

Role of Graduate Medical Education in Addressing Physician Workforce Needs in Texas September 2004

Graduate medical education (GME) refers to the specialized training physicians receive after completing medical school—the lengthy period of time during which they immerse themselves in learning a specific field of medicine. GME programs play an important role in giving physicians the skills they need to become independent practitioners; in providing patient care, often to the most needy; and in improving the health of all Texans through medical research and innovations.

Executive Summary

The once-predicted oversupplies of physicians by the year 2000 did not materialize. In fact, the opposite has occurred: a growing shortage of physicians in many specialties and a continued shortage in some geographic areas. Shortages are likely being caused by a combination of state demographics, the growing complexity of illnesses, patients' renewed ability to self-refer to specialists, and ongoing innovations and expansions of health care technology.

Texas' ability to rely on physicians relocating from other states to meet the state's physician workforce needs may be coming to an end. The in-migration of physicians peaked in 1998 and reached a 10-year low in 2003. Additional GME slots are needed to retain more Texas graduates and to prepare adequate numbers of physicians to meet the state's growing health care needs. Teaching hospitals, however, have expressed concerns about their ability to sustain GME programs due to narrow operating margins and low financial reserves. This is largely due to the recent whittling-away of GME funding sources; the number of slots supported by Medicare is frozen at 1996 levels and Medicaid GME funding was eliminated for the current biennium.

Purpose of GME

Although state funding for medical education primarily focuses on undergraduate programs, a physician's education continues for three to seven years after medical school, depending on the specialty selected. The minimum requirement for licensure of a domestic graduate in Texas is one year of GME, however, completion of a residency program and most often certification by the corresponding national specialty board are typically required for hospital admitting privileges or participation in a health care network or on a provider panel. Physicians may then pursue even more specialized education in fellowship programs where they receive intensely focused training on specific body organs, systems, or life stages. The increased specialization in medicine is reflective of the proliferation of scientific advancements and has been driven largely by patient demand.

The federal government has long recognized the value of medical training to society as reflected in Medicare's financial support for GME across the country. Almost 40 years after its creation, Medicare remains by far the largest financier of GME. Medicare GME has undergone a series of damaging cuts in recent years due largely to erroneous predictions of physician oversupplies. As a result, the number of GME slots supported by Medicare is generally frozen at 1996 levels. Current Medicare funding policies also result in large regional disparities; Texas teaching hospitals come up far short in GME funding in comparison to their counterparts, including New York, New Jersey, and California.

In Texas, a majority of state GME funds are allocated by the Texas Higher Education Coordinating Board to help support primary care GME. In the 2002-03 Biennium, this agency distributed \$51 million in state funds to primary care GME programs. That was *reduced by 37 percent* to \$27.5 million for the 2004-05 Biennium. A smaller amount of state support (\$9.2 million in 2002-03 Biennium; recently *scaled back 12 percent* to \$8

million for 2004-05) is provided directly to selected GME programs.

On top of the recent cuts in direct funding for GME, Medicaid's longstanding role in supporting Texas GME was *completely eliminated for the 2004-05 Biennium – a loss of an estimated \$127 million in state and federal matching funds.* Gov. Rick Perry partially restored these funds for Fiscal Year (FY) 2005 with a transfer of \$3 million from unclaimed lottery winnings on August 23, 2004. These funds garnered a 60-percent federal match for an additional \$4.2 million. As much as \$20 million in one-time state funding may become available in FY 2005 for Medicaid GME and possibly used to qualify for federal matching funds. (Note: Medicare and Medicaid GME support are not open-ended but are tied to the volume of health care services individual GME programs provide to Medicare and Medicaid patients.)

	2002-03 Funding	2004-05 Funding	Net Difference 2004-05/2002-03	% Difference 2004-05/2002-03
Programs				
State GME Funding for:				
Primary Care Residency Programs				
Family Practice Residency	\$20,599,709	\$18,383,522	-\$2,216,187	-11%
Primary Care Residency	5,886,460	5,253,104	-633,356	-11%
Graduate Medical Education	15,200,000	3,828,222	-11,371,778	-75%
Family Practice Pilot Programs	1,974,400	0	-1,974,400	-100%
<i>Subtotal</i>	<i>43,660,569</i>	<i>27,464,848</i>	<i>-16,195,721</i>	<i>-37%</i>
Teaching Hospitals				
Resident Physician Compensation	8,070,238	0	-8,070,238	-100%
Medicaid GME*	E126,800,000	0	E-126,800,000	-100%
<i>Subtotal</i>	<i>E134,870,238</i>	<i>0</i>	<i>E-134,870,238</i>	<i>-100%</i>
Total: GME Programs	E178,530,807	27,464,848	E-151,065,959	E-85%

E=Estimated.

Note: Adjustments were made to FY 2004-05 budget to reflect 0.26 percent decrease as directed by Section 56, Article III, General Appropriations Act, 2003.

*No Medicaid GME funds were allocated for 2004-05 Biennium. One-time relief funding using unclaimed lottery winnings has been approved for FY 2005 and as of Sept. 1, 2004, \$3 million in state and \$4.2 million in federal matching dollars were approved for allocation to teaching hospitals. (Rider 48, Article IX, General Appropriations Act, allows for this allocation). Up to \$20 million in Medicaid GME relief funds may be forthcoming for FY 2005. For FY 2003, Texas teaching hospitals identified \$63.4 million in Medicaid GME payments in the Coordinating Board's study of GME revenues and costs. Allocations for FY 2002 are not available and are assumed to be the same as 2003.

Historical Interest in Establishing State GME Formula Funding

Following the 1998 creation of state formula funding for undergraduate medical education, attention turned to the feasibility of creating a similar funding structure for GME. This effort, however, was stymied because of the complicated nature of GME funding; shared responsibility for GME among teaching hospitals and medical schools; and various contractual and funding arrangements among individual teaching hospitals and medical schools.

This complexity led state leaders to issue Rider 43 in 2001 (77th Legislature, Regular Session, General Appropriations Act), which culminated in the report, "Funding Graduate Medical Education in Texas, August 2004," by the Coordinating Board. This report found a **gap of approximately \$510.3 million between annual funds designated for GME and funds actually needed and used for this purpose** as identified by study participants.

As noted, Medicare support is frozen at 1996 levels with few exceptions and state GME support has been significantly reduced for the current biennium. This **federal and state scale-back is occurring at a time of growing demand for new physicians in Texas, particularly in highly specialized fields.** The state cannot afford to ignore this looming crisis and the potential impact on the physician workforce and

patient care.

Benefits to Texas from GME

What does GME mean for Texas? Home-grown physicians have a higher tendency than others to remain in the state to enter practice. Research has shown a strong relationship between where physicians train and where they choose to enter practice. (Texas Medical Association Survey, 2003; *Annals of Emergency Medicine*, 1998; *Journal of American Medical Association*, 1995; and *Academic Medicine*, 1991.)

TMA studies have shown that **physicians who complete BOTH undergraduate and graduate medical education in the state are almost three times more likely to practice in Texas**. Similar findings have been reported by The University of Texas System (Presentation by Kenneth Shine, MD, UT System, House Appropriations Subcommittee on GME, Public Hearing, March 23, 2004).

Most GME programs are large providers of health care to un- and under-insured Texans. The relatively low salaries of residents (generally, less than \$40,000 per year) help residency programs afford to serve indigent patients.

In 2002, the combined total economic impact of medical schools and teaching hospitals for Texas was \$19.6 billion. Of this, \$8.5 billion had a direct impact and \$11.1 billion was indirect. Texas ranked *fifth* in the nation, following New York, Pennsylvania, California, and Massachusetts. Medical schools and teaching hospitals are major employers and are recipients of spending by hospital patients, patients' visitors, students and their visitors. They also bring in federal and private research dollars. The multiplier effect for these types of institutions averages 2.3—every dollar spent by a medical school or teaching hospital indirectly generates another \$1.30 for a total impact of \$2.30. (Source: Association of American Medical Colleges, Nov. 2003.)

Shortage of GME Slots

The current limits on Medicare and Medicaid support for GME require teaching hospitals to find alternative funding sources to open, maintain, or grow a GME program. **The number of Texas GME slots not paid by Medicare is estimated as high as 2,300 (39 percent)**. This includes slots in hospitals and community settings. Although much of GME training has followed the recent movement of patient care from inpatient to ambulatory or community settings, Medicare's GME support is allocated through hospitals, providing little if anything for slots outside the hospital.

Teaching hospitals have expressed concerns about their ability to sustain GME operations due to narrow operating margins and low financial reserves (Public testimony, House Appropriations Subcommittee on GME, March 23 and July 6; and Senate Subcommittee on Higher Education, April 8). On top of falling hospital revenues, national limitations put in place in 2003 on the number of hours physicians-in-training may work placed a financial hardship on teaching hospitals that has them scrambling to hire additional staff.

Further, **there are concerns Texas does not have enough slots to train the number of physicians needed for our growing population**. At least 1,200 students graduate from Texas medical schools each year in comparison to about 1,350 entry-level GME slots. After counting a slot for each Texas graduate, only about 150 GME slots are available for out-of-state and international graduates to train in Texas (Source: UT System, public testimony at legislative hearings referenced above).

Without enough slots, Texas is losing graduates to other states. In response to requests from Rep. Dan Branch (Dallas), and Sen. Royce West (Dallas), TMA and Texas medical schools polled 2004 medical graduates who were leaving the state for GME to identify how many would have preferred to stay in the state. A total of 137 (38 percent) of this year's graduates who left the state for GME training indicated they would have preferred to remain in Texas had a slot been available. **Additional GME slots are needed to retain the state's substantial investment in undergraduate medical education and provide better educational**

opportunities for our own graduates. Approximately \$50,000 a year in state support is provided for each Texas medical student through the formula funding process. If they are forced to leave the state due to a shortage of GME slots, few are likely to return to Texas to enter practice and the state's \$200,000 investment leaves with them. For the 137 medical graduates who would have preferred to stay in the state for GME, the loss was \$27.4 million.

Growth is also needed to correct national and state policy missteps that were based on predictions of physician oversupplies that did not materialize. Further, physicians are needed to lead research in medical biotechnology, an industry with growth potential for the state.

Growing GME is contingent on the availability of financial resources to support the additional slots. Any additional GME funding, however, should not come at the expense of funding for undergraduate medical education.

Physician Workforce Needs

Popular thinking in the 1990s was of an impending glut of physicians by the year 2000. That did not materialize. In fact, the opposite has occurred: a growing shortage of physicians in many specialties and a continuing shortage in some geographic areas. Shortages are likely being caused by a combination of:

- rising health care demands stemming from the state's population growth, growing complexity of medical needs, growth in elderly population and longer life spans;
- renewed ability of patient's to self-refer to specialists; and
- ongoing innovations and expansions of health care technology.

In Texas, there are increased demands for a number of specialties, including but not limited to:

- anesthesiologists,
- gastroenterologists,
- neurosurgeons,
- pediatric subspecialists (anesthesiologists, surgeons, cardiologists, and neurosurgeons),
- orthopedic surgeons,
- radiologists, and
- urologists.

Patients are feeling the effects of the shortages by experiencing longer waiting times for appointments with many physician specialists.

A shortage of most surgical specialists is predicted by 2020, including ophthalmologists and cardiothoracic surgeons. Shortages in these specialties are particularly hard to reverse because training periods span 9 to 12 years.

Further, national studies by two prominent physician workforce experts predict shortages of 50,000 physicians by 2010 and 150,000 to 200,000 by 2020. They recommend the United States train an additional 3,000 medical students per year by 2015 to help address the shortage. Currently, there are about 66,000 medical students in the U.S.

Not only are there shortages in numbers of physicians but also a growing trend among young physicians to pursue more balanced lifestyles and dedicate time for non-work interests. Some of this is driven by the increased number of two-doctor households and the need to share family responsibilities. Other young physicians consider this trend a reaction to the less rewarding aspects of medicine, i.e. hassles with business operations that are driving physicians to make time for less stressful pursuits.

In Texas, women represented the majority in the medical school entering class of 2003. With fewer men attending college, the percentage of women in medical school is expected to further increase. Traditionally, women have chosen different medical specialties than men, with a strong interest in specialties focused on babies and children. Women have shied away from surgical specialties, and it is not known if growing demand in these areas will influence their future choices. Women physicians also tend to work fewer hours than men. The combined effect is that greater numbers of physicians will be needed to replace retiring physicians.

Texas' long-enjoyed position of being a "net-importer" of physicians is becoming less reliable. Texas medical school enrollments and GME programs saw little growth over the past 20 years despite the substantial population increase during this period. The state's rising physician demand during these years was met largely by physicians relocating to Texas from other states and countries, peaking in 1998. Educational and business opportunities for themselves and their families, the mild climate, the lack of a state income tax, and recreational opportunities were cited as primary reasons physicians chose to relocate to Texas. Although physician in-migration patterns were stable and little cause for worry in the past, the pattern has begun to change. With this change, it has become more obvious that the state has only limited influence on physician in-migration patterns. This calls into question how reliable the external pipeline will be in providing for the state's future physician workforce needs.

The recent professional liability crisis contributed to an **unstable practice environment that caused physicians to limit their practices and discontinue "high-risk" procedures.** Further, it **may have had a chilling effect on physicians relocating from other areas. A 10-year low in new physicians was seen in FY 2003** before the passage of comprehensive health care liability reforms and Proposition 12. Benefits of these reforms are beginning to be seen through restored stability of the practice environment.

There has also been a **decline in the number of international medical graduates (IMGs) training in the U.S. since 1998.** Heightened national security concerns and a curtailment in immigration visas are expected to continue the trend. This development is important in that **one in four Texas physicians is an IMG.**

TMA responded to these signs of a progressive physician shortage by reversing its long-held opposition to medical school expansions. The previous anti-growth policy called for no GME expansions and was firmly embedded, having been reaffirmed numerous times over a 13-year period. National groups such as the American Medical Association, Association of American Medical Colleges, and the federally established Council on Graduate Medical Education made similar policy shifts recently.

In recognition of the state's physician workforce needs and the role of GME in meeting those needs, the following policy statements were recently adopted by the TMA:

- TMA recognizes the growing specialty shortage and strongly supports efforts to increase access to specialty care in Texas through adequate training opportunities in shortage specialties. *Expansion of GME slots would also help provide greater educational opportunity for Texas medical school graduates within the state which increases the likelihood they will remain in the state to enter practice.*
- The Texas Medical Association: (1) reaffirms its policy that Texas GME programs should be fully and appropriately funded, but not at the expense of current undergraduate medical education funding; and (2) urges the Texas Legislature to restore funding of state GME programs at least to previous levels and reinstate Medicaid GME funding at an acceptable level.
- TMA supports state formula funding for GME for all accredited residency programs.
- TMA encourages the Texas Legislature to provide adequate support for the **instructional** costs of GME. *These costs include faculty costs that are not supported by Medicare and Medicaid.*

- TMA advocates the development and maintenance of a strong educational pipeline into medical schools and GME programs, particularly the identification, recruitment and retention of minority students.
- TMA will serve as an informational resource to the Texas Legislature in working with the Texas Congressional Delegation to increase support at the federal level for GME health service delivery costs. Efforts are needed to (1) eliminate the current outdated caps on Medicare-funded GME slots, and (2) work for increased and geographically equitable Medicare GME funding. *Texas teaching hospitals should receive payment based on the same funding policies as other states and no longer be penalized by region-specific policies.*

The need for quality health care is a common thread throughout the state's increasingly diverse and growing population. Barriers to access to care impact the health of Texans. For Texas to continue to be a strong and productive state, access to quality health care must be assured – an assurance that can come only from having a sufficient number of appropriately trained physicians. Physician workforce needs are critical and should not be ignored. The educational pipeline for physicians is long, and long-term state investments are needed to keep pace with the growing complexities in health care needs that lie ahead for Texans.