program funding at some point since 2014.⁷³ All of these respondents reported that SMRP funding is very important for supporting residency positions. Of the 39 respondents who reported receiving SMRP funding, most reported that SMRP funding helped their facility maintain the

⁶⁸ For example, if a 4-year residency program receives approval for 12 new positions, the program may opt to fill 3 positions per year over a 4-year period rather than filling all 12 positions in one year. This may have the benefit of allowing the program to have a more stable population of residents flowing through the program, avoiding spikes in demand for educational resources.

⁶⁹ One large sponsoring institution reported between 119 and 199 total resident transfers annually, with 48% to 69% of those transfers to out-of-state residencies and 2% to 6% transferring to unknown locations.

⁷⁰ This only includes instances where the sponsoring institution provided data and the location of the transfer was known. Of all transfers reported, 20% transferred to an unknown location. Additionally, for at least 28% of responses, information on transfers was unavailable or ambiguous. Information was not requested for sponsoring institutions that closed during the review period.

⁷¹ Due to variation in data entry by respondents or a lack of available information, data was ambiguous or unavailable for at least 28% of responses for off-cycle program year one admits and 30% of responses for off-cycle fellowship admits. In addition, the data are generally not representative of sponsoring institutions that stopped providing GME before OPPAGA's information request. Therefore, this may not be representative of all sponsoring institutions during the review period.

⁷² Residency positions refer to the number of distinct individuals that the accrediting body approves the sponsoring institution to accept. Unlike FTEs, these are not fractional. In contrast, FTEs refers to the proportion of a resident's time spent in training at a given facility. Most funding is disbursed on a per-FTE basis to health care facilities.

⁷³ OPPAGA's analysis of AHCA data shows that in state Fiscal Year 2021-22, 92% (73 of 79) of health care facilities receiving GME funding received SMRP funding.

number of residency positions (90%) and helped improve the quality of care and access to care for Medicaid recipients (85%). These respondents also indicated that SMRP funding helped their facility increase the number of residency positions available (64%) and helped increase the number of highly trained physicians working at their facility (67%).

Of the 39 respondents who reported receiving SMRP funding, 87% indicated that all funds available are used during the same state fiscal year in which the funds were received, while 13% indicated that they were unsure if all funds were used during the same state fiscal year. Additionally, 85% of respondents reported using the funds for resident salaries. Many respondents also reported using the funds for creating additional residency positions (64%) and for creating additional residency programs (54%).

Eighty percent of respondents to OPPAGA's healthcare facility survey reported receiving funding from the GME Startup Bonus Program.⁷⁴ Of those who indicated receiving these funds, 61% reported receiving funds for newly created residency positions as well as funds for retention of residents in supply/demand deficit specialties. Twenty-eight percent of respondents reported receiving only funds for newly created residency positions, while 11% reported only receiving funds from the retention of residents in supply/demand deficit specialties. Of the respondents who received GME Startup Bonus Program funds, 72% reported that their facility typically uses all funds available through the GME Startup Bonus Program during the same state fiscal year in which the funds were received, while 11% reported that they did not typically use all the funds in the same state fiscal year. All respondents who indicated that they did not typically use all available funds in the state fiscal year in which the funds were received reported that because AHCA provides lump-sum payments through the GME Startup Bonus Program, it is common for facilities to prorate the use of the funds over time as the facilities build or grow programs.

Thirty-three hospitals received IME funding. OPPAGA asked representatives of three of these hospitals—one representing a hospital that received less than the average of IME funding for all three distribution years, one that received approximately the average for all three years, and one of the top two recipients of IME funding for all three years—about how they used IME funding. All three hospitals reported using IME funding to support existing residency programs, including to help offset the additional costs of hosting residents, such as additional or unnecessary tests, nurses, and support staff spending more time assisting the resident and providing competitive wages, benefits, and educational support to recruit the best residents. Two hospitals reported being able to use IME funding to support more residents.

Of the 36 respondents who reported receiving some form of funding from the GME Startup Bonus Program, 97% reported that this funding is very important for supporting residency positions. Respondents most frequently reported using these funds for program startup costs (83%) and resident salaries (86%). Respondents also reported utilizing the funds to create additional residency programs (69%) and to create additional residency positions (69%).

⁷⁴ OPPAGA's analysis of AHCA data shows that in state Fiscal Year 2021-22, 92% (73 of 79) of health care facilities receiving GME funding received funding from the Start-Up Bonus Program.

Despite increases in state funding, health care facilities and sponsoring institutions reported that funding is a barrier to further GME growth. In addition to the healthcare facility survey, OPPAGA also surveyed sponsoring institutions.⁷⁵ Twenty-eight of the sponsoring institution respondents reported an increase in the number of residency positions at their institution since 2014. Of those who reported an increase in the number of residency positions, 13 respondents indicated that state GME funding from programs such as SMRP and the GME Startup Bonus Program influenced this increase in residency positions.

However, health care facilities and sponsoring institutions that responded to OPPAGA's surveys indicated that funding was still a barrier to GME growth. Most respondents from sponsoring institutions (71%) and hospitals (76%) indicated that a lack of funding was a barrier to increasing the number of residency positions. Of the respondents who indicated that funding was a barrier to further GME growth, 45% of healthcare facilities and 44% of sponsoring institutions indicated that, in particular, the funding ceiling created by the Medicare cap is a barrier.

Approximately one-third (34%) of sponsoring institution respondents reported that increasing funding was their strategy for increasing the number of available residency positions at their institution. Of those who indicated that their strategy was increasing funding, three respondents reported utilizing state funding, three reported using foundation funding, and two reported using grant funding.

The number of medical school graduates and GME residents retained as practicing physicians has increased; retention rates have remained relatively stable over time

According to the Association of American Medical Colleges, Florida continuously ranked in the top five among states for retention of residents to practicing physicians from 2006 to 2020. During the same period, Florida ranked in the top 10 for retention of undergraduate medical school students to practicing physicians.⁷⁶ For residents who completed both undergraduate and graduate medical education in Florida, the state continuously ranked in the top seven.

In 2020, the most recent year for which data is available, Florida ranked 4th for retention of residents to physicians. The state ranked 10th among states for retention of its undergraduate medical school students to practicing physicians and 5th for the percentage of those retained who completed both medical school and GME in-state. (See Exhibit 18.)

⁷⁵ OPPAGA surveyed 56 sponsoring institutions and received 40 responses, a 71% response rate.

⁷⁶ While the AAMC retention calculations allow for national comparisons, the calculations were not equivalent to OPPAGA's retention calculations. AAMC examined the state of practice for all active physicians in the U.S. who completed their residency in Florida in a 10-year period, while OPPAGA examined the state of practice for only those who likely completed residency in Florida during a single year to allow for identification of trends.

Exhibit 18

Florida Ranked 5th in the Nation by Percentage of Retention of Physicians Who Completed Both Medical School and GME in State, 2020

State	Rank	Number of Medical School and GME Graduates	Number Retained from State's Medical School and GME Programs	Percentage of Physicians Retained from State's Medical School and GME Programs
Hawaii	1	617	534	87%
California	2	26,902	21,915	82%
Texas	3	22,286	18,074	81%
Arkansas	4	2,401	1,929	80%
Florida	5	6,211	4,897	79%
Indiana	6	4,703	3,655	78%
Mississippi	7	1,721	1,337	78%
Nevada	8	295	227	77%
South Carolina	9	2,606	1,975	76%
Oklahoma	10	2,738	2,073	76%
United States		249,011	168,192	68%

Source: Association of American Medical Colleges, 2022.

Statewide, the number of medical school graduates and GME residents retained as practicing physicians has increased; retention rates vary by hospital

Because the AAMC retention measures do not allow for examination of trends in retention among more recent GME completers, OPPAGA examined similar measures. OPPAGA analyzed several measures of retention to describe the pipeline from Florida's undergraduate medical education to licensed, practicing Florida physician to determine how retention may have changed over time. OPPAGA examined Florida's retention from undergraduate medical education to GME; from GME to licensed, practicing physician; and from undergraduate medical education to licensed, practicing physician in Florida.⁷⁷

Between academic years 2012-13 and 2021-22, the number of Florida medical school graduates grew, and during this period the number of graduates who went on to Florida GME also increased. The rate of retention for Florida GME participants to Florida practicing physicians has decreased, however the overall number of residents retained has increased for the period for which there is data (i.e., 2003-2016). The retention rate for practicing physicians in Florida is highest for those who attended a Florida medical school and Florida GME, at 75%. (See Appendix A for additional information on OPPAGA's methodology.)

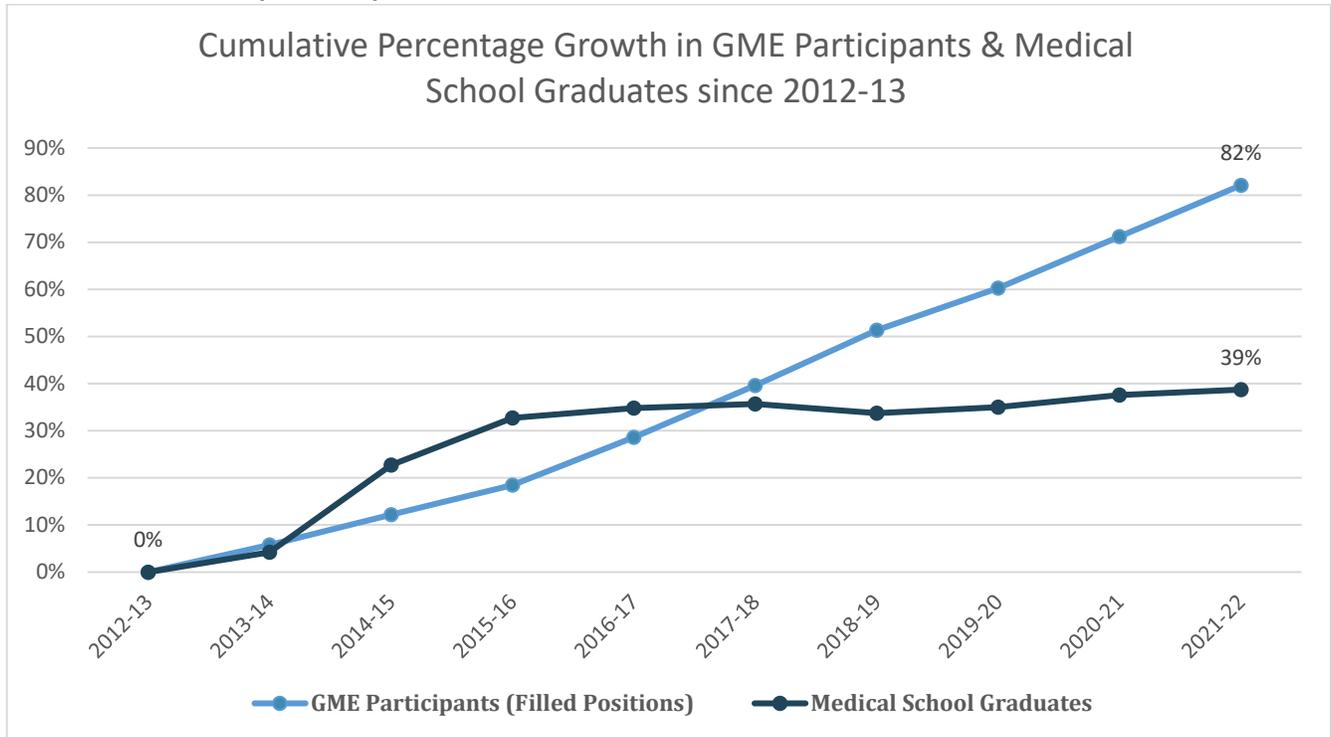
The number of Florida medical school graduates and GME participants increased from academic year 2012-13 to academic year 2021-22; during this time, GME participants increased approximately twice as much as medical school graduates

The growth in GME participants outpaced the growth in medical school graduates from academic year 2012-13 to academic year 2021-2022. During this period, the number of graduates from Florida medical schools increased by 39% (from 976 to 1,354) compared to 82% (from 4,429 to 8,065) for GME participants. (See Exhibit 19.)

⁷⁷ See Appendix A for a complete description of the methodological decisions and limitations that inform this section. As a result of these limitations, different periods of data are presented throughout this and subsequent sections.

Exhibit 19

Growth in GME Participants Outpaced Growth in Medical School Graduates



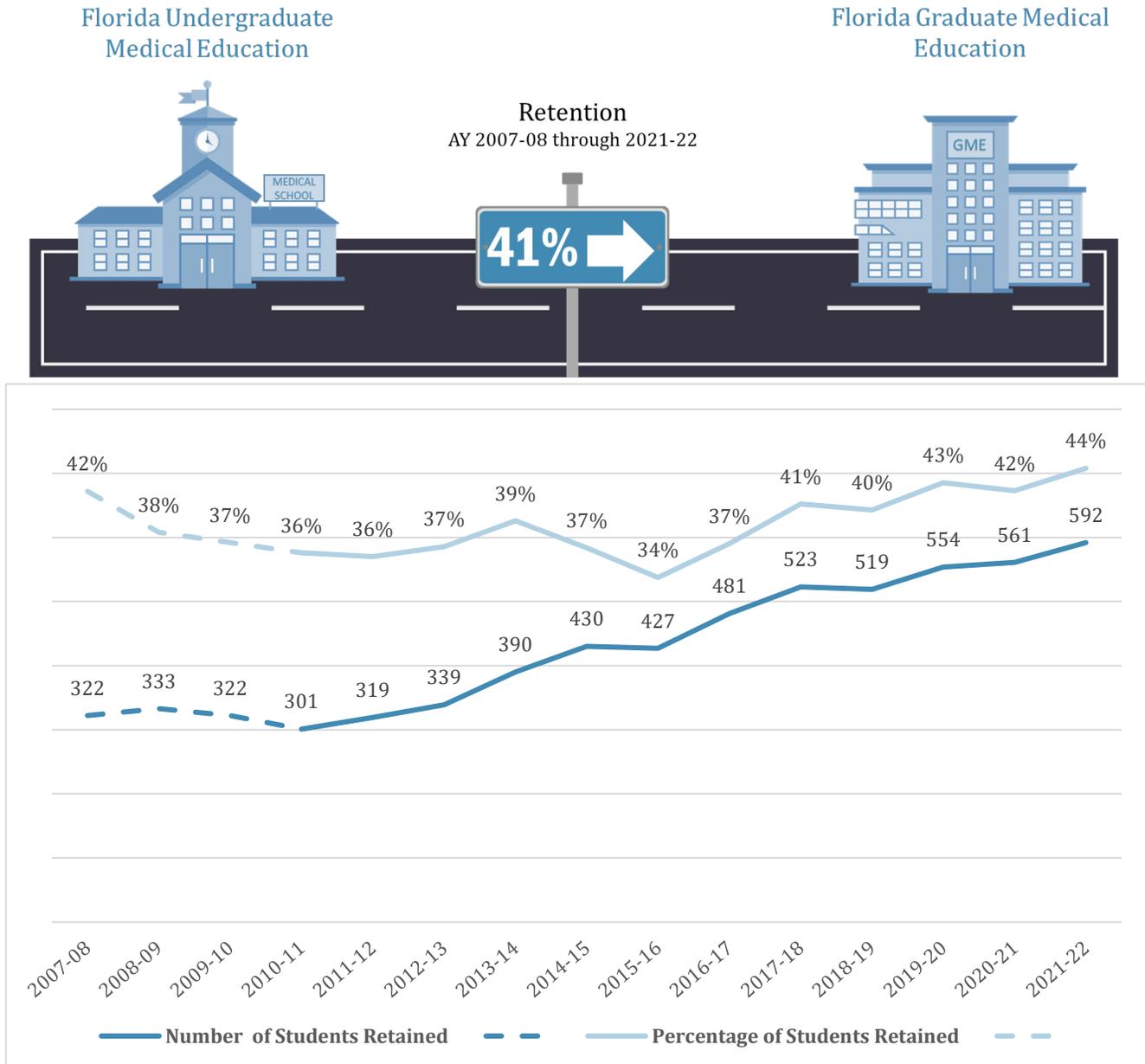
Source: OPPAGA analysis of data from the AOA, ACGME, Florida Board of Governors, American Association of Colleges of Osteopathic Medicine, and Association of American Medical Colleges

Of the 15,787 Florida medical school graduates from academic years 2007-08 to 2021-22, 41% were retained to continue their education in state by matching to a Florida GME program. Florida retained 44% of its medical school graduates to a Florida GME program in academic year 2021-22, slightly more than in academic year 2007-08 (42%).⁷⁸ (See Exhibit 20.)

⁷⁸ Nova Southeastern University College of Osteopathic Medicine did not provide information about matches for graduates from 2007-08 through 2009-2010. This omission will affect the accuracy of both counts and rates of retention for these years. To account for this, OPPAGA estimated figures for Nova Southeastern University College of Osteopathic Medicine for those three years based on graduation counts from AACOM.

Exhibit 20

The Number of Graduates From Florida Medical Schools who Matched to Florida GME Increased From Academic Year 2007-08 to Academic Year 2021-22



Note: Dashed lines represent estimated values accounting for the missing data from Nova Southeastern College of Osteopathic Medicine based on an assumption that the college’s average retention rate was the same as in subsequent years.

Source: OPPAGA analysis of College and University Medical School data.

The percentage retained in a given year may be associated with the relative growth rates of medical school graduates versus GME positions filled. In particular, between academic years 2013-14 and 2015-16 as medical school graduates grew more quickly than GME, the percentage of medical school graduates retained to Florida GME declined. After 2015-16, as medical school graduates grew more slowly than GME positions, the percentage retained increased.

Between academic years 2007-08 and 2021-22, most medical schools had between 35% and 39% of graduates retained to GME in Florida. Just three were outside this range, with Nova Southeastern University College of Osteopathic Medicine (46%) and the University of South Florida (45%) at the

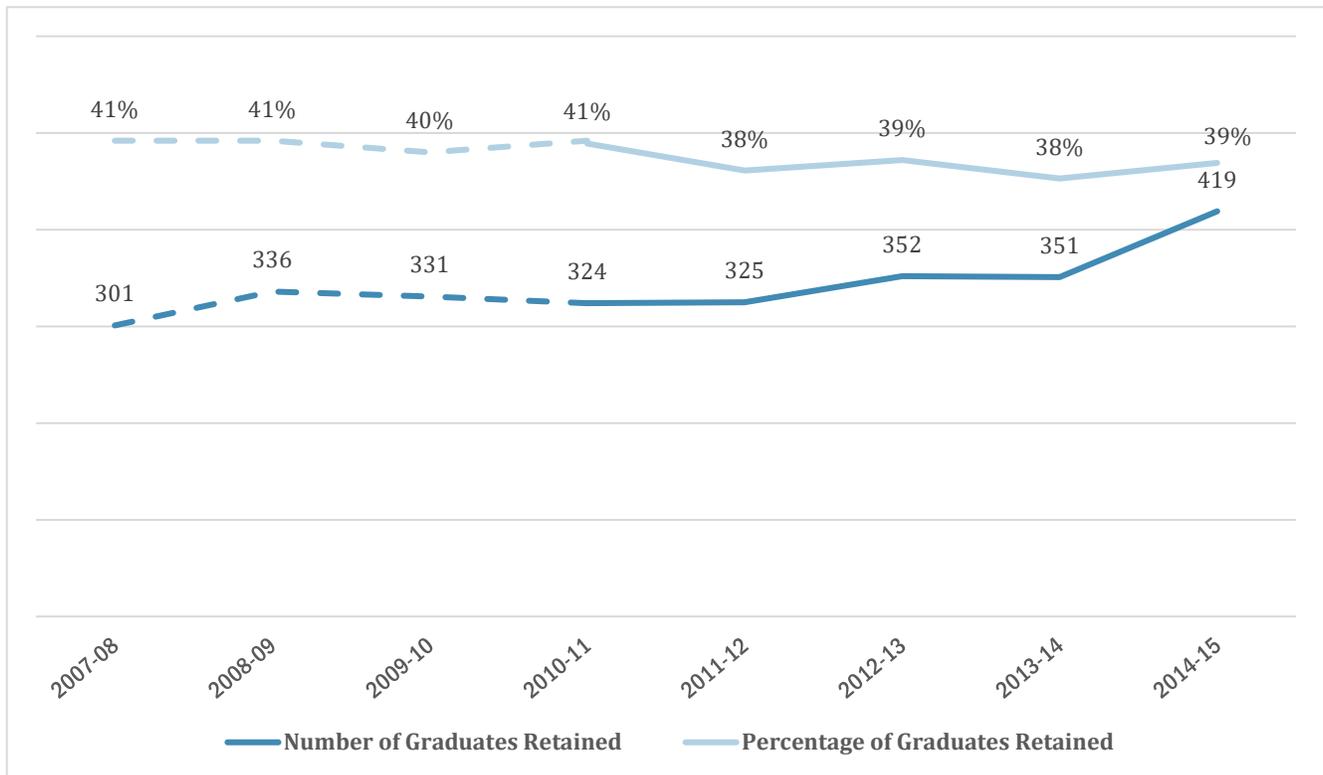
high end and Florida Atlantic University at the low end (30%).⁷⁹ (See Appendix F, Exhibit F-1, for the retention of graduates to Florida GME, by medical school.)

The retention of Florida GME students is most successful when they are also graduates of Florida medical schools

Approximately 40% of students who graduated from a Florida medical school from academic year 2007-08 through academic year 2014-15 who matched to a GME program (in or out of Florida) ultimately practiced as a Florida physician after completing GME.^{80,81} While the percentage of Florida medical school graduates retained as physicians in Florida was relatively stable over this period, due to growth in medical school graduates, the number retained increased by 39%, from approximately 301 of the 2007-08 graduates to 419 of the 2014-15 graduates. This growth in overall graduates retained corresponds with the growth of GME programs and positions in Florida.⁸² (See Exhibit 21.)

Exhibit 21

While the Percentage of Florida Medical School Graduates Retained as Florida Physicians Has Remained Relatively Stable, the Number of Medical School Graduates Retained Has Increased Over Time



Note: Dashed lines indicate that imputed values for the missing data from Nova Southeastern College of Osteopathic Medicine was used based on an assumption that numbers and percentages were the same in these years as in subsequent years.

Source: OPPAGA analysis of College and University Medical School data and Department of Health licensure data.

Fifty percent of those who began their GME in Florida between calendar years 2003 and 2014 were practicing in Florida after the completion of their GME. Since 2003, the percentage of Florida residents who became licensed physicians in the state appears to have slightly decreased, from approximately

⁷⁹ Retention from Florida medical schools to Florida GME could be affected by a variety of factors, including the specialty mix offered in Florida, the reputation of the sponsoring institution, and where the student base is from (e.g., rural or urban, in state or out-of-state).

⁸⁰ This analysis ends at academic year 2014-15 to account for the time it takes to complete GME and apply for and obtain licensure. The results in this and the following section precede the recent growth of GME in Florida.

⁸¹ For this analysis, OPPAGA included physicians practicing with either a full or training license.

⁸²See Appendix A for a description of the methods involved in, and limitations of, this retention analysis.

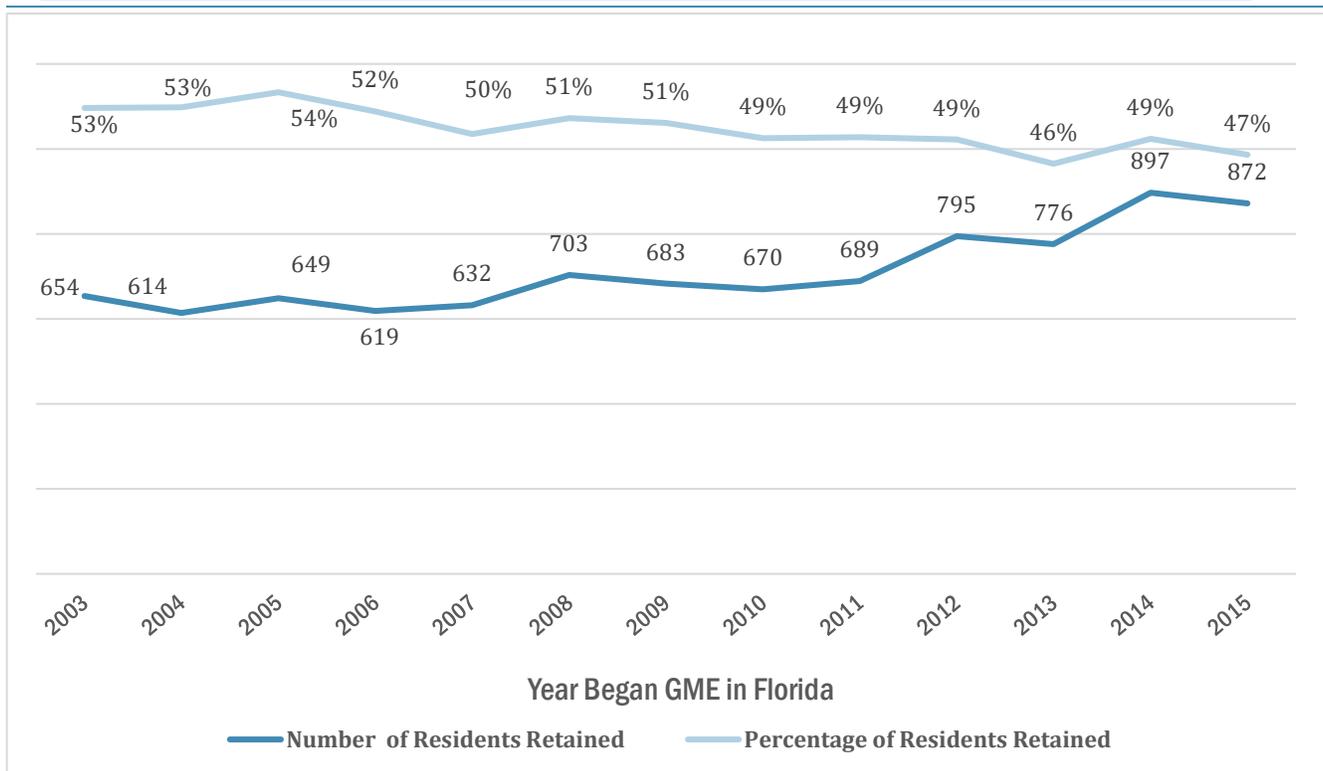
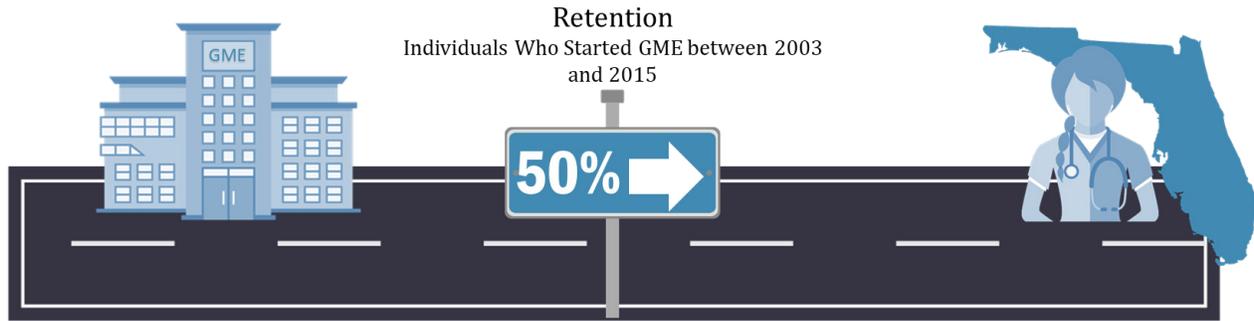
53% of residents starting their GME in Florida in 2003 to 47% of those starting GME in 2015. However, the number of residents retained in the state increased from 654 in 2003 to 872 in 2015.⁸³ (See Exhibit 22.)

Exhibit 22

While the Percentage of Florida Residents Retained as Florida Physicians Has Decreased Over Time, the Number of Residents Retained Has Increased

Florida Graduate Medical Education

Florida Physician



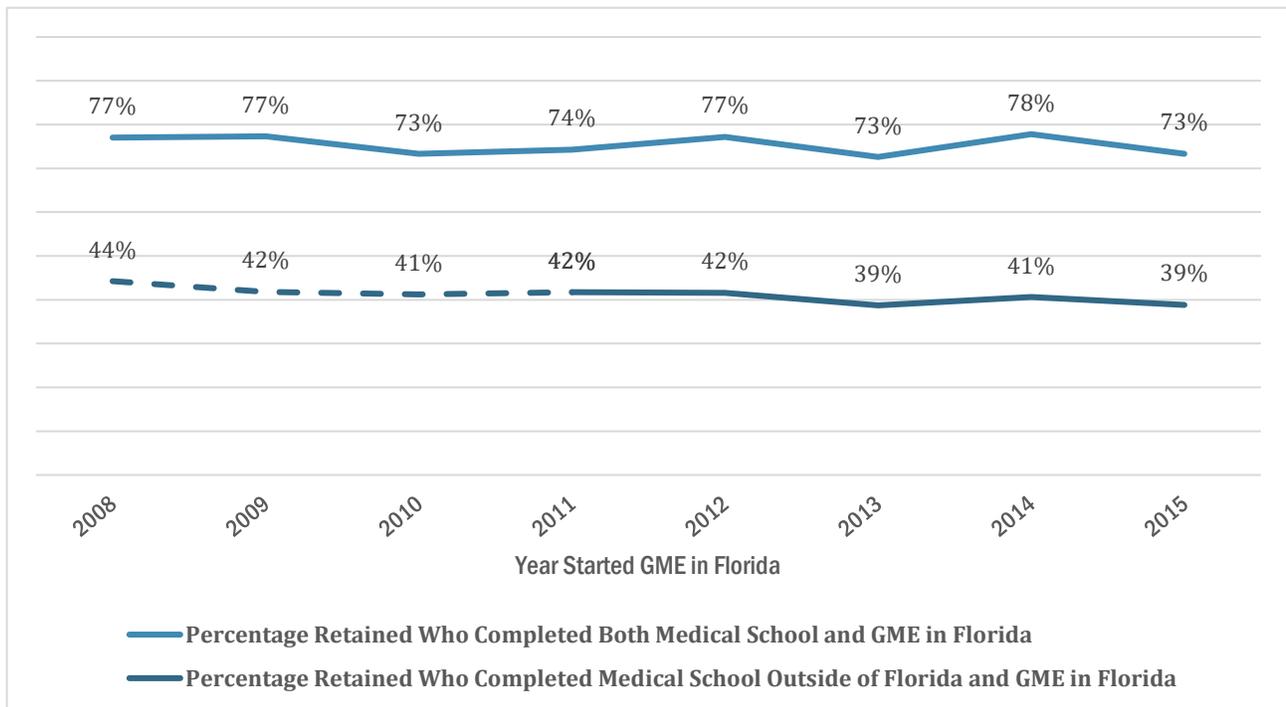
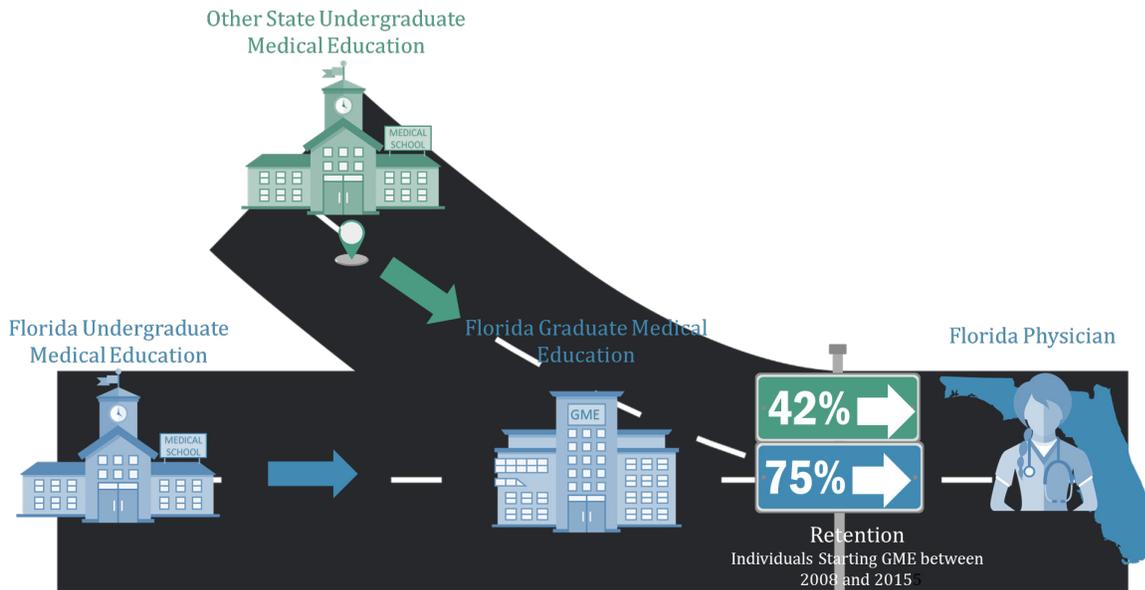
Source: OPPAGA analysis of Department of Health licensure data.

Most notably, of Florida medical school graduates who started GME between calendar years 2008 and 2015 and matched to a GME program in Florida, approximately 75% were licensed and practicing in Florida two years after completion of their GME training. In contrast, only 42% of those who started GME training in Florida but completed medical school in another state were retained as licensed Florida physicians. (See Exhibit 23.)

⁸³ These percentages are estimates that are affected by several data limitations, including changes to data systems over time and the need to use secondary indicators of GME participation and completion due to insufficient primary data. As a result, small percentage differences should not be presumed to reflect real changes and may be a result of the imprecision of these estimates.

Exhibit 23

Between 2008 and 2015, 75% of Those Who Completed Both Medical School and GME in Florida Were Retained, While Only 42% Who Completed Medical School Outside of Florida Were Retained



¹ The dashed line represents estimated values accounting for the missing data from Nova Southeastern College of Osteopathic Medicine. Values were imputed based on the assumptions that the college's average retention rate from medical school to Florida GME were the same as in subsequent years and the percent of Florida GME participants retained to the Florida workforce were the same as the rest of the state for their medical school graduates. In addition, the line showing the retention rates of residents who completed both medical school and GME in Florida shows more year-to-year variability in part because the number of GME participants in this analysis is small (ranging from 209 to 454).

Source: OPPAGA analysis of College and University Medical School data and Department of Health licensure data.

The retention of residents completing GME in Florida to practicing physician varies by the hospital where the resident trained

Of residents who had their last year of GME in academic year 2015-16 through academic year 2019-20, the retention from resident to Florida physician two years after residency completion varied

among hospitals with at least 200 residents (11 hospitals), ranging from 64% (Orlando Health) to 37% (Nicklaus Children’s Hospital).⁸⁴ These hospitals had an average retention rate of 51%. For the 52 hospitals with fewer than 200 residents, 45% became physicians in Florida. (See Exhibit 24.)

These results are descriptive and do not address the causal factors that may contribute to variation in retention rates across hospitals. Further, in instances where residents rotate through multiple sites, the data reflects the hospital where the resident completed the largest share of their GME. Accordingly, attribution of a retention outcome to a specific hospital is inappropriate.

Exhibit 24

Hospitals With 200 or More Residents Retained an Average of 37% to 64% of Residents From GME to Florida Physician From 2015-16 to 2021-22¹

Hospital	Average Retention Rate	Number of Residents Retained	Total Number of Residents Completing GME
Hospitals with 200 or more residents (n = 11)	51%	2838	5600
Jackson Health System	45%	607	1337
University of Florida Health Shands	48%	524	1100
Tampa General Hospital	62%	458	737
University of Florida Health Jacksonville	47%	200	423
Orlando Health	64%	249	389
Larkin Community Hospital	51%	186	365
Moffitt Cancer Center	57%	163	285
Advent Health Orlando	52%	147	284
Mayo Clinic	42%	115	274
Mount Sinai Medical Center	56%	114	204
Nicklaus Children's Hospital	37%	75	202
Hospitals with less than 200 residents (n = 52)	45%	1489	3275
Total	49%	4,327	8,875

¹Conclusions cannot be drawn about the non-hospital sites (FQHCs and Behavioral/Mental Health Clinics) Florida has funded; these facilities have numbers too small to calculate a retention rate.

Source: OPPAGA analysis of AHCA Statewide Medicaid Residency Program data and Department of Health licensure data.

Stakeholders reported barriers to retaining residents and made several recommendations

Health care facilities and sponsoring institutions reported challenges to retaining medical students and residents, including geographic characteristics, institution characteristics, and the limited number of residency slots. Ninety-six percent of all healthcare facility respondents to OPPAGA’s survey indicated that their facility actively seeks to retain residents as licensed physicians following the completion of their GME. However, 76% of health care facility respondents estimated that they employ 25% or less of their former residents.⁸⁵ The reasons most frequently reported by health care facility respondents for physicians leaving Florida following their residency were to be closer to family (84%), to pursue additional training or fellowships outside Florida (69%), and to be in a desired location or practice settings outside Florida (33%).

Both sponsoring institutions and healthcare facilities reported that geographic and institution characteristics are barriers to attracting medical school graduates to Florida GME programs as well as

⁸⁴ Hospitals with fewer than 200 residents are not presented individually as the rates could be unstable or unreliable.

⁸⁵Healthcare facility respondents reported employing between 2% and 75% of their former residents.

for attracting and retaining physicians to practice long term in Florida. Twenty-seven percent of sponsoring institution respondents stated that geographic characteristics (e.g., cost of living, job market for spouses) were a barrier to attracting medical school graduates to GME programs, while 24% stated that institution characteristics (e.g., lack of certain specialties, limited residency slots) were a barrier. Similarly, 54% of healthcare facility survey respondents reported that geographic characteristics were a barrier to attracting medical school graduates to GME programs at their facility.

Survey respondents reported similar barriers for attracting and retaining physicians to practice long term in Florida. Thirty-seven percent of sponsoring institution survey respondents and 51% of healthcare facility survey respondents stated that the high cost of living was a barrier to attracting and retaining physicians to practice long term in Florida. Additionally, 29% of sponsoring institution respondents reported that low pay was a barrier to retaining physicians in Florida, while 27% of healthcare facility survey respondents reported that a lack of funding was a barrier.

Survey respondents provided recommendations for attracting and retaining physicians to practice long term in Florida. Sponsoring institution respondents most frequently cited loan repayment/forgiveness programs (29%), offering competitive salaries (20%), and providing cost of living incentives (17%) as recommended strategies for attracting and retaining physicians to practice long term in Florida. Healthcare facility respondents most frequently recommended offering loan repayment/forgiveness programs (27%), offering good work-life balance (24%), and offering competitive salaries (22%) as strategies for attracting and retaining physicians to practice long term in Florida. Some (15%) healthcare facilities also recommended offering sign-on bonuses.

DOH has several programs that seek to attract and retain physicians to Florida

DOH promotes HRSA's National Health Service Corps Loan Repayment Program. The program provides loan repayment for clinicians in an enrolled National Health Service Corps site. The approved sites provide outpatient, primary health services in Health Professional Shortage Areas, which are geographic areas, population groups, or health care facilities that HRSA has designated as having a shortage of health professionals in the areas of primary care, dental health, and mental health. In 2022, 125 physicians participated in the program in medically underserved areas in Florida.

The department also administers the Florida Reimbursement Assistance for Medical Education program. Created in 2022, the goal of the Florida Reimbursement Assistance for Medical Education program is to encourage medical professionals to practice in underserved areas in the state by providing annual payments to offset the loans and educational expenses they incurred for studies leading to their degrees. Physicians are eligible to be reimbursed up to \$20,000 per year, contingent on continued proof of primary care practice in a rural hospital or an underserved area designated by the department.⁸⁶ DOH may use funds appropriated for the program as matching funds for federal loan repayment programs such as the National Health Service Corps State Loan Repayment Program.

In 2020, the department created and deployed a social media campaign called Think Florida to attract physicians from across the U.S. to consider GME placements in Florida. The campaign, timed to occur when medical students were evaluating possible GME locations, promoted advantages of coming to Florida, including the state's climate and its nationally recognized hospitals. The information also highlighted the number of GME spots in Florida, the speed of medical licensure in the state, and the amount of federal funding that is supporting biomedical research.

⁸⁶ As defined in s. 395.602(2)(b), *F.S.*

CONCLUSIONS

Florida has made significant investments in growing graduate medical education, and these investments have yielded more GME positions. Florida's investment in GME through Medicaid increased by 1,205% from state Fiscal Year 2013-14 to state Fiscal Year 2023-24. In 2021-22, Medicaid comprised approximately half of all GME funding in the state. The majority of the state match for GME funding was through local government contributions in the form of IGTs. As state funding increased, so too did the number of residents. Specifically, as Florida's Medicaid program funding for GME increased from state Fiscal Year 2013-14 (\$80 million) to state Fiscal Year 2021-22 (\$718.4 million), the number of filled GME positions steadily increased (from 4,686 to 8,065).

Research shows that physicians often remain in the state where they complete their training. Expanding the number of residency positions in a state may thus increase the number of physicians in the state's workforce. Because Florida is retaining GME graduates at approximately the same rate over time, it is retaining more physicians to practice in the state as GME positions have increased. OPPAGA found that Florida retained approximately 50% of individuals who started GME from academic year 2003-04 through academic year 2014-15. The retention of Florida GME students is most successful when the individuals are also graduates of Florida medical schools. Between 2008 and 2015, 75% of those who completed both medical school and GME in Florida were retained, while only 42% who completed medical school outside of Florida were retained.

Although Florida has made strides in creating more GME positions and retaining more physicians, the need is still great. Recent studies have found that the number of physicians in Florida is inadequate to meet demand, and one study estimated that Florida will have the second largest physician shortage in 2030 among all states. Although the number of practicing physicians in Florida has increased, in part because of the state's investment in GME, the state's population has also increased. The number of physicians per capita was approximately the same in Fiscal Year 2021-22 as it was 10 years prior. However, it is likely too early to know if the recent funding growth will result in even more rapid growth in GME in Florida and an improvement in current and projected future physician workforce sufficiency.

RECOMMENDATIONS

While Florida has retained more residents to the state as the Legislature has increased state funding, strategies could be implemented to further increase the retention rate. In addition, Florida lacks state-level planning that includes policy priorities and clear objectives, which hinders the tracking of outcomes to gauge progress over time. The Legislature could direct OPPAGA to conduct periodic assessment of Florida's GME system, and to facilitate such analyses, direct the Department of Health to convene a data workgroup to enhance graduate medical education data collection and reliability, which aligns with the department's statutory responsibilities related to GME and the physician workforce. The Legislature could also strengthen the Agency for Health Care Administration's ability to receive financial data from participating health care facilities so that the agency could employ a payment methodology that reflects true costs to the facilities it funds.

Increase Retention

Because OPPAGA’s analysis shows that it is much more likely that Florida GME residents will become practicing physicians in Florida when they also attended medical school in Florida, the Legislature could consider directing sponsoring institutions that receive state funds to give priority in match rankings to graduates of Florida-based medical schools.

In addition, DOH could continue to explore strategies for resident recruitment and retention, including information about opportunities and benefits of training and practicing in Florida similar to the 2020 Think Florida media campaign. Additional media campaigns using multiple outlets could continue to highlight Florida as an attractive destination. DOH could expand their current physician workforce survey to further explore the reasons physicians are leaving Florida and develop strategies to address them.

Develop State-Level Planning

State-level planning may help manage the complexity of GME funding and outcomes by identifying clear objectives and policy priorities. DOH supports a multi-stakeholder workgroup—the Physician Workforce Advisory Council—to create Physician Workforce Annual Reports with recommendations based on a yearly survey.⁸⁷ DOH is also responsible for working with the PWAC to create a state strategic plan for physician workforce assessment and development, but department officials reported that the plan has not been updated since 2013.

Continuously updating a strategic plan with the PWAC and including the Council of Medical School Deans’ GME Workgroup would allow the department to articulate GME goals, metrics, and state strategies, including funding priorities. DOH’s collaboration with the Council of Medical School Deans could include forming strategies to create a strong pipeline for Florida medical schools through Florida GME. DOH could report annually to the Legislature on its progress with and revisions to the strategic plan so the Legislature would have additional information to establish funding priorities.

Conduct Ongoing Analysis

The Legislature may wish to direct OPPAGA to conduct periodic analyses of the state’s GME system. Such analyses could include GME funding, positions, and retention of physicians, and physician specialty and geographic need. In addition, the Legislature could consider directing the Department of Health to work with OPPAGA to enhance data collection and reliability, including requiring the department to convene a multi-stakeholder workgroup. The workgroup could include members of PWAC and the Council for Medical School Deans, and be charged with identifying the most efficient and effective mechanisms for collecting and preparing relevant data sufficient to assess trends in Florida’s GME pipeline and physician retention.

AHCA could improve data collection efforts by

- collecting or consolidating more detailed information about GME-related funding received by health care facilities and their residency programs; and
- routinely compiling data on Medicare funding and caps for GME.

⁸⁷ Section 381.4018, *F.S.*

DOH could improve data collection efforts by

- routinely collecting data from Florida’s medical schools regarding graduates and their matches to GME; and
- creating standardized data files from licensure and physician workforce survey data.

The Legislature could consider directing all hospitals or qualifying institutions that receive state funds through any Florida Medicaid GME program to annually report to AHCA all data determined necessary by AHCA to collect and compile the data files specified above. The Legislature could also consider directing all universities that receive any state funding who have a medical school to annually report to DOH all data determined necessary by DOH to collect, clean, and compile the data files about medical school graduates specified above.

(See Appendix G for details about the recommended data collection and preparation.)

Increase Financial Transparency

To improve financial transparency, the Legislature could consider directing AHCA to establish rules to require health care facilities that receive state GME funding to report detailed records of GME revenues and expenditures and require the agency to contract for regular audits of these entities to verify the accuracy of these reports and identify the number of residents these payments actually support. With more financial transparency, AHCA would be in a position to create rules to utilize a GME payment methodology that recognizes cost differences among residencies based on specialty and other variables.

APPENDIX A

Retention Analysis Methodology

OPPAGA conducted four retention analyses for this report.

- Florida medical school graduates to graduate medical education (GME) in Florida
- Florida medical school graduates to the Florida physician workforce
- Florida GME participants to the Florida physician workforce
- Florida GME participants from hospitals to the Florida physician workforce

Each of these analyses used different data, population selection criteria, timeframes, and tracking durations and had different limitations.

Retention of Florida medical school graduates to GME in Florida

For the analysis of retention from Florida’s medical schools to GME in Florida, with assistance from the Florida Board of Governors, OPPAGA collected data from all Florida public and private medical schools about graduates from academic years 2007-08 through 2021-22 and their initial matches to GME.⁸⁸ This included information about the residencies and, if applicable, internships, the graduates entered.^{89,90} For the 99.5% of graduates who matched to any internship or residency known to the medical school, the graduate was counted as retained for Florida GME if the graduate matched to either an internship or residency with a Florida sponsoring institution.⁹¹

Retention of Florida medical school graduates to the Florida physician workforce

For the analysis of retention of Florida medical school graduates to the Florida physician workforce, OPPAGA used the data on medical schools graduates’ residencies to infer approximately when graduates would complete their residencies based on the established length of each applicable internship and residency program.⁹² A graduate was considered to be retained in Florida’s physician workforce if they were found in the Florida Department of Health (DOH) licensure and physician profile data to be licensed and actively practicing in Florida two years after completing their residency.^{93,94} Since OPPAGA did not have data regarding fellowships the graduates may have entered after completing their residency, the graduate was counted as retained regardless of whether they

⁸⁸ Nova Southeastern University’s Osteopathic College of Medicine did not provide data for graduates between academic years 2007-08 and 2009-10.

⁸⁹ These data indicated when the student graduated from the medical school and the sponsoring institution and specialty for each internship or residency to which the student matched. Fellowships were generally not recorded in the data since they are generally not known to the medical school at the time of the student’s graduation.

⁹⁰ The term “internships” is used here to refer to internships, preliminary year, or transitional year programs.

⁹¹ Since sponsoring institutions in one state may have programs or rotation sites in another state, there can be slight discrepancies between whether the internship or residency was done with a Florida sponsoring institution and whether the internship or residency was physically located in Florida. Due to challenges with collecting reliable data that accounts for these discrepancies, graduates were only counted as doing their GME in Florida if the sponsoring institution for their program was in Florida. During the review period, there were five out-of-state sponsoring institutions with in-state programs (most notably, the Mayo Clinic College of Medicine and Science and HCA Healthcare/Mercer University School of Medicine) which were treated as out-of-state GME).

⁹² Graduates were excluded from the analysis if the university medical school data did not list a residency for the graduate. The combined length of all internships and residencies to which the graduate matched was calculated by adding together the ACGME-recorded length for each applicable program to which the graduate matched.

⁹³ Residents must have a training or full physician license while doing GME in Florida. According to DOH, these licenses are not automatically terminated upon completing GME even if the resident is not practicing in Florida. Since these licenses generally must be renewed every two years, OPPAGA examined the person’s licensure status two years after completing GME. This ensures that the analysis does not count a person as retained if they are not practicing in Florida but simply have an unexpired license from their time in GME.

⁹⁴ An individual was considered to be actively practicing in Florida if they held an active license with an active practicing status and had a Florida primary practice location recorded.

were practicing under a full physician license or a training license, which a person may practice under while doing their GME. As a result of the time needed to track a person for the completion of their residency and subsequent license renewal, this retention analysis is limited to people who graduated from medical school between academic years 2007-08 and 2014-15.

Retention of Florida GME participants to the Florida physician workforce

For the analysis of retention of Florida GME participants to the Florida physician workforce, OPPAGA used DOH physician licensure data to identify individuals first obtaining a Florida physician-in-training license between calendar years 2003 and 2015.⁹⁵ This license is required for all residents until they have completed their first year of GME, after which they may continue their GME under a physician-in-training or full physician license.^{96,97} This approach was intended to identify the majority of residents beginning GME in Florida.⁹⁸ The GME participant was counted as retained if found in the DOH licensure and physician profile data to be licensed with a full physician license and actively practicing in Florida 7.3 years after obtaining the physician-in-training license.^{99,100} OPPAGA matched this analysis population to the university medical school graduates data to further break down the retention rates by whether the resident had also graduated from a Florida medical school.¹⁰¹

Retention of Florida GME participants from teaching hospitals to the Florida physician workforce

OPPAGA also examined whether the retention of Florida GME participants to the Florida physician workforce varied across hospitals. Since hospitals received Statewide Medicaid Residency Program (SMRP) funding for nearly all residents in Florida between state Fiscal Years 2015-16 and 2021-22, OPPAGA used resident-level data on SMRP funding from the Agency for Health Care Administration to determine the primary hospital at which residents practiced while in GME.¹⁰² In addition, since hospitals may claim SMRP funding until a resident completes their GME in Florida, OPPAGA treated the end of the state fiscal year for which the resident was last SMRP-funded as the approximate GME completion date for each resident. The GME participant was counted as retained if found in DOH licensure and physician profile data to be licensed with a full physician license and actively practicing in Florida two years after GME completion. These results are just descriptive, and since residents may rotate through multiple sites, attribution of the retention outcome to a specific hospital may be inappropriate. In addition, this analysis did not address the causal factors that may contribute to variation in retention rates across hospitals nor examine whether the differences were statistically significant.

⁹⁵ This analysis excluded house physicians, who may also practice under supervision with a physician-in-training license, but are not in GME.

⁹⁶ OPPAGA could not identify all people participating in and completing GME in Florida for the full review period using license applications and physician profile data made available by DOH. As a result, the physician-in-training license data was the best available proxy for identifying people starting GME in Florida.

⁹⁷ Except where specified otherwise, in this memo, the term resident is used to refer to people engaged in GME through an internship (or preliminary or transitional year program), residency, or fellowship.

⁹⁸ This may not be inclusive of all residents and may include some people who did a phase of their GME other than a residency in Florida. While inconclusive, using the limited data available, OPPAGA estimated that roughly 16% of this population may be people who did not do a residency in Florida, but did some phase of their GME in Florida, such as an internship or fellowship.

⁹⁹ While inconclusive, based on exploration of the available data, OPPAGA estimated that roughly 90% to 96% of the identified population would have completed their GME within 5.3 years of first obtaining their physician-in-training license. The tracking period was extended by an additional two years, to 7.3 years, to ensure people were not counted as Florida physicians due to having an unexpired training license.

¹⁰⁰ Since most people included in the analysis would have completed all GME at the end of the tracking period, a person was considered to be retained as a physician only if they held a full physician license. For subspecialties with longer programs, some individuals may still hold a physician-in-training license at the end of the tracking period. As a result, this analysis may show lower retention rates for these subspecialties.

¹⁰¹ Since the university medical school data was limited to graduates in academic year 2007-08 or later, this additional analysis was limited to people who first obtained a physician-in-training license in between 2008 and 2015.

¹⁰² Residents may rotate through more than one hospital during their GME; therefore, more than one hospital may have received SMRP funding for the same resident. In these instances, OPPAGA identified the hospital which received the most SMRP funding for the resident between state Fiscal Years 2015-16 and 2021-22.

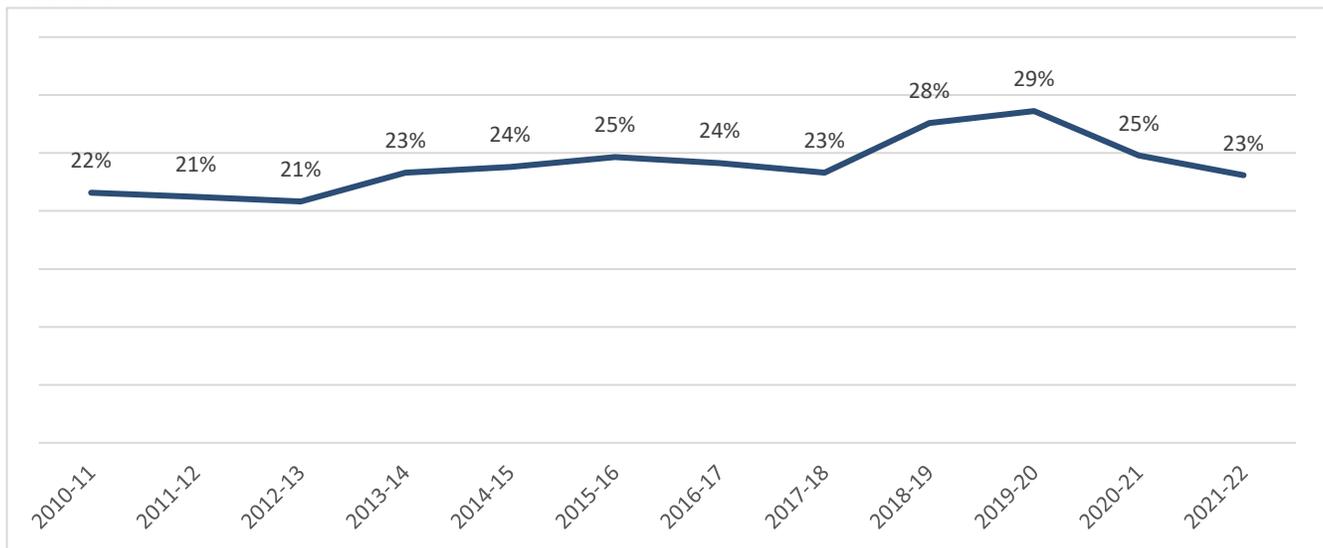
APPENDIX B

Medicare Positions Not Funded

Of the hospitals that received Medicaid funding, those with the highest number of FTEs in the CMS data had a disproportionate share of unfunded FTEs. In federal Fiscal Year 2021-22, 10 hospitals had 52% of all FTEs in Florida and on average 29% of all FTEs at these hospitals were above the Medicare cap, while the average share of unfunded FTEs for all others was 12%. Between federal Fiscal Years 2010-11 and 2021-22, approximately 24% of Florida resident FTEs were not funded by Medicare.

Exhibit B-1

Since Federal Fiscal Year 2010-11, an Average of Approximately 24% of Florida Resident FTEs Were Not Funded by Medicare¹



¹ Not all hospitals had data available for every year of the CMS cost report, therefore the number of reporting hospitals varies year to year as does which hospitals have reported data in a given year (e.g., 10 hospitals may have data available for federal Fiscal Year 2011-12, and 10 hospitals may have data available for federal Fiscal Year 2012-13, but the hospitals for which data is available in federal Fiscal Year 2011-12 may be different from the hospitals for which data is available for federal Fiscal Year 2012-13).

Data are included in summary measures only if hospitals reported both Total Resident FTEs and Total DGME Cap FTEs in a given fiscal year; a small number of hospitals reported only one of the indicators for a fiscal year. Although overall FTEs are over cap, some hospitals had FTEs below the cap.

Hospitals with federal fiscal years that begin before May 1, 2010 used a different version of the CMS Hospital Cost Report and are therefore not included in this data.

Data was available for 41 hospitals in 2019-20, and for 51 hospitals in 2020-21.

Source: Medicare Hospital Cost Reports.

APPENDIX C

Florida Graduate Medical Education Programs

Effective July 1, 2013, the Legislature enacted the Statewide Medicaid Residency Program (SMRP). The SMRP provides funding for GME programs for all physician specialties based on an FTE resident, rather than cost-reimbursement, basis. AHCA determines the amount of each program’s annual allocation using a statutory formula that considers the program’s total number of FTE residents, estimated Medicaid payments for the current state fiscal year, and any adjustments necessitated by an annual reconciliation of the program’s prior year SMRP payments.

After the SMRP was implemented, the Legislature established several other Medicaid GME funding programs in statute and proviso to the General Appropriations Act (GAA). Startup Bonus, Severe Deficit, Primary Care, High Tertiary Care, Psychiatry, Mental/Behavior Health, and Slots for Doctors have been targeted to support GME for certain physician specialties with the greatest need.

In addition to the GME funding programs, the Legislature established the Medicaid Indirect Medical Education Program to recognize the increased use of ancillary services associated with the GME process and the higher case-mix intensity of teaching hospitals. The state IME Program mirrors Medicare IME and uses a similar payment formula. All of the GME funding programs and the IME Program are designed to generate federal matching funds under Medicaid. (See Exhibit C-1.)

Exhibit C-1

Since 2013, the Legislature Has Established a Variety of GME and IME Programs

Program	State Fiscal Years Funded With Initial and Most Recent Appropriation or Funding Amounts	Program Description for Most Recent State Fiscal Year Appropriation ¹	Entities Eligible for Funding
SMRP ²	2013-14 (\$80 million) through 2023-24 (\$191.1 million)	<ul style="list-style-type: none"> Provides funding to support accredited GME programs for all physician specialties based on the program’s number of FTE residents and estimated Medicaid payments. In Fiscal Year 2021-22, the per-FTE resident funding amount was \$15,128. 	<ul style="list-style-type: none"> Hospitals FQHCs
GME Startup Bonus ^{2,3}	2015-16 (\$100 million) through 2023-24 (\$100 million)	<ul style="list-style-type: none"> Provides funding to the two hospitals with the largest number of graduate medical residents in the statewide supply/demand deficit.⁶ For Fiscal Year 2023-23, \$42.3 million of the \$100 million appropriation was designated for two hospitals. Provides a one-time \$100,000 startup bonus for each newly created resident position in an initial or established GME program for physicians in a specialty in the statewide supply/demand deficit identified in the GAA.⁶ Unobligated funds for the program are proportionally allocated to eligible entities for existing FTE residents in the physician specialties in the statewide supply/demand deficit.⁶ This allocation is in addition to funds allocated under the SMRP. An allocation under the program may not exceed \$100,000 per FTE resident. 	<ul style="list-style-type: none"> Hospitals FQHCs

Program	State Fiscal Years Funded With Initial and Most Recent Appropriation or Funding Amounts	Program Description for Most Recent State Fiscal Year Appropriation ¹	Entities Eligible for Funding
Severe Deficit ^{3,4}	2018-19 (\$10 million) through 2021-22 (\$30 million)	<ul style="list-style-type: none"> Provides funds for filled Fiscal Year 2020-21 unweighted FTE residents in severe deficit physician specialties.⁷ The first 39% of the funds is distributed to hospitals with greater than 40 unweighted Fiscal Year 2020-21 FTEs, with the remaining funds distributed proportionally based on total unweighted Fiscal Year 2020-21 FTEs. 	<ul style="list-style-type: none"> Entities with FTE residents in severe deficit physician specialties
Primary Care – Medicaid Regions With Certain Demand ^{3,5}	2018-19 (\$5 million) through 2023-24 (\$18 million)	<ul style="list-style-type: none"> Provides funds for FTEs in primary care in Medicaid regions with primary care physician shortages.^{7,8} The first 25% of the funds are distributed proportionally per-FTE to hospitals with high Medicaid utilization (i.e., at least 14% Medicaid utilization), with the remaining 75% of funds distributed proportionally per the filled Fiscal Year 2022-23 Medicaid-approved GME FTEs. 	<ul style="list-style-type: none"> Entities in the specified Medicaid regions providing primary care and training
High Tertiary Care ^{3,5}	2018-19 (\$30 million) through 2023-24 (\$66 million)	<ul style="list-style-type: none"> Provides funds to teaching hospitals offering highly specialized tertiary care with more than 30 FTE residents over the Medicare cap.^{10,11} Funding is calculated on a per GME resident-FTE proportional allocation that is in addition to any other GME funding. The first 42% of funds is distributed to hospitals with greater than 500 unweighted Fiscal Year 2022-23 FTEs, with the remaining funds distributed proportionally based on the total unweighted Fiscal Year 2022-23 FTEs. 	<ul style="list-style-type: none"> Teaching hospitals offering highly specialized tertiary care with certain residents
Psychiatry ^{3,5}	2019-20 (\$480,000) through 2023-24 (\$1.3 million)	<ul style="list-style-type: none"> Provides funds for psychiatry residency slots for FQHCs that hold ACGME accreditation in adult and child psychiatry. 	<ul style="list-style-type: none"> FQHCs with certain psychiatry residency slots
Primary Care – Certain Medicaid Regions ^{3,5}	2020-21 (\$7.9 million) through 2023-24 (\$20.1 million)	Provides up to \$150,000 per FTE in primary care and training in Medicaid Region 1 and/or Medicaid Region 2. ⁸ Payments are distributed proportionally per the filled Fiscal Year 2022-23 Medicaid-approved GME FTEs.	<ul style="list-style-type: none"> Entities in the specified Medicaid regions providing primary care and training
Mental/Behavioral Health ^{3,5}	2020-21 (\$2 million) through 2023-24 (\$4.4 million)	Provides up to \$200,000 per filled Fiscal Year 2023-24 unweighted FTE resident, fellow, or intern in an accredited program who rotates through mental health and behavioral health facilities licensed under Ch. 394, F.S.	<ul style="list-style-type: none"> Licensed mental health and behavioral health facilities
Indirect Medical Education ^{3,5}	2020-21 and 2021-22 (\$501 million) through 2023-24 (\$613 million) ¹²	<ul style="list-style-type: none"> Provides payments to eligible teaching hospitals based on each hospital's IME costs for services provided. AHCA calculates IME payments by computing each hospital's ratio of residents to beds and Medicaid inpatient payments calculated using the most recently filed and available Medicare Cost Report. Subsidizes the higher costs of delivering health care services in a teaching hospital compared to a non-teaching hospital. 	<ul style="list-style-type: none"> Eligible Teaching Hospitals¹³
Slots for Doctors ²	2023-24 (\$30 million)	<ul style="list-style-type: none"> Provides an annual \$100,000 allocation for each newly created resident position in an initial or established GME program for physicians in a specialty or subspecialty in the statewide supply/demand deficit identified in the GAA.⁶ Applies only to newly-created resident positions first filled on or after June 1, 2023. 	<ul style="list-style-type: none"> Hospitals FQHCs

Program	State Fiscal Years Funded With Initial and Most Recent Appropriation or Funding Amounts	Program Description for Most Recent State Fiscal Year Appropriation ¹	Entities Eligible for Funding
---------	---	--	-------------------------------

- Payments cannot be made for resident positions previously funded by the SMRP.
- AHCA must submit an annual report to the Governor's Office of Policy and Budget and chairs of the Florida Senate and House Appropriations Committees specifying the number of newly created resident FTE positions by each hospital and FQHC by position specialty and subspecialty.

¹ The program description in the exhibit is based on the most recent state fiscal year in which the program received an appropriation. Criteria for some of the programs identified in the exhibit varied over the years. For example, appropriations were made for primary care GME in Medicaid regions with primary care greater than supply by a specified percentage. For state Fiscal Years 2022-23 and 2023-24, the percentage was 85% or more and for state Fiscal Years 2018-19 through 2021-22, the percentage was 25% or more.

² Section 409.909, *F.S.*; Ch. 2023-239, s. 3, line item 202, *Laws of Florida*.

³ Proviso specifies that the appropriations for this program are contingent on the non-federal share being provided through intergovernmental transfers in the Grants and Donations Trust Fund.

⁴ Chapter 2021-236, s. 3, line item 201, *Laws of Florida*.

⁵ Chapter 2023-239, s. 3, line item 202, *Laws of Florida*.

⁶ For state Fiscal Year 2023-24, the GAA specifies that the "statewide supply/demand deficit" is comprised of the following specialties and subspecialties, both adult and pediatric: allergy or immunology; anesthesiology; cardiology; colon and rectal surgery; emergency medicine; endocrinology; family medicine; gastroenterology; general internal medicine; geriatric medicine; hematology; oncology; infectious diseases; neonatology; nephrology; neurological surgery; obstetrics/gynecology; ophthalmology; orthopedic surgery; pediatrics; physical medicine and rehabilitation; plastic surgery/reconstructive surgery; psychiatry; pulmonary/critical care; radiation oncology; rheumatology; thoracic surgery; urology; and vascular surgery. Chapter 2023-239, s. 3, line item 202, *Laws of Florida*.

⁷ For state Fiscal Year 2021-22, the GAA specifies that "severe deficit physician specialties" are residency positions in urology, thoracic surgery, nephrology, ophthalmology, infectious disease, and hematology/oncology. Chapter 2021-36, s. 3, line item 201, *Laws of Florida*.

⁸ "Primary care" is defined as family medicine; general internal medicine; general pediatrics; preventive medicine; geriatric medicine; osteopathic general practice; obstetrics and gynecology; emergency medicine; general surgery; and psychiatry. Section 409.909(2)(a), *F.S.*

⁹ For state Fiscal Year 2023-24, the GAA specifies that a primary care physician shortage occurs when traditional primary care demand exceeds supply by at least 85%. Chapter 2023-239, s. 3, line item 202, *Laws of Florida*.

¹⁰ The term "teaching hospital" means "any Florida hospital officially affiliated with an accredited Florida medical school which exhibits activity in the area of [GME] as reflected by at least seven different [GME] programs accredited by the [ACGME] or the Council on Postdoctoral Training of the American Osteopathic Association and the presence of 100 or more [FTE] resident physicians. The Director of the [AHCA] shall be responsible for determining which hospitals meet this definition." Section 408.07(46), *F.S.*

¹¹ For state Fiscal Year 2023-24, the GAA specifies that highly specialized tertiary care includes "comprehensive stroke and Level 2 adult cardiovascular services; NICU II and III; and adult open heart" Chapter 2023-239, s. 3, line item 202, *Laws of Florida*.

¹² Proviso in the GAAs for state Fiscal Year 2021-22 through state Fiscal Year 2023-24 authorized AHCA to submit budget amendments requesting spending authority to manage an IME program. The amount specified for 2020-21 and 2021-22 is the amount that was approved pursuant to AHCA's budget amendment requests which spanned the last two quarters of state Fiscal Year 2020-21 and state Fiscal Year 2021-22. For Fiscal Year 2023-24, funds have not yet been appropriated. This exhibit shows the amount of IME Program funding AHCA expects to request from the Legislative Budget Commission in 2023-24.

¹³ An eligible teaching hospital must meet at least one of five criteria and have a resident to bed ratio between 0.1% and 100%. The five criteria are a) statutory teaching hospital with greater than 650 beds per license and greater than 500 FTEs as referenced in FYE 2019 CMS Form 2552; b) public hospitals with residents in approved ACGME training programs and does not meet eligibility criteria in a); c) statutory teaching hospital with greater than 650 beds per license as recorded in the AHCA licensure file and does not meet the eligibility criteria in a) or b); d) Children's hospital as indicated as provider type 7, on CMS Form 2522, Worksheet S_2, Part I, column 4, that are excluded from the Medicare prospective payment systems under 42 CFR 412.23, or Regional Perinatal Intensive Care Center, that does meet the eligibility criteria in a), b), or c); or e) statutory teaching hospital with greater than 200 beds per license as recorded in the AHCA licensure file that does not meet the eligibility criteria in a), b), c), or d).

Source: OPPAGA analysis of s. 409.09, *F.S.*, the GAAs for state Fiscal Years 2013-14 through 2023-24, information provided by AHCA, legislative budget requests, and Medicaid State Plan Amendment #: 22-0007.

APPENDIX D

Indirect Medical Education Program and Graduate Medical Education Programs and Medicaid Funding

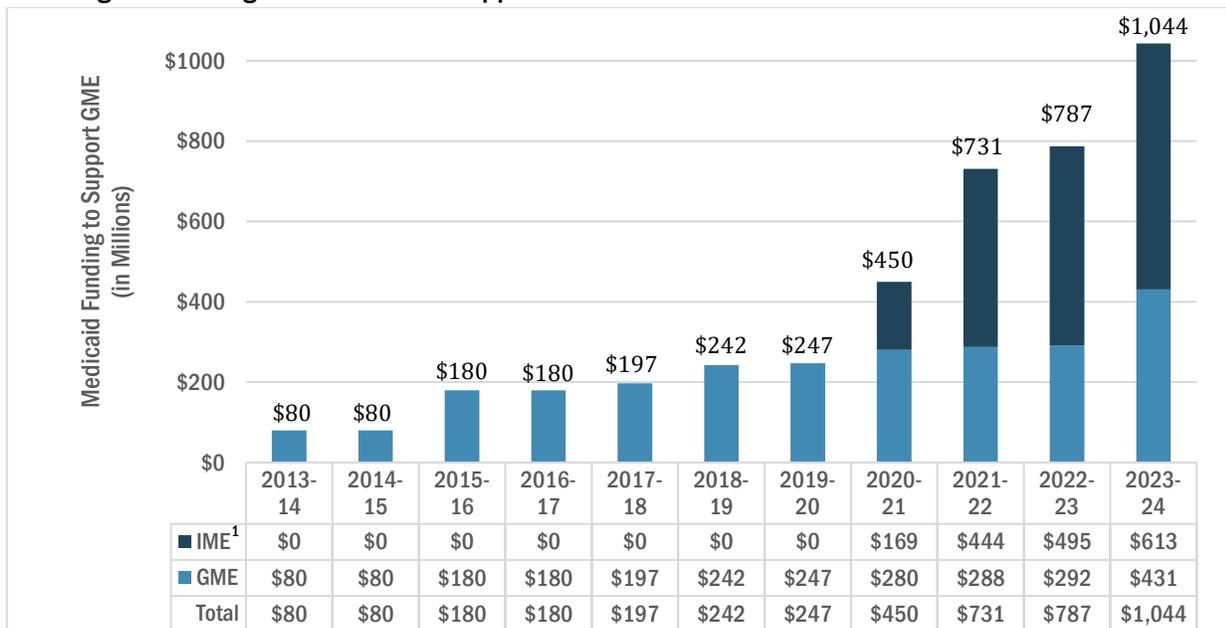
OPPAGA analyzed available data to understand how much IME increased state support for GME and the number of individual health care facilities funded. (See Exhibits D-1 and D-2.) OPPAGA also analyzed the funding for FTEs for the two largest GME programs, SMRP and Startup Bonus. (See Exhibits D-3 through D-5.) Finally, OPPAGA analyzed the number of facilities receiving GME funding by program per state fiscal year. (See Exhibit D-6).

Indirect Medical Education Program and State Support for GME

Since 2013, when the SMRP was first established, state funding for GME programs and the IME Program have increased from approximately \$80.0 million in state Fiscal Year 2013-14 to approximately \$1,044 million in state Fiscal Year 2023-24 (a 1,205% increase). IME Program funding from state Fiscal Year 2020-21 through state Fiscal Year 2023-24 increased state support for GME by approximately \$1.72 billion. Most recently, GME programs and the IME Program funding in state Fiscal Year 2023-24 significantly increased state support for GME by approximately \$257 million compared to state Fiscal Year 2022-23 (a 33% increase over the previous year)¹⁰³ (See Exhibit D-1.)

Exhibit D-1

IME Program Funding Increased State Support for GME



¹ Appropriations made in Fiscal Years 2021-22 and 2022-23 included funding for the IME Program in the prior fiscal year. In this exhibit, to better reflect the years for which the GME activity was supported, for Fiscal Years 2020-21 through 2022-23, the funding for the IME Program reflects the year for which the funding was disbursed rather than the year in which the appropriation was made. For Fiscal Year 2023-24, funds for the IME Program have not yet been appropriated. This exhibit shows the amount of IME Program funding AHCA expects to request from the Legislative Budget Commission in 2023-24.

Source: OPPAGA analysis of the GAAs for state Fiscal Years 2013-14 through 2023-24, information provided by AHCA, and legislative budget requests.

¹⁰³ This increase is a comparison of the IME Program 2023-24 expected appropriations to 2022-23 disbursements. Disbursements were used instead of appropriations for 2022-23 because some funds appropriated in 2022-23 included funding for 2021-22.

Individual Health Care Facilities Funded

In state Fiscal Year 2021-22, state programs disbursed approximately \$2 million to 86 individual health care facilities. Almost all health care facilities received SMRP funding, and only three facilities received mental and behavioral health funding.

Exhibit D-2

Increased Funding to State GME Programs and the IME Program from State Fiscal Year 2013-14 Through State Fiscal Year 2021-22 Has Supported 86 Individual Health Care Facilities

	Number of GME Participating Facilities ¹	Total Amount Disbursed
SMRP	81	\$804,285,598
Startup Bonus	79	\$699,412,218
High Tertiary	8	\$122,823,663
Severe Deficit	20	\$76,715,810
Primary Care ²	5	\$42,566,500
Mental Behavioral Health	3	\$5,500,000
Indirect Medical Education	33	\$613,030,597
Total	86³	\$2,364,334,386

¹ Unduplicated counts of all health care facilities that participated at least once in each program.

² The "Primary Care – Medicaid Regions With Certain Demand" and "Primary Care – Certain Medicaid Regions" programs listed in Appendix C have been combined in this exhibit.

³ This is an unduplicated count of all health care facilities participating in any GME program. Multiple health care facilities participated in multiple programs.

Source: OPPAGA analysis of AHCA GME Reports.

SMRP Disbursements and FTEs

The amount of SMRP allocations, and thus the amounts disbursed, increased from state Fiscal Year 2013-14 through state Fiscal Year 2021-22. From state Fiscal Year 2015-16 through state Fiscal Year 2021-22, SMRP funded approximately 99% of all residents in Florida. The number of FTEs supported by SMRP increased by 81%, from 3,562.20 in 2013-14 to 6,431.60 in 2021-22. During the same period, the amount of funding per FTE decreased 33%, from \$22,452 to \$15,128. (See Exhibit D-3.)

Exhibit D-3

The Number of FTEs Supported by SMRP Increased by 80% from 2013 to 2021, Reducing the Amount per FTE Received by Health Care Facilities

State Fiscal Year	Statewide Medicaid Residency Program FTEs ¹	Total Amount Disbursed	Amount per FTE
2013-14	3,562.20	\$79,980,640	\$22,453
2014-15	3,804.04	\$79,980,645	\$21,025
2015-16	4,121.03	\$80,000,000	\$19,413
2016-17	4,627.23	\$79,200,000	\$17,116
2017-18	5,021.66	\$96,699,997	\$19,257
2018-19	5,434.30	\$96,982,300	\$17,846
2019-20	5,506.05	\$96,842,016	\$17,588
2020-21	6,225.43	\$97,300,000	\$15,629
2021-22	6,431.60	\$97,300,000	\$15,128

¹ Because residency programs can last from three to five years, FTEs carry over from year to year.

Source: OPPAGA analysis of AHCA GME Reports.

Startup Bonus Disbursements and FTEs

From state Fiscal Year 2015-16 to state Fiscal Year 2021-22, a total of 25% of Startup Bonus Program funds have been provided to support the 1,750 newly-approved FTEs in the supply/demand deficit specialties. The number of newly-approved FTEs has varied over time, with just 85 approved in the first year of the program and 410 approved in the third year. However, the number of newly approved positions was relatively stable between 2018-19 and 2021-22. (See Exhibit D-4)

Exhibit D-4

A Total of 25% of Startup Bonus Program Funds Have Been Provided to Support the 1,750 Newly-approved FTEs in the Supply/Demand Deficit Specialties

State Fiscal Year	Total Distribution for Startup Bonus Programs ¹	Number of Newly Approved FTEs	Percentage of Startup Bonus for New FTEs
2015-16	\$100,000,000	85	8%
2016-17	\$100,000,000	313	31%
2017-18	\$100,000,000	410	41%
2018-19	\$99,412,215	249	25%
2019-20	\$100,000,000	226	23%
2020-21	\$100,000,000	228	23%
2021-22	\$100,000,000	239	24%
Total	\$699,412,218	1,750.38	25%

¹ Allocations for 2018-19 remained at \$100,000,000.

Source: OPPAGA analysis of AHCA GME Reports.

The remaining funds used to support retention of current residents in the supply/demand deficit specialties and the funding per current FTE have varied over time. Since annual appropriations to the Startup Bonus Program have remained consistent at \$100 million, variation in funding per current FTE for retention results from either a change in the number of newly-created FTEs and/or a change in the number of current resident FTEs in supply/demand specialties. In years where more new FTEs are created, less unobligated funding remains available to support retention of current resident FTEs. In addition, as the number of resident FTE's in the supply/demand deficit specialties has grown, these remaining funds have been distributed across more resident FTEs. Assuming annual appropriations remain the same, the funding per current FTE for retention would decline if the recent relatively stable growth in new FTEs continues. (See Exhibit D-5.)

Exhibit D-5

Remaining Startup Bonus Program Funds to Support Existing FTEs in Supply/Demand Deficit Specialties Varied Over Time

State Fiscal Year	Remaining Startup Bonus Funds ¹	Number of Existing FTEs ²	Percentage of Startup Bonus for Existing FTEs	Amount per Existing FTE
2015-16	\$48,987,024	2,178.70	49%	\$22,484.52
2016-17	\$26,437,024	2,306.47	26%	\$11,462.11
2017-18	\$16,698,564	2,441.86	17%	\$6,838.46
2018-19	\$32,249,239	2,670.05	32%	\$12,078.14
2019-20	\$34,657,024	2,660.98	35%	\$13,024.16
2020-21	\$34,937,024	2,991.44	35%	\$11,679.00
2021-22	\$33,837,023	2,995.19	34%	\$11,297.12
Total	\$227,802,923			

¹ This amount is based on the amount of Startup Bonus Program funding that remains after removing annual appropriation of \$42,262,976 to the two teaching hospitals with the largest number of resident FTEs and removing the obligated \$100,000 per newly approved FTEs.

² According to AHCA, all FTEs from eligible supply/demand deficit residency programs are eligible for the remainder of the funds appropriated under the Startup Bonus Program.

Source: OPPAGA analysis of AHCA GME Reports.

Number of Facilities Receiving GME Funding, by Program, per State Fiscal Year

The number of state graduate medical education (GME) funding programs in Florida and the amount of state funding has increased steadily since the Statewide Medicaid Residency Program (SMRP) was funded in state Fiscal Year 2013-14. GME funding more than doubled when the Startup Bonus Program was created in state Fiscal Year 2015-16 and the number of individual health care facilities participating increased by 40% (from 43 to 60). However, the total number of disbursements to 60 individual health care facilities more than doubled from 43 disbursements for one GME program to 112 disbursements for two GME programs. For example, of the 60 individual health care facilities that received SMRP and Startup Bonus Program funding in state Fiscal Year 2015-16, 52 received funds through both programs, 7 received funds from only SMRP, and 1 received funds only from Startup Bonus.

When GME program funding increased in state Fiscal Year 2018-19 with an additional three GME funding programs, the number of individual health care facilities increased to 65, with multiple facilities receiving funding through more than one GME program. (See Addendum, Exhibit 2.) Since state Fiscal Year 2013-14, there have been 86 different health care facilities receiving GME funding in at least one program. Facility counts by state fiscal year are unduplicated counts. However, many facilities received more than one type of GME funding. Counts in GME programs also varied across fiscal years. Some facilities did not continue to participate, others dropped out for a year or two and returned, and at least one year, a facility did not complete required reporting. (See Exhibit D-6.)

Most differences between the total disbursements and appropriations were small. For state Fiscal Year 2020-21 the Agency for Health Care Administration reported GME funding program disbursements 2% above the amounts appropriated for the Primary Care Program. Of the total funds appropriated for the IME Program for the full period (state Fiscal Year 2020-21 through state Fiscal Year 2022-23), 1.3% of funds were not disbursed by the end of state Fiscal Year 2022-23.

Exhibit D-6

The Number of Facilities Receiving GME Funding Has Increased Over Time

Program by State Fiscal Year	Number of Facilities ¹	Percentage of Facilities Each Year Receiving Funding	Total Disbursements	Percentage of Appropriations Disbursed
Fiscal Year 2013-14	43		\$79,980,640	100%
Statewide Medicaid Residency Program	43	100.0%	\$79,980,640	100%
Fiscal Year 2014-15	53		\$79,980,645	100%
Statewide Medicaid Residency Program	53	100.0%	\$79,980,645	100%
Fiscal Year 2015-16	60		\$180,000,003	100%
Statewide Medicaid Residency Program	59	98.3%	\$80,000,000	100%
Startup Bonus Program	53	88.3%	\$100,000,003	100%
Fiscal Year 2016-17	61		\$179,200,000	100%
Statewide Medicaid Residency Program	60	98.4%	\$79,200,000	99%
Startup Bonus Program	55	90.2%	\$100,000,000	100%
Fiscal Year 2017-18	64		\$196,699,997	100%
Statewide Medicaid Residency Program	60	93.8%	\$96,699,997	99%
Startup Bonus Program	59	92.2%	\$100,000,000	100%
Fiscal Year 2018-19	65		\$240,731,900	99%
Statewide Medicaid Residency Program	63	96.9%	\$96,982,300	100%
Startup Bonus Program	58	89.2%	\$99,412,215	99%
High Tertiary Program	8	12.3%	\$29,823,664	99%
Severe Deficit Program	14	21.5%	\$9,941,221	99%
Primary Care Program	3	4.6%	\$4,572,500	91%
Fiscal Year 2019-20	68		\$245,525,603	100%
Statewide Medicaid Residency Program	62	91.2%	\$96,842,016	100%
Startup Bonus Program	60	88.2%	\$100,000,000	100%
High Tertiary Program	8	11.8%	\$29,999,999	100%
Severe Deficit Program	14	20.6%	\$10,434,088	94%
Primary Care Program	4	5.9%	\$8,249,500	100%
Fiscal Year 2020-21	77		\$443,851,944	99%
Statewide Medicaid Residency Program	73	94.8%	\$97,300,000	100%
Startup Bonus Program	68	88.3%	\$100,000,000	100%
High Tertiary Program	8	10.4%	\$30,000,000	100%
Severe Deficit Program	17	22.1%	\$26,340,501	88%
Primary Care Program	5	6.5%	\$18,744,500	102%

Program by State Fiscal Year	Number of Facilities ¹	Percentage of Facilities Each Year Receiving Funding	Total Disbursements	Percentage of Appropriations Disbursed
Mental/Behavioral Health Program	3	3.9%	\$2,000,000	100%
Indirect Medical Education Program	33	42.9%	\$169,466,943	N/A ²
Fiscal Year 2021-22	79		\$718,363,654	97%
Statewide Medicaid Residency Program	73	92.4%	\$97,300,000	100%
Startup Bonus Program	73	92.4%	\$100,000,000	100%
High Tertiary Program	8	10.1%	\$33,000,000	100%
Severe Deficit Program	19	24.1%	\$30,000,000	100%
Primary Care Program	4	5.1%	\$11,000,000	57%
Mental/Behavioral Health Program	3	3.8%	\$3,500,000	80%
Indirect Medical Education Program	33	41.8%	\$443,563,654	N/A ²
Total	86		\$2,364,334,386	

¹The number of facility counts provided in the state Fiscal Year row (in dark blue) are unduplicated counts. Many facilities received funding from more than one GME funding program in one year.

²The percentage of appropriations disbursed could not be calculated for the IME Program because appropriations covered more than one state fiscal year.

Source: AHCA GME Distribution Reports.

APPENDIX E

Residency Programs and Positions

For 2021-22, sponsoring institutions varied substantially in terms of the number of approved and filled residency positions, as well as the rate at which these positions were filled.^{104,105} (See Exhibit E-1.) The 10 largest institutions filled, on average, 86% of positions. The lowest rate among these was Broward Health, at 47%, while the highest was HCA Florida Healthcare, at 97%. The remaining institutions filled a slightly higher percentage of positions, on average, at 88%. Approved position totals ranged considerably across sponsoring institutions, ranging from 2 to 1,202. Filled positions also varied substantially, ranging from 1 to 1,080.

OPPAGA conducted this analysis using information provided by sponsoring institutions; the data may be incomplete or include some inconsistencies. OPPAGA obtained data about program and sponsoring institution positions filled from the Accreditation Council for Graduate Medical Education (ACGME) and American Osteopathic Association (AOA). However, ACGME was unable to provide complete information about approved positions for some sponsoring institutions during OPPAGA’s review period. This analysis is thus based on data provided by sponsoring institutions in response to OPPAGA’s information request. As a result, these data are incomplete and generally do not include sponsors who were no longer providing GME at the time of OPPAGA’s information request. In addition, in part due to complications resulting from the transition to a single accreditation system, the information provided by sponsoring institutions may not align with data provided by ACGME and AOA.

Exhibit E-1

For 2021-22, Sponsoring Institutions Varied in Terms of Number of Approved and Filled Residency Positions, as Well as the Rate at Which These Positions Were Filled

Sponsoring Institution	Institution Type	Total Approved	Total Filled	Percentage Filled
University of Miami-Jackson Health System	General/Teaching Hospital	1,202	1,080	90%
University of Florida College of Medicine	Academic Medical Center/Medical School	988	870	88%
HCA Florida Healthcare-USF Morsani College of Medicine	Consortium	949	822	87%
University of South Florida Morsani College of Medicine	Academic Medical Center/Medical School	821	738	90%
University of Central Florida - HCA Florida Healthcare	Consortium	539	496	92%
HCA Florida Healthcare	Consortium	448	435	97%
University of Florida College of Medicine Jacksonville	Academic Medical Center/Medical School	387	360	93%
AdventHealth Florida	General/Teaching Hospital	353	216	61%
Orlando Health	General/Teaching Hospital	325	291	90%
Broward Health	Consortium	304	143	47%
Larkin Community Hospital	General/Teaching Hospital	294	267	91%

¹⁰⁴ According to ACGME, the term “approved positions,” means positions in a residency or fellowship program (GME program) approved based on resources available to the program. The term “approved positions filled” is not an ACGME term.

¹⁰⁵ This measure should not be confused with NRMP’s “fill rate” measure, which is a measure of the extent to which positions offered for match through the national resident matching process resulted in the position being filled. The NRMP measure is limited to looking at those positions offered for a match.

Sponsoring Institution	Institution Type	Total Approved	Total Filled	Percentage Filled
Memorial Healthcare System	Independent Academic Medical Center	239	160.75	67%
Mount Sinai Medical Center of Florida	Independent Academic Medical Center	207	192	93%
Florida Atlantic University	Academic Medical Center/Medical School	199	169	85%
Florida State University	Academic Medical Center/Medical School	194	202	104%
HCA Florida Orange Park	Community Hospital	161	151	94%
Nicklaus Children's Hospital	Children's Hospital	136	126	93%
Cleveland Clinic Florida	General/Teaching Hospital	125	116	93%
Larkin Community Hospital Palm Springs Campus	General/Teaching Hospital	124	90	73%
University of Miami Hospital and Clinics	General/Teaching Hospital	76	72	95%
NCH Healthcare System	General/Teaching Hospital	56	48	86%
Johns Hopkins	Children's Hospital	55	51	93%
Manatee Memorial Hospital	Community Hospital	52	44	85%
Bayfront Health St. Petersburg	Community Hospital	42	42	100%
Nemours Children's Hospital	Children's Hospital	36	35	97%
Nova Southeastern University College of Osteopathic Medicine	Academic Medical Center/Medical School	36	15	42%
US Air Force Regional Hospital	General/Teaching Hospital	36	35	97%
Tallahassee Memorial Healthcare	General/Teaching Hospital	33	34	103%
St. Vincent's Medical Center	Community Hospital	32	32	100%
Wellington Regional Medical Center	Community Hospital	30	21	70%
Community Health of South Florida Inc.	Federally Qualified Health Center	27	27	100%
Citrus Health Network	Federally Qualified Health Center	24	19	79%
Westchester General Hospital (dba Keralty Hospital)	General/Teaching Hospital	20	20	100%
Centerstone	Specialty Hospital	15	16	107%
Lakeside Medical Center	Community Hospital	15	15	100%
Borinquen Medical Centers	Federally Qualified Health Center	12	12	100%
Florida Department of Health Palm Beach County	Other	8	6	75%
Halifax Medical Center	General/Teaching Hospital	8	8	100%
H. Lee Moffitt Cancer Center and Research Institute	Specialty Hospital	6	6	100%
Andrews Research and Education Foundation	Other	5	5	100%
Baptist Health-West Kendall Baptist Hospital	General/Teaching Hospital	5	5	100%
Baptist Health-Doctors Hospital	General/Teaching Hospital	2	2	100%
Broward County Medical Examiner's Office	Pathology Lab / Medical Examiner's Office	2	1	50%
Total (n = 43)	—	8,628	7,495.75	87%

Source: OPPAGA analysis of data from OPPAGA's information request to sponsoring institutions.

Between academic years 2012-13 and 2021-22, approximately 15% of the total number of positions that were approved by ACGME and AOA were not filled by a resident at the beginning of the year.^{106,107,108} (See Exhibit E-2.)

Exhibit E-2

The Total Number of Approved and Filled Positions in Florida Grew Over Time, While the Percentage of Positions Not Filled Remained Stable¹

Academic Year	Total Approved Positions	Total Filled Positions	% of Approved Positions Not Filled
2012-13	3,584	3,136	13%
2013-14	4,592	3,954	14%
2014-15	5,020	4,245	15%
2015-16	5,625	4,836	14%
2016-17	6,379	5,389	16%
2017-18	7,202	6,022	16%
2018-19	7,401	6,259	15%
2019-20	7,836	6,679	15%
2020-21	8,281	7,122	14%
2021-22	8,628	7,496	13%
Total	64,548	55,138	15%

¹These figures are only representative of the 44 sponsoring institutions who responded to OPPAGA’s information request. Figures for both total approved and filled positions are incomplete and are but approximations relative to those found in AOA/ACGME data. The total number of positions reported by sponsors understates the actual number of positions in Florida by 26% for academic year 2012-13, by 11% to 12% for academic years 2013-14 and 2014-15, and by less than 5% for all subsequent years.

Source: OPPAGA analysis of information request data from sponsoring institutions.

From state Fiscal Year 2013-14 through state Fiscal Year 2021-22, as state funding increased so did the number of residents. Specifically, as Florida’s Medicaid program funding for GME increased from state Fiscal Year 2013-14 (\$80 million) to state Fiscal Year 2021-22 (\$718.4 million) the number of filled GME positions steadily increased (from 4,686 to 8,065). (See Exhibit E-3.)

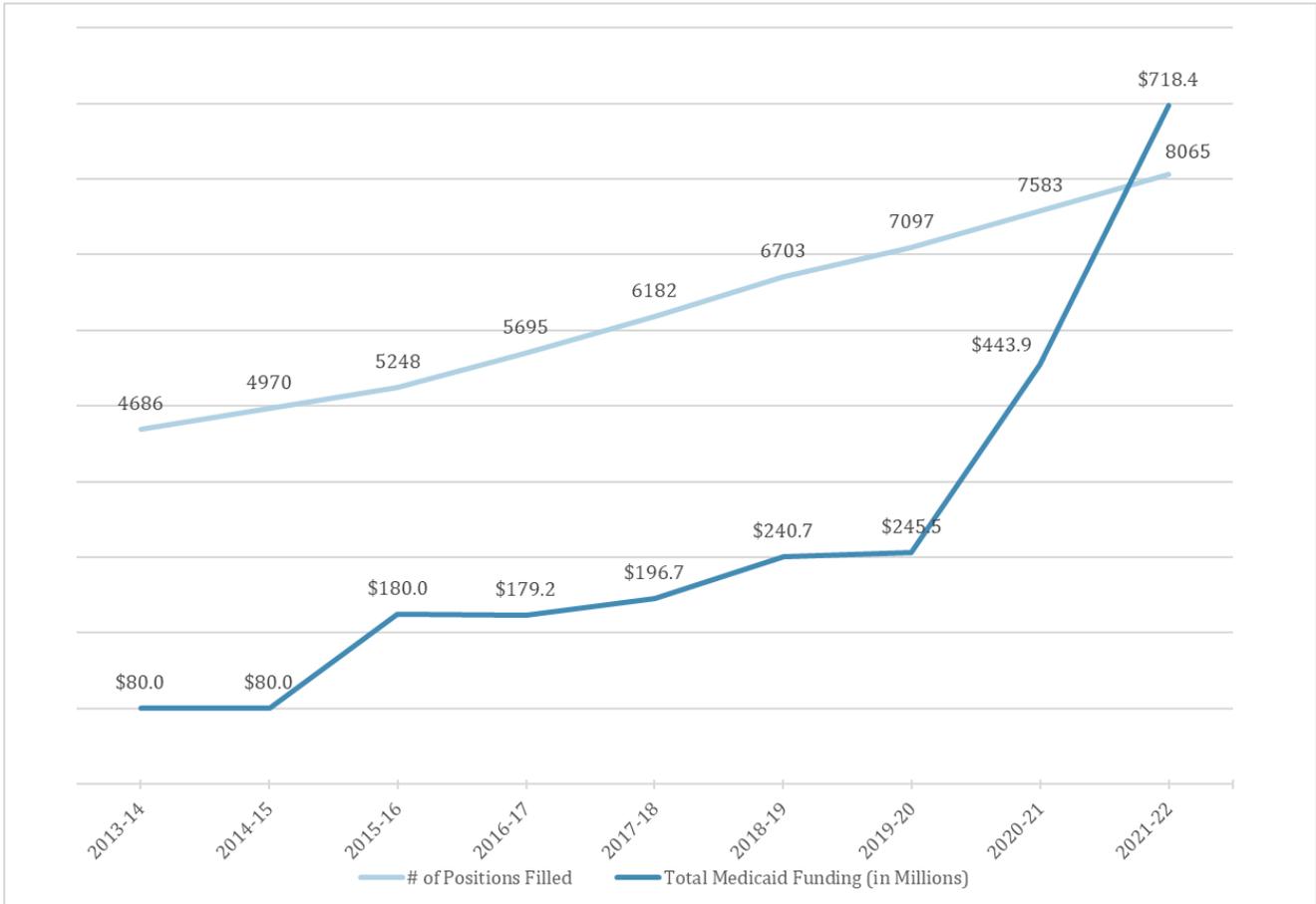
¹⁰⁶According to ACGME, the term “approved positions,” means positions in a residency or fellowship program (GME program) approved based on resources available to the program. The term “approved positions filled” is not an ACGME term.

¹⁰⁷ This measure should not be confused with NRMP’s “fill rate” measure, which is a measure of the extent to which positions offered for match through the national resident matching process resulted in the position being filled. The NRMP measure is limited to looking at those positions offered for a match.

¹⁰⁸ OPPAGA obtained data about program and sponsoring institution positions filled from ACGME and AOA. However, ACGME was unable to provide complete information about approved positions for some sponsoring institutions during OPPAGA’s review period. So, this analysis is based on data provided by sponsoring institutions in response to OPPAGA’s information request. As a result, these data are incomplete and generally do not include sponsors who were no longer providing GME at the time of OPPAGA’s information request. In addition, in part due to complications resulting from the transition to a single accreditation system, the information provided by sponsoring institutions may not align with data reported by ACGME and AOA.

Exhibit E-3

Between State Fiscal Years 2013-14 and 2021-22, There Was Substantial Growth in Medicaid Funding Through GME Programs and the IME Program; During This Period the Total Number of Residency Positions Filled Steadily Increased



Source: OPPAGA analysis of AHCA Medicaid funding data and data on positions filled from AOA and ACGME.

APPENDIX F

Medical Student Retention by Medical School

Between academic years 2007-08 and 2021-22, most medical schools had between 35% and 39% of graduates retained to GME in Florida. Just three were outside this range, with Nova Southeastern University College of Osteopathic Medicine (46%) and the University of South Florida (45%) at the high end and Florida Atlantic University at the low end (30%).¹⁰⁹ (See Exhibit F-1.)

Exhibit F-1

Between Academic Years 2007-08 and 2021-22, Retention of Graduates to Florida GME Varied Between 30% and 46% Among Medical Schools

University/Medical School	Total Number of Graduate	Number Retained ³	Percentage of Graduates Retained
Nova Southeastern University – College of Osteopathic Medicine ¹	3,211	1,462	46%
University of South Florida	2,101	952	45%
Florida International University	941	365	39%
Nova Southeastern University – College of Allopathic Medicine	46	18	39%
Florida State University	1,604	614	38%
University of Florida	1,926	723	38%
Lake Eerie College of Osteopathic Medicine	2,525	878	35%
University of Central Florida	951	337	35%
University of Miami	2,655	920	35%
Florida Atlantic University	471	141	30%
Total	16,431	6,410	39%

¹Data reported by Nova Southeastern University College of Osteopathic Medicine was missing for academic years 2007-08 through 2009-10. For these years, OPPAGA used data reported by American Association of Colleges of Osteopathic Medicine to arrive at a total for the report period. The retention percentage for this program is only for academic years 2010-11 through 2021-22.

²These counts are based on college and university medical school data for the students for whom OPPAGA could analyze retention to GME. The number of graduates reported may deviate slightly from official counts.

³Graduates were only counted as retained if the sponsoring institution for their GME program was in Florida. During the review period, there were five out-of-state sponsoring institutions with in-state programs (most notably, the Mayo Clinic College of Medicine and Science and HCA Healthcare/Mercer University School of Medicine) which were treated as out-of-state GME.

Source: OPPAGA analysis of College and University Medical School data.

¹⁰⁹ Retention from Florida medical schools to Florida GME could be affected by a variety of factors, including the specialty mix offered in Florida, the reputation of the sponsoring institution, and where the student base is from (e.g., rural or urban, in state or out-of-state).

APPENDIX G

Data Recommendation Technical Details

To facilitate more efficient and comprehensive ongoing analyses of the state's graduate medical education (GME) system, the Legislature could consider directing state agencies to improve data collection and preparation in consultation with OPPAGA. This would include preparing standardized data files intended for consistent, efficient analysis. While some of these improvements would not support continued analysis of historical trends, it would support more transparency and robust analysis of trends in GME going forward.¹¹⁰

Recommendations for the Agency for Health Care Administration

The Legislature could consider directing the Agency for Health Care Administration (AHCA) to collect and compile annual analysis data files containing information about GME programs in health care facilities receiving state funds through any of Florida's Medicaid GME or indirect medical education (IME) programs. The data files should include program level, resident level, and facility-level funding information.

- **Program-level information.** The purpose of this data is to provide basic trends in the size and composition of GME programs, including concentration in given specialties and geographic distribution, and linkages between sponsoring institutions and primary practice sites. Files should include information for each facility that receives funding, and for each program, as of August 1 of the year. Data files should include, but not be limited to, hospital/health care facility name, facility's Medicaid provider ID, state fiscal year, Accreditation Council for Graduate Medical Education (ACGME) sponsoring institution name and ID, sponsoring institution state, ACGME program name and ID, ACGME specialty/subspecialty name and code, Intern and Resident Information System (IRIS) code and primary & secondary descriptions, subspecialty indicator, program level (internship, residency, fellowship), program length, number of approved positions, number of filled positions, physical location of the practice site (state, county, city, and zip code), and program accreditation status.
- **Resident-level information.** The purpose of this data is to provide greater financial transparency and a basis for tracking funded residents to workforce outcomes. Data files should include information for all residents in funded health care facilities including but not limited to Florida physician license ID, a unique ID for each person (stable across licenses and years), facility's Medicaid provider ID, ACGME program ID, the resident's program year, an indicator for whether the resident is training in primary care, and state fiscal year.¹¹¹ For each Florida Medicaid GME program for which the facility requested funding based on the resident's FTE, files should also include the name of the Medicaid funding program, the portion of an FTE that was funded by the Medicaid program, and the amount of funding disbursed for the FTE.

¹¹⁰ OPPAGA has not solicited feedback from the agencies on the feasibility of or the timeline for implementing these recommendations. OPPAGA recommends obtaining feedback from the state agencies and working collaboratively toward meeting the specified data requirements, guided by the Legislature's priorities.

¹¹¹ AHCA should use a unique person ID that is shared with the Department of Health.

- **Facility-level Medicaid GME program funding information.** The purpose of this data is to provide greater transparency regarding the distribution of GME funding and the mechanisms through which the funding is disbursed. Data files should include but not be limited to the facility’s Medicaid provider ID, state fiscal year, and the total funds disbursed for each Florida Medicaid GME and IME program. In addition, for funding disbursed on a per-FTE basis, this should include the total funds disbursed on a per-FTE basis and total FTEs funded for each Medicaid GME program. For funds disbursed on a per-position basis, this should also include total newly approved positions receiving per-position funding and total funds disbursed on a per-position basis, broken down by specialty/subspecialty, and date of ACGME approval. For all funds disbursed on a different basis (such as IME funds, psychiatric funds, and components of funding disbursed on another statutorily specified basis), this should include the total of such funds disbursed by Medicaid GME program. Where pertinent, reconciled information should be provided. Documentation should be maintained explaining the basis of the disbursements and whether the information has been adjusted based on reconciliation.
- **Medicare data from Centers for Medicare and Medicaid Services (CMS) Cost Reports.** To provide greater transparency regarding the extent of state and federal funding available to health care facilities to support GME, total per-resident funding and the extent to which Medicare supports residents in Florida, files should include but not be limited to facility Medicaid provider ID, Provider CMS Certification Number (CCN) and Medicare Core-based Statistical Area (CBSA) number, report record number, fiscal year begin and end dates, submission status (final, interim, etc.), rural/urban indicator, location (state, county, city, zip code), report record number, hospital/facility name, CCN Facility Type, Provider Type, type of control, and all fields related to DGME & IME funding and caps. This should include a crosswalk between the data elements and the CMS Cost report worksheet element references.

Recommendations for the Department of Health

The Legislature could consider directing the Department of Health (DOH) to collect and compile annual analysis data files containing information about Florida public and private university medical school graduates and files containing information about Florida’s licensed physicians.¹¹² The suite of files listed below provides the primary source for identifying all GME participants in Florida. These files allow for analysis of physician retention and the extent to which Florida medical school graduates and GME contribute to the physician workforce. These data files should include the following elements.¹¹³

- Starting with Academic year 2022-23, Florida medical school graduates information consisting of records on all graduates during the academic year including, but not limited to, a unique student ID, the name of the university and medical school from which they graduated, the school’s Association of American Medical Colleges (AAMC) school code or American Association of Colleges or Osteopathic Medicine (AACOM) college acronym, the first Florida physician license ID for any graduate who subsequently obtained a license, a unique ID for each person (stable across licenses and years), medical school graduation date, an indicator for whether the person matched to a GME program at any point known to the university. In addition to these elements, for each known match, data should include

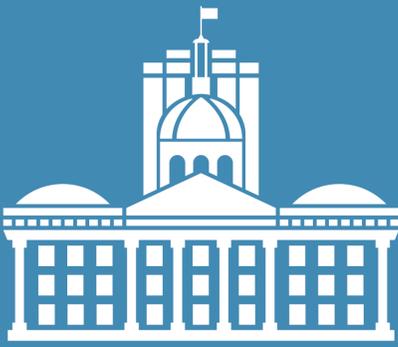
¹¹² DOH should use a unique person ID that is shared with AHCA.

¹¹³ If any records or components of the data are unavailable, DOH should provide documentation detailing the causes and extent of missing information.

GME level (internship, residency, fellowship), state of the GME, and, for all matches to Florida GME programs, the name of the sponsoring institution and ACGME sponsor ID, ACGME program ID, and ACGME specialty/subspecialty name and code.

- Cumulative, annually updated files with DOH licensure and physician workforce survey data, consisting of all people who held a valid Florida physician license at any point since the start of state fiscal year 2014-15, including Physician-in-Training licenses. This should include, at a minimum, a person-level file, a GME-level file, an annual license-level file, and a Physician Workforce Survey file, as described below.
 - **Person-level file** should include but not be limited to, a unique person ID (stable across licenses and years), month and year of birth, year first practicing medicine or earliest physician license in any state (if applicable), the date of graduation from medical school, state of the medical school, and name of the medical school. If the state of the medical school was in Florida, the file should include a uniform name for the university and the AAMC school code or AACOM college acronym, at a minimum, for all graduations on or after January 1, 2000.
 - **GME-level file** should contain one record for each GME program the person participated in, regardless of whether the program was completed or completion of the program was recorded. This file should include but not be limited to the unique person ID, dates of attendance (start and end dates), whether credit was received, state where the program is located, program name, program type (internship, residency, fellowship), and specialty/subspecialty area. For all records for Florida GME where the training had not ended before July 1, 2020, the GME information should include standardized coding of all programs and specialties/subspecialties including the ACGME sponsor code and sponsor name, ACGME program code and program name, ACGME (or IRIS) specialty/subspecialty name and code, and, if available, ACGME or Medicaid provider ID for the primary practice site.
 - **Annual license-level file** should contain one record for each license that was active during the year including the unique person ID, license ID, profession code, file number, an indicator for whether the person was identified as participating in GME in Florida under the license, code(s) for how the person was identified as participating in GME, training modifier, rank, indicator for house physicians, original license date, license expiration date, number of days the license was listed as active during the year, number of days the person was listed as actively practicing under the active license during the year (based on license status and secondary status), number of days the person was actively practicing under an active license in Florida during the year, and for people practicing in Florida the location of practice (county, city and zip code).
 - **Physician workforce survey file** should include, but not be limited to, the unique person ID, whether the person was providing direct care, whether the person was practicing full or part-time, primary specialty, an indicator for whether they were in primary care, practice setting, plans to relocate, plans to retire, and the date of the survey response.

This page is intentionally left blank



OPPAGA

Office of Program Policy Analysis and Government Accountability

OPPAGA provides performance and accountability information about Florida government in several ways.

- [Reports](#) deliver program evaluation and policy analysis to assist the Legislature in overseeing government operations, developing policy choices, and making Florida government more efficient and effective.
- [Government Program Summaries](#) (GPS), an online encyclopedia, provides descriptive, evaluative, and performance information on more than 200 Florida state government programs.
- [PolicyNotes](#), an electronic newsletter, delivers brief announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.
- Visit [OPPAGA's website](#).

OPPAGA supports the Florida Legislature by providing data, evaluative research, and objective analyses that assist legislative budget and policy deliberations. This project was conducted in accordance with applicable evaluation standards. Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475).

Project supervised by Wendy Scott (850/717-0500)

Project conducted by Michelle Chandrasekhar, Dan Dunleavy, Justin Graham, Daphne Holden, Eryn Jones, Becca Smith, and Tina White
Kara Collins-Gomez, Coordinator