



## Research

# Accessing Dentistry in the US

BRITTANY LA COUTURE, BRENT BEGANY | NOVEMBER 3, 2016

## INTRODUCTION

The United States is in the midst of an oral health crisis. The availability of dental care is currently insufficient to meet the needs of all United States' citizens. [1] This crisis would leave as many as one-third of Americans without access to basic oral health services. [2] Of particular concern are children as dental disease is the most common chronic condition among children. [3] In 2012, U.S. children did not receive necessary dental care as a result of financial constraints. [4]

In the U.S. today, as many as 20 percent of American children had untreated tooth decay, and many more adults regularly forgo necessary dental health care with tragic results. Low reimbursement rates from both public and private insurers, coupled with geographic disparities and a looming dental practitioner shortage have created a situation in desperate need of solutions. Proposed solutions include public financing of dental health care, expanding reciprocity of state licensing laws, modifying dental education, and providing licensing for mid-level dental practitioners.

## A HISTORY OF INADEQUATE DENTAL CARE

The U.S. Surgeon General's first report on oral health, suitably titled *Oral Health in America*, was published in 2000. That report highlighted the scope of poor oral health in the U.S. At the time of its publication, 51.6 percent of children ages 5 to 9 displayed signs of tooth decay. [5] These childhood oral health issues persist with age. Among adults age 18 and older, 84.7 percent showed signs of tooth decay. [6]

Oral health issues are exacerbated by low treatment rates. [7] A 2015 report showed poor children are the most affected, with almost a quarter of children below the poverty line afflicted with untreated dental diseases. [8] Children above the poverty line fared better, but 17.3 percent still had untreated tooth decay. [9] Some disparity exists between ethnic groups: minorities are less likely to have received treatment for tooth decay than their non-Hispanic white counterparts, [10] but even among the group most likely to receive treatment (non-Hispanic whites), 14.5 percent of children had untreated tooth decay. [11]

While the Surgeon General brought these issues to light in 2000, little was achieved to address the oral health crisis in the years that followed. Then, in 2007, oral health regained national attention when a 12-year-old boy died from a dental infection. [12] This tragedy prompted a Congressional investigation and eventually led to the inclusion of some oral health provisions in the Patient Protection and Affordable Care Act (ACA). In particular, the American Dental Association (ADA) successfully lobbied Congress to expand coverage for basic dental care to all children through the ACA. [13] At the same time, the ADA blocked efforts to introduce new types of dental providers. [14] Despite these measures, six years after the ACA's passage, America's poor and underinsured still face barriers to accessing dental care.

# ROADBLOCKS TO ACCESS

There are both monetary and geographic barriers to dental care access. Monetary barriers stem from issues with the public safety net. Many of the underserved are insured by either Medicaid or the Child Health Insurance Program (CHIP), but fewer than 25 percent of private practice dentists accept these types of insurance.<sup>[15]</sup> Dentists' low participation is generally due to insufficient reimbursement rates from public insurers. A Pew Research Center study found that state Medicaid programs reimbursed dentists at an average rate of 60.5 percent of the median retail charge.<sup>[16]</sup> This is only sufficient to cover a dentist's overhead costs, and does not account for the cost of labor. The opportunity cost of treating Medicaid and CHIP patients is enough to discourage the majority of dentists from doing so.

Geographic barriers are felt most acutely in rural areas. Despite being eligible for Health Care Loan Forgiveness programs if they provide care in rural areas, dentists are still severely lacking in most states with large rural populations. For example, in 2009, 91 of Kansas' 105 counties had dental shortages.<sup>[17]</sup> But even states with sufficient numbers of dentists may not have them adequately distributed. California is home to 14 percent of the nation's dentists (compared with 12 percent of the population) yet still had 233 "dental health professional shortage areas," primarily in the state's rural areas.<sup>[18]</sup>

These rural areas struggle to attract dentists in part due to personal preference, but also because of a lack of professional resources. General dentists depend on dental specialists for the auxiliary care needs of their patients,<sup>[19]</sup> but both are scarce outside of urban environments. Dentists are deterred from practicing in areas where these resources are unavailable.

Both monetary and geographic barriers are likely to only grow worse with a looming demographics crisis among dentists. Over the past three decades, the number of new dentists graduating yearly has declined by nearly 20 percent while at the same time the US population grew by one-third.<sup>[20]</sup> The dentist-to-population ratio has been declining since 1990, and will only decline further with the retirement of baby-boomer dentists.<sup>[21]</sup> As dentists become responsible for an ever increasing number of patients, access issues will be exacerbated.

## PROPOSED SOLUTIONS

To address the current access barriers to dental care, reforms have been proposed to the public safety net, state licensing laws, dental education, and the dental workforce, including the implementation of "mid-level dental providers."

### Public Financing

In their November 2010 report to Congress, the Government Accountability Office (GAO) stated that of 39 states surveyed, 25 had less than 50 percent doctor participation in CHIP and Medicaid.<sup>[22]</sup> GAO found that lacking the resources to attain care, poor individuals are forced to either go without or to seek care from "unlicensed dentists, physicians, or hospital emergency departments."<sup>[23]</sup> This results in poor care and poor health outcomes, with potentially higher long term costs.

The ADA recommends increasing reimbursement rates for dental care through Medicaid and CHIP from the current 60.5 percent of median costs to the market rate. This would encourage dentists to participate in these

programs, extending access to millions of poor Americans. However, reducing reliance on safety net programs like Medicaid in general, while expanding geographical access would more efficiently close the access gaps.

## State Licensing Laws

Geographic disparities in the distribution of dentists is a complex issue that involves some level of personal preference on the part of dentists. But the issue is made worse by [barriers to movement](#) faced by dentists. [Like doctors](#), dentists are licensed on a state by state basis.<sup>[24]</sup> When moving between states, dentists are required to relicense in the new state.<sup>[25]</sup> This process includes completing (and paying for) a clinical examination, administered in most licensing jurisdictions by one of five regional testing agencies.<sup>[26]</sup> Beyond the logistical difficulties of relocating a practice, relicensing is a barrier to the flow of dentists between markets.

Making it easy for dentists to move into underserved areas is an important first step in fixing geographic disparities in access to care. States should retain the right to issue dental licenses for their jurisdiction, but reciprocity between the five regional testing agencies should be established. This would allow dentists to relocate between regions without having to retake unnecessary clinical examinations, and remove a barrier to the free movement of dentists. The ADA has advocated a similar position.<sup>[27]</sup>

## Dental Education

Because underserved areas often have a shortage of both general dentists and specialists, and because both groups depend on one another professionally, an impasse arises where neither group can easily be recruited to practice in the underserved area. The American Journal of Public Health suggests reforms to dental education, specifically encouraging a postgraduate year of residency for general dentists, can help break the logjam.

The current dental curriculum is too crowded. Dental schools are asked to produce dentists capable of practicing independently within four years. By contrast, becoming a licensed doctor requires four years of medical school and an additional 3 years of residency.<sup>[28]</sup> An additional year of training produces more competent dentists, and more competent general dentists are less reliant on specialists to meet the needs of their patients.<sup>[29]</sup> As a result, they are better equipped and more likely to practice in underserved areas.<sup>[30]</sup> However, an additional year of schooling brings with it the attendant time and financial burdens that may contribute to increased dental health care costs.

## Mid-Level Dental Providers

To address access issues to dental care, a host of organizations have recommended the creation of a new type of oral health professional, the Midlevel Dental Provider (MLDP), including: the American Public Health Association, the American Association of Public Health Dentistry, the W.K. Kellogg Foundation, the American Association for Community Dental Programs, the American Dental Education Association, the Association of State and Territorial Dental Directors, the National Rural Health Association, Oral Health America, First Focus Campaign for Children, the Pew Children's Dental Campaign, the Children's Dental Health Project, and Community Catalysts.<sup>[31]</sup>

The role of an MLDP can be easily understood by first considering a familiar analog from the medical field: the nurse practitioner (NP). Just as NPs function in an intermediate role between that of a Nurse and a Physician, MLDPs would bridge the gap between Dental Hygienists and Dentists. In addition to basic preventative care,

MLDPs would be able to offer basic restorative dental procedures such as simple fillings or extractions.[32] MLDPs would work under the supervision a dentist, although whether that supervision would be direct, indirect, or general depends on the particular proposal. Most proposals call for MLDPs to focus their treatment on the underserved, typically by setting a requirement that a certain percentage of their patient load be comprised of low income patients. [33]

MLDPs are not an original idea. More than 50 countries already employ MLDPs in various capacities, and this number includes nations with advanced medical systems such as the UK, Canada, and New Zealand.[34] To date only two states, Alaska and Minnesota, have implemented their own MLDP programs. Alaska's program was launched in 2005 as a response to pervasive dental disease in the native population, and has proved both effective and popular amongst the Native Alaskan community.[35]

MLDPs address all of the major access issues to dental care. Because MLDPs require less schooling and have fewer overhead expenses, they are able to offer lower cost care. This enables them to treat low income patients which dentists typically ignore. Extending access to those for which dental care would have otherwise been price prohibitive would likely lead to a multiplied reduction in total spending[36] as a result of cost effective preventative care.[37]

The looming numbers crisis among dentists is also addressed by the introduction of MLDPs. As the number of dentists per capita falls, it may simply be time for dentists to transition into a more supervisory role. It's already a widely held belief that dentists are overeducated for much of what they routinely do,[38] and these tasks can be delegated to MLDPs. A dentist leading a team of other providers can care for more patients than one dentist alone.

Despite their widespread use abroad, proposals to implement MLDPs in the US have come under fire, particularly from the ADA. It is the ADA's belief that allowing MLDPs to take over basic surgical procedures "puts patients at risk of receiving inappropriate and possibly unsafe care." [39] The ADA also believes that MLDPs will lead to a two-tier system of dental care, where the rich see dentists and the poor are cared for by MLDPs.

Research largely suggests that these positions are overstated. Numerous studies conducted abroad as well as in Alaska and Minnesota have demonstrated that the care offered by MLDPs is safe and comparable in quality to that provided by dentists.[40] Further, the success and widespread use of mid-level practitioners such as nurse practitioners and physicians assistants supports the idea that routine care can be safely and effectively provided under the supervision of licensed physicians.

## CONCLUSION

The United States' oral health crisis deserves more attention. A significant portion of the population does not have access to basic dental care, be it due to monetary or geographic disparities, and their health suffers as a result. The current system of dental care must be reformed to address the needs of these Americans. Of the reforms discussed here, the introduction of Mid-Level Dental Providers is the most comprehensive.

[1] Rodriguez, T. E., Galka, A. L., Lacy, E. S., Pellegrini, A. D., Sweier, D. G., & Romito, L. M. (2013, May).

Can Midlevel Dental Providers Be a Benefit to the American Public? *Journal of Health Care for the Poor and Underserved*, 24(2), 892-906. doi:10.1353/hpu.2013.0084.

[2] Shaefer, H. L., & Miller, M. (2011, August). Improving Access to Oral Health Care Services Among Underserved Populations in the U.S.: Is There a Role for Mid-Level Dental Providers? *Journal of Health Care for the Poor and Underserved*, 22(3), 740-744. doi:10.1353/hpu.2011.0068.

[3] *Id.*; <http://www.cdc.gov/nchs/fastats/dental.htm>.

[4] Rodriguez *supra*, note 1.

[5] The United States of America, Department of Health and Human Services, Surgeon General. (2000). *Oral health in America: A report of the Surgeon General*. Rockville, MD: Department of Health and Human Services, U.S. Public Health Service.

[6] *Id.*

[7] National Center for Health Statistics. Health, United States, 2015: With Special Feature on Racial and Ethnic Health Disparities. Hyattsville, MD. 2016.

[http://www.cdc.gov/nchs/data/15.pdf](http://www.cdc.gov/nchs/data/hus/15.pdf)

[8] *Id.*

[9] *Id.*

[10] *Id.*

[11] *Id.*

[12] Mathu-Muju, K. R., DMD, MPH. (2011). Chronicling the dental therapist movement in the United States. *Journal of Public Health Dentistry*, 71, 278-288. doi:10.1111/j.1752-7325.2011.00270.x.

[13] Mundy, A. (2012, June 23). Campaign Journal: The Health PAC to Watch? Dentists — Powerful Group Fights to Keep Others From Lucrative Practice as It Prepares for High-Court Ruling. *Wall Street Journal*, p. A4.

[14] *Id.*

[15] Rodriguez *supra*, note 1.

[16] Shaefer *supra*, note 2.

[17] Collier, R. (2009, November 24). United States faces dentist shortage. *Canadian Medical Association*, 181(11). doi:10.1503/cmaj.109-3086.

[18] *Id.*

[19] Lamster, I. B., & Eaves, K. (2011). A Model for Dental Practice in the 21st Century. *American Journal of Public Health*, 101(10), 1825-1830. doi:10.2105/ajph.2011.300234.

[20] Collier, R. (2009, November 24). United States faces dentist shortage. *Canadian Medical Association*, 181(11). doi:10.1503/cmaj.109-3086.

[21] Mertz, E., & O'Neil, E. (2002). The Growing Challenge Of Providing Oral Health Care Services to All Americans. *Health Affairs*, 21(5), 65-77. doi:10.1377/hlthaff.21.5.65.

[22] Lamster *supra*, note 19.

[23] Rodriguez *supra*, note 1.

[24] Current Policies; Retrieved from [http://www.ada.org/en/~media/ADA/Member Center/Files/2013 Current Policies Final](http://www.ada.org/en/~media/ADA/Member_Center/Files/2013_Current_Policies_Final)

[25] Dental Licensure; Retrieved August 10, 2016, from <http://www.asdanet.org/licensure/>

[26] State Licensure for US Dentist; Retrieved August 11, 2016, from <http://www.ada.org/en/education-careers/licensure/state-dental-licensure-for-us-dentists>.

[27] Current Policies *supra*, note 24.

[28] How Long Does it Take to Become a Doctor? | Kaplan Test Prep. (2014). Retrieved August 11, 2016, from <http://www.kaptest.com/blog/med-school-pulse/2014/09/09/long-take-become-doctor/>.

[29] Lamster *supra*, note 20.

[30] *Ibid*

[31] Mathu-Muju *supra*, note 12.

[32] Shaefer *supra*, note 2.

[33] Mathu-Muju *supra*, note 12.

[34] Rodriguez *supra*, note 1.

[35] Wetterhall, S., Burrus, B., Shugars, D., & Bader, J. (2011). Cultural Context in the Effort to Improve Oral Health Among Alaska Native People: The Dental Health Aide Therapist Model. *American Journal of Public Health*, 101(10), 1836-1840. doi:10.2105/ajph.2011.300356

[36] Brocklehurst, P., Mertz, B., Jerkovič, K., Littlewood, A., & Tickle, M. (2014). Direct access to midlevel dental providers: An evidence synthesis. *Journal of Public Health Dentistry*, 74(4), 326-335.

doi:10.1111/jphd.12062.

[37] Shaefer *supra*, note 2.

[38] Lamster *supra*, note 19.

[39] Mathu-Muju *supra*, note 12.

[40] Rodriguez *supra*, note 1; Mathu-Muju *supra*, note 12.; Brocklehurst *supra*, note 36; Wright, J. T., Graham, F., Hayes, C., Ismail, A. I., Noraian, K. W., Weyant, R. J., . . . Frastsve-Hawley, J. (2013, January). A systematic review of oral health outcomes produced by dental teams incorporating midlevel providers. *Journal of American Dental Association*, 144(1), 75-91. Retrieved from <http://jada.ada.org>.