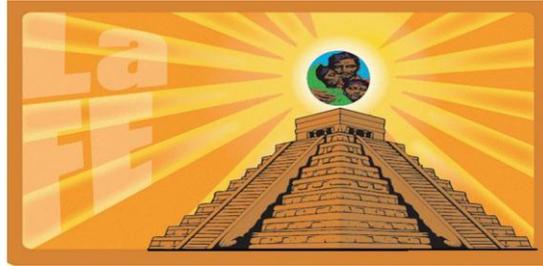


ISSUE BRIEF



HISPANIC INEQUITY IN TEXAS DENTAL SCHOOL ENROLLMENT

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I. Introduction

“A 2000 report by the U.S. Surgeon General called dental disease a “silent epidemic.” Ten years later, very little has changed.”¹ Low income, people of color and seniors have the highest oral health problems and needs.² The need to address the shortage of dentists, develop a diverse and more equitable racial/ethnic dental workforce, and improve dental care access for culturally competent care are critical community not just institutional and professional goals.³

In 2008, Hispanics in Texas represented 36% of the state’s population while comprising 8% (297) of all general dentists.⁴ Oral health disparities among Latinos are prominent, particularly among children and seniors.⁵ According to the Texas State Health Coordinating Council, in 2009, there were 9,401 dentists in private practice in Texas.⁶ Overall, the supply ratios of dentists per 100,000 populations have remained fairly constant over the last two decades. In 2005, the state lagged behind the U.S. average ratios of 45.5 compared to its 35.7 ratio per 100,000 populations.

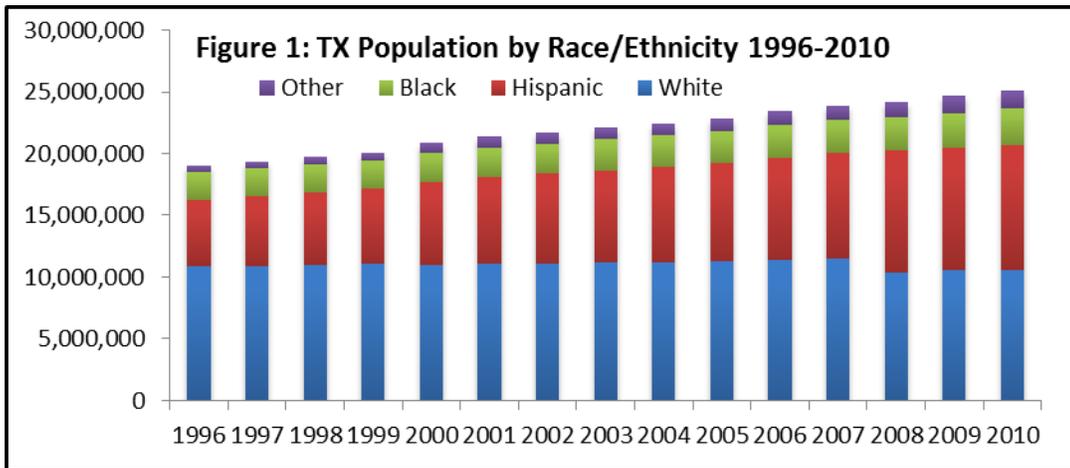
In 2009, the supply ratio for dentists in Texas was 37.8 per 100,000 populations. There were more dentists employed in metropolitan counties (ratio of 39.8) than in nonmetropolitan counties (ratio of 23.9). The disparity is worse for border metropolitan (18.1 ratio) and border non-metropolitan (12.0 ratio) per 100,000 populations.

There is agreement that the state has an inadequate dentist workforce to meet the state’s oral health needs.⁷ The state’s dentist shortage further exacerbates the oral health disparities among Latinos.⁸ Given the combination of increasing Latino population growth and oral health needs, the need for Latino dentists is self-evident.

Eighty (80) percent of the States’ practicing dentists graduated from a Texas dental school, 19% from other schools across the nation, and the remaining 1% were educated in a foreign country.⁹ It is important to note that Texas dental schools are legislatively mandated to enroll 90% Texas residents and the other 10% can include out-of state and foreign exchange students. For Hispanic dentists, the percent that went to a dental school in Texas is slightly lower, 77%; 3.7% were foreign trained, 3.6% earned their degree in Puerto Rico, and the remaining 15.7% went to schools in a state other than Texas.

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.¹⁰ 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 and documented social determinants (e.g., poverty, and lower education achievement) that impact oral health inequities require we bring attention to Hispanic representation in Texas dental schools.



Texas has 3 dental schools which are the Texas A&M, Baylor College of Dentistry, and 2 University of Texas System Dental Schools. The dental schools are located in Dallas, Houston, and San Antonio respectfully.

II. The Dental School Applicant Pool¹¹

For prospective dental students, the process to apply to Texas dental 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 dental schools that then proceed with their admissions process. The age range, at which most students either apply enroll, or graduate from dental school is 21 to 27.

This underrepresentation becomes more glaring when one considers that the youth of the Hispanic population suggests an increasing percentage of Hispanics who are in this age-range in greater proportionate. In 1996, Hispanics represented 35% of young adults ages 21 to 27, increasing to 45% in 2010 (Figure 2).¹² Compared to White Non-Hispanic, Blacks, and Others; Hispanics retain a much larger gap between the percent of potential applicants ages 21 to 27, and their percent representation of all dental school applicants. Hispanic represent only 15% of all applicants, compared to White Non-Hispanic 42% dental school applicants and 37% of the total population of young adults' ages 21 to 27. "Other" applicants represent 38% of all applicants, yet represent only 6% of young adults.

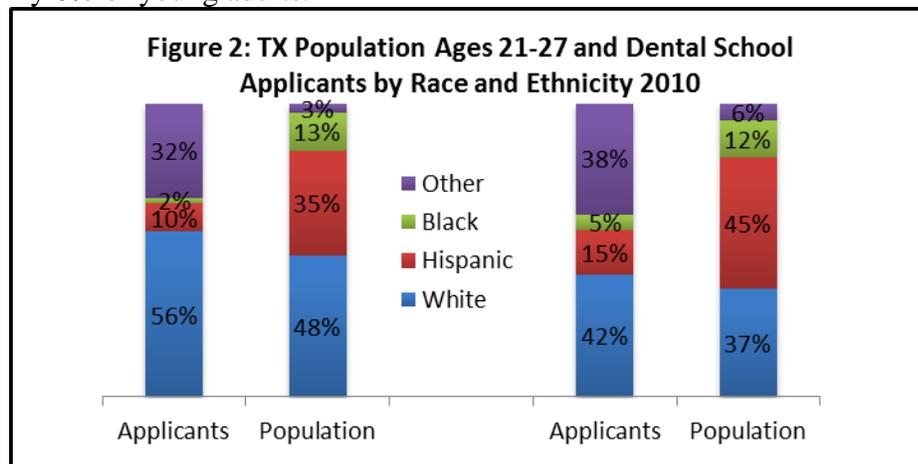
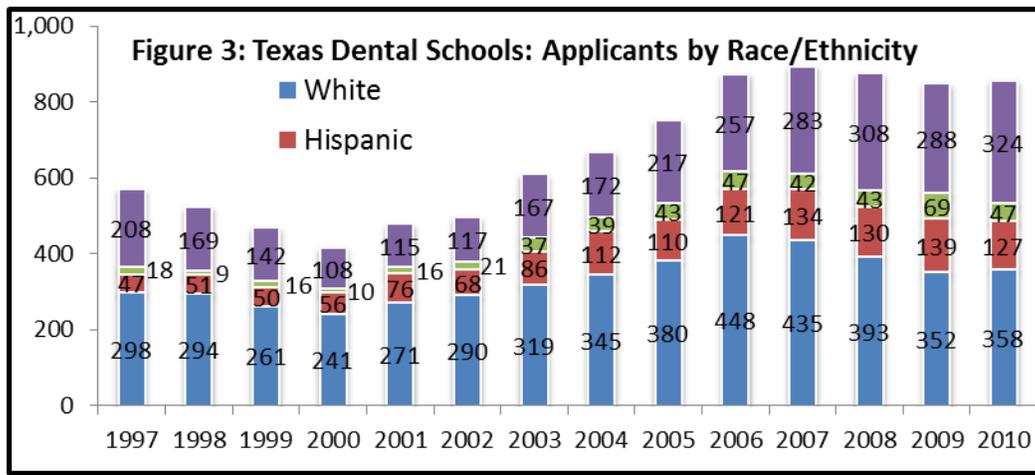
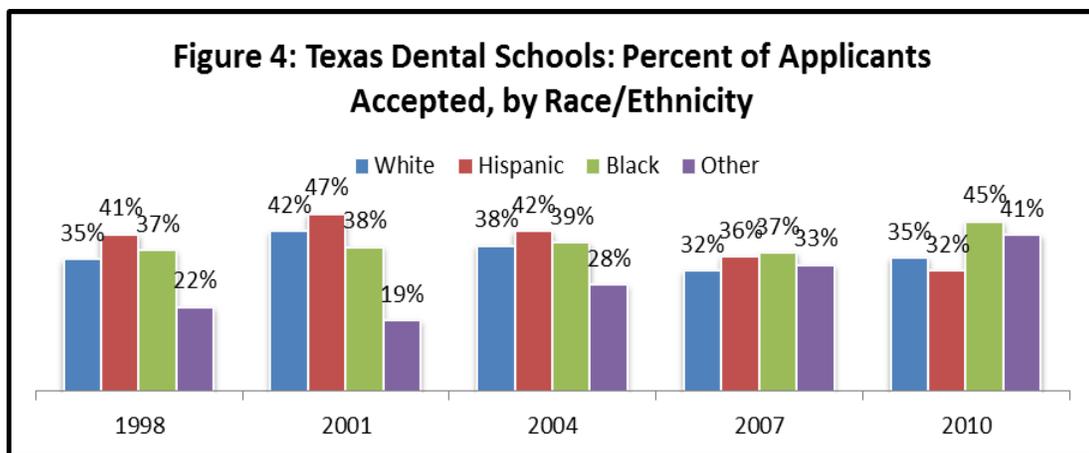


Figure 3 illustrates that the number of applicants to Texas dental schools decreased (20%) between 1997 and 2001, falling from 571 to 478. However, beginning in 2002 there was a steady increase in dental school applicants which peaked to a high of 894 (87% increase) in 2007. All racial and ethnic groups experienced an increase between 2001 and 2007. **Hispanic applicants doubled** between 2002 and 2007, increasing from 68 to 134. In 2007, the number of Hispanic applicants had increased by 97% compared to 50% for White Non-Hispanic since 1996. Arguably, the increase in Hispanic applicants is an improvement. However, the question remains will a steady increase in applicants parallel the current size of and projected Hispanic population growth among young adults ages 21 -27? More importantly, will an increase in the number of applicants lead to increased enrollment sufficient to seriously address the severe shortage of Hispanic dentists?



III. Dental School Accepted Applicants

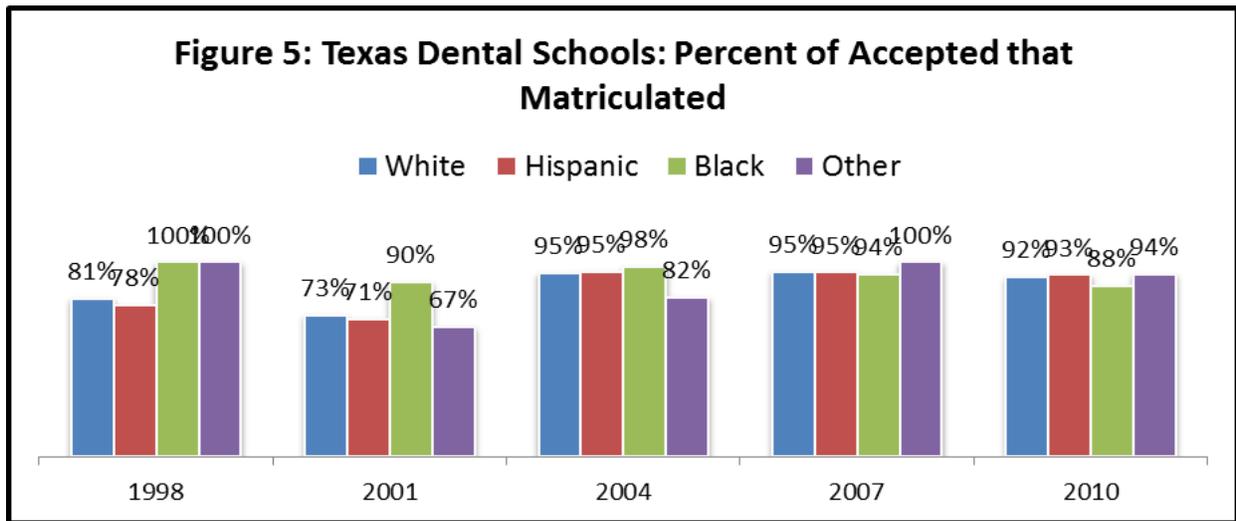
According to Figure 4, the percentage of accepted Hispanic dental school applicants was greater for Hispanics than all other racial/ethnic groups for 3 of the first 5 years illustrated. In 2007, they were second to accepted Black applicants, then dropping to last place in the percentage of applicants accepted among all groups. **A steady decline is noted in the percentage of Hispanic applicants accepted dropping from the high point of 47% acceptance rate in 2001 to just 32% in 2010.**



Blacks have had a more consistent level acceptance rate than either Hispanics or White Non-Hispanics. However, in 2010 their acceptance rate increased substantially to 45%. The "Other" student category demonstrated the largest increases, nearly doubling from 22% in 1998 to 41% acceptance rate in 2010.

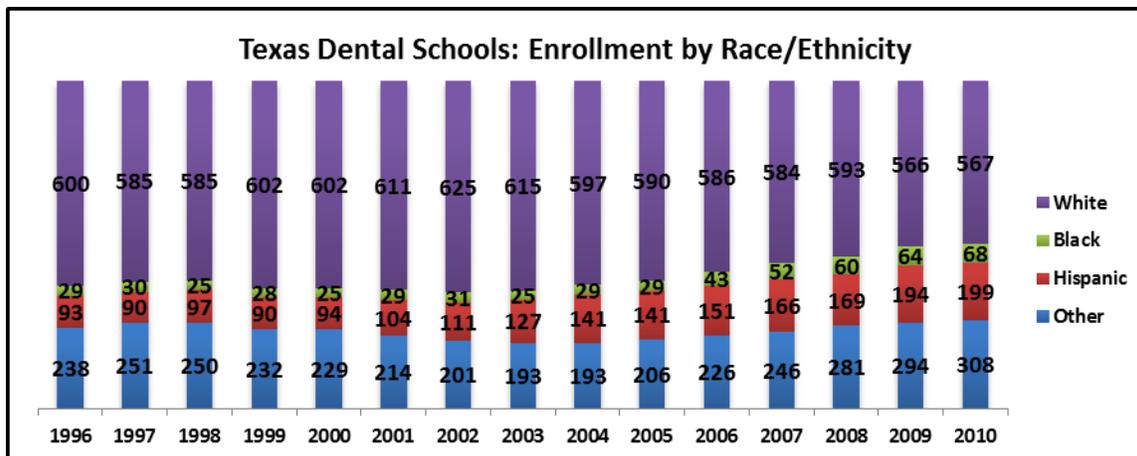
IV. Matriculation

In Figure 5, the percent of applicants who actually matriculated into dental school is a percentage of those who were accepted. Overall beginning in 2004, student matriculation has remained in the 90% and above range. This trend was significantly higher than in 1998 and 2002 when half or more of the student groups had a matriculation rate of 81% or below.



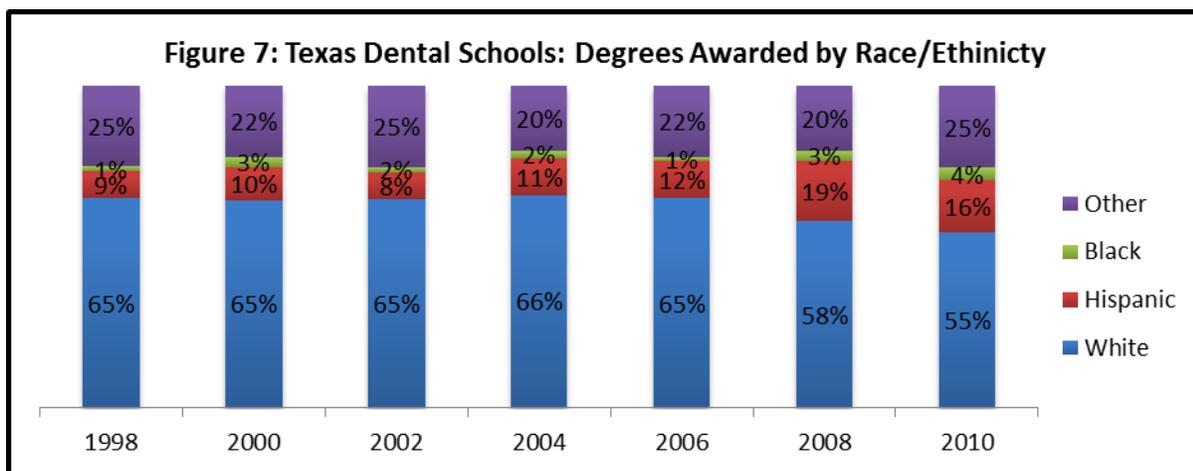
V. Total Enrollment

The increases in the number of applicants and dental school acceptance have led to a concomitant increase in total (year 1-4) dental school enrollment. As illustrated by Figure 6 total enrollment had hovered at about 960 from 1996 to 2005. Beginning in 2006, total enrollment increased to 1,006 and to 1,142 in 2010.



With a majority of practicing dentists coming from Texas schools and the history of shortages and undersupply of dentists, it is disappointing that the number of dental school graduates has remained stagnant. Figure 7 indicates that for nearly 15 years (1996 – 2009) the number of dental graduates hovers between 220 and 230. In 2010, Texas dental schools graduated 255 students. With total dental school enrollment now over 1,000 it's hoped that dental graduate rates will continue in the 250 or above range.

Hispanics, in 2010, continued to have low representation as dental school graduates at 16%, well below their population representation of 38%. Little improvements have occurred over the 15 years since 1996. White Non-Hispanic representation has decreased from a high of 66% in 2004 to 55% of all degrees awarded in 2010, but still exceeds their population representation of 48%. Among "Other", they represent 25% of all degrees awarded compared to their population representation of 5%.¹³



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

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

- Establishing a new dental school, preferably in El Paso or the lower Rio Grande Valley.
- Increasing the size of 1st year class enrollment at each of the existing three dental schools.
- Accepting more dental school applicants from the high dental shortage areas particularly the border and rural Texas.
- Assessing admission policies and processes of the dental schools to insure equity in acceptance of a more diverse and representative dental student body that is demographically comparable to the state's population.

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

Texas needs more dentists. Increasing the number of Hispanic dentists will improve access for all Texans and reduce oral health disparities. Transformative change reflected by these recommendations is necessary to achieve equity in Hispanic dental education, and subsequent increase in their practice representation.

¹ The Cost of Delay: State Dental Care Policies Are Failing One in Five Kids. The PEW Center on States, February 2010, Page 3.

² The Dental Access Gap: Findings from a National Survey, Lake Research Partners for W.K. Kellogg Foundation, 2011, and Improving Access to Oral Health Care for Vulnerable and Underserved Populations, Institute of Medicine and National Research Council, 2010.

³ Hispanic Dental Education and Practice in Texas, La Fe Policy Research and Education Center, November 2008.

⁴ Ibid, Notes: The Texas Board of Dental Examiners does not maintain an identifier for the race or ethnicity of licensed dentist. The “Spanish surname” method was used to identify how many of the dentist in Texas with an active license are Latino. The LAST NAME of the dentists was compared with a list, created by the U.S. Census Bureau (Technical Working Paper, March 1996).

⁵ Two Kinds of Dental Shortages Fuel One Major Access Problem, The PEW Center on States, Issue Brief, February 2011, and Hispanic Dental Education and Practice In Texas, La Fe Policy Research and Education Center, November 2008.

⁶ Texas State Health Plan, Road to a Healthy Texas, 2011 – 2016, Statewide Health Coordinating Council 2010, and Oral Health in Texas, Texas Department of State Health Services, and Center for Disease Control, 2008.

⁷ Ibid, and Building Better Oral Health: A Dental Health Home for All Texas, A Report Commissioned by the Texas Dental Association, February 2008.

⁸ Hispanic Dental Education and Practice in Texas, La Fe Policy Research and Education Center, November 2008.

⁹ Ibid, Notes: Analysis of Demographic Data from the Texas Board of Dental Examiners.

¹⁰ U.S. Census.

¹¹ Notes: Dental 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.

¹² U.S. Census and Annual Community Survey.

¹³ Note: The ‘Other’ student category includes Native American, Asian, and Unidentified; most (80 -90%) in category are Asian.