

WHITE PAPER

MISSED POTENTIAL

How Expanding Dental Hygienists' Roles Can Bridge America's Oral Health Gaps



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Missed Potential: How Expanding Dental Hygienists' Roles Can Bridge America's Oral Health Gaps

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Executive Summary

Oral health is no less important than overall physical health—in fact, these facets of health are intertwined.

This paper examines the high prevalence of oral diseases that persist in the U.S. today and the serious physical and psychosocial concerns and productivity losses stemming from poor oral health. It describes the lack of access to preventive oral health care that many U.S. residents face and outlines why increasing autonomy for dental hygienists can help provide greater access.

The paper also includes data on self-reported anxiety among U.S. adults related to the condition of their mouths and teeth to magnify how significantly poor oral health is tied to mental health. This is a critical issue that deserves greater attention and deeper exploration.



Introduction

Drastic Oral Health Consequences in the United States—At a Standstill

More than 30 years ago, the late U.S. Surgeon General C. Everett Koop coined the phrase, “You’re not healthy without good oral health” (National Institutes of Health, 2021). Decades later, data on oral health from across the United States show the continued great toll of oral disease in our nation.

A 2021 National Institutes of Health (NIH) document, *Oral Health in America*, states a definition of oral health that includes “the ability to speak, smile, smell, taste, chew, swallow, and convey a range of emotions without pain, discomfort, and disease of the craniofacial complex” (National Institutes of Health, 2021). To date, one in three young adults, along with 42% of low-income adults of all ages in the United States, say they have pain when chewing or biting food (Health Policy

Institute, n.d.). Among adults 65 or older, 60% have periodontal diseases. Among children, more than one in four has untreated caries disease. Based on the definition from NIH’s *Oral Health in America*, a large proportion of the U.S. population doesn’t meet the definition of a healthy person.

It is time to acknowledge the state of American oral health and help health care workers, legislators, insurance companies, educators, and community leaders (state and national) understand the importance of preventive care (Bress, 2013). Along with increased direct-to-patient oral health literacy, dental hygienists can increase awareness that the mouth needs regular, preventive care just as the rest of the body does to maintain overall health.

Delving into the Data

Tooth Loss, Periodontal Diseases, Caries Disease, and Their Inequitable Toll

A wealth of current data highlights the continuing problem of poor oral health in the U.S. population, with especially concerning prevalence of disease among those with lower incomes and other marginalized groups.

Edentulism and Acceptance of Losing Teeth with Age

More than 1 in 6 (17%) adults ages 65-74 in the U.S. have no remaining natural teeth (Fellows et al., 2022). Tooth loss that comes with age seems to be accepted by almost half (48%) of high-income adults and 3 in 4 (74%) of low-income adults in the U.S. (Health Policy Institute, 2023).

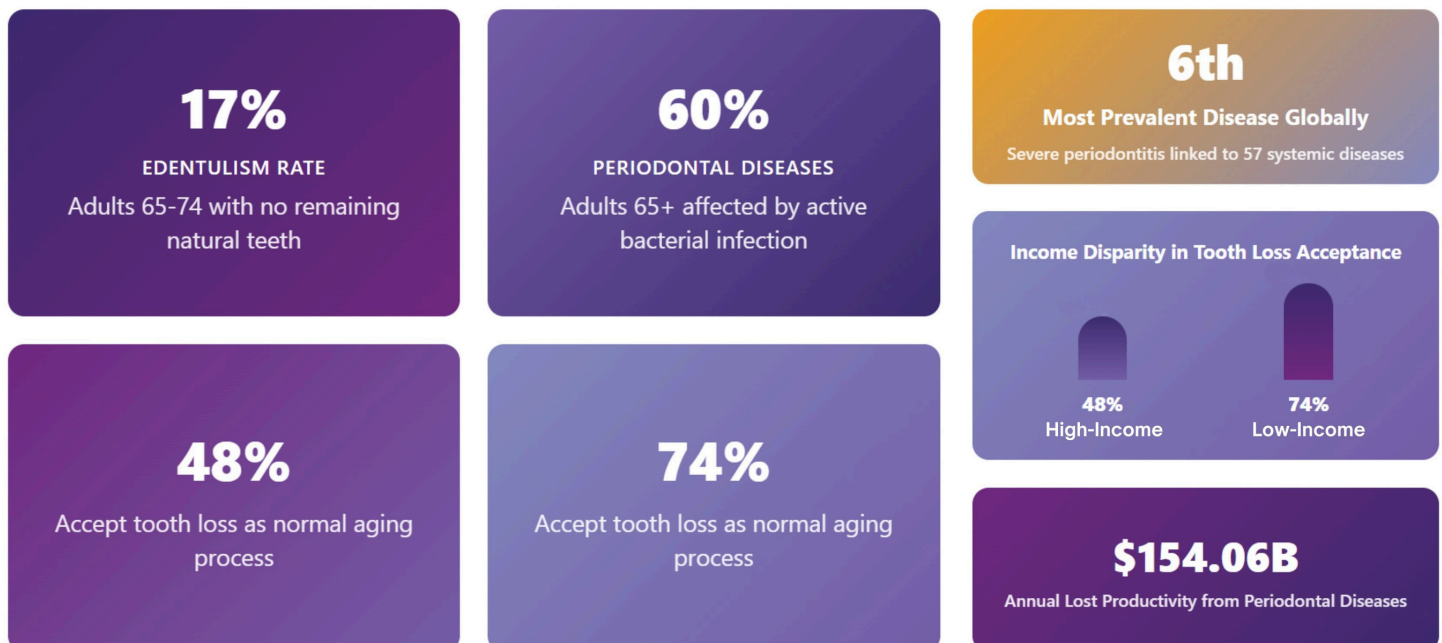
Periodontal Diseases: Infection, Inflammation, and Related Systemic Disease

Among older adults ages 65 and older, 60% have periodontal diseases — active bacterial infection of the gingiva (Fellows et al., 2022). Severe periodontitis has been labelled as the 6th most prevalent disease globally and has been potentially linked to 57 systemic diseases (IFDH, 2023).

The economic burden of periodontal diseases in the U.S. is staggering, on top of prevalence and linkages to multiple systemic diseases. In terms of lost productivity, periodontal disease caused an estimated loss of \$154.06 billion in the United States in just one year (Botelho et al., 2021).

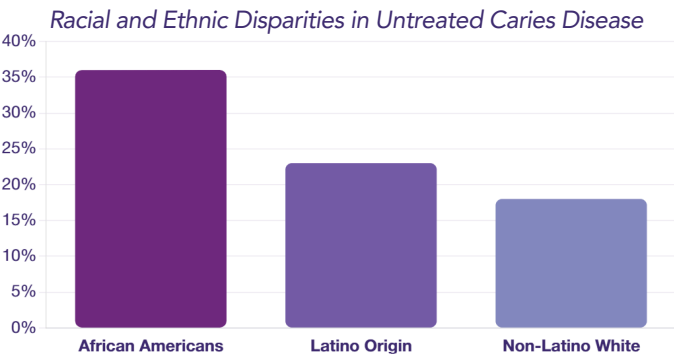
Over time, evidence of the association between periodontal diseases and systemic diseases has grown stronger. Although adults now retain most of their natural teeth, many working-age adults continue to experience “the same levels of tooth decay, gum disease, and oral cancers seen 20 years ago” (National Institutes of Health, 2001). Retention of natural teeth helps to show how oral infection and inflammation are connected to chronic and systemic diseases, including heart disease and diabetes. This demonstrates, more than ever, the need to prevent and control periodontal diseases to preserve overall health (National Institutes of Health, 2021).

The Inequitable Toll of Oral Health Diseases



Cause of Infection, Pain, and Related Effects

Over the past 20 years, the prevalence of untreated caries disease (or tooth decay) has not improved overall (Fellows et al., 2022). In terms of income differences, more than 40% of lower-income adults have untreated caries, compared with 9% among higher-income adults. Comparing racial and ethnic populations, untreated caries disease prevalence is 36% among African Americans, 23% among people of Latino origin, and 18% among non-Latino white populations (Fellows et al., 2022).



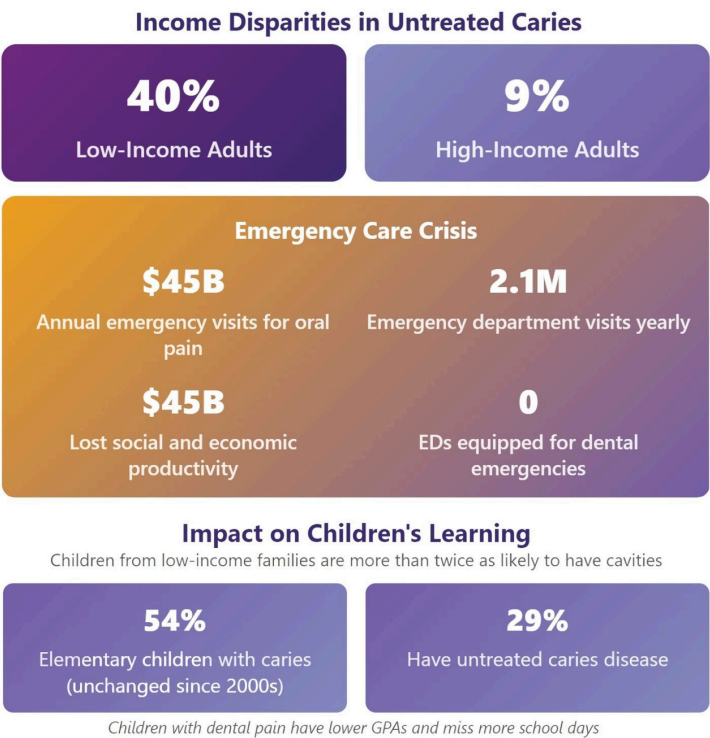
In the early 2000s, 54% of elementary school children had experienced caries disease (treated and untreated) and 29% had untreated caries disease (Aldosari et al., 2021). To date, this has remained largely unchanged. This problem among children is concerning. Children from lower-income families are more than twice as likely to have cavities compared with children from higher-income households (CDC, 2024).

Children with untreated caries disease and resulting pain can face learning deficits stemming from their dental disease, largely due to lower academic performance and missed days of school (Aldosari et al., 2021).

Children who report dental pain have lower average GPAs and are less likely to complete homework compared to those who have no dental pain (Aldosari et al., 2021). With regard to psychosocial concerns linked to poor oral health, students with dental problems are more likely to “be shy and to report feeling worthless, unhappy, or less friendly” (Aldosari et al., 2021).

Emergency Care and Costs

Untreated oral diseases cost \$45 billion in social and economic productivity losses in the United States each year (Gajendra et al., 2025). Emergency visits related to oral pain exceed \$45 billion annually for adults (Luo, 2024). In 2017, there were 2.1 million emergency department visits for oral pain, even though personnel in emergency departments are not equipped or trained to handle dental emergencies (Gajendra et al., 2025).



The Psychosocial Toll

One-third of adults (35%) in the U.S. are embarrassed about the condition of their mouth or teeth, and one in every five experiences anxiety as a result (Health Policy Institute, n.d.). Almost one in three (31.6%) people in the U.S. experience an anxiety disorder (Mental Health America, 2023), and oral problems are shown to cause or heighten this for many (Health Policy Institute, n.d.)



Lack of Access to Care in Dental Deserts

According to the American Dental Association's (ADA) Health Policy Institute, 77% of U.S. adults polled in 2015 said they planned to have a dental visit within the next year (Health Policy Institute, 2023.). 2013 data from the same document show that only 37% of adults had an actual dental visit in the past year (Health Policy Institute, n.d.). Among other variables, lack of access to a dental provider may be a sizeable barrier (Kim et al., 2024).



Getting routine oral health care takes time, effort, planning, and access. Despite the importance of preventive oral health care, 1.7 million people in the United States don't have access within a 30-minute drive, and 24.7 million

live in dental care shortage areas (defined as less than one dental office per 5,000/population) (Rahman et al., 2024). Communities with high levels of segregation and lower socioeconomic status are more likely to experience oral health care shortages (Rahman et al., 2024).

For 3.6 million people living in both urban and rural areas, transportation obstacles, including lack of a vehicle, lack of public transportation, or lengthy distances to dental offices, prohibit them from getting regular preventive oral health care (Kim et al., 2024).

This preventive care, which millions lack access to, has been proven to significantly reduce the risk of periodontal diseases, caries disease, tooth loss, and diabetes (Luo et al., 2024). It can even decrease heart disease risk by 14% (Luo et al., 2024).

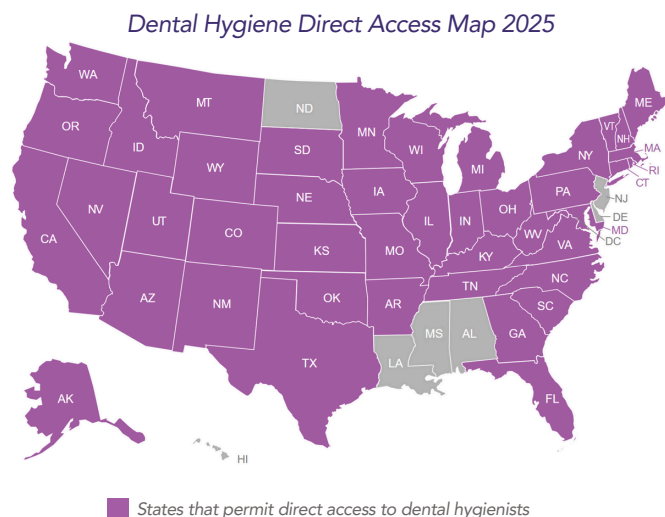
Dental hygienists are ideally educated to provide this care, but until it is accessible and the national norm, periodontal diseases, caries disease, and tooth loss will have a greater chance to develop. This will lead to potentially painful, costly, and unwanted outcomes. The following section details why preventive care should be made more accessible through increased dental hygienist scope and autonomy.



Part of the Solution

All States Should Allow Dental Hygienists to Practice to the Highest National Level with Increased Autonomy

The American Dental Hygienists' Association (ADHA) believes that oral health care is a basic right of all people. Allowing hygienists in every state direct access is a way to make preventive oral health care more accessible. State laws establish the scope of practice for dental hygienists. As of 2025, 43 states allow direct access; in these, scope limitations are varied, with no national standard (*Direct Access* - ADHA, 2025). States without direct access require a dentist to supervise a hygienist directly, restricting autonomous preventive care.



The National Governors Association (NGA) agrees that expanding the provision of affordable preventive oral health services in communities, outside of dental offices, in more states can reduce the most serious consequences of poor oral health (National Governors Association, 2014). In fact, NGA acknowledges that dental hygienists' normal scope of practice includes the services that are most effective in preventing serious dental diseases, citing these as professional prophylaxis, application of fluoride, and application of sealants (National Governors Association, 2014).

The December 2021 release of the National Institutes of Health report, *Oral Health in America*, further supports greater access to preventive oral health care by dental hygienists (National Institutes of Health, 2021).

As an example of state differences, Colorado dental hygienists can work autonomously, and there is no requirement that a dentist authorize or supervise most dental hygiene services. Conversely, Mississippi has no direct access. Some data from these states are presented in this paper for comparison.

When dental hygienists' autonomy level increases in a state, rates of oral preventive care are notably large in areas with shortages of dental providers. (Chen et al., 2020). Conversely, a lack of autonomy can create barriers to care. Preventive care is cost-effective, as it is associated with a reduced need for restorative care and dental treatment down the line (Chen et al., 2020). In addition, increased access to dental hygienists, especially outside of the traditional dental office, can reduce the prevalence of emergency department visits for non-traumatic dental complaints, particularly among younger adults (Akintolan et al., 2022).

There are major gaps and challenges to our population's oral health, as detailed in this paper. Restrictions on dental hygienist autonomy and scope limitations in states add to the hindrance in patients accessing preventive oral health care. Compounding this is the fact that there is no national standard.

Every state varies in terms of their scope of practice laws, but we know that an increased scope of practice generates better outcomes for patients. Dental hygienists, nationally, should be working autonomously and practicing at the highest national level.

Snapshots of Dental Hygiene Legislation & Data

Legislation and Data Points from Two States: Colorado & Mississippi

While every state has room to improve access to preventive oral care, even modest increases in professional autonomy can lead to measurable gains in routine care and long-term outcomes for those served. The following are 2 snapshots of state data; however, anyone can access their own state's fact sheet online via ADA's Health Policy Institute.

Colorado: A Snapshot of State That Offers Dental Hygienists Full Autonomy

Colorado offers a case study on how an effective state policy can increase access to oral health services offered by dental hygienists (Gadbury-Amyot, 2023). Over the past 35 years, dental hygienists licensed in Colorado have been able to provide dental hygiene care without authorization or supervision of a dentist. They can also own their practice, thanks to legislation enacted in 1987, and perform dental hygiene assessments, diagnoses, treatment planning, administration of local anesthesia (with permit), scaling and root planing, and prescribing and administering fluoride products (Gadbury-Amyot, 2023).

In Colorado, according to the state ADA Health Policy Institute fact sheet, 1 in 10 low-income adults say their mouth and teeth are in poor condition (Health Policy Institute, n.d.). Twenty-three percent of Coloradans experience anxiety about the condition of their mouth and teeth (occasionally or very often) (Health Policy Institute, n.d.). Fourteen percent think the appearance of their mouth and teeth affects their ability to interview for a job (Health Policy Institute, n.d.).

Mississippi: A Snapshot of a State Without Direct Access

In Mississippi, dental hygienists must work under the direct supervision of a dentist; direct access to dental hygiene services is not permitted.

In Mississippi, according to the state ADA Health Policy Institute fact sheet, 27% of low-income adults say their mouth and teeth are in poor condition (Health Policy Institute, n.d.). One in four (25%) experience anxiety about the condition of their mouth and teeth (occasionally or very often). Twenty-one percent think the appearance of their mouth and teeth affects their ability to interview for a job (Health Policy Institute, n.d.). Mississippi lacks direct access, and the data show more concerning oral health problems.

A Colorado Case Study Showing Increased Access to Care Along with Legislative Changes

The SMILES Dental Project, piloted in 2015, helped Colorado dental hygienists develop tests and refine a new system for delivering services to low-income, isolated Coloradans, including older adults and young children. The project helped expand both preventive dental hygiene services to those in need and expand the scope of care that licensed dental hygienists were able to perform. From 2017 to 2019, the program resulted in treatment delivered by dental hygienists to 10,938 Coloradans, from infants and school-aged children to residents of a senior center, a homeless shelter, and a mental health center. The project also leveraged two distinct changes to Colorado's legislation as it relates to the scope of practice for dental hygienists. In June 2015, a House Bill was enacted, allowing registered dental hygienists to provide interim therapeutic restorations even when recommended via tele-dentistry. In June 2018, another House Bill was enacted that allows dental hygienists to treatment plan and place silver diamine fluoride.

Recommendations

Based on a broad scoping review of current literature, there are several recommendations related to dental hygienists' scope of practice that every state should consider. States should:

- Permit dental hygienists to practice to the highest national level;
- Remove restrictions on settings in which dental hygienists can practice;
- Support the utilization of tele-dentistry; and
- Provide direct reimbursement to dental hygienists for care provided.

Overall, professional regulation that enables dental hygienists to use their education and array of skills can support innovation while ensuring patient safety and quality of oral health care.

A 2015 study by Turner et al. reviewed over 100 dental and other health-related research publications about direct access, primarily based in the U.S., and found no evidence of significant issues related to patient safety resulting from work performed by dental hygienists under direct access. In contrast, there was strong evidence that access to dental care improved as a result (Turner et al., 2015).

Conclusion

There will always be barriers to access when it comes to preventive oral health care, just as there are with access to fresh food and regular medical care. But, given the prevalence of oral diseases and the toll they are taking across the U.S., states should look to pave the way for dental hygienists to offer more preventive oral health care to those who need it.

The end result should be a national standard, resulting in a more physically and psychosocially well population with decreased pain, decreased medical expenses, and increased productivity that can help every state's bottom line.

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American Dental Hygienists' Association

The American Dental Hygienists' Association (ADHA) is the only organization representing the professional interests of the more than 200,000 dental hygienists in the United States. Dental hygienists are preventive oral health professionals, licensed in dental hygiene, who provide educational, clinical and therapeutic services that support total health through the promotion of optimal oral health. To learn more about the ADHA, dental hygiene or the link between oral health and general health, visit adha.org.

