2009 MEDICAL EDUCATION AND PHYSICIAN WORKFORCE

Consensus Group Members

Baylor College of Medicine

Texas A&M Health Science Center: College Station, Temple, Bryan, and Round Rock

Texas Tech University Health Sciences Center: Lubbock, Amarillo, and Odessa; and Paul L. Foster Medical School-El Paso

The University of Texas System

The University of Texas Health Science Center at Houston

The University of Texas Health Science Center at San Antonio, and Lower Rio Grande Valley Regional Academic Health Center

The University of Texas Health Science Center at Tyler

The University of Texas M.D. Anderson Cancer Center

The University of Texas Medical Branch

The University of Texas Southwestern Medical Center

University of North Texas Health Science Center

Children's Hospital Association of Texas

Teaching Hospitals of Texas

Texas Medical Association

CONSENSUS STATEMENT

81st Texas Legislature



PURPOSE

The state's nine medical schools, regional campuses, two other health-related institutions, as well as state teaching and children's hospital and medical associations, as named at left, recognize the significant challenge state lawmakers face in formulating laws and policies that address the future physician supply needs of the state. With a shared commitment to achieving a physician supply molded in response to the state's needs, this grouping of institutions and organizations was formed to forge a consensus statement on state policy recommendations for medical education and the physician workforce. This document is offered as a resource to assist state legislative members and staff in making budgetary and legislative decisions during the 81st legislative session.

PROCESS

This consensus document is based on deliberations from two state-level forums hosted by the Texas Medical Association in 2008 to assess the status of the state's physician workforce and the potential role of medical education in addressing the state's need for physician services. Forum participants reassessed the 2007 Medical Education and Physician Workforce Consensus Statement adopted as a resource document for the 80th Texas Legislature. It was recognized that most consensus points from the 2007 statement remain valid, but forum participants identified a greater urgency for action in anticipation of a deepening physician shortage.

CONSENSUS POINTS

Forum participants identified the following consensus points as priority issues for the 2009 legislative session.

- Texas, like much of the United States, has a shortage of physicians, and the shortage is expected to grow worse over the next decade.
- Shortages are occurring across medical specialties, with Texas falling below U.S. totals in the ratio of physicians per population for 37 (93 percent) of 40 major categories of medical specialties.



ABSTRACT

Texas has a *shortage* of physicians, ranking 43rd in a stateby-state comparison of physician-to-population ratios. The shortage is expected to grow worse over the next decade.

Medical education and graduate medical education need to be *expanded* to better position the state for steep increases in physician demand. Adequate funding is needed to grow both segments of the physician workforce pipeline.

GME is growing more slowly than medical school enrollments, which will force medical school graduates to leave the state for GME. Adequate numbers of GME slots are needed to *keep our graduates in Texas*.

Texas needs 27 percent more physicians today to reach the current U.S. ratio of patient care physicians per 100,000 people.

- Texas is attracting more physicians to the state than at any other time in recent history; however, the exceptional growth has been only slightly ahead of population gains.
- Combined growth in the number of Texans as well as greater longevity of Texans is creating an ever-increasing demand for physician services.
- Innovations in health care delivery, pharmaceuticals, medical devices, and other advances in medical technology are further contributing to the greater demand for health care.
- The large number of Texas physicians among the baby-boomer generation soon will be approaching retirement age along with a large portion of the patient population. This combination likely will result in an even greater shortage of physicians. At a time when many Texas physicians can be expected to cut back on their patient care hours or retire, the large number of Texans among the baby-boomer generation are expected to drive up the demand for health services over the coming decades.
- Even if Texas continues to set new records in the number of new physicians added to the state, the state's physician supply is expected to grow more slowly than the state's population over the coming decade.
- Texas led the nation in population gains between 2005 and 2006 and is projected to grow 21 percent between 2005 and 2015 (Texas State Data Center).
- Texas medical school enrollments are projected to grow 30 percent by 2015

 the growth rate recommended by leading national physician workforce experts (2008 TMA survey of medical schools).
- Graduate medical education (GME) is expanding more slowly than medical school enrollment. As a result, Texas will lose a significant number of its medical graduates, who will be forced to leave the state for GME. Given the evidence that location of GME is highly predictive of where a physician will enter practice, medical school graduates who leave Texas for GME are not likely to return to the state to practice on completion of GME. This is demonstrated by research from the Association of American Medical Colleges on active Texas physicians in January 2007. Of this group, 80 percent who completed both medical school and GME in Texas were practicing in Texas. In comparison, 35 percent of physicians who completed only medical school in Texas not GME were practicing in Texas.
- Losing medical students to other states has economic consequences, with a net loss to the state of more than \$200,000 in state funding for each graduate who leaves and does not enter practice in Texas. The state also forfeits the economic benefit that a physician's practice brings to a community, averaging \$750,000 a year.

POLICY RECOMMENDATIONS

- Expand the physician workforce pipeline for medical schools and GME, in both primary care and other specialties, to better position the state for steep increases in physician demand expected to result from population gains. This pipeline expansion will require a greater investment in the state's educational infrastructure.
- Provide adequate funding for *both* segments of the pipeline medical school and GME. Both levels of education are required to prepare a physician for practice.

Medical school prepares a physician not for medical practice but for entrance into a GME program. A physician is not prepared to practice a medical specialty until completion of GME. • Align the state's GME capacity with medical school enrollment growth by expanding the number of entry-level GME positions in accredited programs to at least 110 percent of the total number of Texas medical school graduates each year, as recommended by the Texas Higher Education Coordinating Board. A step-wise increase in GME positions would also be needed for the subsequent years of training (from three to seven years) to enable residents to complete the full duration of their training in the state.

The growth in GME positions would better position the state to retain the increased numbers of Texas medical graduates for GME and also provide greater opportunity for Texas to attract qualified medical graduates from other states.

• Fund the state GME formula at \$16,000 per year per resident to help cover the educational costs that medical schools bear. This recommended funding level is based on the estimated portion of a faculty member's time that is devoted to supervising residents. Generally, GME is a shared responsibility between medical schools and teaching hospitals, with each side incurring training-related costs. Medical schools typically provide clinical faculty to train residents, and teaching hospitals serve as training sites. In addition, primary care GME is often based at community clinics. The estimated GME faculty education cost for medical schools is at least \$16,000 per resident per year, and teaching hospital cost is estimated at an additional \$100,000 per resident per year.

State GME formula funding remains the only designated state funding source for faculty education costs. The current funding level of \$5,634 per resident per year is valuable but represents less than one-third of the estimated cost. Texas needs adequate resources for high-quality GME programs in order to attract the best and brightest physicians for GME and to meet the state's future workforce needs. (See page 7 for a comparison of current state GME funding with funding in previous biennia.)

• Bring more federal dollars to Texas by maximizing federal matching funds for Medicaid GME funding (a 40 percent state/60 percent federal match) for teaching hospitals.

The current state budget does not provide specific funding for the teaching hospital costs related to GME — estimated at approximately \$100,000 per resident per year, as noted above — and there has been no effective federal policy for funding additional GME slots since 1996. Medicare's support for GME at teaching hospitals is frozen at 1996 levels, leaving a significant number of Texas GME slots without Medicare support for hospital-related GME costs. (Note: In 2008, the Texas Health and Human Services Commission estimated \$121 million would be needed in 2010-11 to restore the Medicaid GME program for supporting a portion of GME costs at teaching hospitals, with \$50 million a year in general revenue to be matched by \$71 million a year in federal funding.)

• Restore state medical student per-capita formula funding to 2000-01 levels, as recommended by the Texas Higher Education Coordinating Board. This restoration is recommended over two biennia. The first increase would raise formula funding by 2.5 percent from the current state funding of \$51,527 per student per year to \$52,815 for each year of the 2010-11 biennium.

(Note: The second recommended increase would raise formula funding to \$54,103 per year for the 2012-13 biennium. It is important to note that these





recommended increases would still fall short of the high point of formula funding of \$55,971 per medical student from the 2002-03 biennium; and further, restoring the base formula funding to 2000-01 levels would not address inflationary cost factors that have reduced the buying power of medical schools and GME programs since 2000.)

• Support expansion and updating of the State Physician Education Loan Repayment Program.

This recruitment tool for medically underserved communities is particularly important at a time when medical education debt levels have seen dramatic increases, now averaging \$131,000 per graduate.

• Utilize an improved State Physician Education Loan Repayment Program to attract more students into family medicine and other primary care specialties in underserved areas, as well as improved payment and better support for primary care physicians.

Primary care physicians are needed throughout the state and are particularly essential to rural communities, which typically experience greater barriers to accessing health care.

• Restore the Statewide Primary Care Preceptorship Program to the 2002-03 funding level of \$2 million per year.

In response to the state's increasing primary care shortage, this program has a strong potential for promoting careers in primary care (family medicine, general internal medicine, and general pediatrics) among medical students. Beginning in 2004, the program lost over half of its \$2 million annual state budget as a legislative cost-saving measure.

- Strive to achieve a ratio of physicians per capita in Texas closer to the national total. Texas needs 27 percent more physicians today to reach the current U.S. ratio of patient care physicians per 100,000 people.
- Fund the Joint Admission Medical Program (JAMP) at a level of \$10 million per year. The JAMP program, unique to Texas, is a critical tool for achieving a diversity level among the physician workforce that better reflects the state's shifting demographic profile. Further, the benefits of this program will not be fully realized unless Texas has sufficient entry-level GME slots to retain JAMP participants as they complete medical school, with the first class graduating in 2010.
- Support medical school efforts to share curricula, including Webbased applications, across campuses and university systems. This would benefit Texas medical students as well as students in other health professions.
- Maintain recent improvements in state medical licensure processing times to facilitate the addition of qualified applicants to the state's physician workforce.
- Develop a comprehensive physician workforce analysis and planning process for Texas to better define expected physician demand and supply over the next decade.
- Ensure the state has adequate numbers of bedside nurses, dentists, and other important members of the health care team who are critically important for meeting the health care needs of Texans.

KEY FINDINGS & FORECASTS

Texas has a shortage of physicians, and projections indicate it is likely to grow worse by 2015. New physicians have been added to the Texas workforce in record-high numbers since 2003, but these gains, although significant, are failing to meet growing demand.

Findings

Although all pipelines into the physician workforce are expanding at historically high rates both in response to rising demand and as a reflection of a favorable medical practice environment in the state, the physician workforce is barely keeping up with the gains in population. The gap between physician supply and health care needs is predicted to widen over the next decade.

Texas Rankings

- Texas ranks 43rd among the states in the ratio of allopathic physicians (MDs) per 100,000 population. Texas dropped from 42nd to 43rd place in 2006, the most recent data available. Texas' 2006 ratio of 191 MDs per 100,000 population ratio is 27 percent lower than the U.S. ratio of 242 (American Medical Association).
- Texas ranks last in the ratio of physicians per 100,000 population when compared with the most populous states in the United States: California, New York, Florida, Illinois, and Pennsylvania.

Texas Physician Supply Trends

- The state's physician supply is growing rapidly, with almost 15,000 new physicians added since state tort reform measures were adopted in 2003. The state averaged gains of 2,900 physicians per year since 2003, compared with an average of 2,200 per year during the previous five-year period, 1999 to 2003.
- Despite historically high numbers, the physician supply grew more slowly in Texas when compared with the number of newly licensed physicians in the other most populous states as shown below:

No. 4	Texas	3,324
No. 3	New York	4,343
No. 2	Florida	4,492
No. 1	California	5,284

- Physician supply grew 17 percent in Texas between 2000 and 2007, just slightly ahead of the 16.6-percent population growth for these years. The similarity in growth margins for physician supply and population resulted in little change in the physician-per-100,000-population ratio for the past seven years, as shown in the graph at right.
- Even if Texas continues to attract the same high numbers of new physicians as seen in recent years, population gains are expected to exceed physician growth over the next decade. This will cause the physician-per-100,000-population ratio to decline, as shown in the graphic on page 6 based on physician supply and population projections to the year 2015.

A declining ratio of physicians per population may signify reduced access to medical care for Texans over the coming decade.



Ratio of Texas Physicians per

Finding:

Texas has a shortage of physicians, which limits patient access to care.

Forecast:

The shortage of physicians will become worse as a result of a growing imbalance between health care needs and physician workforce capacity.



Finding:

Texas medical school enrollments are increasing faster than expansions of GME slots in Texas.

Forecast:

Medical school graduates will be forced to leave the state as a result of a shortage of entrylevel GME positions unless GME growth is aligned with medical school expansions

Finding:

Texas has far fewer physicians per capita than the national total.

Forecast:

Physician shortages in most medical specialties are expected to grow worse over the next decade in Texas. Texas medical school enrollments are growing more quickly than GME programs. Unless GME programs expand, Texas will lose medical school graduates, as well as the state's investment in their medical education, to other states.

Findings

- Medical school enrollments are the highest in history, up 18 percent since 2004 and expected to reach 30 percent by 2015. This would put Texas on track to reach the national target of a 30-percent gain in medical school enrollments by 2015 as recommended by the Association of American Medical Colleges.
- GME programs are expanding in Texas but not at the same rate as medical school expansions.
- Texas ranks 25th in state comparisons of medical students per capita but 27th in the number of GME slots per capita.

• The Texas Higher Education Coordinating Board reports that the number of GME entry-level positions is almost equal to the size of the 2007-08 first-year medical school class for Texas, as shown below:

2007 filled entry-level GME positions in Texas:	1,481
2007-08 total Texas first-year medical students:	1,480
Difference:	1

While the 2007 first-year medical students will not be ready to enter GME programs until 2011, the comparison demonstrates the need to expand GME in response to medical school enrollment growth or risk losing medical graduates to other states for GME. The national GME accreditation process takes time, requiring one to two years of lead time for GME expansions.

Texas has a shortage in 37 out of 40 major categories of medical specialties.

Texas has far fewer physicians when compared with the U.S. totals for ratios of physicians by specialty per 100,000 population, falling below in 37 (93 percent) out of 40 medical specialties.

Findings

• Texas exceeds U.S. averages in only one specialty, aerospace medicine, likely a reflection of NASA's programs in the state. Texas has comparable ratios for only two specialties: allergy and immunology, and colon and rectal surgery, which were equal to national averages. Of the 37 specialties that fall below U.S. totals, psychiatry and vascular medicine are among the lowest ratios, just over half the national total.

Conclusions

To keep pace with the state's vigorous population growth, Texas needs significant increases in physician numbers, as well as maintenance of a stable practice environment to enhance physician retention. Both segments of the physician pipeline, medical education and GME, need to be expanded and funded in order to educate and train more physicians for Texas. Further, GME numbers need to be aligned with medical school expansions to retain the Texas medical graduates who want to train in the state and to prepare physicians in the specialties most needed for Texas.

STATE GME APPROPRIATIONS

State support for GME has fluctuated in recent years, and the current budget provides considerably less than half of the total funding provided in the 2002-03 biennium, as shown in the table below:



	2002-03 Biennium (in millions)	2004-05 Biennium (in millions)	2006-07 Biennium (in millions)	2008-09 Biennium (in millions)	Difference 2002-03 to 2008-09 (in millions)
Texas Health and Human Services Commission					
(Article II, Appropriations Act)					
Medicaid GME {estimated General Revenue (GR)}	\$67.5	\$28.3	\$0.0	\$0	-\$67.5
Medicaid GME (estimated Federal \$)	\$101.7	\$43.6	\$0.0	\$0	-\$101.7
Health-Related Institutions* (Article III)					
GME Formula	\$0.0	\$0.0	\$25.0	\$62.8	\$62.8
Texas Higher Education Coordinating Board (Article III)					
Family Practice Residency Program (GR)	\$20.6	\$18.4	\$17.5	\$17.5	-\$3.1
Primary Care Residency Program (GR)	\$5.9	\$5.3	\$5.0	\$5.0	-\$0.9
GME Program (GR)	\$15.2	\$3.8	\$3.6	\$0.6	-\$14.6
Resident Physician Compensation Program (GR)	\$8.1	\$0.0	\$0.0	\$0.0	-\$8.1
Family Practice Pilot Projects (GR)	\$2.0	\$0.0	\$0.0	\$0.0	-\$2.0
GENERAL REVENUE TOTAL	\$119.3	\$55.8	\$51.1	\$85.8	-\$33.5
ALL FUNDS TOTAL	\$221.0	\$99.4	\$51.1	\$85.8	-\$135.2

*Does not include special item appropriations to health-related institutions for GME programs. Detail may not add to totals due to rounding. (Base report prepared by The University of Texas System and used by permission. Modifications were made by the Texas Medical Association.)

