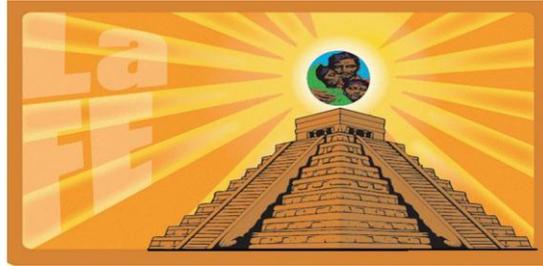


ISSUE BRIEF



MAHPA

**INEQUITY
IN
TEXAS MEDICAL SCHOOL EDUCATION
FOR HISPANICS**

SEPTEMBER 2012

Acknowledgments

La Fe Policy Research and Education Center (La Fe PREC) is a non-profit organization established in January 2006, to engage in policy analysis, education, leadership training, promoting civic involvement and advocacy for system changes in health and social policies. La Fe PREC is a component of Centro de Salud Familiar- La Fe, Inc., based in El Paso, Texas. La Fe is a multiple service organization with over 43 years of social justice, and direct service delivery experience in health care, social services, cultural arts, housing, economic development, and education.

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The Mexican American Hispanic Physician Association (MAHPA) is a non-profit organization committed to assisting and empowering students, underrepresented in the health professions, to pursue medical and healthcare careers. By encouraging students to enter the health professions, MAHPA strives to improve the delivery of health care services to the medically underserved.

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I. Executive Summary

This report highlights 11 years of Hispanic medical school enrollment and graduation data from the State's 9 medical schools. The report illustrates no significant progress after accounting for Hispanic population growth, including the medical school applicant pool of young adults ages 22-27. The underrepresentation of Hispanics in Texas medical schools is a problem with education and health implications that demands more immediate, innovative, and statewide attention.

In 2011, Hispanics comprised just 9% of direct patient care doctors in Texas. Their representation in first-year and total 4-year medical school enrollments in 2011 were both at 13%, and they comprised 14% of medical school graduates. Hispanics comprise 38% (over 9.6 million) of the State's population, and have the highest percentage (46%) of young adults ages 22-27.

In context, doctors of 'color' are in extreme short supply across the country. For the Hispanic population in Texas, where they are projected to comprise the majority of the population in little over a decade, their underrepresentation among practicing physicians is a crisis. The concurrent shift to experiencing the highest rates of chronic illnesses with their population growth imposes more barriers to address health disparities to improve Hispanic *bienestar* (well-being) and health.

There exists an overall shortage of doctors in the United State and in Texas, which has been steadily worsening for nearly 2 decades, particularly among primary care physicians. The doctor shortage in Texas is one of the worst in the country. The challenges to solve this problem are increasing daily because of the overall aging of the US population and the Affordable Care Act (ACA). If successful, the ACA will add millions of previously uninsured people to the health insurance rolls and impose significant stress on an already inadequate supply of direct care physicians for their on-going care.

In this health shortage environment resides the problem of Hispanic underrepresentation in medical education and practice. The important role that Hispanics and other students of color can have on addressing health disparities and inequities is well documented.

This descriptive brief is a snap-shot of critical health professions issues that requires thoughtful and strategic education and practice attention. The intent of this report is to initiate a critical dialogue with decision makers regarding education policy with a statewide perspective, and not from the unilateral perspective of Texas Medical Schools' Admissions policies. Furthermore, this issue and the decisions needed to address the inequities should not be left solely with health professions education leaders and policy-makers.

Most recommendations offered in this report require broad-based engagement with both public school and higher education representatives, and community interest groups. For example, development of collaborating partnerships must be achieved to significantly increase the medical school applicant pool through career exposure, mentorship and academic preparation among Hispanics and African Americans. Furthermore, we must rethink solutions with new paradigms and effective coordination inclusive of statewide strategies and plans. The current and future health status of our State's residents is at stake - we must act decisively to secure a future of opportunity and health for all Texas residents.

II. Introduction

In 2008, the Association of Academic Health Science Centers announced that the United States is “Out of Order and Out of Time,” regarding the state of the nation’s health workforce.¹ The finding indicated a major dysfunction in public and private health workforce policy and infrastructure. The study identified decentralized workforce policy decision-making as a key reason for the suboptimal supply and distribution of the health labor force. Generally, that health professions training institutions have function independently in their responsibilities in training health professionals purported to be consistent with community needs. Further, the report argues that they have operated without a strategic roadmap developed from coordinated multi-institutional and community stakeholder involvement.

The critical issues raised are directly relevant to national and state health professions policies impacting the supply of physicians. The issues include rising costs of training, inadequate financial support, residency training supply, increasing student debt, labor market financial incentives, advances in care procedures that impact training an adequate number of physicians to meet the populations’ existing and future health needs, and lack of racial/ethnic diversity in the workforce. More recent national and state-level reports have continued to sound this alarm.² Health care and the development of an adequate physician workforce are in a critical stage.

“The combined forces of health care reform, demographic shifts, continued economic woes, and the projected worsening of physician shortages portend major challenges for the health care enterprise in the near future.”³

The current environment further intensifies the need to increase diversity in the physician workforce. The challenge is to move away from previous approaches to address diversity in the physician workforce. Indeed, the author (M.A. Nivet) suggests that a new paradigm is already taking root, which is adding personal experience and attributes into current metrics for medical school admissions.

Whether this purported new paradigm will be effective in increasing diversity, including Latinos, is yet to be determined. Nonetheless, other prominent authors and advocates, such as S.W. Sullivan and I.S. Mittman, recommend a more comprehensive integrated approach.⁴ Their paper demonstrates limited gains in diversity in the health professions, despite decades of interventions and calls for better integration and coordination of efforts among schools and funders to increase diversity. These findings further suggest that *uncoordinated* and *decentralized* policy decision-making has dominated efforts to create real gains in health workforce diversity. According to Sullivan and Mittman, the notion of diversity in the health professions tends to emphasize benefits to minority populations only, rather than benefits to all, inadvertently leading to the pigeonholing of minority health professionals, while absolving other providers from the need to pursue public service. They stipulate that diversity interventions do not stop at medical school graduation, but rather must afford equity in opportunities to excel and lead. They call for national and statewide collaborations to recruit, support and nurture the growth of minorities in the health professions.

The problem remains as evidenced by significant disparities in access to health care for racial and ethnic minorities⁵ and also in their representation in the U.S. physician workforce. African Americans, Hispanic Americans and Native Americans comprise more than 30% of the U.S.

population, yet they account for less than 10% of the physician workforce.⁶ The increasing population growth of people of color in the U.S. portends even more serious challenges to increase their representation in medical education and practice.

Research supports that physicians from racial and ethnic minority groups are more likely to enter primary care, practice in health profession shortage areas, and care for minority, poor, underinsured, and uninsured individuals than their white counterparts.⁷ Additionally, diversity among physicians helps to improve cross-cultural training and competencies throughout the profession by broadening other physicians' perspectives regarding racial, ethnic and cultural differences. The waning and elimination of many U.S. Public Health Service Title VII programs and reduction in private foundation support, increases the challenges for more comprehensive and integrated approaches to improve physician representation of Latino populations and other people of color.⁸

“A century later, despite decades of targeted programs and advocacy, minorities are still vastly underrepresented among medical students, physicians, and medical school faculty of all ranks.”⁹

III. Texas Physician Workforce and Latinos

Nationally and in Texas, we are facing major physician shortages.¹⁰ The physician shortage alarm, particularly for primary care physicians was sounded over 20 years ago.¹¹ The shortages are especially troubling because of both the aging of the U.S. population and the projected increase of newly insured, resulting from implementation of the Affordable Care Act – both creating increasing demand for more physicians.¹²

The shortages affect everyone, but will particularly impact the most vulnerable, low-income, African Americans and Latinos. Low income, people of color and seniors have the highest disproportionate health disparities and needs.¹³ The need to address the shortage of physicians, develop a diverse and more equitable racial/ethnic physician workforce, and improve access to quality health care is a critical community need, not merely an institutional and professional goal. Projections from the American Association of Medical Colleges indicate that there will be a shortage of 45,000 primary care physicians and 46,000 surgeons and medical specialist in the next decade.¹⁴

Nationally, Texas ranks 46 in the number of all active patient care physicians (176.1) per 100,000 populations.¹⁵ For active patient care primary care physicians (PCP), the state ranks 48 with 62 PCPs per 100,000 populations. The estimated annual average for physician openings is 2,301.¹⁶

The state's shortage problem is worsened by the insufficient number of residency training sites that would retain a larger number of graduates in Texas. It's estimated that 45% of Texas medical graduates leave the state every year for residencies elsewhere.¹⁷ According to the Texas Higher Education Coordinating Board, by 2016, at least 180 medical school graduates will have to leave the state for their first year of residency.¹⁸

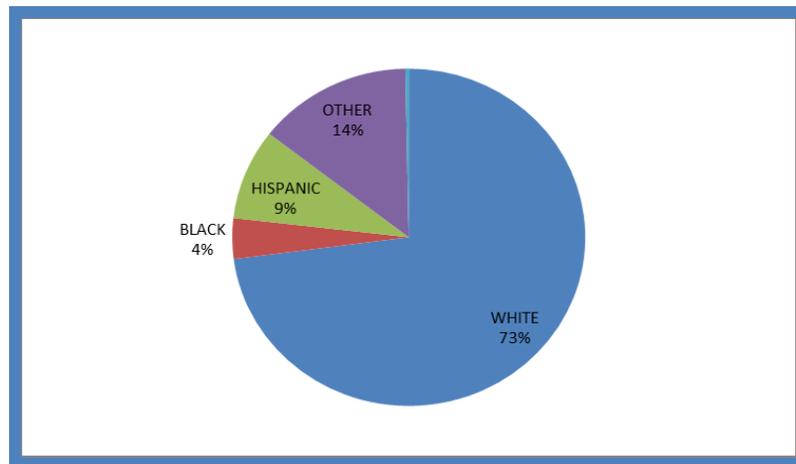
As a result, few of these graduates who leave to train in out-of-state residencies return to practice in Texas. According to the Texas Medical Association, this represents a loss of more than \$200,000 per student, the amount invested by the State in that student's education.¹⁹

Texas is fortunate in that it is a net importer of physicians; more physicians migrate to Texas than it loses. Nonetheless, the rapid growth of the Texas population and insufficient residency training programs are key reasons why Texas ranks so poorly in the ratio of physicians to 100,000 population rate.

These shortages are even more striking along the border, such as El Paso and Hidalgo County with 49 and 56 PCPs per 100,000 residents respectively.²⁰ If estimates are correct, how will Texas fill the 23,000 job openings for physicians between 2010 and 2020? The medically underserved areas with physician shortages are of particular concern. There are 125 Texas counties considered full primary care health professional shortage areas and 69 counties which are considered partial shortage areas. In addition, there are 25 Texas counties that currently do not have any physicians.

What are the implications of these physician workforce issues for Texas Latinos? In 2010, Hispanics in Texas represented 38% of the state's population, while comprising 5.8% and 8.9% of direct patient care physicians in rural and urban areas respectfully.²¹ In 2011, data indicates that Latino Physicians comprise 9% of the State's direct patient care physicians.²²

Chart 1: Texas Direct Patient Care Physician 2011



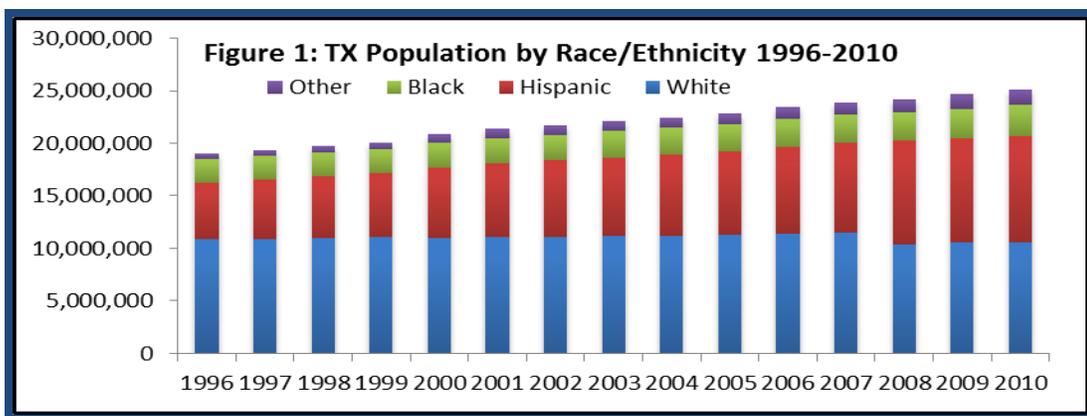
Research studies and reports, such as the annual National Health Disparities report, document that Hispanics are a population group which experiences inequities in health care access and disparities in health status. These disparities are identified as some of the most unequal in the country - worsened by the historical and continuing under-representation of Latinos in medicine.

This alarming data clearly demonstrates an acute need for a more coherent description of the health status of Latinos in Texas. Furthermore, Texas lacks a comprehensive strategic plan by state health agencies and Texas is in dire need of proactive medical school policy decisions to address physician shortages affecting Latino communities. Concurrently, these strategic plan weaknesses also exist in addressing the under-representation of Latinos in medical education.

“Since 2002, both African American and Hispanic Texas medical school graduates increased in number. However, as a percentage of total graduates, African American medical school graduates only increased by two percent, while the percentage of Hispanic Texas medical school graduates remained the same.”²³

Nationally and in Texas, there is a shortage of Latino physicians. The overall professional physician supply issue magnifies the under-representation of Latinos, Hispanics, as well as being a contributing barrier to addressing health disparities. Research indicates that the shift to a Latino-majority State also means a shift to greater incidence and prevalence of higher cost chronic diseases.²⁴

Figure 1 illustrates the growth of the Texas population by race and ethnicity for a fifteen-year period. Most of the population growth is attributable to Hispanics. During this period, the Hispanic population grew from 5.4 million in 1996 to 9.4 million in 2010, a 58% increase. Over 88% of the Hispanic population is Mexican American.²⁵ The median age of the Hispanic population is 26; median income is \$20,000; poverty rate of 35% for children under 17; and a 38% uninsured population.



By 2020, nearly 50% of the State’s population is projected to be Hispanic. Regarding language, 78% of Hispanics speak other than English at home. Hispanic population growth, coupled with adverse social determinants (poverty and lower education achievement) will predictably augment health inequities and ultimately require aggressive and coordinated and centralized decision-making regarding policies that have a DIRECT effect on Hispanic representation in Texas medical schools.

IV. The Medical School Applicant Pool²⁶

Texas has 9 medical schools spread across 4 university systems – University of Texas (4), Texas Tech University System (2), Texas A&M University (1), University of North Texas System (1), and the Baylor College of Medicine (1). The cities in which the schools are located are Dallas, Houston, Galveston, College Station, Fort Worth, San Antonio, Lubbock and El Paso. The Texas Tech Paul L. Foster School of Medicine in El Paso is the newest medical school, enrolling its first year class in 2009.

For prospective medical students, the process to apply to Texas medical schools begins online by students submitting their application to the Texas Medical and Dental School Application Service (TMDSAS) Center. This umbrella State agency collects and distributes student application information to the medical schools to complete the admissions process.

The age range, at which most students either apply and enroll, or graduate from medical school is 22 to 27. In 1996, Hispanics represented 35% of young adults ages 22 to 27, increasing to 45% in 2010 (Figure 2).²⁷ Compared to White Non-Hispanic, Blacks, and other ethnic groups, Hispanics retain a much larger gap between the percentage of potential applicants ages 22 to 27, and their percentage representation of all medical school applicants.

Last year, more than half of all Texas medical school applicants were students of color (Figure 2). This has been a consistent trend since 2006. However, of the 55 % of the non-White applicants, only 13% were Latino and 7 percent were Black. The remaining 35% of student applicants fall into the racial/ethnic category “other” (they self-identified as Asian/Pacific Islanders, Native American, or “other”), while representing less than 6% of the Texas population. While the percentage of non-Hispanic White applicants continues to decrease, mirroring Texas population trends, this ethnic group retains higher representation rates than their proportionate composition of the Texas population.

Figure 2

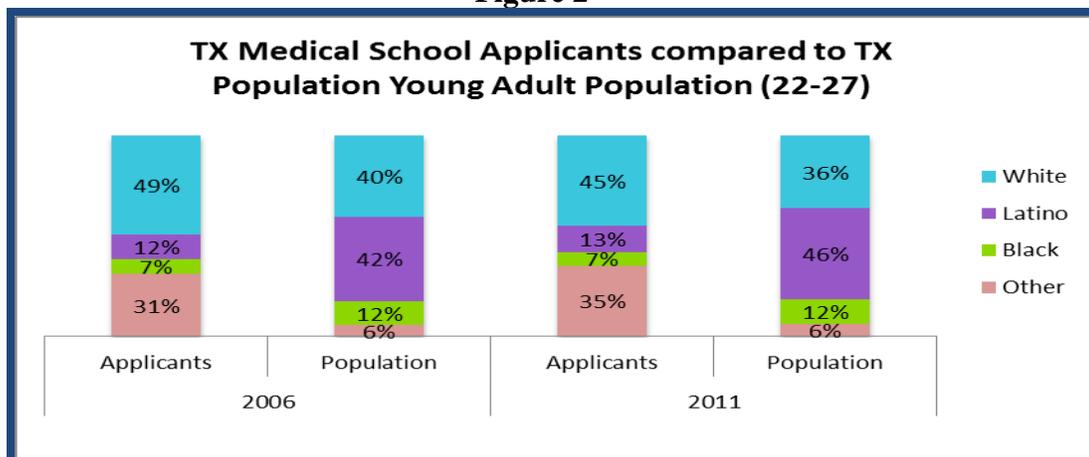
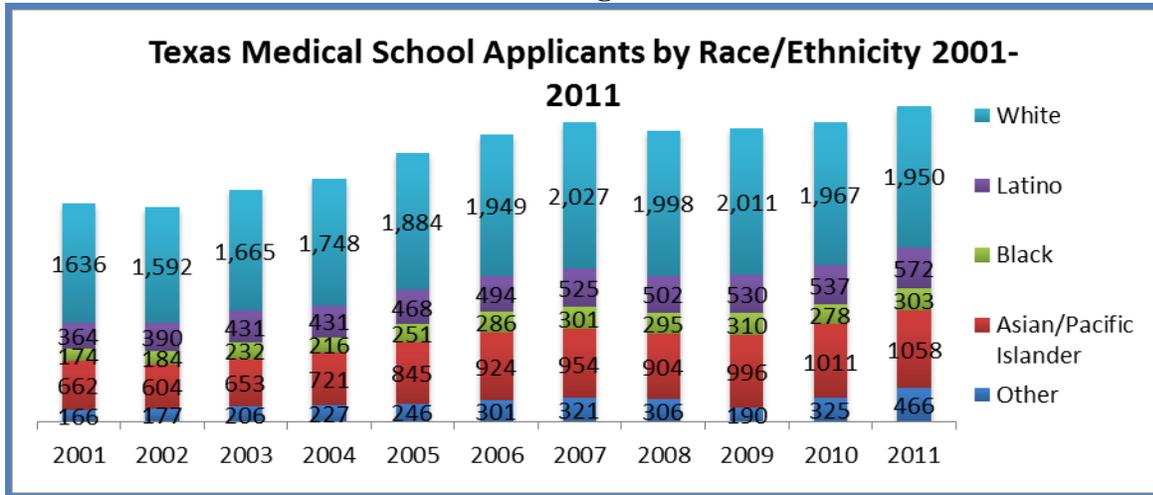


Figure 3 illustrates the number of applicants to Texas medical schools over a ten-year period. Texas medical schools saw a 45% increase in applications, from 3,002 applicants in 2001 to 4,349 in 2011. Over that same ten-year period, all racial and ethnic groups had an increase in applicants; non-Hispanics Whites saw the lowest increase, 19%. Latinos, the fastest growing population with the largest age-range potential for applicants only realized a 36% increase, Blacks experienced a 180% increase, and Asians/Pacific Islanders with a 60% increase. It's apparent that the Latino applicant pool is weak, given that this group represents only 13% of the total applicants in 2011, yet comprises 38% of the State's population and also retains the largest number of age-range potential applicants.

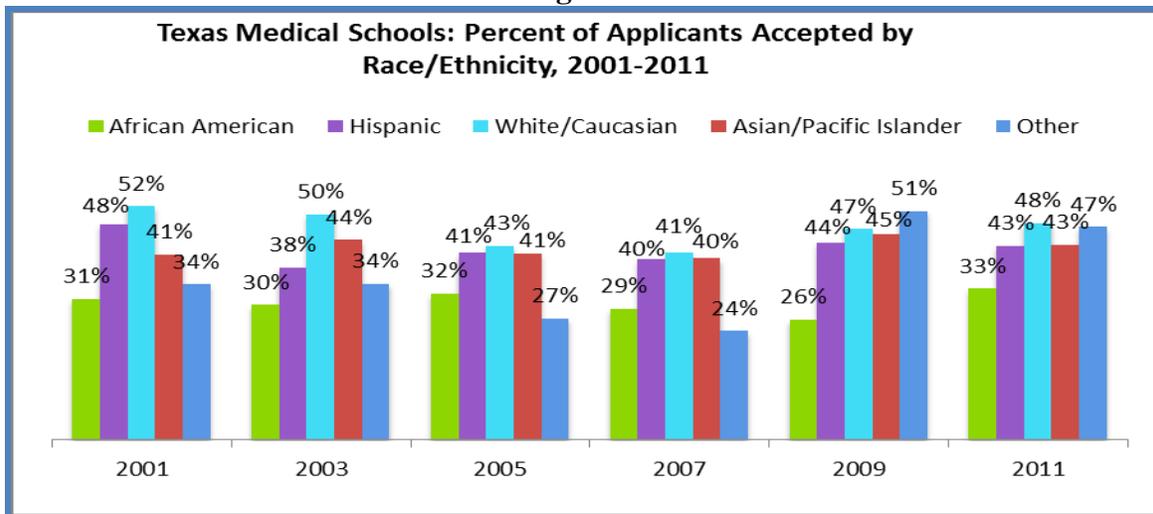
Figure 3



V. Medical School Accepted Applicants

According to Figure 4, the percentage of accepted Hispanic medical school applicants has been lower for nearly a decade, since it highest acceptance rate of 48% in 2001. Over most of the decade, Whites have retained the highest acceptance rates with the exception of 2009. Of note, for the years shown, African Americans and Other applicant acceptance rates were the lowest; however, in 2009 and 2011 the acceptance rate for the ‘Other’ category nearly doubled.

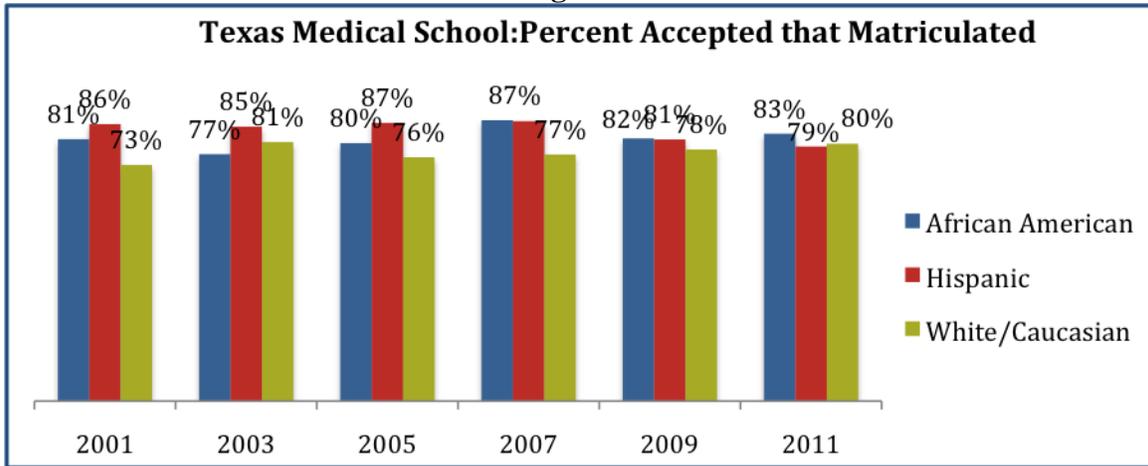
Figure 4



VI. Matriculation

In Figure 5, the percentage of accepted medical school applicants who actually matriculated is illustrated. Overall, Whites matriculate at rates less than either Hispanics or Blacks. Over the decade, Hispanics and African Americans have remained steady in the 80% ranges; whereas, for Whites, it has hovered in the high 70% ranges.

Figure 5



VI. Total Enrollment

Figure 6 illustrates that over the past decade, total medical school enrollment increased by 27% from 5,159 to 6,575 students. Over that same ten-year period, all racial and ethnic groups had an increase in enrollment with the highest increase among African Americans at 45%, followed by Asians at 49%, Hispanics at 35%, and the lowest increase among Whites at 6%. International number not showed number small and less than 1% growth.

Figure 6

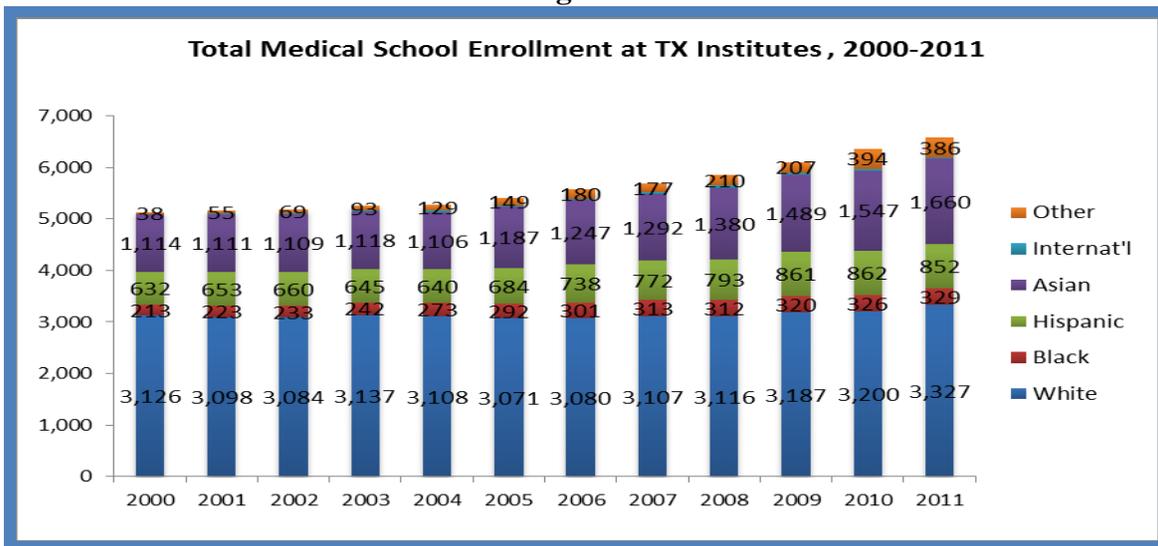
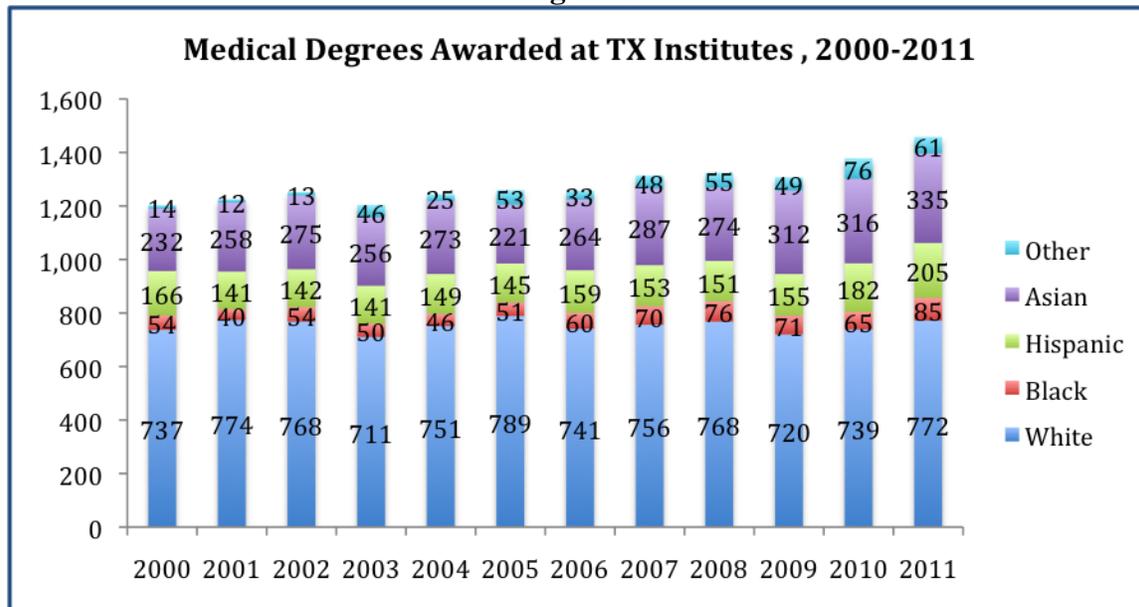


Figure 7 indicates that between 2000 and 2011, the total number of medical school graduates has increased by 20% from 1,202 to 1444.

In 2011, Hispanics continued to have low representation among medical school graduates at 10.5%, well below their population representation of 38%. When compared to their 10.4% representation in year 2000, no progress has been made in producing more Hispanic physicians. It's arguable that Hispanics actually fared better in representation in 2000, when compared to their population representation of 32%. White Non-Hispanic representation has decreased from

61% in 2000 to 53% of all degrees awarded in 2011, but still exceeds their population representation of 48%. Asian students increased from 19% to 23%; and among African American students, an increase from 4% to 6%.²⁸

Figure 7



VII. Summary

In summary, several observations are noted in examining the racial/ethnic characteristics of Texas medical school applicants, enrollment, and degrees awarded. First, the enrollment and medical degrees awarded have not sufficiently increased to effectively address the physician shortage needs of the State. Second, Hispanics and Blacks have made limited progress in increasing their representation in medical school enrollment and degrees awarded. In particular, the growth of the Hispanic population and larger potential medical applicant pool ages 21 – 27; further illustrate the limited progress of medical schools to increase Hispanic representation. Third, the Asian minority population is disproportionately over-represented in Texas medical schools.

The continuing underrepresentation of Hispanics in Texas medical schools demands attention. A combination of approaches and State-level actions are needed to achieve equity in medical school enrollment, and realize more Hispanic physicians in practice. Recommended actions include:

- Establishing a new medical school in the lower Rio Grande Valley.
- Increasing the size of 1st year class enrollment at each of the existing 9 medical schools.
- Assessment of admissions criteria to include attributes and experience factors, which are directly related to the successful completion of a rigorous medical school education and overall admissions policies and processes to insure equity in acceptance of a more diverse and representative medical student body that is demographically comparable to the State’s population.

- Providing funding that supports collaborative efforts to increase the medical school applicant pool through career exposure, mentorship and academic preparation among Hispanics and African Americans.
- Requiring the medical schools to develop a joint statewide action plan to increase the number of Hispanic and African American medical students.

Texas needs more physicians. Increasing the number of Hispanic physicians will improve access for all Texans and reduce health disparities and inequities. A new and more comprehensive dialogue which is overtly inclusive in its representation and directed toward transformative change is needed. These recommendations are just a beginning to the dialogue toward achieving equity in Hispanic medical education, representation in active clinical practice and ultimately, improving the health status of all Texas residents.

¹ Out of Order Out of Time: The State of the Nation's Health Workforce, Association of Academic Health Centers, 2008.

² Recent Studies and Reports on Physician Shortages in the US, American Association of Medical Colleges, August 2011. Also, review Uwe E. Reinhardt's "Health Care Reform and the Doctor Shortage" at <http://economix.blogs.nytimes.com/2012/08/17/health-care-reform-and-the-doctor-shortage/>

³ Diversity 3.0: A Necessary Systems Upgrade, Commentary: Marc A. Nivet, EdD, *Academic Medicine*, Vol. 86, No. 12 / December 2011.

⁴ The State of Diversity in the Health Professions a Century after Flexner, *Academic Medicine*, Vol. 85, No. 2 / February 2010.

⁵ National Healthcare Disparities Report, Agency for Healthcare Research and Quality, 2012.

⁶ Physician Characteristics and Distribution in the US, 2010 Edition, American Medical Association.

⁷ Does the Under- or Overrepresentation of Minority Physicians across Geographical Areas Affect the Location Decisions of Minority Physicians? *Health Service Research*, 2009 August; 44(4): 1290–1308.

⁸ Increasing Diversity in the Health Professions: Recommendations to Improve Title VII of the Public Health Service Act, National Hispanic Health Foundation and Josiah Macy, Jr. Foundation, Summit Report, June 22, 2009.

⁹ The State of Diversity in the Health Professions a Century after Flexner, *Academic Medicine*, Vol. 85, No. 2 / February 2010.

¹⁰ 2011 State Physician Workforce Data Book Center for Workforce Studies, American Association of Medical Colleges, November 2011.

¹¹ Out of Order Out of Time: The State of the Nation's Health Workforce, Association of Academic Health Centers, 2008.

¹² Remaking Primary Care: From Crisis to Opportunity, New England Healthcare Institute, April 2009.

See also, Primary care health work force in the United States, The Robert Wood Johnson Foundation, Research Synthesis Report No. 22, July 2011

¹³ Achieving Equity in Health, Health Affairs and the Robert Wood Johnson Foundation, Health Policy Brief, October 6, 2011. *See also*, A Time of Opportunity: Local Solutions to Reduce Inequities in Health and Safety, Institute of Medicine Roundtable on Health Disparities, November 2009; *and* CDC Health Disparities and Inequalities Report — United States, 2011, *Morbidity and Mortality Weekly, Supplement / Vol. 60* January 14, 2011.

¹⁴ Physician Shortages to Worsen Without Increases in Residency Training, American Association of Medical Colleges, October 2010.

¹⁵ 2011 State Physician Workforce Data Book Center for Workforce Studies, American Association of Medical Colleges, November 2011.

¹⁶ The price of the Texas doctor shortage = \$1.1 billion and 17k jobs, Redback Texas Report, Spring Issue 2012.

¹⁷ Too few doctors: Texas' shortage of medical residency positions puts all of us in a bind, *Houston Chronicle*, Tuesday, November 2, 2010. *See also*,

¹⁸ Graduate Medical Education Report: 82nd Texas Legislature, Regular Session House Bill 2908, Texas Higher Education Coordinating Board, April 2012.

¹⁹ Why Texas Needs More Physicians, Texas Medical Association, 2006.

²⁰ The price of the Texas doctor shortage = \$1.1 billion and 17k jobs, Redback Texas Report, Spring Issue 2012; *See also*, Health Professions Workforce, Texas Pediatric Society, Presentation by Ben G. Raimer, MD, Senior Vice President, Health Policy and Legislative Affairs, April 21, 2012; and The Crisis in El Paso: Health Care Professional Shortages, El Paso Greater Chamber of Commerce and City of El Paso, November 2009.

²¹ 2012 Licensure Data, Texas Medical Board

²² Supply Trends Among Licensed Health Professions Texas, 1980 – 2011, Health Professions Resource Center, Center for Health Statistics, Texas Department Of State Health Services, January 2012. **Note:** A Direct Patient Care (DPC) physician is a licensed health care professional who diagnoses, treats, operates on, or prescribes medicine for any patient with disease, pain, injury, deformity, or physical condition. DPC physicians are those who spend at least 50% of their time in the direct care of patients.

²³ Graduate Medical Education Report: 82nd Texas Legislature, Regular Session House Bill 2908, Texas Higher Education Coordinating Board, April 2012.

²⁴ Population Change in Texas: Implications for Health, the Labor Force and Economic Development, Presentation by Steve H. Murdock, Hobby Center for the Study of Texas, Kaiser Foundation Health Journalists, Austin Texas, November 14, 2011.

²⁵ U.S. Census.

²⁶ **Notes:** Medican school applicant, accepted, matriculation and degree award data is from the Texas Medical and Dental Application Service Center and the Texas Higher Education Coordination Board.

²⁷ U.S. Census and Annual Community Survey.

²⁸ **Note:** The 'Other' student category includes Native American, Asian, and Unidentified; most (80 -90%) in category are Asian.