

## **PolicyPerspective**

# Dental Workforce Reform in Texas

by John Davidson
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## **Key Points**

- Texas faces a serious shortage of dentists. Many Texans who need care do not have adequate access to a dental provider. Nearly a quarter of Texas counties have no practicing dentist.
- Dental disease and untreated tooth decay are major problems in Texas that lead to poor health outcomes and lost productivity, especially among low-income children and families.
- Authorizing a new provider category such as a dental hygiene practitioner, similar to a nurse practitioner, could increase access to care. Other states have tried this approach with positive results.

#### Introduction

In 2007, a 12-year-old boy from Maryland named Deamonte Driver died of a toothache. His death made national headlines because he had been enrolled in Medicaid and was therefore "covered," yet his mother was unable to find a dentist willing to treat him until his condition had become critical. A simple \$80 tooth extraction at the right time would have saved Deamonte's life. Instead, by the time he received care, bacteria from an abscessed tooth had spread to his brain. Deamonte underwent multiple neural operations and received weeks of hospital care at a cost of more than \$250,000. But it was too late. Deamonte died because Medicaid, the government health care plan that was supposed to provide basic care, failed him.

In the ensuing fallout, problems with pediatric dental services in Maryland's Medicaid program came to light. During the year before Deamonte's death, only one third of the 500,000 children enrolled in the state's Medicaid program had received dental care (Driessen, 2012). Maryland undertook reform efforts, but a January 2016 report by the Office of Inspector General (OIG) at the U.S. Department of Health and Human Services (HHS) found that 73 percent of the children enrolled did not receive basic dental services (Murrin, 6). This problem is not unique to Maryland. The OIG report, which also examined Medicaid pediatric dental services in Louisiana, California, and Indiana, found that on average three out of four children did not receive required dental care, and one out of four did not see a dentist at all.

## The Dentist Shortage in Texas

Medicaid is supposed to provide dental care to enrolled children through the Early and Periodic Screening, Diagnostic, and Treatment program. However, states often struggle to ensure access to these services due to a shortage of dental providers in general, and in particular a shortage of dentists who participate in Medicaid. Texas is no exception. There are currently 270 total dental health professional shortage areas (HPSAs) across 99 Texas counties, and only one general dentist for every 2,764 Texans (Aaronson, 2012). About 20 percent of Texas counties have no practicing dentists at all, and a third have no dentists enrolled as Medicaid providers (Texas Medicaid Provider database, 2012). This dentist shortage is expected to worsen over the next decade because more than one third of the dentist workforce in Texas is approaching retirement age (over 55 years of age) and the median age is 48. Because nearly 93 percent of dentists in the state practice in metropolitan areas, the shortage is most acute in rural Texas (Health Professions Resource Center, 2015).

As a result of poor access to dental care, many Texans often go without it, leading to complications of major chronic medical conditions like heart and lung disease, stroke, diabetes, and higher rates of dental-related emergency room use (U.S. Dept. of Health and Human Services, 2000). In 2014, more than 40 percent of all Texans reported they had not seen a dentist within the last year, and the share increases to more than 60 percent among the uninsured (Texas Dept. of State Health Services). For children, untreated tooth decay causes pain and eventually infection, which results in missed school days and poor school performance (Holt, 2). Mounting evidence suggests dental cavities are the most common chronic disease among American children, and are most prevalent among poor children (General Accounting Office, 7). This is especially a concern in Texas, where

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state officials estimate that among 6- to 8-year-old children, 44 percent have untreated tooth decay and 68 percent experience cavities—rates that are significantly higher than the national average (Texas Dept. of State Health Services, 5.2).

These problems also affect adults, especially seniors. More than 9 million adults in Texas have lost at least one tooth to den-

tal disease (Texas Dept. of State Health Services, 5.2). When people experience tooth pain and cannot get to a dentist, they often seek pain relief from an ER. In 2014, more than 2 million dental-related visits to ERs cost more than \$2 billion nationwide (Nasseh and Wall, 3), yet most of them could have been treated for far less in a dentist's office.

	Minnesota's Dental Therapists (DTs) and Advanced Dental Therapists (ADTs)	Alaska's Dental Health Aide Therapists (DHATs)
Education	University of Minnesota: Duel degree program (Bachelor's degree in Dental Hygiene and Master's degree in Dental Therapy); 8 prerequisite courses; 28 months.  Normandale Community College/Metropolitan State University: 16-month Master's Degree; Bachelor's degree in Dental Hygiene required for entry.  Students in both programs graduate as DTs. After 2,000 hours of clinical practice, DTs can be licensed as ADTs.	Post-high school certificate program (20 months plus 400 hours of clinical practice under direct supervision of a dentist).
Scope of Practice (not a compre- hensive list)	<ul> <li>X-rays</li> <li>cleanings (above and below the gum line)</li> <li>fluoride varnish and sealants</li> <li>space maintainers</li> <li>temporary fillings</li> <li>fillings on baby and permanent teeth</li> <li>pulpotomies</li> <li>temporary and stainless steel crowns</li> <li>simple extractions of baby teeth</li> <li>local anesthesia and nitrous oxide</li> <li>dispense non-narcotic pain relievers and antibiotics</li> <li>ADTs (in addition to the DT scope):</li> <li>simple extractions of very loose permanent teeth</li> <li>oral evaluation and creation of treatment plan</li> </ul>	<ul> <li>X-rays</li> <li>cleanings (above the gum line)</li> <li>fluoride varnish and sealants</li> <li>space maintainers</li> <li>temporary fillings</li> <li>fillings on baby and permanent teeth</li> <li>pulpotomies</li> <li>temporary and stainless steel crowns</li> <li>simple extractions of baby and permanent teeth</li> <li>local anesthesia</li> <li>dispense non-narcotic pain relievers and antibiotics</li> <li>exams</li> <li>diagnose and treatment plan within scope of practice</li> </ul>
Supervision	DTs can perform some procedures (X-ray, fluoride varnish, sealants) without a dentist in the office. Other procedures (filling cavities and extracting teeth) require a dentist's presence in the office.  ADTs can work without a dentist in the same location. Any procedures that may require the supervising dentist's prior consent are noted in a Collaborative Management Agreement.	DHATs can practice without a dentist in the same location (general supervision). They perform procedures according to standing orders issued by the supervising dentist.
Other Requirements	The underserved population must comprise at least half of an advanced dental therapist's patients.	DHATs must be employees of the Indian Health Service or of a tribe or tribal organization.

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## Mid-level Dental Providers: a Free-Enterprise Solution

Fortunately, a policy reform adopted so far by Minnesota and Maine, and by the federal government for Alaska, could increase access to dental care in Texas without burdening tax-payers. Licensed mid-level dental providers, often called dental hygiene practitioners or dental therapists, work under the supervision of a dentist and provide basic, preventative and restorative care such as fillings and certain tooth extractions. Mid-level practitioners also enable dentists to expand the geographic reach of their practices by offering care in schools, nursing homes, and other community settings.

Minnesota and Maine differ in how they regulate these providers, but each recognizes that with sufficient education and training—typically, two-to-four years of education as opposed to eight years for a dentist—one need not be a fully licensed dentist in order to safely and efficiently perform certain procedures under a dentist's supervision. A growing body of research has shown that mid-level dental practitioners can safely perform many procedures usually done by dentists. One study found 48 to 60 percent of all procedures performed at safety net-type dental clinics could be done by a mid-level practitioner, and 80 percent of community clinic visits and more than half of visits at hospital-based clinics could be done by a midlevel practitioner (Phillips, et al., 1771). Mid-levels are able to perform about 80 procedures compared to the 600 procedures a dentist can perform. Among the procedures a mid-level can perform are those most in demand, like filling cavities, which is why they are able to do much of the care provided in safety net settings.

#### Minnesota

In 2009, Minnesota passed a law authorizing two categories of mid-level dental providers: Dental Therapist (DT) and Advanced Dental Therapist (ADT). Scopes of practice for these providers are very similar; they differ primarily in the level of supervision required, but both categories are allowed to do a variety of procedures, including fillings and certain tooth extractions, under a collaborative management agreement with a licensed dentist.

The law requires that dental therapists primarily serve underserved patients. A 2014 report by the Minnesota Department of Health and the Board of Dentistry on the state's experience to date found it is indeed expanding care to vulnerable patients, and that savings from the lower costs of employing DTs and ADTs allowed Minnesota dental practices to treat more Medicaid and uninsured patients, and increased the efficiency of dental offices and clinics. Patients and supervising dentists

were satisfied with the care they received from DTs and ADTs, and demand is growing for these providers (Minnesota Dept. of Health and Minnesota Board of Dentistry, 2).

Dental mid-levels in Minnesota are having the desired effect, not only by increasing access to care but by enabling dentists to expand their practices thanks to the efficiencies of employing dental therapists. A 2014 case study of dental mid-level providers conducted by the The Pew Charitable Trusts found that one such safety net clinic in Minneapolis hired a DT who performed 1,756 patient visits in a single year, mostly from Medicaid patients, and that revenue generated from increased patient volume exceeded the cost of employing the DT by more than \$30,000, which enabled the clinic to hire an additional DT to fill unmet patient demand (5).

#### Maine

In 2014, Maine established its own version of mid-level provider, the Dental Hygiene Therapist (DHT), to address a serious dental provider shortage across the state. In 2012, 15 of Maine's 16 counties contained at least one dental HPSA. Maine has fewer dentists per capita than the U.S. overall, and according to 2011 data the state's dentists were distributed unevenly, ranging from one active dentist per 1,219 residents in Cumberland county to one per 4,352 in Somerset county (Maine Department of Health and Human Services, 30). The result has been inadequate access to dental care. The most recent National Survey of Children's Health Estimates found 49,500 Maine children did not receive preventative dental care in 2011-12, the most recent year for which data is available (NSCH).

As in Minnesota, DHTs in Maine are authorized to work under the supervision of a dentist and are allowed to perform a variety of procedures such as simple cavity preparation and restoration or simple extractions, as well as preparing and placing stainless steel crowns and aesthetic crowns, and providing urgent management of dental trauma. DHTs, like DTs in Minnesota, are also authorized to supervise dental hygienists and dental assistants to the extent supervision is outlined in a written practice agreement with the supervising dentist.

Because the state's Board of Dental Examiners only approved regulations in 2015, no DHTs are yet practicing in Maine. State lawmakers are now considering reforms to the law that would change some education requirements for DHTs to conform to the requirements approved by the American Dental Association Commission on Dental Accreditation (CODA) in August 2015. Another change under consideration is to leave the level of required supervision entirely up to the supervising dentist.

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#### Alaska

In 2003, HHS's Indian Health Service (IHS)\* authorized the use of mid-level dental providers to serve communities in western Alaska, and the Alaska Native Tribal Health Consortium added a new provider category to its Community Health Aide Program, the Dental Health Aide Therapists (DHATs). Students began training that same year—the first group received training and education in New Zealand, where dental nurses have been working since 1921—and by 2005 were practicing in underserved areas of rural Alaska. Currently, the state has 31 trained and federally certified DHATs serving 81 rural communities in Alaska with a combined population of more than 45,000 (Potter).

Quality has not been an issue. A 2010 evaluation of DHATs found that they were well trained, competent, operating safely, and that patients were satisfied with the quality of care they receive (Wetterhall, ES-4). A 2011 case-study evaluation of the program found that care provided by DHATs resulted in outcomes comparable to dentists serving similar populations (Bader, 323).

#### Efforts in other states

As evidence mounts of the effectiveness of mid-level dental providers in increasing access to care and reducing dental disease, states across the country are considering different

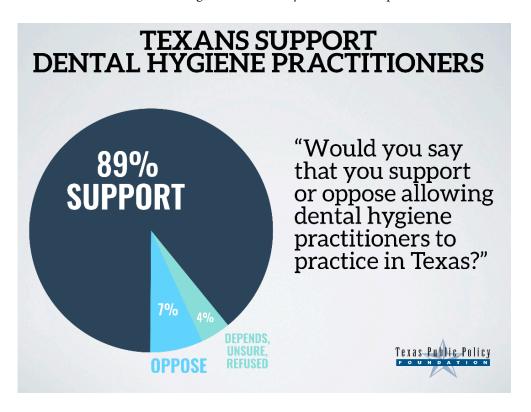
versions of dental workforce reform, with ten states having introduced such legislation since 2013, often drawing bipartisan support. A bill that would authorize the creation of dental hygiene practitioners, closely modeled on Minnesota's reform, was introduced in Massachusetts last year and reported favorably from the Joint Public Health Committee in December. In February, the Oregon Health Authority approved a five-year pilot project, the Tribal Dental Health Aide Therapist Project (TDHATP), modeled on Alaska's program, which will authorize and train DHATs to practice in tribal dental clinics in the state. Michigan will consider midlevel dental provider legislation in

\* IHS provides medical and public health services to members of federally recognized tribes and Alaska Natives. 2016, and Vermont is also considering authorization of midlevels. A bill passed in the Vermont Senate last year and is now in the House Committee on Human Services.

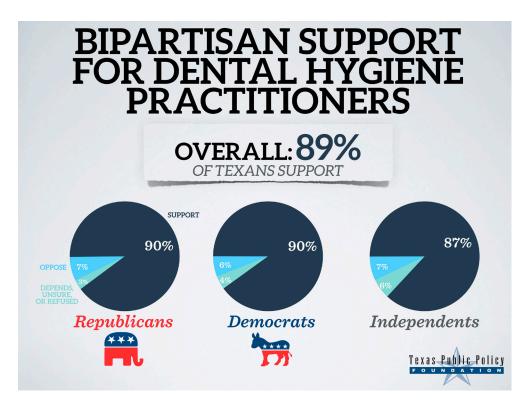
In addition to efforts at state houses across the country, a growing number of national organizations have endorsed mid-levels, including the National Caucus of Native American State Legislators, the National Black Caucus of State Legislators, the American Dental Hygienists' Association, American Public Health Association, the National Dental Association, and the National Foundation for Women Legislators.

#### Legislative efforts in Texas

During the 84th Legislative session in Texas, a bill (HB 1940/SB 787) was introduced that would have created dental hygiene practitioners (DHPs) similar to DTs in Minnesota. The bill failed to pass, but drew significant bipartisan support from a diverse coalition including the Texas Hospital Association, AARP, Coalition of Texans with Disabilities, Americans for Tax Reform, Americans for Prosperity, the Center for Public Policy Priorities, and others. Like DTs in Minnesota, the bill would have allowed DHPs to provide restorative and preventative care in multiple settings outside a dentist's office or dental clinic, such as a Head Start center, K-12 school, community center, adult day care facility, correctional facility, home health care environment, charitable clinic, veterans or military clinic, hospital or long-term care facility. Care would be provided under the



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supervision of a dentist and subject to a written collaborative practice agreement.

In April 2015, Texas Public Policy Foundation (TPPF) commissioned a statewide poll by Baselice & Associates of 949 likely voters that found overwhelming support for DHPs. "Upon learning how they would function and what they would do, a large majority of Texas voters support (89 percent) allowing dental hygiene practitioners to practice in Texas," said the president & CEO of Baselice & Associates, Michael Baselice. "Support for allowing dental hygiene practitioners to practice in Texas is 90 percent among both Republican and Democratic voters, and 87 percent among Independent voters."

The poll also found:

- Support for DHPs was bipartisan (58 percent Republican, 60 percent Democratic);
- Among rural voters, 64 percent of solid Republican voters and 66 percent of solid Democratic voters expressed strong support for DHPs;
- 91 percent of solid Democratic voters in urban-suburban areas and 92 percent of solid Republican voters in rural areas expressed support for DHPs;
- 35 percent of voters said they or a family member put off dental care in the last 12 months because of difficulty affording a dentist.

## Commission on Dental Accreditation Endorses Mid-level Practitioners

In August 2015, the Commission on Dental Accreditation (CODA), voted to implement dental therapy education standards—a strong endorsement of the mid-level model. The vote came after three years of research and extensive evaluation of current data and research evaluating mid-levels. CODA is an independent entity recognized by the U.S. Department of Education as the national accrediting agency for dental, allied dental, and advanced dental education programs. It is comprised of 30 members from organizations like the American Dental Association, American Dental Education Association, and the American Dental Hy-

gienists' Association. CODA sought to answer three questions in its evaluation: Are mid-levels safe? Do they improve access to care? Is there enough demand for them to create national accreditation standards? The answer to all of these was yes.

Specifically, after CODA adopted education standards at its February 6, 2015, meeting, it requested input from interested parties on two specific criteria that must be met for new allied dental education areas or disciplines:

- Has the allied dental education area been in operation for a sufficient period of time to establish benchmarks and adequately measure performance?
- Is there evidence of need and support from the public and professional communities to sustain educational programs in the discipline?

Having determined that these criteria were indeed met, CODA voted on August 7, 2015, to implement the standards it had adopted six months prior. While there is some opposition to CODA's decision, most notably from the American Dental Association, the question of whether the evidence supports the claim that mid-levels are safe and efficacious should be settled. CODA's decision also drew support from the Federal Trade Commission (FTC), which had previously urged the commission "to finalize and adopt proposed standards without unnecessary delay, so that the development of this emerging service model can proceed, and consumers can reap the likely benefits

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of increased competition" (Federal Trade Commission). Adoption of accreditation standards, wrote FTC staff,

"has the potential to enhance competition by supporting state legislation for the licensure of dental therapists, and also to encourage the development of dental therapy education programs consistent with a nationwide standard, which would facilitate the mobility of dental therapists from state to state to meet consumer demand for dental services... Any further delay in the adoption of accreditation standards could discourage and delay the development of education programs, reduce the availability of these new professionals, and hinder their ability to practice in different states." (FTC, 2014.)

The standards themselves include aspects of dental therapy education such as program length, which must be "at least three academic years of full-time instruction or its equivalent at the postsecondary level." Other standards deal with advanced standing, wherein "credit may be given to dental assistants, expanded function dental assistants and dental hygienists who are moving into a dental therapy program," supervision, scope of practice, and criteria for a program director (Commission on Dental Accreditation, 15).

#### **Conclusion**

Safety concerns about mid-level dental practitioners of the kind often raised by incumbent dentists, regulatory bodies, and professional associates are unfounded. Numerous studies have shown no difference between care provided by midlevels and care provided by dentists. A systematic review by The American Dental Association's own Council on Scientific Affairs in 2013 found patients treated by mid-level providers had favorable health outcomes and that populations treated by mid-levels had a decrease in untreated disease. "The results of a variety of studies indicate that appropriately trained midlevel providers are capable of providing high-quality services, including irreversible procedures such as restorative care and dental extractions," the study's lead author wrote in a commentary that accompanied the review (Wright, 92). "Adding a tier of oral health care providers who perform restorations and extractions can increase the number of restorations being placed and decrease the number of decayed teeth."

The need to increase access to dental care and reduce dental disease in Texas is apparent. Authorizing the creation of mid-level dental providers is a safe, cost-effective, and free enterprise policy reform that would help alleviate instances of dental disease, especially in rural Texas and among low-income populations. Texas lawmakers should follow the lead of Minnesota and Maine, and enact similar dental workforce reform. The stakes are as high as they can be—just ask the family of Deamonte Driver.

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