

## **THE COST OF GRADUATE MEDICAL EDUCATION (GME)**

The cost to support a resident in a graduate medical education (GME) program is typically divided into two cost categories:

Direct Medical Education (DME) Costs – include those costs directly attributable to the GME program. DME costs are typically subdivided further into the following three categories:

- (1) Resident Costs- include resident salaries and benefits and may include malpractice insurance for residents; these costs are typically borne by the teaching hospital.
- (2) Faculty Costs- are comprised primarily of that portion of medical school teaching faculty members' compensation devoted to supervising residents and to GME administrative responsibilities; these costs are typically borne by the medical school, but may be shared with the teaching hospital.
- (3) Administrative /Overhead Costs - include support staff compensation, classroom space, instructional materials and supplies, and costs associated with accreditation and professional association dues and licensing examination fees; most of the costs are typically borne by the teaching hospital, but some may borne by the medical school.

Indirect Medical Education (IME) Costs - include those costs incurred by teaching hospitals with residency programs as a result of their unique mission and case mix (providing more complex and highly specialized care, treating more severely ill patients and providing more uncompensated care). IME costs also reflect such considerations as the higher volume of tests and procedures performed at teaching hospitals, the higher staffing ratios at teaching hospitals and the increased record-keeping/documentation associated with residency training.

Because the federal Medicare program is the largest explicit source of funding for GME, data derived from the Medicare cost reporting and accounting system has served as the basis for most national studies of GME costs. These studies have consistently found GME costs per resident vary among hospitals, medical schools and residency programs, even when the entities incurring the costs are in the same city or state, have similar GME programs, patient volume and payer mixes and would otherwise appear to be comparable. The range of variation in GME costs is historically wider than the range in variation in DME costs. These variations in GME costs are the result of a variety of factors, including: (a) differing methodologies used to allocate costs among/within categories; and (b) differences in the financial arrangements between the numerous hospitals and medical schools that sponsor GME programs. For example, the costs associated with faculty supervision of residents for a given residency program may be wholly assigned to the affiliated medical school, wholly assigned to the teaching hospital, or shared between both entities. The lack of consistency in these financial arrangements makes it difficult to accurately and appropriately determine and allocate GME costs between teaching hospitals and medical schools.

Data collected from Medicare cost reports for Florida’s six statutory teaching hospitals<sup>a</sup> and six selected community teaching hospitals<sup>b</sup> for a legislatively mandated study of graduate medical education completed in 2001 indicate the following:

	Resident Costs	Faculty Costs	Admin./Overhead Costs	Total Direct Costs	Indirect Costs	Total Cost Per Resident
Range	\$28,622-\$47,826	\$4,532-\$66,771	\$639-\$42,951	\$39,554-\$141,107	\$65,373-\$124,132	\$107,632-\$256,998
Average	\$41,323	\$32,252	\$17,159	\$88,695	\$97,176	\$185,871
% of Total Cost	22%	17%	9%	48%	52%	100%

<sup>a</sup> Statutory Teaching Hospitals: Shands Hospital, Gainesville; Shands Hospital, Jacksonville; Jackson Memorial Hospital, Miami; Tampa General Hospital; Mt. Sinai Medical Center, Miami Beach & Orlando Regional Medical Center

<sup>b</sup> Community Teaching Hospitals include St. Vincents Hospital, Jacksonville; Tallahassee Memorial Hospital; Sun Coast Hospital, Largo; Florida Hospital, Orlando; Palmetto General Hospital; & Bayfront Medical Center, St. Petersburg.

Data was collected on the cost of GME from the state's three allopathic medical schools with residency programs (UF, USF and UM) for the purposes of the Board of Governors March 17, 2004 workshop. These data indicate that, although there are modest variations among the three medical schools' GME costs per resident, GME costs for the three schools average as follows:

Average Direct Costs, Excluding Faculty Supervision:	\$ 65,000
Faculty Supervision Costs:	\$ 50,000
<b>TOTAL DIRECT GME COST PER RESIDENT:</b>	<b>\$115,000</b>
Indirect Costs:	\$ 75,000
<b>TOTAL COST PER RESIDENT:</b>	<b>\$190,000</b>

It should be noted that, traditionally, osteopathic residency programs have used community physicians as faculty who serve either as uncompensated volunteers or who receive only very modest stipends. Consequently, although the salaries & benefits paid to osteopathic interns and residents is comparable to that paid to allopathic residents, the total direct cost for osteopathic GME programs is typically somewhat lower than the total direct cost of allopathic residency programs. The indirect cost of allopathic and osteopathic GME programs is comparable, however.

### **NEW AND EXPANDED GME PROGRAMS:**

The federal Balanced Budget Act of 1997 made significant reductions in the funding for graduate medical education provided through the Medicare program. Because Medicare funding is a major source of support for most GME programs, the capacity and number of Florida GME programs, like those nationally, has remained essentially frozen since 1998. This stagnation has been particularly hard for Florida because the state is well below the national average, ranking 46<sup>th</sup> nationally, in GME positions per 100,000 population. The University of Florida, University of South Florida, University of Miami and Nova Southeastern University medical schools have identified the residency programs described on the chart on the following page as those that they believe should be either expanded or established in order to meet the state's physician workforce needs. The number of residency positions associated with each new or expanded residency program is indicated in parentheses.

	New Program	Expanded Program	Total # Positions
USF	Orthopedics (15) Plastic Surgery (18) Emergency Medicine (12) Cardiothoracic Surgery (6)	Neurosurgery (8) Neurology (4) Physical Medicine (4) Radiology (6) Surgery 95) Trauma/Critical Care (2) Radiology Specialties (4) Pediatric Specialties (14) Breast (1) Neuro-Oncology (1)	100
UF	Emergency Medicine (18) Ophthalmology (16)	Internal Medicine (10) Anesthesia (8) Neurosurgery (3) Otolaryngology (5) Pathology (5) Pediatric Genetics (3) Pediatric Infectious Disease (3) Pediatric Hematology/ Oncology (3) Psychiatry (3) Surgery (5)	82
UM	Emergency Medicine (36) Rehab./Physical Medicine (4) Pediatric Gastroenterology (1)	Hematology/Oncology (4)	45
NSU	Internal Medicine (30) Pediatrics (18) General Surgery (12) Psychiatry (9) Obstetrics/Gynecology (16)	Internal Medicine (6) Pediatrics (12) General Surgery (10)	113
Total New & Expanded GME Positions			340

## **STATE SUPPORT FOR GME:**

Because the direct costs for GME are clearer, easier to capture and vary less than the indirect costs of GME, one approach the state could take is to appropriate funding to support a portion of direct GME costs. Priority for such state support could be given to establishing or expanding GME programs in high priority specialties and/or those located in targeted geographic areas of the state.

For example, if the state chose to provide funding at a level equal to half of the average direct cost per resident (approximately \$57,500 annually), \$19.6 million would be required annually to support the 340 new and expanded residency positions identified as a high priority on the chart above.

