

**BUILDING BETTER ORAL HEALTH: A DENTAL HOME FOR ALL TEXANS**

A REPORT COMMISSIONED BY THE TEXAS DENTAL ASSOCIATION  
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“...Oral health is essential to general health and well-being at every stage of life.”<sup>1</sup>

SOURCE: *A National Call to Action to Promote Oral Health*, Office of the U.S. Surgeon General, 2003.



## EXECUTIVE SUMMARY

Poor oral health affects more than just the mouth. It can seriously compromise a person's general health, quality of life and life expectancy. Oral diseases can and do lead to systemic problems — damaging other parts of the body and resulting in the need for expensive emergency department visits, hospital stays and medications. The consequences of poor oral health, however, go far beyond damaging medical effects. Oral disease can also wreak economic havoc — keeping children out of school and adults home from work — not to mention lower productivity of workers in pain. Untreated oral diseases can also drive up health care costs in general.

The good news is that with proper oral health care, both at home and in professional settings, many of the negative consequences associated with poor oral health can be prevented.

The State of Texas has a unique and unprecedented opportunity to significantly increase access to oral health care for all Texans. Complying with the *Frew* agreement is a key priority. However, there are additional ways that Texas policymakers can improve the oral health of the state.

**In an effort to begin a constructive dialogue about improving the oral health of all Texans, the Texas Dental Association (TDA) with grant funding from the American Dental Association (ADA) commissioned an independent third-party report on the issue of access to oral health care in Texas modeled after the 2000 groundbreaking surgeon general's report, *Oral Health in America*.** The TDA assembled a team of five nationally recognized dentists from both academia and private practice to oversee the project. The dentists (hereafter called the editorial review board or ERB) were asked to identify the state's most pressing issues, needs and challenges associated with improving the oral health of all Texans, with a special focus on the state's most vulnerable.

The ERB looked carefully at the economic, medical and social consequences of untreated oral disease in Texas. It reviewed the current systems of oral health care delivery and payment throughout the state. The team also studied the oral health status of Texans in general and analyzed the oral health disparities that exist in the state. Finally, the ERB made specific and practical policy recommendations to expand access to oral health care in Texas, including:

- ① **Identifying a “dental home” for every Texan**
- ② **Strengthening the Texas Department of State Health Services (DSHS) Oral Health Program (OHP)**
- ③ **Creating new programs to encourage general dentists and specialists to practice in underserved areas and to treat underserved populations**
- ④ **Developing a comprehensive oral health public awareness and education campaign**
- ⑤ **Expanding access to oral health services for older Texans**

As the face of Texas continues to change, the state must put in place a new, more aggressive strategy to improve access to oral health care. This challenge must be approached as a shared responsibility — among dentists, allied health professionals, primary care providers, policymakers, community-based organizations, parents and schools. The job is too big — and too important — for any one group to try to tackle alone. **The time to act is now.**

Texas can and should do a better job of improving access to oral health care, especially for the state's most vulnerable residents.

<sup>1</sup> U.S. Department of Health and Human Services, “A National Call to Action to Promote Oral Health,” Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Dental and Craniofacial Research. NIH Publication No. 03-5303, Spring 2003.

# What is *Frew v. Hawkins*?

*Frew v. Hawkins* was filed in 1993 on behalf of Texas Medicaid recipients. The class-action lawsuit alleged that children enrolled in Medicaid (known as Texas Health Steps) were not adequately receiving the preventive and specialty care services (including dental care) available to them under the federally mandated Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program.

In April 2007, after 14 years in court, the State of Texas reached an agreement with the plaintiff’s counsel in the *Frew* lawsuit. The agreement allocated \$1.8 billion (including \$707 million in state revenues) to expand access to children’s Medicaid services for the 2008–09 biennium.

Most of the *Frew* funding will be used to improve medical and dental Medicaid reimbursement rates in an effort to attract more providers into the Medicaid program. About \$150 million has been set aside during the 2008–09 budget period for “strategic medical and dental initiatives” to increase access to care, including dental services, in underserved areas. Another \$45 million for the 2008–09 biennium has been allocated to expand outreach and education for Medicaid-enrolled families and health care providers.

## INTRODUCTION

The State of Texas is in a unique—and unprecedented—position to take decisive action to build better oral health for all Texans. Complying with the *Frew* agreement is a key priority. However, there are additional ways that Texas policymakers can improve the oral health of the state. Texas dentists, as leaders of the dental team, are ready to work with lawmakers, state officials, community organizations, parents and schools to improve access to oral health for all Texans—and make a real difference today and for generations to come.

## UNDERSTANDING THE BARRIERS TO ORAL HEALTH CARE

There are many reasons why so many Texans do not receive the oral health care they need. Some of the barriers are financial, while others are structural or cultural. The policy recommendations described in this report are designed to remove as many of these barriers as possible—and move Texas toward the ultimate goal of establishing a dental home for all of its residents.

### Financial barriers

Financial considerations are among the most frequently cited barriers to oral health care. Many individuals do not seek dental care for themselves or a family member because they don’t have enough money to pay for treatment and don’t have any help to pay, such as dental insurance or other third-party payer coverage. Others can afford to pay, but are not willing to pay for comprehensive oral health care out of their own pocket. Some individuals who can afford dental care (or who have coverage) choose not to seek care for other reasons (see *cultural barriers*). Others who can afford care may have physical limitations that make it difficult to visit a dentist (see *structural barriers*). Although the cost of a dental visit or procedure is a major hurdle for some Texans, other financial considerations, such as lost wages, transportation and child care costs, also influence an individual’s decision to seek dental care.

### Structural barriers

Cost is a frequently cited barrier to oral health care. However, physical or logistical barriers should not be overlooked. Individuals with limited mobility, such as nursing home residents or persons with special needs, may not be able to find adequate transportation to and from dental appointments, despite the availability of some public programs. And some Texans who live in rural areas of the state may need to travel many miles to find a practicing dentist. Low-income Texans who live in communities with limited public transportation face special challenges.

There is also a need for more dentists in Texas (and the nation) with the specific expertise and training to treat the elderly and patients with special needs. Finding anesthesiologists trained and willing to treat children who require sedation for certain dental procedures, especially at Medicaid reimbursement rates, is often challenging. Long wait times to schedule an appointment, especially for specialty providers, can also deter people from seeking the oral health care they need.

### Cultural barriers

There are also many cultural or attitudinal factors at play that prevent some Texans from seeking the oral health care they need. Even though they may understand that oral health is important, when balancing competing household demands many families place oral health at or near the bottom of their priority list. Language barriers also prevent some Texans from seeking care for themselves or their children. Some people fear dental procedures, while others are embarrassed about the condition of their teeth and avoid dentists unless there is an emergency. Still others lack basic knowledge about the importance of preventive oral health care. Some cultures are less accustomed to the traditional American dental delivery system, which usually requires patients to schedule appointments in advance and arrive at a given location at a specific time.

## STUDY SCOPE AND ORGANIZATION

This study is the first in a series of planned public policy reports to be published by Texas dentists over the next few years. The goal of this report is to raise public awareness about the importance of oral health and to begin a constructive dialogue about improving the oral health of *all* Texans. Because of limited time, space and data, this report does not fully address all issues related to access to oral health care.

**CHAPTER ONE** describes the economic, medical and social consequences of untreated oral disease and reasons why Texas must take action—now—to improve access to oral health care.

**CHAPTER TWO** describes the oral health care system in Texas as it exists today. The chapter details the settings in which dental care is delivered, the variety of funding mechanisms used to pay for oral health care services and the role of charitable care.

**CHAPTER THREE** presents a snapshot of the current oral health status of Texas using the most recent state and national comparative data available.

**CHAPTER FOUR** analyzes the oral health disparities that exist now in Texas, particularly among populations that face special challenges accessing oral health care services.

**CHAPTER FIVE** provides practical public policy recommendations to expand access to oral health care in Texas. It also documents best practices from other states.

A comprehensive bibliography is included at the end of the report. The sources cited represent only a sample of the academic journal articles, public policy studies, surveys, Web sites, newspaper articles and statistical analyses reviewed by the editorial review board.

# How is “access to oral health care” defined in this study?

There are many different ways to define the term “access to oral health care.” The authors of this report developed an approach to access to care that takes into account both the need to: (1) increase the availability of oral health care services for all Texans regardless of income, geography, race or ethnicity; and (2) enhance the public’s understanding of the importance of oral health care.

# What is a dental home?

The American Academy of Pediatric Dentistry and the American Dental Association define a dental home as “the ongoing relationship between the dentist who is the Primary Dental Care Provider and the patient, and includes comprehensive oral health care, beginning no later than age one.”<sup>2</sup>

<sup>2</sup> American Academy of Pediatric Dentistry Foundation, “The Dental Home: It’s Never Too Early to Start,” February 2007, <<http://www.aapd.org/foundation/pdfs/DentalHomeFinal.pdf>> (March 26, 2008).



# Can Texas Afford Not to Care About Oral Health?

“There isn’t a day that goes by at a Seton Emergency Department where we don’t see a patient with serious oral disease and pain. Most of the time we give the patient penicillin and pain medication—and a referral to a local dentist or clinic. A few weeks ago, an uninsured young male presented at the University Medical Center at Brackenridge Emergency Department with night sweats, weight loss and fever—symptoms that can accompany AIDS or a malignancy such as testicular cancer. He came to the Emergency Department after one of his teeth fell out into his drink at a party. We ran about \$8,000 worth of tests which excluded cancer and several other possible conditions. It turned out this young man had serious gum disease. How many teeth cleanings could \$8,000 have paid for?”

DR. CHRISTOPHER ZIEBELL  
Emergency Department Director  
University Medical Center Brackenridge  
Austin, Texas

Employed adults lose an estimated 164 million hours of work due to oral health problems or dental visits each year.

SOURCE: *Oral Health in America: A Report of the Surgeon General*, 2000.

## BACKGROUND

Even in the face of an economic recession, health care reform remains a top domestic priority among American voters.<sup>1</sup> Political candidates from the top to the bottom of the ballot speak passionately about increasing access to general health coverage. Less attention, however, is being paid to improving access to oral health care.

This is nothing new. Oral health care has taken a backseat to general health for decades. In 2000, however, the landmark study *Oral Health in America: A Report of the Surgeon General*, shined much-needed light on the “silent epidemic” of untreated oral disease—and affirmed the link between oral health and general health.<sup>2</sup> A few years later in 2003, the government, health care providers and public health advocates released *A National Call to Action to Promote Oral Health*.<sup>3</sup>

Unfortunately, *A National Call to Action* was released while the State of Texas’ Oral Health Program (OHP) was being dismantled due to state budget shortfalls. Total funding for the Department of State Health Services (DSHS) Oral Health Program dropped from \$3.1 million in fiscal year 2002 to a mere \$1.2 million in fiscal year 2005—a 62 percent cut. Staffing levels during that same period were cut from 56 employees to about 20—a 65 percent reduction.<sup>4</sup> Dental benefits for children enrolled in the state’s Children’s Health Insurance Program (CHIP) also fell victim to budget shortfalls in 2003, but were reinstated by lawmakers a few years later.

## ECONOMIC CONSEQUENCES OF UNTREATED ORAL DISEASE

Untreated oral disease has serious economic consequences. The surgeon general estimates that children with oral disease miss over 51 million hours of school each year.<sup>5</sup> Missing school not only disrupts student learning, it also directly affects local school funding, since the amount of state dollars a school in Texas receives is based in part on weighted average daily attendance.

Untreated dental disease is extremely painful and affects a person’s productivity at work. According to the surgeon general, employed adults lose an estimated 164 million hours of work due to oral health problems or dental visits each year.<sup>6</sup> What’s more, adults with visible dental problems are less employable and sometimes reluctant to seek employment because they are simply ashamed to open their mouths.

Untreated oral diseases can also drive up health care costs in general. Left untreated, certain dental infections can become systemic and damage other parts of the body, resulting in the need for expensive emergency department visits, hospital stays, anesthesia and antibiotics.

<sup>1</sup> Health care was ranked as the third most important issue voters wanted presidential candidates to discuss during the 2008 campaign, according to the March 2008 tracking poll, “Kaiser Health Tracking Poll: Election 2008.”

<sup>2</sup> U.S. Department of Health and Human Services, “Oral Health in America: A Report of the Surgeon General — Executive Summary,” Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.

<sup>3</sup> U.S. Department of Health and Human Services, “A National Call to Action to Promote Oral Health,” Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Dental and Craniofacial Research. NIH Publication No. 03-5303, Spring 2003.

<sup>4</sup> Staffing and funding data provided electronically from the Oral Health Group, Texas Department of State Health Services (25 March 2008).

<sup>5</sup> U.S. Department of Health and Human Services, “Oral Health in America: A Report of the Surgeon General — Executive Summary,” Rockville, MD: US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.

<sup>6</sup> Ibid.

# Preventive oral health care saves money

A study published in *Pediatrics*, a journal of the American Academy of Pediatrics, found that dental costs among Medicaid-enrolled children who visited the dentist before age 1 were 40 percent lower in the first five years of life compared to children who did not see a dentist before their first birthday.<sup>7</sup>

SOURCE: *Pediatrics*, 2004.



## Did you know?

## MEDICAL CONSEQUENCES OF UNTREATED ORAL DISEASE

Failure to treat oral diseases costs more than money. It can also seriously compromise a person’s general health and quality of life. **The good news is that most oral diseases are preventable.** The bad news is that left untreated, dental infections can enter the bloodstream and lead to serious and occasionally life-threatening conditions. In fact, the International Classification of Diseases lists more than 120 systemic diseases that come from the oral cavity.<sup>9</sup>

Although the health care system often treats the mouth as separate and apart from the rest of the body, oral and general health are closely linked. What happens in the mouth can and does affect what happens in other parts of the body. An ever-expanding body of research supports possible associations between oral disease (particularly gum disease) and medical conditions such as diabetes, heart disease, stroke and bacterial pneumonia.<sup>10</sup> Researchers have also found evidence of the vertical transmission of bacteria causing oral disease between caregivers and very young children.<sup>11</sup> And the mouth is increasingly being used to help identify other health conditions throughout the body, such as early stages of diabetes.

“Oral health ailments—cavities, cancer, gum disease, tooth loss, oral-craniofacial injuries and birth defects—afflict more Americans than any other cluster of health problems.”<sup>8</sup>

SOURCE: *Oral Health America*, 2003.

<sup>7</sup> Matthew F. Savage, Jessica Y. Lee, Jonathan B. Kotch and William F. Vann, Jr., “Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs,” *Pediatrics* 114 (2004): e418.

<sup>8</sup> “A State of Decay: The Oral Health of Older Americans, An Oral Health America Special Grading Project,” *Oral Health America*, September 2003, <<http://www.oralhealthamerica.org/pdf/stateofdecayfinal.pdf>> (15 March 2008):1–10

<sup>9</sup> Mandel, Irwin, “Oral Infections: Impact on Human Health, Well-being and Health Care Costs,” Compendium, May 2002, as referenced in Texas Health and Human Services Commission, “Cost and Benefit Analysis for Senate Bill 34: Final Report to the Legislature,” December 2002: 3-4.

<sup>10</sup> Michael L. Barnett, “The Oral-Systemic Disease Connection: An Update for the Practicing Dentist,” *Journal of the American Dental Association* 137 (2006): 5S.

<sup>11</sup> Kevin J. Hale et al., “Oral Health Risk Assessment Timing and Establishment of the Dental Home,” policy statement of the American Academy of Pediatrics, *Pediatrics* 111 (2003): 1113.



“The oral cavity is a portal of entry as well as the site of disease for bacterial and viral infections that affect general health status.”<sup>15</sup>

SOURCE: Centers for Disease Control and Prevention, 2007.

“Oral-facial pain, as a symptom of untreated dental and oral problems and as a condition in and of itself, is a major source of diminished quality of life. It is associated with sleep deprivation, depression, and multiple adverse psychosocial outcomes.”<sup>17</sup>

SOURCE: Centers for Disease Control and Prevention, 2007.

Tooth decay is the most common chronic disease among American children, causing unnecessary pain, avoidable facial disfigurement and rarely but tragically, life-threatening infections.<sup>12</sup> Early Childhood Caries (cavities among 2- to 5-year olds, also known as ECC) are increasingly common.<sup>13</sup> According to the American Academy of Pediatric Dentistry, “not only does ECC affect teeth, but consequences of this disease may lead to more widespread health issues.”<sup>14</sup>

Oral problems can also dramatically affect babies and toddlers with untreated cleft lip/palate (a congenital birth defect). Structural problems and chronic pain caused by the cleft lip/palate can make eating painful — inhibiting healthy growth and sometimes resulting in a condition known as “failure to thrive.”

#### SOCIAL CONSEQUENCES OF UNTREATED ORAL DISEASE

Although difficult to quantify, the social consequences of poor oral health are also important. Children with untreated oral disease often have difficulty eating, speaking and sleeping. They may be ashamed of their appearance and have a hard time interacting with their peers. What’s more, children with pain from untreated cavities or other dental conditions may be distracted in school and unable to learn or participate. One study even found a link between oral health problems and low self-esteem, teen delinquency and adolescent pregnancy.<sup>16</sup> Adults with visible dental problems also suffer. As described earlier, many are reluctant to seek employment because of how they look or sound when they try to speak.

#### CONCLUSION

The impact of unchecked oral disease goes beyond the damaging effects found locally in the mouth. Oral disease can lead to poor nutrition, serious systemic illness and a diminished quality of life and life expectancy. Oral disease can also wreak economic havoc — keeping children out of school and parents home from work — not to mention lower productivity of workers with untreated oral pain. The good news is that with proper oral health care, both home and professional, most of the negative consequences associated with poor oral health can be prevented.

<sup>12</sup> Bruce A. Dye et al., “Trends in Oral Health Status: United States, 1988-1994 and 1999-2004,” *Vital and Health Statistics* 11 (2007): 16.

<sup>13</sup> Ibid.

<sup>14</sup> Council on Clinical Affairs, American Academy of Pediatric Dentistry, “Policy on Early Childhood Caries (ECC): Unique Challenges and Treatment Options,” Adopted 2000; revised 2003, 2007: 42.

<sup>15</sup> Centers for Disease Control and Prevention, “The Burden of Oral Disease: Tool for Creating State Documents,” Atlanta: U.S. Department of Health and Human Services, 4 June 2007, <<http://www.cdc.gov/oralhealth/library/burdenbook/>> (11 April 2008): 16.

<sup>16</sup> Homa Amini, Janet Goldberg and Jill Huntley, “Does Oral Health Matter?” Columbus, OH: The Health Policy Institute of Ohio (2005): 3.

<sup>17</sup> Centers for Disease Control and Prevention, “The Burden of Oral Disease: Tool for Creating State Documents,” Atlanta: U.S. Department of Health and Human Services, 4 June 2007, <<http://www.cdc.gov/oralhealth/library/burdenbook/>> (11 April 2008): 15.

<sup>18</sup> American Dental Association, “Periodontal Disease Linked to Mortality in Diabetes Patients: Study,” *ADA News*, 10 January 2005, <<http://www.ada.org/prof/resources/pubs/adanews/adanewsarticle.asp?articleid=1219>> (5 March 2008).

## The link between oral health and systemic diseases

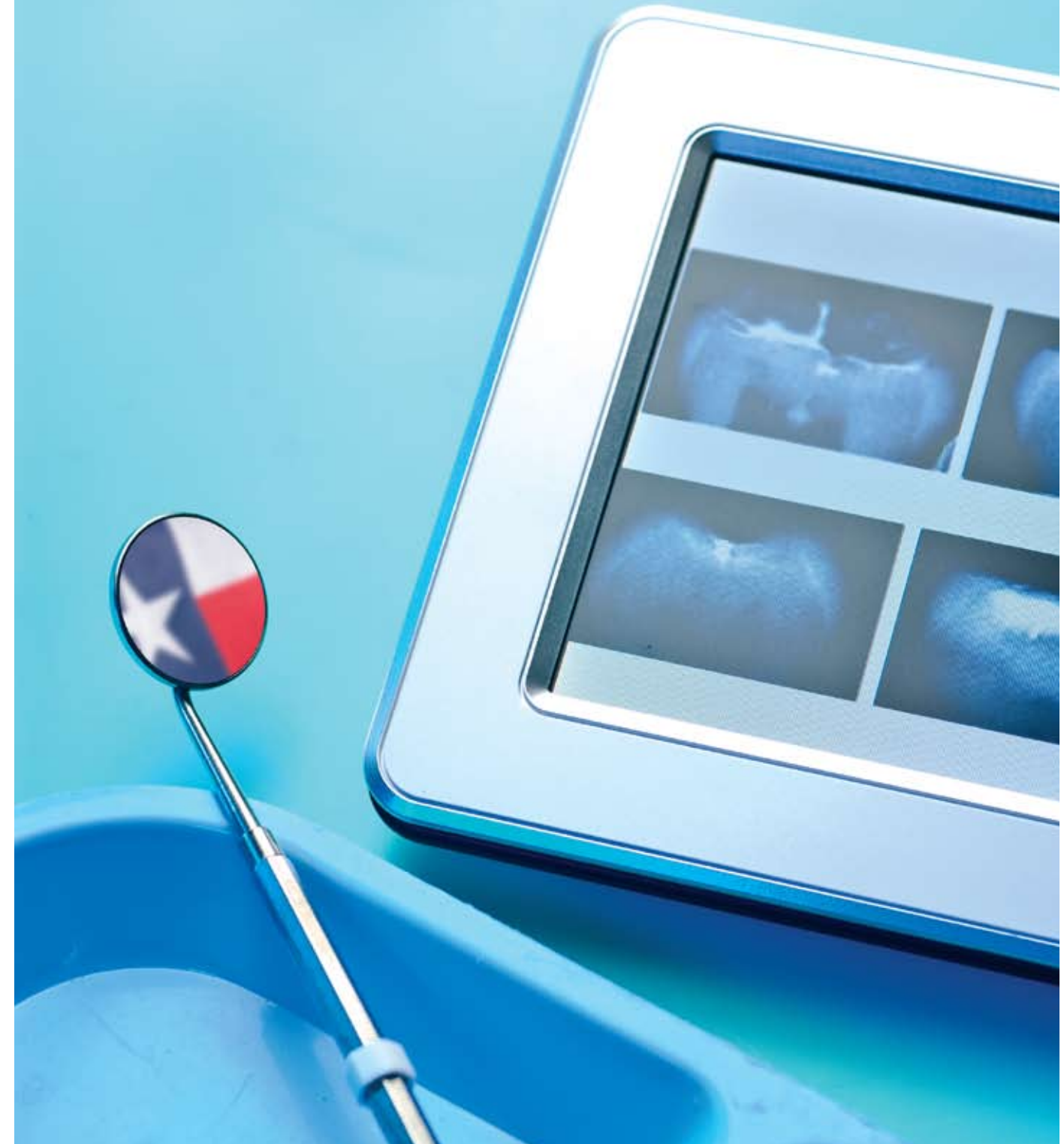
Researchers from the National Institute of Diabetes and Kidney Disease found that diabetic patients with severe gum disease were more than three times more likely to die of combined kidney and heart dysfunction compared with other groups with no or mild-to-moderate gum disease — even after adjusting for other risk factors, such as high blood pressure and tobacco use.<sup>18</sup>

SOURCE: American Dental Association, 2005.

**Did you know?**



# How Does the Oral Health Care System in Texas Work?



BACKGROUND

Texans receive dental care in a wide range of settings, including private dental offices, for-profit or nonprofit dental clinics, Community Health Centers (CHCs), school-based programs, charitable programs and hospital emergency departments.

HOW IS DENTAL CARE PAID FOR IN TEXAS?

The four primary payment sources for dental services in Texas are:

- Self-pay
- Private insurance
- Government programs
- Charitable care

Self-pay

Dental patients frequently “self-pay” the entire cost of their treatment. In 2005, Texans paid nearly 54 percent of their dental expenditures out of pocket— compared to the national average of about 49 percent. Of the 10 largest states, Texas had the third highest percentage of dental expenses paid out of pocket, after Florida and New Jersey (see *Exhibit 1*).<sup>1</sup>

Private dental coverage

Private insurance coverage is another important payment source for dental care. In 2005, private insurance paid for about 43 percent of dental care expenditures nationwide — compared to about 38 percent in Texas (see *Exhibit 1*).<sup>2</sup> According to the National Association of Dental Plans, about 96 percent of dental benefits today are provided through employment or group coverage.<sup>3</sup>

Most patients with private dental insurance coverage self-pay a portion of their dental care. The amount paid out of pocket, the type of services covered and the flexibility for selecting a dentist vary widely, depending on the specific type of dental insurance coverage provided.

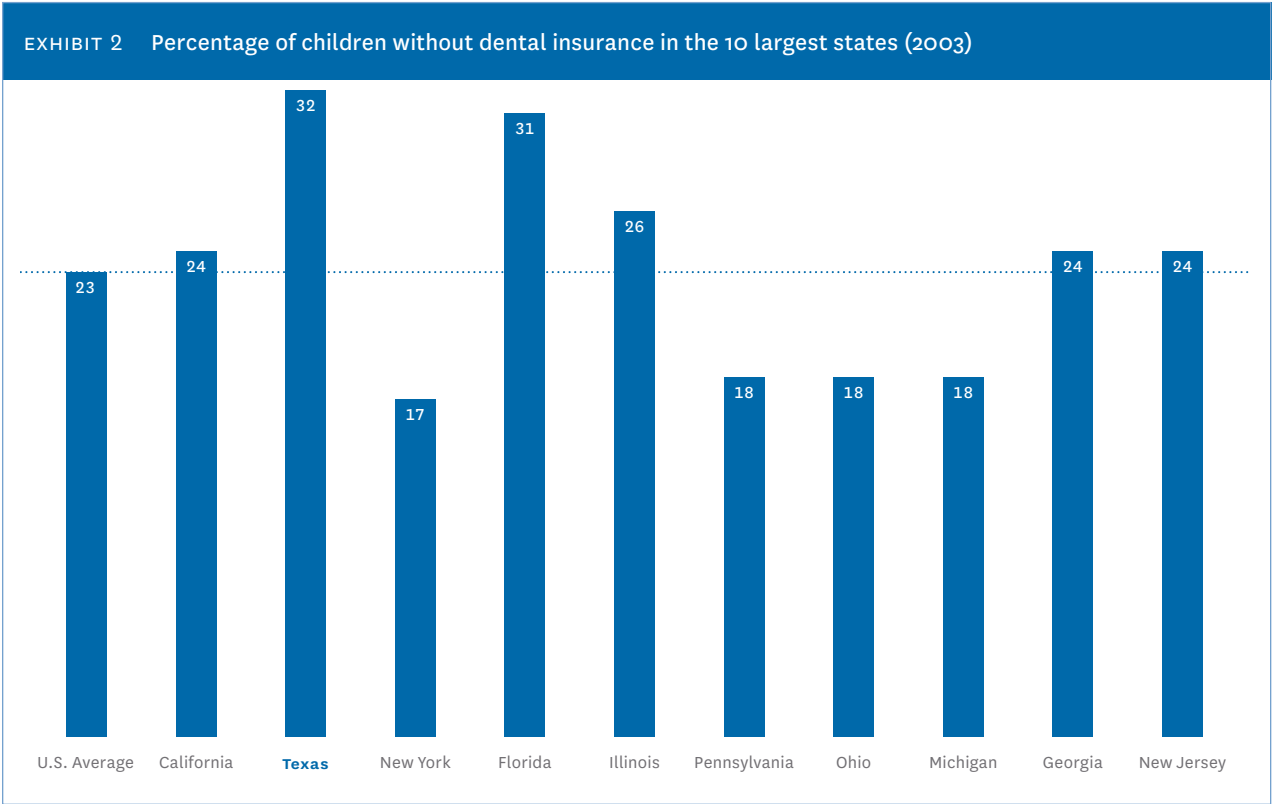
WHO HAS DENTAL COVERAGE?

Although it is widely known that about 25 percent of Texans have no health insurance coverage, the percentage of the total Texas population without dental coverage is unknown. State-level estimates for children without dental coverage, however, are available from the National Survey of Children’s Health. According to the survey, in 2003 Texas had the highest percentage of children without dental coverage (32 percent) among the 10 largest states (see *Exhibit 2*). Among all 50 states, only three (North Dakota, South Dakota and Montana) had a higher percentage of children without dental insurance than Texas.<sup>4</sup>

<sup>1</sup> J.P. Sommers, “Dental Expenditures in the 10 Largest States, 2005,” Statistical Brief #195, January 2008, Rockville, MD: Agency for Healthcare Research and Quality, <[http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/st195/stat195.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/st195/stat195.pdf)> (3 March 2008).  
<sup>2</sup> Ibid.  
<sup>3</sup> National Association of Dental Plans. “Frequently Asked Questions.” Downloaded from <[www.nadp.org](http://www.nadp.org)>  
<sup>4</sup> The National Survey of Children’s Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration. Data query performed at <[www.nschdata.org](http://www.nschdata.org)> on April 16, 2008. All numbers are rounded.  
<sup>5</sup> The Kaiser Commission on Medicaid and the Uninsured, “Dental Coverage and Care for Low-Income Children: The Role of Medicaid and SCHIP,” The Henry J. Kaiser Family Foundation (Washington, D.C., 2007).  
<sup>6</sup> The National Survey of Children’s Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration. Data query performed at <[www.nschdata.org](http://www.nschdata.org)> on April 16, 2008. All numbers are rounded.



SOURCE: Medical Expenditure Panel Survey results published January 2008.<sup>7</sup> ALL NUMBERS ARE ROUNDED.



SOURCE: National Survey of Children’s Health, 2003.<sup>8</sup> ALL NUMBERS ARE ROUNDED.

<sup>7</sup> J.P. Sommers, “Dental Expenditures in the 10 Largest States, 2005,” Statistical Brief #195, January 2008, Rockville, MD: Agency for Healthcare Research and Quality, <[http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/st195/stat195.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/st195/stat195.pdf)> (3 March 2008). All numbers rounded.  
<sup>8</sup> The National Survey of Children’s Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration. Data query performed at <[www.nschdata.org](http://www.nschdata.org)> on April 16, 2008. All numbers are rounded.

“While nine million children lack health insurance coverage, more than 20 million children are not covered for dental services.”<sup>5</sup>

SOURCE: The Kaiser Commission on Medicaid and the Uninsured, 2007. Numbers cited are national.

“In 2003, Texas had the highest percentage of children without dental insurance among the 10 largest states.”<sup>6</sup>

SOURCE: National Survey of Children’s Health.



“Dental care represents a small portion of total health care spending. In 2006, dental services expenditures in the United States were \$91.5 billion, only about 4.3 percent of total health care expenditures.”<sup>14</sup>

SOURCE: Center for Medicare and Medicaid Services.

National data on dental coverage for both adults and children are available from the Medical Expenditure Panel Survey. In 2004, the most recent year for which data is available, 53.9 percent of the total U.S. community population had private dental coverage; 11.5 percent had public dental coverage and 34.6 percent had no coverage at all. When broken down by age group, older adults are the least likely to have dental coverage, while children are the most likely to have some form of dental coverage.<sup>9</sup>

**DOES PRIVATE DENTAL COVERAGE INFLUENCE THE USE OF DENTAL CARE?**

Studies have shown that persons with private dental coverage are more likely to receive dental care than persons without coverage. A study published in the *Journal of the American Dental Association*, for example, found that persons with private dental coverage were more likely to visit a dentist and have more frequent visits and higher expenditures than persons without coverage. The study’s authors concluded that private dental insurance coverage was a strong determinant of dental care use, but not the only determinant. Other factors that played a role in the decision to seek care included demographics and socioeconomic status. For example, regardless of insurance coverage, whites were more likely to have visited a dentist than non-Hispanic blacks or Hispanics, while low-income persons had fewer visits to the dentist and lower expenditures than higher-income persons.<sup>10</sup>

The results from the most recent Medical Expenditure Panel Survey also suggest a strong relationship between insurance coverage and dental service utilization. According to the survey, children (age 0–20) with private dental coverage were twice as likely to have visited a dentist as children with no coverage.<sup>11</sup> Another study that analyzed the results of the National Survey of Children’s Health found that “children uninsured for dental care were less than half as likely to have received PDC” (preventive dental care).<sup>12</sup>

**Government programs**

Government plays a relatively limited role in the delivery and financing of oral health services, both nationwide and in Texas. In 2004, dental services accounted for only about 4.6 percent of total health care spending in Texas.<sup>13</sup> Medicare, the national health insurance program for retirees, does not cover most dental care. Medicaid, the state/federal health program for the poor, provides dental coverage for children. However, only a small number of states

<sup>9</sup> Richard J. Manski and Erwin Brown, Jr., “Dental Use, Expenses, Dental Coverage, and Changes, 1996 and 2004,” Medical Expenditure Panel Survey, MEPS Chartbook No. 17, U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, 2007, <[http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/cb17/cb17.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/cb17/cb17.pdf)> (11 April 2008):10–11.

<sup>10</sup> Richard J. Manski, Mark D. Macek and John F. Moeller, “Private Dental Coverage: Who Has It and How Does It Influence Dental Visits and Expenditures?” *Journal of the American Dental Association* 133 (2002).

<sup>11</sup> Richard J. Manski and Erwin Brown, Jr., “Dental Use, Expenses, Dental Coverage, and Changes, 1996 and 2004,” Medical Expenditure Panel Survey, MEPS Chartbook No. 17, U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, 2007, <[http://www.meps.ahrq.gov/mepsweb/data\\_files/publications/cb17/cb17.pdf](http://www.meps.ahrq.gov/mepsweb/data_files/publications/cb17/cb17.pdf)> (11 April 2008).

<sup>12</sup> Charlotte Lewis et al., “Dental Insurance and Its Impact on Preventive Dental Care Visits for U.S. Children,” *Journal of the American Dental Association* 138 (2007): 369.

<sup>13</sup> “The Texas Health Care Primer,” Center for Public Policy Priorities, November 2007, <<http://www.cppp.org/files/3/sidebysidebyside.pdf>> (28 March 2008): 4.

<sup>14</sup> Table 4, “National Health Expenditures by Source of Funds and Types of Expenditures: Calendar Years 2001–2006,” <[www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf](http://www.cms.hhs.gov/NationalHealthExpendData/downloads/tables.pdf)>

**Did you know?**

**Different types of dental benefit products:**

**Dental Health Maintenance Organizations (HMOs)**

offer comprehensive benefits within a defined network of dentists. Providers are normally paid under a “capitation agreement” in which payment is made on a per-person rather than a per-service basis. Dental HMO plans sometimes allow enrollees to seek care from a non-network dentist.

**Dental Indemnity Plans** involve an employer transferring risk of claims to a third-party insurer for a specific premium. Providers are reimbursed on a nondiscounted fee-for-service basis.

**Discount Dental Plans** are a noninsurance product in which a group of dentists agrees to provide services for enrollees at a special discount price or at a percentage discount of their usual charge. Enrollees pay a monthly fee to access the network of dentists and are directly responsible for all payments.

**Direct Reimbursement (DR) Plans** are a unique way for employers to offer dental benefits. Under a DR plan, employers agree to reimburse their employees a portion of the actual cost of dental care received. DR plans are self-funded and not an insurance or HMO product.

SOURCES: National Association of Dental Plans, American Dental Association.



# Medicaid and the Frew agreement

One of the primary goals of the *Frew* agreement is to increase the number of Medicaid children who seek and use the dental care that they are entitled to receive. One of the key strategies the state has implemented to meet this goal is to encourage more Texas dentists to treat Medicaid patients. Effective September 1, 2007, Medicaid reimbursement rates for 38 of the most common dental services were increased by 100 percent.

provide comprehensive dental care for adults on Medicaid.<sup>15</sup> Most states, like Texas, only cover emergency dental care for adult Medicaid recipients. In Texas dental care for adult Medicaid recipients is extremely limited — generally covering only extractions related to life threatening conditions.

**MEDICAID** Under federal law, Texas’ Medicaid program for children must provide dental services to most Medicaid-eligible children under the age of 21 as part of the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit. In Texas, EPSDT is known as Texas Health Steps (THSteps). THSteps dental coverage includes:

- Complete preventive care, including dental exams, cleanings and application of fluoride and sealants
- Restorative services such as fillings, crowns, tooth extractions, treatment of gum disease and dentures
- Medically necessary orthodontic care, such as the correction of a cleft palate
- Emergency care, including procedures necessary to control bleeding, relieve pain and eliminate acute infection or treatment of injuries to the teeth or supporting structures

In fiscal year 2007, the cost for Medicaid dental services in Texas was \$400.9 million, up from \$369.7 million in fiscal year 2006 and \$357.5 million in fiscal year 2005.<sup>16</sup>

Although Medicaid covers dental care for children, not all children receiving Medicaid see a dentist each year. According to data prepared by the Department of State Health Services, in state fiscal year 2007, 50 percent of eligible Medicaid children received any dental service, while 45 percent received a dental checkup. Although these numbers are low, they represent an increase from 47 percent and 43 percent, respectively, in state fiscal year 2006.<sup>17</sup>

There is no single explanation for the relatively low rate of dental visits among Medicaid recipients. Some parents may not take their children to the dentist because they lack reliable transportation, because the distance is too great or because they cannot get time off from work to go to an appointment. Some parents may delay dental care until there is an obvious problem causing serious pain. Some families may want to take their child to the dentist, but have difficulty finding a local Medicaid provider.

**CHILDREN’S HEALTH INSURANCE PROGRAM** The Children’s Health Insurance Program (CHIP) is a health coverage program for children whose parents earn too much to qualify for Medicaid, but not enough to afford private insurance. In 2006, a family of three would need to earn less than \$33,200 per year to qualify for CHIP (or 200 percent of the Federal Poverty Level or FPL). Unlike Medicaid, CHIP families pay annual enrollment fees and co-payments for services like office visits and prescription drugs.

The CHIP program began serving Texas children in April 2000, but was dramatically scaled back in 2003 due to a state budget deficit. Dental services were reinstated in April 2006. Current CHIP dental benefits include preventive, diagnostic and therapeutic services at participating providers or clinics. Examples include cleanings, fillings, crowns, root canals and extractions. Preventive benefits are capped at \$250 per 12-month period, while the annual maximum for therapeutic benefits is limited to \$280 – \$565.

### Other public programs

Although Medicaid and CHIP provide most government-funded dental services, several other programs provide oral health services to Texas children. One of these programs is the Maternal and Child Health Block Grant (Title V), which provides oral health care to non-Medicaid eligible children through fee-for-service contracted providers. The Children with Special Health Care Needs (CSHCN) services program also covers dental services for children whose families earn 200 percent of the FPL or less. Coverage is limited to what is necessary to prevent, treat or correct dental and oral complications. The STAR Health Program for children in foster care is a new managed care program that became operational in April 2008. Children enrolled in the program will have a medical home through a primary care physician and access to a wide range of health benefits, including physical and behavioral health, vision care and dental services provided through an enrolled dentist.

### School-based and Head Start preventative dental services

The Texas Department of State Health Services (DSHS), through the Oral Health Group (OHG), maintains offices in Austin, Lubbock, Tyler, Houston, San Antonio and Midland, and currently provides preventive dental services to low-income, underserved, preschool and school-aged children who are Texas residents. The two major direct preventive services programs are the school-based dental sealant program (portable clinics) and working with Head Start programs in rural areas of Texas.

In addition to providing preventive dental services to underserved populations, the OHG has other responsibilities, including recruiting Medicaid dental providers, monitoring oral disease and oral health services utilization in Texas, and working with the Texas Fluoridation Project, which monitors community water fluoridation levels, inspects fluoridation sites, provides water operator training and provides technical assistance to Texas communities regarding water fluoridation.

### Community Health Centers

Community Health Centers (CHCs) are local, nonprofit or public outpatient clinics that provide a wide range of primary health care services to low-income and medically underserved communities. Under federal law, CHCs must provide care to all persons regardless of their ability to pay and offer support services such as referrals, case management, translation and transportation assistance.

As of July 2008, 463,939 Texas children were enrolled in the traditional CHIP program.<sup>18</sup>

SOURCE: Texas Health and Human Services Commission, 2008.

In 2007, Texas had 61 Community Health Centers, with nearly 300 service delivery sites. About 58 percent of the 770,338 patients seen at Texas CHCs in 2007 were uninsured, while another 23 percent were Medicaid recipients.<sup>19</sup>

SOURCE: Texas Association of Community Health Centers.

<sup>15</sup> Summary Report. Synopsis of State Dental Public Health Programs. Data for FY 2005-6. Association of State and Territorial Dental Directors. August 29, 2007:8.  
<sup>16</sup> Electronic communication from Texas Department of Health and Human Services, 6 August 2008.  
<sup>17</sup> “Dental Services Summary 2005-2007” Excel spreadsheet compiled by HHSC, July 14, 2008.

<sup>18</sup> “Children enrolled in Medicaid, CHIP, and CHIP Perinatal Average by Month.” <www.hhsc.state.tx.us/research/medicaid-chip-chipperinatal-counts.html>  
<sup>19</sup> Texas Association of Community Health Centers Fact Sheet.

“No matter how much free care dentists give, volunteerism alone won’t solve the problem. Charity is not a health care system.”

SOURCE: American Dental Association.

Federally Qualified Health Centers (FQHCs) are required to provide some form of access to preventive dental services to their patients — either in-house or through contractual arrangements. According to the Texas Association of Community Health Centers (TACHC), 48 of the 55 FQHCs and FQHC look-alikes in Texas, for which the organization has information, provide dental services on-site. The remaining seven CHCs either have plans to provide on-site dental in the near future or have referral arrangements in place.<sup>20</sup>

In 2007, Texas CHCs employed 110 dentists who logged more than 285,000 patient visits.<sup>21</sup> Although some CHCs contract with private dentists or hire part-time clinical staff, most hire dentists on a full-time basis. Recruitment of dentists, however, continues to be a problem in Texas and across the nation. Average salaries paid to CHC dentists are slightly higher than those in academic positions, but less than in private practice employment or ownership.<sup>22</sup> Nevertheless, some graduating dentists consider working at CHCs due to their eligibility for assistance with student loan repayment.

#### CHARITABLE CARE

A recent TDA survey of Texas district dental societies found that dental professionals in every area of the state volunteer time, money and resources to help people of all ages receive care. Local charitable care programs abound. The Theo Project, for example, sponsors a fleet of vans that travel to Central Texas schools providing free dental care to children in need, while the Centro de Salud Familiar La Fe in El Paso offers a full-service family dental center. The Love and Care Ministries in Abilene provides indigent medical and dental care weekly using mobile medical and dental buses.

Several of the state’s larger dental societies host major fundraising events, such as golf tournaments. For example, in North Texas, the local dental society organizes an annual “Rite to Smile” golf tournament fundraiser for the Rite to Smile Foundation, the society’s nonprofit entity. All funds are donated to the TDA Smiles Foundation and the Texas Scottish Rite Hospital for Children.

The section that follows briefly describes some of the national, state and local programs that provide free or discounted dental care to those in need. The discussion is by no means exhaustive. Rather, it represents only a small sample of the volunteer efforts and charitable programs that exist throughout the state.

#### *The Texas Dental Association Smiles Foundation*

In 2006, two charitable foundations affiliated with the Texas Dental Association merged to form the Texas Dental Association Smiles Foundation (TDASF). The goals of the TDASF are to educate the public and profession about oral health, enhance the public image of dentistry and improve access to dental care for the citizens of Texas. The foundation accomplishes these goals through

<sup>20</sup> Electronic communication from Texas Association of Community Health Centers staff. A FQHC is a type of CHC that is recognized by the Centers for Medicaid and Medicare Services and eligible for certain benefits.

<sup>21</sup> Texas Association of Community Health Centers Fact Sheet.

<sup>22</sup> “Community Health Center. Board Work Groups Report,” Texas Dental Association, 2008.

<sup>23</sup> American Dental Association, Give Kids a Smile (GKAS) <<http://www.ada.org/prof/events/featured/gkas/index.asp>> (23 July 2008).

<sup>24</sup> Telephone interview with the Greater Houston Dental Society Staff, 5 May 2008.

<sup>25</sup> Telephone interviews with Dr. Mary Swift, 5th Dental District, and Becca Haynes, Attitudes and Attire Program Manager, May 12, 2008 and information from the Attitudes and Attire web site <[www.attitudesandattire.org](http://www.attitudesandattire.org)>.

## Give Kids a Smile

The American Dental Association’s Give Kids a Smile Day (GKAS) is an event held on the first Friday of every February as part of National Children’s Dental Health Month. Dentists across the nation spend one day providing free care to children in need. As of September 2008, there were an estimated 1,883 GKAS programs serving approximately 478,000 children nationwide.<sup>23</sup> Most dental societies in Texas participate in the GKAS program. The Greater Houston Dental Society, for example, annually collaborates with The University of Texas at Houston Dental Branch to participate in Give Kids a Smile Day. In 2007, 54 dentists and other oral health professionals treated 131 patients at this event alone.<sup>24</sup>

## Dentists Who Care

The Dentists Who Care program, operating as a 501(c)(3) in the Rio Grande Valley since 1996, uses more than 130 volunteer dentists to provide care to children in need. Supported in part by a local golf tournament, the organization provides care via a mobile clinic, but also provides “Valley Smile Coupons” to children who need more extensive or specialty care. Local dentists give two to three coupons per month to school nurses, who refer children, distribute the coupons and make the appointments for dental care.

## The Hope Clinic

The Hope Clinic in Alvin, Texas, is a nonprofit organization conceived by a handful of local dentists and supported almost entirely by charitable contributions and volunteers. The clinic opened its doors for service in January 2008 and as of July 2008 had already provided dental services to 366 patients valued at \$188,909. Operating two days a week and staffed by 15 area dentists, patients come to the clinic from more than 10 different cities in the region and pay for care on a sliding scale, with fees generally ranging from \$5 – \$15 per visit.

## Hopeful Smiles

Hopeful Smiles provides free restorative care to women recovering from abusive relationships, addiction, homelessness or other serious personal challenges. Created by a Dallas area dentist, the program operates in partnership with “Attitudes & Attire,” a nonprofit organization in Dallas “dedicated to promoting personal growth for women seeking self-sufficiency.” In 2007, more than 50 women received restorative care, which was provided by 15 general dentists and four specialists.<sup>25</sup>

## Best practice case studies





Charitable care is a vital component in the overall distribution of oral health care in Texas, but it is part of a safety net rather than a strategy for increasing access to regular care.

charitable and educational programs, including Texas Missions of Mercy and Texas Donated Dental Services.

**TEXAS MISSIONS OF MERCY (TMOM)** In 2001, the TDA Smiles Foundation established Texas Missions of Mercy (TMOM). The program provides free restorative care to as many people in need as possible, usually over a two-day period. In 2007, the cities of Dallas, Hereford and Houston hosted TMOMs, treating more than 2,700 people in need. Several other areas of Texas, including El Paso, Nueces Valley and South Plains, are planning to host TMOM events in the future. Between November 2001 and November 2007, nearly 12,000 Texans received free dental services through the TMOM program.<sup>26</sup>

**TEXAS DONATED DENTAL SERVICES (TXDDS)** The Texas Donated Dental Services program provides comprehensive oral health care for persons with a permanent disability and/or those over the age of 55. All of the care provided by TXDDS is donated by Texas dentists and other oral health professionals. In 2007, 727 volunteer dentists participated in TXDDS, providing care valued at nearly \$710,000. Demand for services far exceeds the capacity to provide them. As a result, applicants eligible for services may have to wait more than three years to start receiving care.

*University-based care*

Texas’ three dental schools provide charitable care in several ways. Faculty and students serve patients in their communities through outreach efforts, as well as through required community rotations and mobile clinics. In addition, each of the schools, The University of Texas Health Science Center at Houston Dental Branch (UTHSC-H), The University of Texas Health Science Center at San Antonio Dental School (UTHSC-SA) and the Texas A&M Health Science Center Baylor College of Dentistry (Baylor), has university-based clinics, outreach clinics and faculty-provided services.

**THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER**

**AT HOUSTON DENTAL BRANCH (UTHSC-H)**

The UTHSC-H Dental Branch provided over \$1 million in unsponsored charity dental care in fiscal year 2008. That same year, the Dental Branch conducted outreach at a variety of sites throughout greater Houston and the surrounding counties, providing oral health education and treating 14,756 patients. In addition, the Dental Branch conducted 20,629 treatments in Houston hospitals. As is true with the other state dental schools, UTHSC-H’s community outreach enables students to provide direct care through community clinics, area schools and health fairs. In fiscal year 2008, Dental Branch faculty, students and staff participated in three Texas Mission of Mercy events, sponsored by the TDA, providing dental care in underserved areas. Students staff a mobile dental van

operated by St. Luke’s Episcopal Health Charities, which visit sites throughout Houston and East Texas, providing oral cancer screenings and clinical care. In fiscal year 2008, the van provided 9,437 patient treatments with an equivalent value of care of over one million dollars.<sup>27</sup>

**THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER**

**AT SAN ANTONIO DENTAL SCHOOL (UTHSC-SA)**

Students at the UTHSC-SA Dental School are required to complete rotations in outreach clinics as part of the school’s community-based training program. The majority of patients who visit the outreach clinics are indigent.<sup>28</sup> In fiscal year 2007, 93 percent of the 33,982 patients served were indigent. The total value of care provided in fiscal year 2007 was \$9,804,712, of which \$8,511,053 was donated. In addition to providing charity care, the outreach clinics accept Medicaid patients and offer discount care by students. The UTHSC-SA Dental School and students also participate in oral health fairs and are involved in other activities to promote oral health such as providing free dental sealants to local public school students and donating mouth guards to student athletes.<sup>28</sup>

**THE TEXAS A&M HEALTH SCIENCE CENTER BAYLOR COLLEGE OF DENTISTRY**

Under faculty supervision, Baylor dental students provide affordable care to patients through outreach clinics in the community and university-based clinics. Although the Texas A&M Health Science Center Baylor College of Dentistry in Dallas does not provide charitable care through its university clinics, services provided by students are discounted to 40 to 60 percent of area market costs. Charges for services vary according to the students’ level of training, but are not considered unsponsored unless provided at a deeper discount or free of charge to medically or financially indigent patients. As part of a community dentistry externship, fourth-year Baylor students complete rotations through the dental clinic at the Juvenile Detention Center, the Children’s Oral Health Center of Dallas and the Dallas County Sealant Initiative. Students and faculty also provide oral health education and screenings in the community.<sup>29</sup>

**CONCLUSION**

The oral health delivery system in Texas is diverse and offers several points of access, including private dental offices, public and private clinics, school-based programs and Community Health Centers. Expanding access to oral health care must be approached as a shared responsibility — between dentists, policymakers, community-based organizations, parents and schools. The job at hand is simply too big — and too important — for any single entity to take on alone.

In 2005, the University of Texas Health Science Center at Houston Dental Branch provided emergency dental care to hurricane victims at the George R. Brown Convention Center in the aftermath of Hurricane Katrina. The mobile dental van spent two weeks in the convention center, providing 280 free dental procedures for 68 patients and donating 100 complete dentures. A total of 149 faculty and 445 staff hours were provided as part of this volunteer relief effort.

<sup>26</sup> Texas Dental Association Smiles Foundation, “Momentum,” 2007 Annual Report.

<sup>27</sup> The state’s definition for unsponsored charity care is the “total dollar amount of indigent patient charges provided in hospitals and clinics contracted with or owned, operated and funded by the health-related institution during the reporting period,” and it excludes the Faculty Practice Plan care. Data provided by The University of Texas at Houston Dental Branch, Office of Patient Care, 23 May 2008.

<sup>28</sup> Written information compiled by the University of Texas Health Science Center at San Antonio Dental School, Office of External Affairs, 19 May 2008.

<sup>29</sup> Juanna Moore, Assistant Dean, Baylor College of Dentistry, Office of Finance, phone interview with author, 23 May 2008.

# Does the Oral Health of Texas Measure Up?

BACKGROUND

Although there are many different ways to evaluate oral health status, the discussion that follows focuses on how Texas measures up to the nation as a whole on six indicators, defined in Healthy People 2010, an initiative created by the government to improve the health of Americans and eliminate health disparities among different segments of the population.<sup>1</sup> These indicators are:

- Percentage of communities with access to fluoridated drinking water
- Percentage of adults who visited the dentist within the past 12 months
- Percentage of children with untreated tooth decay
- Percentage of young children with dental sealants
- Incidence and early detection of oral cancer
- Incidence of adult tooth loss

The data presented in this chapter are derived from various sources, including the 2006 Basic Screening Survey (BSS) of third-grade Texas public school children, the Behavioral Risk Factor Surveillance Survey (BRFSS), the state cancer registry and the Texas Water Fluoridation Reporting System (WFRS).

COMMUNITY WATER FLUORIDATION

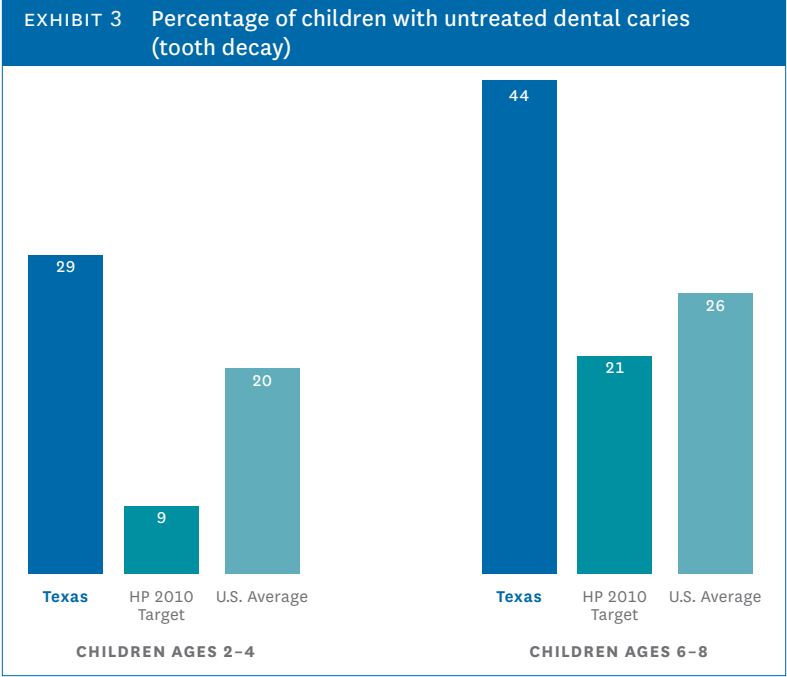
Water fluoridation is widely viewed as a safe and cost-effective way to prevent tooth decay and cavities. Texas has surpassed Healthy People 2010 objectives in community water fluoridation. In 2007, 78 percent of the population served by public water systems in Texas had access to fluoridated water, compared to the national average of 69 percent and the Healthy People 2010 target of 75 percent.<sup>2</sup> The increasing popularity and use of nonfluoridated bottled water, however, may reduce the positive effects of fluoridation of community water.

REGULAR DENTAL VISITS AMONG ADULTS

Because regular dental visits may prevent or delay tooth decay and gum disease, a good predictor of oral health is the percentage of a given population that has visited the dentist within a 12-month period. The most recent data indicate that 61 percent of Texas adults had a dental visit during the past 12 months, which is lower than the national estimate of 68 percent.<sup>4</sup>

UNTREATED TOOTH DECAY IN CHILDREN

Another important indicator used to track oral health status is the rate of untreated tooth decay among children, which can result in chronic pain and early tooth loss. As illustrated in Exhibit 3 below, the rate of untreated tooth decay among Texas children was higher in Texas than in the rest of the United States. Texas has a long way to go to meet national Healthy People 2010 targets.



SOURCES: Basic Screening Survey of Texas Public School Children, 2006. Basic Screening Survey of Texas Head Start Students, 2007. Data provided and confirmed by DSHS Oral Health Program, July 2008. ALL NUMBERS ARE ROUNDED.

“Something as simple and inexpensive as giving children a toothbrush, teaching them how to use it and putting dental sealants on their first molars with portable equipment at the school campus has made a dramatic impact on the oral health of the low-income children in our community. When Dental Health Arlington’s school-based sealant program began fourteen years ago, about 61 percent of the children screened by the program had untreated tooth decay. By the end of the 2007-08 school year, the percent of students with untreated decay had dropped to nearly half that amount — at about 33 percent of screened students.”

SALLY HOPPER  
Executive Director, Dental Health Arlington  
Executive Committee, Texas Oral Health Coalition  
Arlington, Texas

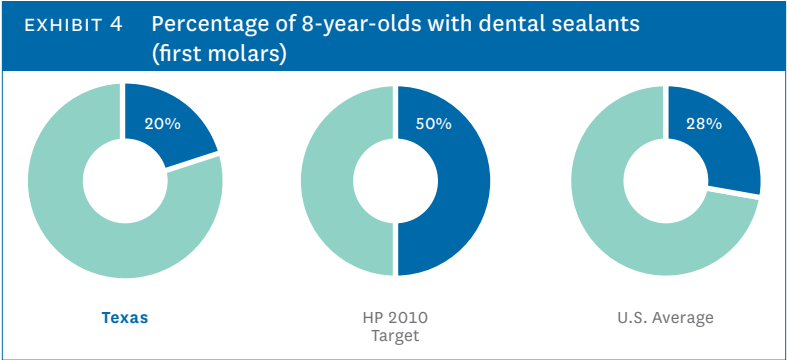
A study published in 2000 by the Department of State Health Services (DSHS) Oral Health Group (OHG) found that widespread community water fluoridation in Texas produced significant cost savings in publicly financed dental care under Texas Health Steps, but that further savings could be realized by implementing community water fluoridation in other areas of the state.<sup>3</sup>

SOURCE: Department of State Health Services Oral Health Program.

DENTAL SEALANTS IN CHILDREN

Dental sealants (also known as pit-and-fissure sealants) are plastic coatings applied to the chewing surfaces of back teeth to block cavity-causing bacteria. They are a safe, painless and effective way to prevent cavities in young children. Most dentists recommend that sealants be applied to first molars soon after they erupt (around age 6) and later to second molars (around 12 – 13 years). The application of dental sealants on molars is especially important since the pits and fissures around these teeth are an inviting spot for bacteria to grow — and are harder for children to brush effectively.

Texas has not yet met the Healthy People 2010 target of 50 percent of 8-year-olds with dental sealants on their molar teeth. In fact, according to the 2006 Texas Basic Screening Survey (BSS), only 20 percent of 8-year-olds had dental sealants on their first molars.



SOURCE: Texas Basic Screening Survey (BSS), 2006. Data provided and confirmed by DSHS Oral Health Program, July 2008. ALL NUMBERS ARE ROUNDED.

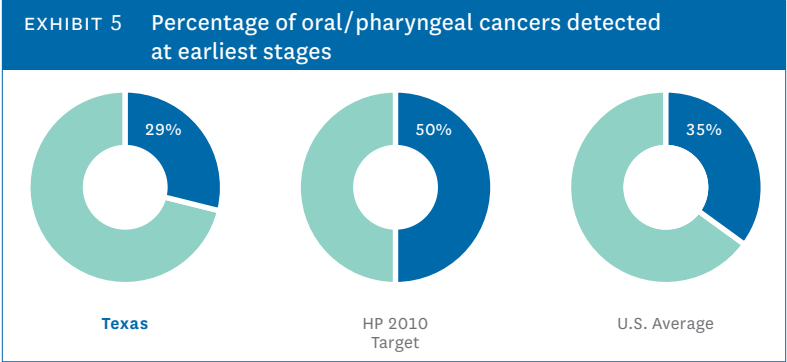
<sup>1</sup> For detailed information on the progress the nation as a whole is making toward achieving Healthy People 2010 goals, see <<http://www.healthypeople.gov/data/midcourse/pdf/fa21.pdf>> (25 July 2008).  
<sup>2</sup> Centers for Disease Control and Prevention, “Populations Receiving Optimally Fluoridated Water—United States 1992–2006,” MMWR Weekly (11 July 2008): 737 – 741. Downloaded <[www.cdc.gov/mmwr/preview/mmwrhtml/mm5727a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5727a1.htm)> 30 September 2008.  
<sup>3</sup> Texas Department of State Health Services, Oral Health Program, “Water Fluoridation Costs in Texas: Texas Health Steps (EPSDT – Medicaid),” May 2000.

<sup>4</sup> Behavioral Risk Factor Surveillance Survey, 2006. Data provided and verified by DSHS Oral Health Group.



INCIDENCE AND EARLY DETECTION OF ORAL CANCERS

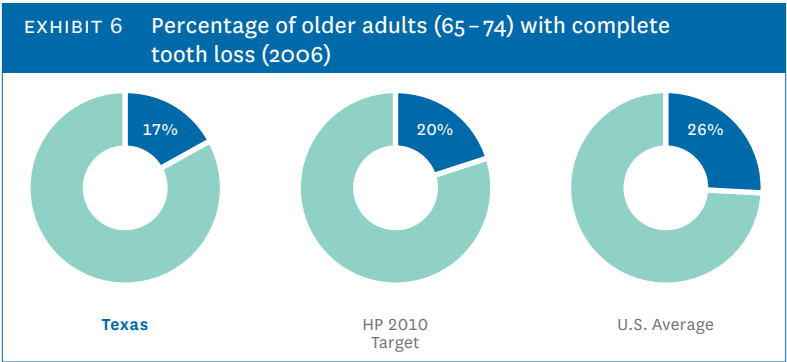
Texas performed just below the national average on reducing the death rate from oral cancer — 2.6 per 100,000 persons per year compared to the Healthy People 2010 objective of 3.0 per 100,000. About 29 percent of oral cancer cases in Texas are detected at the earliest, most treatable stage — compared to the Healthy People 2010 target of 50 percent.<sup>5</sup>



SOURCE: Texas Department of State Health Services, Cancer Epidemiology and Surveillance Branch, Texas Cancer Registry.  
Data provided and confirmed by DSHS Oral Health Program, July 2008.

ADULT TOOTH LOSS

Another key indicator used to evaluate the oral health of adults is the degree of tooth loss. Most adult tooth loss is the result of dental caries and periodontal disease, which can usually be avoided through early detection and routine dental care. As illustrated below, only about 17 percent of older Texans in 2006 had lost all their natural teeth, compared to the national average of 26 percent.<sup>6</sup> While this statistic bodes well for the state, it also means that more elderly persons will need assistance with oral hygiene to prevent decay and periodontal disease later in life.



SOURCE: Behavioral Risk Factor Surveillance Survey, 2006.  
Data provided and confirmed by DSHS Oral Health Program, July 2008.

CONCLUSION

While Texas can be proud of what it has accomplished in improving the oral health of its residents, the State cannot afford to rest until it meets—or exceeds—the Healthy People 2010 goals. Many inexpensive, effective measures are available to prevent dental disease. The challenge is to make these measures widely accessible and to educate the public about the value of preventive dental care and good oral hygiene.

Early detection saves lives

Cancers of the oral cavity (including the lips, gum tissue, cheek lining, tongue and the hard or soft palate) are as common as leukemia and claim more lives than either cervical cancer or melanoma, a dangerous form of skin cancer.<sup>7</sup> Risk factors for oral cancers include age (most oral cancers strike after age 40), tobacco use (in any form), alcohol consumption and, for lip cancers, prolonged sun exposure. Nevertheless, 1 in 4 oral cancers occur in patients with no identified risk factors.

Although men are more likely to die from oral cancer than women, the incidence of oral cancer among women has increased. African-Americans are more likely to be diagnosed with and die from oral cancers than any other ethnic or racial group in the United States.<sup>8</sup> The oral cancer death rate among African-American males in Texas was 7.5 per 100,000 persons, compared to 4.9 among white males and 3.2 among Hispanic males.<sup>9</sup>

Early detection significantly increases survival rates. Oral cancer often starts as a tiny red or white spot or sore anywhere in the mouth. These spots can be detected by dentists during routine exams—and further tests may be conducted as needed.



Did you know?

<sup>7</sup> American Cancer Society <<http://www.cancer.org>> (25 March 2008).  
<sup>8</sup> American Dental Association, “Oral Health Topics A–Z: Oral Cancer,” American Dental Association online, 14 March 2005, <<http://www.ada.org/public/topics/cancer-oral.asp>> (7 March 2008).  
<sup>9</sup> Texas Department of State Health Services, Cancer Epidemiology and Surveillance Branch, Texas Cancer Registry.

# Where Is the Greatest Need for Oral Health Care in Texas?



BACKGROUND

Although oral health in the United States has improved significantly during the past several decades, certain segments of the population continue to suffer disproportionately from oral diseases. The same is true in Texas. The following chapter focuses on five key groups of Texans:

- Low-income children
- Nursing home residents and the elderly
- Individuals with special health care needs
- Low-income adults
- Residents of medically underserved areas

LOW-INCOME CHILDREN

Although many low-income children have access to Medicaid, CHIP and other safety net programs, far too many fall through the cracks and do not receive adequate dental care. As a result, poor children are less likely to visit the dentist for preventive care and more likely to suffer from oral diseases than children from more affluent families. In fact, a national survey conducted in 2003 found that higher-income Texas children were far more likely to have gone to a dentist for a preventive visit during the previous 12-month period than lower-income children (see *Exhibit 7 below*).<sup>2</sup>

EXHIBIT 7 Percentage of children with preventive visits in the past 12 months by income		
FAMILY INCOME	U.S.	TEXAS
0–99% Federal Poverty Level	58%	59%
100–199% Federal Poverty Level	66	56
200–399% Federal Poverty Level	77	70
400%+ Federal Poverty Level	82	78

SOURCE: *The Oral Health of Children: A Portrait of States and the Nation 2005*,<sup>1</sup> based on data from the National Survey of Children’s Health (2003).

NURSING HOME RESIDENTS AND THE ELDERLY

The State of Texas, regrettably, lacks clear documentation on the oral health status of older Texans in general and nursing home residents in particular. Data is available on the percentage of elderly Texans with complete tooth loss. However, information on other important indicators of oral health status (such as incidence of periodontal disease or the percentage of long-term residents who use the oral health care system) is not currently collected by the state.

Although oral health data on the elderly is somewhat limited, the fact that the elderly, especially those in nursing homes, are at high risk for oral diseases, is well-documented. For starters, access to care is a significant issue. Medicare does not provide dental coverage and only a small number of elderly persons have private dental coverage. Older adults are also at greater risk for oral

disease because many take one or more prescription or over-the-counter drugs. Certain medications, including decongestants, heart medications and diuretics, can cause a condition known as “dry mouth,” which may limit the flow of saliva that protects the teeth against decay.

Many nursing home residents are at high risk for oral disease because of the simple fact that they may not have the physical or cognitive ability to take care of their teeth. Visiting a dentist for a routine cleaning may pose logistical or even physical challenges. And caregivers may not have the time or training to provide the level of care needed to residents of long-term care facilities.

As described earlier in this report, oral disease has also been linked to systemic diseases, such as pneumonia, one of the most common causes of death among elderly nursing home residents. The existence of dental plaque (a colorless layer of bacteria that builds up on the teeth) has been found to contribute to the presence of pneumonia-causing bacteria, which can enter the lower respiratory tract. One study compared the incidence of pneumonia among two groups of nursing home residents: an “oral care group” and a “no-oral care group.” The persons in the oral care group had their teeth cleaned after each meal by a nurse or caregiver and had weekly professional care, such as tartar control and plaque removal. Patients in the “no-oral care group” brushed their teeth by themselves. The two-year randomized study, which involved 366 residents at 11 different nursing homes, found significantly lower rates of pneumonia among the “oral care group” than the “no oral care group.”<sup>4</sup>

TEXANS WITH SPECIAL HEALTH CARE NEEDS

Data on access to care for special populations, including foster children and persons with mental or physical disabilities, are also limited. The State of Texas, for example, does not gather statistics on the prevalence of oral disease among special needs populations, nor does it inquire about disability status when conducting telephone surveys on oral health care.

Although national or state-level data are limited, several studies have found that persons with special health care needs are at high risk for oral disease and often have difficulty obtaining the care they need. Useful data are available on children with special health care needs. In 2003, 23 percent of Texas children with special health care needs had no dental insurance (compared to 18 percent nationwide).<sup>5</sup> Another survey found that 16 percent of children with special health care needs had at least one unmet health care need. According to the survey, “the service most commonly reported as needed but not received was preventive dental care.”<sup>6</sup>

LOW-INCOME ADULTS

Poor adults are also vulnerable to oral disease. The Texas Medicaid program covers only limited emergency dental treatment for adults. Preventive care,

A key trend that cannot be ignored is the fact that more older adults are retaining their natural teeth. As fewer older adults experience tooth loss, the risk of tooth-related disease, including rampant caries and periodontal disease, increases dramatically. This trend will only increase the demand for oral health care among the elderly and better training for both health care workers and family members.

“Approximately 80 percent of dental caries (tooth decay) is concentrated in 25 percent of U.S. children — mostly low-income children — with even higher levels of caries found in African-American and Hispanic children.”<sup>1</sup>

SOURCE: *Center for Health Care Strategies*, 2006.

“Dental caries is a disease in which acids produced by bacteria on the teeth lead to loss of minerals from the enamel and dentin, the hard substances of teeth. Unchecked, dental caries can result in loss of tooth structure, inadequate tooth function, unsightly appearance, pain, infection, and tooth loss.”<sup>3</sup>

SOURCE: *Centers for Disease Control and Prevention*, 2008.

1 Carolyn Ballard and Nikki Highsmith, “Catalyzing Improvements in Oral Health Care: Best Practices from the State Action for Oral Health Access Initiative,” Center for Health Care Strategies Inc. (August 2006): 44.  
2 The National Survey of Children’s Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration.  
3 Centers for Disease Control and Prevention, “The Burden of Oral Disease: Tool for Creating State Documents,” Atlanta: U.S. Department of Health and Human Services, 4 June 2007, <http://www.cdc.gov/oralhealth/library/burdenbook/> (11 April 2008).

4 “Oral Health Affects Pnuemonia Risk in the Elderly,” PulmonaryReviews.com (2002), <www.pulmonaryreviews.com/sepo2/pr\_sepo2\_oralhealth.html>  
5 The National Survey of Children’s Health (NSCH) was conducted by the National Center for Health Statistics, the Centers for Disease Control and Prevention, and the Maternal and Child Health Bureau of the U.S. Health Resources and Services Administration. Data query performed at <www.nschdata.org> on April 16, 2008. All numbers are rounded.  
6 “The National Survey of Children with Special Health Care Needs: Chartbook 2005–2006,” U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, <www.mchb.hrsa.gov/cshcnos/cs/texas.htm/> (16 April 2008).



such as cleanings or oral cancer screenings or therapeutic care, such as tooth extractions, are not covered. Low-income Texans are much less likely to have visited a dentist or had their teeth cleaned than their more affluent peers. According to the 2006 Behavioral Risk Factor Surveillance Survey, nearly 8 out of 10 Texas adults earning more than \$50,000 per year visited the dentist or a dental clinic in the past year — compared to less than 4 out of 10 Texans earning less than \$15,000 per year.

EXHIBIT 8 Percentage of adults who have had their teeth cleaned within the past year by income (2006)		
ANNUAL INCOME LEVEL	U.S.	TEXAS
< \$15,000	36%	36%
15,000 – 24,999	45	46
25,000 – 34,999	55	50
35,000 – 49,999	64	55
> 50,000	79	77

SOURCE: Behavioral Risk Factor Surveillance Survey, 2006.  
Data provided and confirmed by DSHS Oral Health Program, July 2008.  
ALL NUMBERS ARE ROUNDED.

RESIDENTS OF MEDICALLY UNDERSERVED AREAS

A detailed discussion of dental work force trends and related issues is outside the scope of this report. The geographic distribution of dentists in Texas, however, is an important issue that can and should be addressed in the context of access to care. For thousands of Texans, geography serves as a barrier to oral health care. The problem is presumably worse among poor, uninsured or elderly uninsured residents of medically underserved areas.

Every year, the Texas Department of State Health Services gathers and analyzes data on the number of dentists in Texas and where they practice. A recent state report found that, although the number of dentists in Texas per 100,000 residents has remained fairly stable over the past twenty years, the population-to-dentist ratio between metropolitan and nonmetropolitan counties has been widening. In 2007, there were 36.5 general dentists in Texas per 100,000, residents. Not surprisingly, the supply ratio in metropolitan areas were higher than nonmetropolitan areas (38.5 per 100,000, and 23.5 per 100,000 respectively).<sup>7</sup>

The State also tracks the number of Dental Health Professional Shortage Areas (HPSA) in Texas, which are designated by the federal government. The primary indicator used to determine if an area qualifies for HPSA status is the population-to-dentist ratio. In January 2008, 111 counties had some type of HPSA designation (82 of these were whole-county designations).<sup>8</sup> Partial-county HPSAs are designated by census track and are common in major urban counties, including Bexar, Dallas, Harris and Travis.

A 2004 article published in the *Texas Dental Journal* characterized access to dental care in rural areas of Texas as an “emerging crisis.” According to the

study’s author, although Texas has become increasingly urban, the state’s rural population is projected to grow over the next 20 years and may exceed 4 million by 2020. The analysis found that only 5.5 percent of all licensed practicing dentists worked in a rural area and that less than 4 percent of recent dental school graduates (defined as dentists out of school for 10 years or less) were located in a rural area. In addition, the analysis found that rural dentists are more likely than their urban counterparts to be an older male and to be a general dentist rather than a specialist.<sup>11</sup>

CONCLUSION

Poor oral health persists in Texas. Too many of the state’s young, sick, poor and elderly are falling through the cracks and are at higher risk of developing serious dental diseases, most of which could have been prevented with routine care. The changing demographics of Texas demand a new, more aggressive state strategy to improve access to oral health care.

In 2007, there were 47 counties without a single dentist, mostly in the Panhandle, West Texas, and South Texas.<sup>9</sup>

SOURCE: Texas Department of State Health Services and the Statewide Health Coordinating Council, Health Professions Resource Center for Health Statistics, 2008.

<sup>7</sup> Texas Department of State Health Services and the Statewide Health Coordinating Council, Health Professions Resource Center for Health Statistics, “Promoting Excellence Through Healthcare Workforce Planning in Texas 2007,” <www.dshs.state.tx.us/chs/hprc/shpo7ch2.pdf> (30 July 2008).  
<sup>8</sup> Ibid, 29.  
<sup>9</sup> Ibid, 28.

Oral health and adults with diabetes

One of the serious complications of diabetes is periodontal disease, the chronic inflammation of the tissues supporting the teeth, which is linked to poor glycemic control and glucose intolerance among diabetic patients. As such, one of the goals of Healthy People 2010 is to increase the percentage of people with diabetes who have an annual dental exam to 71 percent.

According to an analysis of data collected by the U.S. government through the Behavioral Risk Factor Surveillance System (BRFSS), in 2004 only seven states exceeded the Healthy People 2010 goal for annual dental exams among persons with diabetes. The statistics for Texas, a state with a high incidence of diabetes, are disturbing. In 2004, only 50 percent of dentate adults (those with teeth) with diabetes had a dental exam in the past year, down from 65 percent in 1999. The only state that had a lower rate of dental visits in 2004 among dentate diabetic patients was Mississippi, at 49 percent.

The survey also found that white adults diagnosed with diabetes were more likely than their Hispanic or black counterparts to see a dentist. Dental visits were also higher among people with higher income and education levels and those patients who attended a diabetes management class.<sup>10</sup>

SOURCE: Centers for Disease Control and Prevention, 2005.

<sup>10</sup> Centers for Disease Control and Prevention, “Dental Visits Among Dentate Adults: United States, 1999 and 2004,” *MMWR Weekly*, 54(25 November 2005):1181–1183. Downloaded <www.cdc.gov/mmwr/preview/mmwrhtml/mm5446a3.htm> 4 April 2008.  
<sup>11</sup> Eric S. Solomon, “Dentists in Rural Areas of Texas,” *Texas Dental Journal* 121 (2004).

Did you know?



# How Can Texas Build Better Oral Health?



“Better access to oral health care would help Texans of every age. If we connect our kids to care as infants now, they could avoid cavities altogether! And, basic dental care is critical to maintaining good health as adults. This report gives legislators and other decision-makers vital information about how we can make real progress in addressing our state’s oral health care crisis.”

ANNE DUNKELBERG  
Center for Public Policy Priorities

BACKGROUND

Texas policymakers and state officials are uniquely positioned to make a lasting difference in the lives of hundreds of thousands of Texans. **The time is now to develop and execute a strategic plan of action to increase access to oral health care.**

The authors of this report fully support the ongoing *Frew* initiatives funded by the 80th Texas Legislature, including the Medicaid fee increases for dental services; the “First Dental Home” initiative, which provides training and financial incentives for general and pediatric dentists to examine and treat children under 3 years old; and the “Oral Evaluation and Fluoride Varnish in the Medical Home” project, which trains and reimburses primary care providers for examining and applying fluoride varnish to the teeth of very young children.

Complying with the *Frew* agreement is a key priority. However, there are additional ways that Texas policymakers can improve the oral health of the state. After reviewing the national landscape and analyzing current programs and policies in Texas, the authors of this report propose five key policy recommendations.<sup>1</sup>

POLICY RECOMMENDATIONS

- 1 Identify a “dental home” for every Texan
- 2 Strengthen the Texas Department of State Health Services (DSHS) Oral Health Program (OHP)
- 3 Create new programs to encourage general dentists and specialists to practice in underserved areas and to treat underserved populations
- 4 Develop a comprehensive oral health public awareness and education campaign
- 5 Expand access to oral health services for older Texans

1 For more examples of oral health promotion best practices, see “A for Effort Special Grading Project” by Oral Health America (2005) <www.oralhealthamerica.org>. In addition, the Association of State and Territorial Dental Directors (ASTDD) Best Practices Project collects best practices for state, territorial and community oral health programs. See <www.astdd.org> for more information.

RECOMMENDATION #1

Identify a “dental home” for every Texan

Research suggests that “having a regular source of care, defined as a doctor or other health care provider, or a specific site where care is provided, is one of the strongest determinants of access to health care.”<sup>2</sup> This report’s first recommendation, therefore, is to identify a dental home for every Texan. While ambitious, this is an achievable undertaking. Several states, including Vermont, Washington and Iowa have launched dental home projects. The authors of this report recommend that the State of Texas:

- **Adopt an incremental approach and commit to finding a dental home for the state’s youngest children (ages 1 to 5) first.** The role of a dental home can be assumed by a wide range of entities, including Community Health Centers, community-based dental clinics, dental school clinics, charitable programs and individual primary care provider offices.
- **Continue partnering with organizations** like the Texas Dental Association, the Texas Academy of Pediatric Dentistry, local dental societies, the Texas Medical Association, the Texas Pediatric Society, the Texas Academy of General Dentistry and the Texas Academy of Family Practitioners to connect Texas’ youngest children to dental homes.
- **Create an online resource** that captures information about available dental homes. The resource should be marketed to Community Health Centers, WIC (Women, Infants, and Children) clinics, Head Start centers, school-based pre-K programs, nonprofit clinics, primary care provider offices (i.e., pediatricians, family practitioners) and the general public.
- **Partner with the Texas Dental Association and other key stakeholders** to educate the public about the dental home initiative and health coverage programs that can cover the cost of care, such as CHIP and Medicaid.
- **Require all Texas dental students to pass mandatory competencies in early infant care.** Currently, The University of Texas Health Science Center at San Antonio and the Baylor College of Dentistry require mandatory competencies in infant care. Implementing this requirement will increase the number of dentists with the training and expertise to see and treat infants and toddlers.

2 Teresa A. Dolan, Kathryn Atchison and Tri N. Huynh, “Access to Dental Care Among Older Adults in the United States,” *Journal of Dental Education* 69 (2005): 961.  
3 “First Dental Home,” *FREW Medical and Dental Strategic Initiatives*, Health and Human Services Commission, September 2007.

The First Dental Home initiative

As part of the *Frew* agreement, the State of Texas has launched a program for children under 3 years old called the “First Dental Home” initiative. Under the program, pediatric and general dentists are being trained to conduct infant oral health screenings, risk assessments, fluoride varnish applications and parent education.

As Texas rolls out a larger-scale dental initiative, primary care providers will play an important role, since they see children on a regular basis, especially during the first two years of life. Nationwide, 17 state Medicaid programs currently reimburse pediatricians for oral exams/assessments, fluoride varnish application and/or parent training/education.<sup>3</sup>



*“Children are so vulnerable. They rely on us to help them be healthy. We know that last year well over a thousand children in our community failed a basic dental screening. These children’s mouths are full of infection, disease and decay—and they are dealing with the terrible pain that accompanies serious oral disease. We believe a child having a dental home by the age of one, along with proper education on basic oral hygiene for the child and the family, are absolutely key to that child having a healthy mouth and a healthy body.”*

GINNY HICKMAN  
Assistant Vice President,  
Community Health Outreach  
Cook Children’s Health Care System,  
Fort Worth, Texas

*“Studies of programs initiating early dental care show improved health outcomes and long-term cost savings.”<sup>6</sup>*

SOURCE: Center for Health Care  
Strategies Inc., 2006.

### Challenges

One of the issues that could make implementation of this recommendation challenging is the fact that “the Texas Medicaid program has approximately 200 pediatric dentists for over 1.2 million Medicaid children under the age of 5 years.”<sup>4</sup> The need for more pediatric dentists is addressed further in Recommendation #3, below.

Funding may also be a challenge; however, existing payment sources such as Medicaid and CHIP can be used to pay for care provided at the dental home. Other options include self-pay and possibly fee-for-service vouchers (see Recommendation #2 below for more information on fee-for-service vouchers).

Although implementing this recommendation will be challenging, local resources such as Area Health Education Centers (AHECs) are available to provide technical assistance and support. AHECs are local partnerships between community organizations and academic institutions that train local health care providers, among other services. The official mission of the AHEC program, which is administered by the U.S. Department of Health and Human Services, is “to improve the supply, distribution, diversity and quality of the healthcare work force, ultimately increasing access to health care in medically underserved areas.”<sup>5</sup>

### Looking ahead

Once every Texas child is connected with a dental home, Texas lawmakers should consider enacting legislation requiring that each Texas schoolchild have an oral exam prior to enrolling in public school. Similar legislation has been adopted in several states, including California, Georgia, New York, Oregon, Rhode Island and Pennsylvania.<sup>7</sup> The State of Illinois currently requires that all kindergartners, second and sixth graders in public, private or parochial schools have a dental exam. Waivers are available for children who can demonstrate that they lack access to a dentist or that a visit would be a significant burden.

After completing the first phase of the dental home initiative, the State should focus on finding dental homes for other priority populations, such as children 6 to 18 years of age, pregnant women on Medicaid and residents of long-term care facilities.

<sup>4</sup> Ibid.

<sup>5</sup> “Area Health Education Centers.” Bureau of Health Professions, U.S. Department of Health and Human Services, Health Resources and Services Administration, 18 March 2008, <<http://bhpr.hrsa.gov/ahec/>> (10 July 2008).

<sup>6</sup> Carolyn Ballard and Nikki Highsmith, “Catalyzing Improvements in Oral Health Care: Best Practices from the State Action for Oral Health Access Initiative,” Center for Health Care Strategies Inc. (August 2006): 18.

<sup>7</sup> “Back to School Dental Exams Increasingly Mandated by States,” Foxnews.com (28 August 2007).

<sup>8</sup> Carolyn Ballard and Nikki Highsmith, “Catalyzing Improvements in Oral Health Care: Best Practices from the State Action for Oral Health Access Initiative,” Center for Health Care Strategies Inc. (August 2006): 18.

<sup>9</sup> Ibid., 18–20.

## The Early Childhood Caries Prevention Project

The Early Childhood Caries Prevention Project in Klamath County, Oregon, is an example of a successful rural dental home program. The central goal of the program, which began in 2004, is “to educate and treat pregnant women to prevent dental infection in their children.”<sup>8</sup> To meet this goal, pregnant mothers are referred to dental homes by their local WIC (Women, Infants, and Children) office. There, they receive treatment for existing cavities and other infections (to reduce the risk of their children being infected with a dental disease). The women are also taught about oral hygiene, given toothbrushes and fluoride toothpaste and are visited by a WIC nurse for a follow-up home visit. When the mother delivers her baby, she is given Xylitol gum and is asked to chew the gum daily until the baby is 6 months old (chewing gum with xylitol is an effective way to curb the pathogens that lead to dental caries). After the child reaches 6 months, he or she is assigned the same dental home as the mother, and receives fluoride varnishes every six months once his or her first tooth erupts. WIC nurses then conduct home visits at six weeks, six months, one year and two years.<sup>9</sup>

SOURCE: Center for Health Care Strategies Inc., 2006.

### Best practice case study



“Good oral health is as important as good physical and mental health to the overall wellness of a child. Just as we want to ensure all children have access to a medical home we encourage the same access to a dental home and are proud to partner with general and pediatric dentists at the community level in making this a reality.”

DR. OSCAR BROWN  
President, Texas Pediatric Society

RECOMMENDATION #2  
Strengthen the Texas Department of State Health Services Oral Health Program (OHP)

As described earlier in the report, the State’s Oral Health Program was largely dismantled in 2003 due to a state budget shortfall. Total funding for the Texas Department of State Health Services (DSHS) Oral Health Program dropped from \$3.1 million in fiscal year 2002 to a mere \$1.2 million in fiscal year 2005 — a 62 percent cut. Staffing levels during that same period were cut from 56 to about 20 — a 65 percent reduction.<sup>10</sup> Today, the Oral Health Program is operating with minimal staff on what can only be described as a shoestring budget. Organizationally, the Oral Health Program is also buried in a large bureaucracy. Once a division unto itself, the OHP is now a “group” several times removed from top agency leadership. At a minimum, state leadership should raise the profile of the Oral Health Group and make sure that it has the financial and human resources it needs to carry out the mandates of the *Frew* agreement and successfully lead Texas’ efforts to improve the oral health of its citizens.

The authors of this report recommend the following specific strategies for rebuilding the OHP:

- **Amend the Oral Health Improvement Act to require that the OHP be led by a dentist**, the most highly trained and experienced member of the dental team. Several states, including Arkansas, have this requirement in place. By enacting this requirement, Texas will be assured that the person leading the state’s OHP has the broad training and expertise needed to improve the state’s oral health.
- **Appropriate funds to the OHP to ensure that it has the resources needed to collect, analyze and disseminate data on oral health**, such as statewide and targeted surveys, needs assessments and other critical research activities. Without solid, timely data, Texas cannot successfully address the issue of access to care.
- **Appropriate funds so that the OHP can develop and implement a comprehensive oral health education and promotion campaign** (see *Recommendation #4* for more details).
- **Integrate oral health information** into existing public health initiatives and campaigns, such as tobacco cessation, diabetes education and obesity prevention.
- **Reestablish and possibly expand the fee-for-service voucher program**, which could provide uninsured children, pregnant women and low-income adults with “vouchers” that could be used at participating dentists to receive critically needed dental services. These vouchers could also be used for children under 5 who do not qualify for Medicaid or CHIP to pay for care in their newly assigned dental home.

<sup>10</sup> Oral Health Program, Texas Department of State Health Services. Staffing and budget data provided electronically 25 March 2008.

RECOMMENDATION #3  
Create new programs to encourage dentists and specialists to practice in underserved areas and to treat underserved populations

One of the primary goals of the *Frew* agreement is to increase the number of dentists participating in the state’s children’s Medicaid program. To that end, the *Frew* Advisory Committee is considering allocating funds from the \$150 million “Strategic Medical and Dental Initiatives” set-aside to encourage dentists to practice in underserved areas of the state. One of the specific strategies that the advisory committee is working on with the Texas Health and Human Services Commission is creating a *new* loan repayment assistance program for dentists and pediatric subspecialist physicians who agree to practice in underserved communities for a specific number of years.<sup>11</sup>

Graduates of Texas dental schools currently have access to two loan repayment programs: the National Health Service Corps (NHSC) and the state-supported Dentist Education Loan Repayment Program (DELRP), which is administered by the Texas Higher Education Coordinating Board. Currently, 28 Texas dentists receive NHSC support, while 13 receive state loan repayment funds.<sup>12</sup> The incentive provided by the DELRP, however, is limited (a maximum of \$10,000) and is funded through a 2-percent set-aside of dental school tuition. To receive DELRP support, a dentist must work at an approved Texas practice site (a federally designated Dental Care Health Professional Shortage Area or a federally funded Community Health Center) and accept Medicaid as full payment for services.<sup>13</sup> Although the authors of this report support continuing these existing programs, Texas would benefit greatly from a new loan repayment program specifically designed to ensure state compliance with the pressing needs of the *Frew* agreement.

The authors of this report recommend the following strategies to build the state’s capacity to meet its oral health needs:

- **Create a new loan repayment program** that would provide dentists up to \$100,000 in repayment assistance in return for three years of service in an underserved area providing a minimum level of service to Medicaid recipients. To provide an immediate incentive, annual payments should be provided up front. The new program should target third- or fourth-year dental students or recent graduates, with a focus on pediatric dentists. To increase ease of participation, program rules and requirements should be kept as simple and flexible as possible. The program should also be designed to maximize drawdown of federal funds and target “lagging counties” (those counties where *Frew* class members are found to have a particularly difficult time finding dental providers).

<sup>11</sup> For information on loan repayment programs in other states, see “State Experience with Dental Loan Repayment Programs,” National Conference of State Legislators, Forum for State Health Policy Leadership (2005): 1-34.  
<sup>12</sup> “Loan Repayment Program,” *FREW Medical and Dental Strategic Initiatives*, Health and Human Services Commission, briefing paper, (September 2007).  
<sup>13</sup> Texas Higher Education Coordinating Board, “Dental Education Loan Repayment Program Fact Sheet.” (13 March 2008).  
<sup>14</sup> “Diversity and Texas A&M University,” *Texas A&M University Web site*, <http://www.tamu.edu/vision2020/groundwork/83.php> (10 July 2008).  
<sup>15</sup> L. Jackson Brown, Karen Schaid Wagner and Beverly Johns, “Racial/Ethnic Variations of Practicing Dentists,” *Journal of the American Dental Association* 131 (2000): 1753.  
<sup>16</sup> 2006-07 Survey of Dental Education, Academic Programs, Enrollment, and Graduates – Volume 1 Table 12B, page 28.  
<sup>17</sup> “Highlights: The Supply of General Dentists in Texas – 2006,” Center for Health Statistics, Health Professions Resource Center, Texas Department of State Health Services, Publication No. 25-12581 (March 2007): 3.

Diversity and the dental work force

Texas is becoming an increasingly diverse, multicultural state. According to estimates published by Texas A&M University, the population of Texas is expected to be 45.9 percent Hispanic and 9.5 percent black by the year 2030.<sup>14</sup>

Increasing diversity in the dental work force, including dentists and auxiliary personnel, is therefore a key strategy for improving access to oral health care. The research literature offers concrete evidence that minority dentists are more likely to treat minority patients. A study published in 2000, for example, concluded the following: “Our findings show that the race/ethnicity of the dentist seems to influence the race/ethnicity of patients who come to them for treatment.” Researchers found that white dentists primarily treated white patients (76.6 percent), while about 62 percent of black dentists’ patients were black and 27 percent were white. Hispanic dentists treated equal percentages of Hispanic and white patients (45.4 percent and 43.6 percent, respectively). The study also found that black and Hispanic dentists reported treating the greatest proportion of low-income patients, specifically those earning less than \$15,000 per year.<sup>15</sup>

Texas’ three dental schools ranked in the top five of all nonminority dental schools in the number of underrepresented minority students (blacks, Hispanics, American Indians and Native Alaskans) in fiscal year 2006.<sup>16</sup> Also, Texas has seen an increase in the number of Hispanic students enrolled in dental schools in recent years, from 9.4 percent of total students in 1997 to 14.6 percent in 2005.<sup>17</sup>

“The average debt for students graduating from public dental schools in 2006 was \$124,700.”<sup>18</sup>

SOURCE: *Journal of Dental Education*, 2007.

- **Appropriate funds to assist dental schools in recruiting, enrolling and retaining minority dental students and other persons interested in working in underserved areas.** Funds could be used for outreach activities, academic and social support during dental school and zero-interest loans that could be forgiven if the dental graduate practices in an underserved area for a specific number of years. With the state’s shifting demographics and the high level of need among minorities and low-income Texans, the benefit of this investment should far outweigh the modest costs associated with supporting such an effort.

## Best practice case study



## Hispanic Center of Excellence-School of Dentistry, UT Health Science Center, San Antonio

Since 2001, the Hispanic Center of Excellence-Dentistry has helped The University of Texas Health Science Center at San Antonio Dental School successfully recruit and retain Hispanic dental students and faculty. The program offers predental students assistance with dental school applications and prep courses. Once enrolled in dental school, students receive tutoring, opportunities to work with faculty on research projects and clinical work experience in rural and urban communities. The program has been funded in part by a federal grant from the Health Resources and Services Administration, an agency of the U.S. Department of Health and Human Services.<sup>19</sup>

<sup>18</sup> Jacqueline E. Chmar et al., “Annual ADEA Survey of Dental School Seniors, 2006 Graduating Class,” *Journal of Dental Education* 71 (2007): 1228-1253.

<sup>19</sup> Karen Fox, “Texas Program Targets Hispanics for Dental Careers,” *ADA News Today*, American Dental Association, 25 April 2005, <<http://www.ada.org/prof/resources/pubs/adanews/adanewsarticle.asp?articleid=1367>> (19 June 2008). For more information on the Hispanic Center of Excellence-Dentistry, see <http://multicultural.uthscsa.edu/dhcoe/index.html>

### RECOMMENDATION #4

#### **Develop a comprehensive oral health public awareness and education campaign**

In Texas, as in most of the nation, oral health has taken a backseat to general health. Statewide campaigns to raise awareness about the dangers of obesity and smoking are fairly common, as is public education on the importance of childhood vaccinations, cancer screenings and other preventive health measures. However, far less attention has been paid to the importance of preventing oral disease, the serious risks associated with poor oral health and the relationship between oral health and general health.

Several states (e.g., South Carolina, Vermont) have embarked on comprehensive oral health campaigns that can serve as models for Texas. These campaigns are often called “social marketing campaigns” since they are designed to change social attitudes and motivate specific changes in behavior. Some campaigns, such as “Brighter Smiles for New Mexico,” have been launched by dental organizations (the New Mexico Dental Association).

The authors of this report recommend that the State of Texas take the following actions prior to launching a public awareness and education campaign:

- **Determine the target audience for the campaign.** Texas state officials should work with stakeholder groups to determine whether the campaign should focus on the public in general and/or be targeted to specific “high-risk” populations, such as children, pregnant women, caregivers of older adults or African-American males (for oral cancer). The “Watch Your Mouth” campaign in Maine, Massachusetts and New Hampshire, for example, focuses exclusively on children’s oral health (see [www.watchyourmouth.org](http://www.watchyourmouth.org)). Another possibility is targeting physicians, such as pediatricians, family practitioners, internists or ear-nose-throat (ENT) specialists.
- **Conduct research to develop a solid understanding of the existing attitudes, beliefs and behaviors the targeted audience or audiences have about oral health care.** Vermont held a series of focus groups with parents and caregivers to gather information to shape the key messages that made up its public awareness campaign, “Smile Vermont.” Texas would benefit from taking a similar approach. Another important piece of information that can be gathered from focus group research is the best (and most culturally appropriate) way to communicate with the public (tv, radio, Internet, print).
- **Develop the key messages that the campaign seeks to impress on the targeted audience** (see *sample messages*).
- **Determine the best way to communicate the messages (including strategies to ensure cultural sensitivity).** In Vermont, traditional communication channels, such as advertisements, 1-800 hotlines and an interactive Web site were used to distribute information. However, special family-oriented events, such as ice skating and bowling parties, were also used to spread the messages about

## Sample messages for a statewide oral health campaign

- It is equally important to have a dental home as a medical home.
- The health of your teeth and mouth is just as important as the health of any other part of your body.
- Many oral diseases can be prevented with simple, cost-effective measures such as regular brushing and flossing, dental sealants, fluoride varnishes and community water fluoridation.
- Don’t put a baby or toddler to bed with a bottle.
- Children should have their first dental exam by their first birthday.
- The elderly and physically challenged need special assistance with daily oral hygiene (brushing/flossing).
- Adults who are taking multiple medications are at increased risk for dental caries and oral disease.



oral health. According to post-campaign evaluations, these unique communication vehicles motivated parents to action more effectively than traditional methods like advertisements. In Texas, promotoras can play an important role in a state-sponsored oral health outreach campaign. These bilingual outreach workers can spread the word about the importance of early and regular preventive dental care (the dental home) and good oral hygiene practices (brushing, flossing, fluoride, dental sealants) through community centers, churches and other venues.

**RECOMMENDATION #5**  
**Expand access to oral health care services for older Texans**

Older Texans are at high risk for poor oral health. Many long-term care residents have significant dental needs that go unmet because of staffing shortages and a general lack of awareness among staff about the importance of good oral hygiene. Even the most basic care, such as brushing teeth, can be a problem for an Alzheimer’s patient or an older Texan suffering from severe arthritis.

Oral disease not only impacts the nutritional status and overall well-being of older or physically dependent Texans, it can have life-threatening consequences. Fortunately, preventive efforts can significantly improve the quality of life of older Texans and help prevent costly hospital stays when dental infections expand into systemic infections.

As Texans live longer and the over 65 population continues to grow, oral health care for older Texans will become an increasingly important and challenging public policy issue. The authors of this report urge policymakers to implement the following recommendations as a *first step* in improving access to oral health care for older Texans:

“Because such a small proportion of U.S. elders have private dental insurance and Medicare and Medicaid’s coverage of oral health care is minimal, the dental care needs of underserved older Americans will not be met without significant changes in health policy related to dental care for older adults.”<sup>22</sup>

SOURCE: *Journal of Dental Education*, 2005.

- **Conduct a comprehensive needs assessment to determine the level of unmet need among older Texans, with a focus on long-term care residents.** Several states, including New Hampshire and Washington, have conducted statewide oral health surveys of nursing homes. In Washington, a survey of 1,063 residents in 31 nursing homes found that the greatest single need among the dentate elderly was routine oral hygiene.<sup>21</sup>
- **Appropriate funds to implement Senate Bill 34, which passed in 2001 but was never funded.** The bill, which was authored by Senator Judith Zaffirini, requires the State to provide annual preventive services to Medicaid nursing home residents, including an annual dental examination by a licensed dentist; a prophylaxis by a licensed dentist or licensed dental hygienist (if practical considering the health of the resident); and diagnostic dental X-rays, if possible.
- **Mandate that all providers who assist in activities of daily living for the physically dependent or elderly be properly trained in providing oral hygiene.** Obtaining dental care has long been a problem for residents of nursing homes. Although many residents start out in relatively good oral health and with most of their teeth, their oral health can rapidly deteriorate without regular care. Often, facility staff is not adequately trained to provide day-to-day oral health care or neglects to do so. As a result, over time residents suffer from abscesses, infections, tooth loss and other dental problems that adversely affect their quality of life and jeopardize their overall health.

<sup>20</sup> “A for Effort: Making the Grade in Oral Health, An Oral Health America Special Grading Project,” *Oral Health America*, September 2003, <<http://www.oralhealthamerica.org/pdf/StateofDecayFinal.pdf>> (15 March 2008):1–10.  
<sup>21</sup> H.A. Kiyah et al, “Oral Health Problems and Needs of Nursing Home Residents,” *Community Dentistry and Oral Epidemiology* 21 (2006):49–52.  
<sup>22</sup> Teresa A. Dolan, Kathryn Atchison and Tri N. Huynh, “Access to Dental Care Among Older Adults in the United States,” *Journal of Dental Education* 69 (2005): 968.  
<sup>23</sup> Shay, K. and M. Terpenning, “Oral Health is Cost Effective to Maintain but Costly to Ignore,” *Journal of the American Geriatrics Society* 50 (2002): 584–585.

**Best practice case study**



**Social marketing campaign, South Carolina**

The State of South Carolina was recognized by Oral Health America for developing an innovative social marketing campaign to educate the public about the importance of oral health. The South Carolina Department of Health and Environmental Control initiative “More Smiling Faces” was the first comprehensive attempt by a state health department at implementing a broad social marketing campaign to improve oral health for all age groups.

One unique feature of the campaign was the partnership forged between the South Carolina Department of Health and Environmental Control and the African Methodist Episcopal Church, which plays an important role in many rural areas of the state. “Patient navigators” were used to conduct dental health education seminars with more than 110 congregations at venues such as church youth events, Bible schools, summer meal programs and dental health fairs. At these events, dentists and other health providers volunteered their time to conduct screenings for children, while patient navigators helped parents make sure that referral appointments were scheduled and kept. In addition, program sponsors developed and distributed a “Building Bridges” oral health tool kit that contained basic information on oral health, dental care tips, children’s activities and an animal puppet with toothbrushing instructions.<sup>20</sup>

SOURCE: *Oral Health America*, 2005.

**Did you know?**

The annual cost of treating pneumonia acquired in nursing homes is more than \$8 billion. According to one researcher, hiring a nurse’s aide (at a yearly salary of \$25,000 with benefits) at every nursing home in the United States simply to provide oral care to residents would cost less than \$500 million a year. If the rate of pneumonia decreased by only 10 percent because of this intervention, the annual cost savings would exceed \$800 million.<sup>23</sup>

SOURCE: *Journal of the American Geriatrics Society*, 2002.

*“Delivering oral care to the institutionalized elderly is from many standpoints complex and challenging. Teamed with the difficulties associated with reimbursements, few providers choose to provide care in this setting. Consequently, the oral health status of this population is poor and a contributor to poor overall health. Priority must be given to advancing the delivery of care to this vulnerable population.”*

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- **Require that nursing home inspections include a mandatory oral health component.** Although a nursing home would certainly be penalized for failing to regularly bathe its residents, there is little or no oversight of routine oral hygiene practices in long-term care facilities. Currently, nursing home inspections do not include a specific review of the oral health care provided to residents. Texas state officials should modify the inspection process and raise awareness among nursing facility inspectors about the link between oral health and general health and the risks of poor oral hygiene.
- **Provide incentives to encourage dentists to practice in long-term care facilities.** While many long-term care facility residents urgently need dental treatment, only a small number of dentists routinely practice in such facilities. To increase the number of dentists providing care to older Texans, the State should consider providing financial incentives to dental students, young dental graduates on loan payback programs or retired dentists who serve residents of long-term care facilities.
- **Educate residents and family members of Medicaid-eligible nursing facilities about “Incurred Medical Expense” (IME) accounts.** IME accounts consist of funds diverted from a resident’s monthly Social Security payments, which ordinarily are paid directly to the long-term care facility. Under federal law, IME funds may be used for specific needs, including medical and dental care. In that case, the IME funds go to the resident (or to the individual responsible for his or her care) to pay the health care provider, and the State of Texas uses Medicaid funds to offset the long-term care facility’s lost revenue. Educating family members and residents about this payment option could result in increased utilization of dental services.
- **Utilize Area Health Education Centers (AHECs) and promotoras to conduct outreach and train long-term care facility employees on the importance of oral health care.** Existing community resources such as AHECs and promotoras can play an important role in raising awareness and providing education on the oral health needs of the elderly and residents of long-term care facilities. Promotoras can provide education and training on oral hygiene directly to employees of long-term care facilities, as well as to family members who are taking care of elderly relatives in the home. Area Health Education Centers also can play an important role in developing specific training programs for employees of long-term care facilities and distributing educational information to the medical community at large.

## CONCLUSION

Texas can and should do a better job of improving access to oral health care, especially for the state’s most vulnerable residents. The first step is to identify a dental home for all Texans, starting with the state’s youngest children, who should be encouraged to see a dentist for preventive oral health care by their first birthday (*Recommendation #1*). To achieve the goal of a dental home for every Texan, state policymakers will need to strengthen the Texas Department of State Health Services (DSHS) Oral Health Program (*Recommendation #2*) by giving it the resources it needs to succeed, including adequate funding to support research activities and launch a comprehensive oral health public awareness and education campaign (*Recommendation #4*). To further address issues of access to oral health care services, policymakers can create and fund new programs to encourage dentists to practice in underserved geographic areas and to treat underserved populations (*Recommendation #3*). Finally, Texas policymakers should take first steps toward addressing the critical oral health needs of older Texans (*Recommendation #5*).



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In 2007, the Texas Dental Association (TDA) with grant funding from the American Dental Association (ADA) commissioned an independent third-party report on the issue of access to oral health care in Texas, modeled after the 2000 groundbreaking surgeon general’s report, *Oral Health in America*.

The TDA assembled a team of five nationally recognized dentists from both academia and private practice and contracted with Austin-based public policy research firm, Mindstorm Consulting, to manage the project. The dentists (hereafter called the editorial review board or ERB) were asked to identify the state’s most pressing issues, needs and challenges associated with improving the oral health of all Texans, with a special focus on the state’s most vulnerable. The ERB was also directed to propose practical policy recommendations that the TDA could review and consider.

The TDA and the ADA would like to recognize and thank the ERB for its hard work and dedication to this project. The members of the ERB volunteered untold hours participating in monthly calls, reviewing report drafts, discussing research findings and debating policy recommendations. The TDA would also like to thank the Texas Department of State Health Services (DSHS) Oral Health Group (OHG), particularly Linda M. Altenhoff, D.D.S. The DSHS Oral Health Group provided and verified the Texas-specific data presented in chapters 2 and 3 of the report and assisted in the review of the entire report.

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Dr. Troendle has over 30 years of teaching experience in the disciplines of prosthodontics and restorative dentistry. She has directed numerous courses and has received several awards for teaching and for the creation and dissemination of innovative educational materials. Most notable among these materials was a package designed to train nurse aides in South Texas nursing facilities to deliver daily oral health care needs to residents with limited motor skills. The package won the ADA Geriatric Dental Health Care Award and has recently been adopted for use in the states of Nevada and Kansas.

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[www.ada.org](http://www.ada.org)
- Texas Dental Association  
[www.tda.org](http://www.tda.org)
- American Academy of Pediatric Dentists  
[www.aadp.org](http://www.aadp.org)
- Association of State and Territorial Dental Directors  
[www.astdd.org](http://www.astdd.org)
- Centers for Disease Control and Prevention  
[www.cdc.gov](http://www.cdc.gov)
- National Institute of Dental and Craniofacial Research, National Institutes of Health  
[www.nidcr.nih.gov](http://www.nidcr.nih.gov)
- Children's Dental Health Project  
[www.cdhp.org](http://www.cdhp.org)
- Oral Health America  
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- U.S. Department of Health and Human Services, Office of the Surgeon General  
[www.surgeongeneral.gov](http://www.surgeongeneral.gov)
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