ISSUE BRIEFS
85TH TEXAS LEGISLATURE

Community Water Fluoridation
Adult Oral Health Care Cost Study

COMMUNITY WATER FLUORIDATION

BACKGROUND

Fluoride is a mineral that exists naturally in lakes, rivers and groundwater. The leading health and medical experts[1] are united in supporting community water fluoridation—adding a little more fluoride to reach a level proven to reduce the rate of tooth decay. In the early 1960s, the average U.S. adult had over half their teeth missing, decayed or filled. Community water fluoridation has helped to dramatically reduce tooth decay in Texas and across the nation.

A Texas study[2] shows that fluoridation saves state taxpayers $19 per child, per year because it reduces Medicaid costs for treating cavities. With approximately 3.9 million people eligible for Medicaid in Texas, this is a significant annual savings for the state.

CHALLENGE

In recent years, a number of local water systems in Texas have stopped adding fluoride to drinking water without giving local residents, dentists, physicians and health departments advance notice. In several instances, local health departments and residents heard about these decisions only months or even years after they were made, if at all. Many of these community water systems also failed to notify the Texas Commission on Environmental Quality (TCEQ) as required per 30 TAC290.39(j) which states, the water system is required to submit a notification of change whenever a significant change occurs to their water system (e.g. starting or stopping fluoride treatment).

In 2014, Texas provided nearly 80% of its population with access to community water fluoridation. However, as of September 2016, only 73% of people in Texas have access to fluoridated public water supplies. This backward trend could place Texas children and adults at greater risk of dental problems.

SOLUTION

A Healthy Smiles Bill would amend the Texas Health & Safety Code to ensure that local residents, parents and health professionals have ample time to share their views or concerns before their community makes a final decision about water fluoridation. This promotes transparency and democracy within local communities.

After a city council, water board or other entity takes a vote to cease fluoridation, the Healthy Smiles Bill would respect local residents by requiring that the elected body:

- provides at least a 90-day advance notice before taking a final vote on the matter and post it publicly for a least the first 30 days,
- identifies by name the organizations, physicians, dentists or other health professionals with which it has consulted in reaching its decision, and
- identifies alternatives to fluoridation, if any, that will be made available in the community if fluoridation is ended.

This bill would *not* require any community to change its fluoridation policy. This decision would remain a local decision and ensure a transparent process so local residents have a chance to be heard before a final decision about fluoridation is made.

To address the deficiency of notification and mandatory reporting to the Texas Department of State Health Services and the TCEQ respectively, the legislature may want to consider stronger enforcement policies with substantial consequences for insubordination of elected policymaker's decisions and/or the disregard of required reporting and notification requirements by imposing hefty fines and support for prosecution at local or state levels.

SUPPORTING STATEMENTS

The Healthy Smiles Bill is needed for three reasons:

- The public deserves transparency and a right to be heard. No decision affecting the dental health of children and adults in a community should be made without sufficient time to hear from parents, health professionals and other key stakeholders.

- A community decision to halt water fluoridation impacts the residents' access to a proven form of prevention. In fact, fluoridation has been named[3] one of 10 "great public health achievements" by the Centers for Disease Control and Prevention. If fluoridation ends in a community, local dentists need some lead-time to talk with their patients, discuss options and, if appropriate, begin prescribing fluoride supplements for children.

- For many residents, especially lower-income Texans whose employers do not offer dental insurance, water fluoridation may be one of the only forms of prevention that is available to them.

Water fluoridation remains the GOLD standard (or most cost-effective means[4]) for delivering fluoride to an entire community. It does not require a single change in a person's behavior to reap the benefits of its decay reductions.

Decades of research show that water fluoridation reduces tooth decay[5] by 25%. In the absence of fluoridation, local governments should provide their residents and state health officials with an alternative oral health protection plan. This will allow residents the opportunity to examine the evidence showing the cost and effectiveness of different approaches to protecting dental health. The Healthy Smiles Bill supports a more transparent, participatory form of government.

This is not an unfunded mandate on communities. Local communities retain the authority to make decisions regarding their water supply. This change gives local residents the opportunity to have a say in local policy decisions affecting their families' dental health and health costs. The lifetime costs of treating a single decayed tooth can exceed $6,000[6]. Parents and families have a right to be heard before a decision is made that could impose a hidden tax on them (through higher dental bills).

Water fluoridation is supported by the leading health and medical organizations, including the American Academy of Pediatrics, the American Dental Association and the Centers for Disease Control and

Prevention. Texas has been a pioneer in this breakthrough. In fact, Texas was one of the first[7] states in the nation where fluoridation was tested and found to significantly reduce the rate of dental cavities.

Researchers at the Wellesley Institute reported in 2013, "[t]he adverse impacts of removing water fluoridation will be inequitably distributed. Lower income and other health-disadvantaged populations experience poorer oral health overall and significant barriers to dental care. As a result, the removal of water fluoridation will be particularly damaging for health disadvantaged populations and will worsen oral health inequities." The Institute added: "Alternate oral health measures will not be as effective and will be much more expensive."[8]

Legislators should care for two reasons. First, they should stand up for the right of taxpayers to be heard before a final decision is made that would deprive them or their children of having access to fluoridated water. Second, all Texas taxpayers have a reason to care because higher treatment costs drive up our state's Medicaid costs.

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[1] Campaign for Dental Health. (n.d.). *WHAT DO HEALTH EXPERTS SAY?* Retrieved from ilikemyteeth.org: http://ilikemyteeth.org/fluoridation/health-experts-on-fluoride/

[2] Texas Department of State Health Services. (n.d.). *Fluoride Cost*. Retrieved from Texas DSHS: https://www.dshs.texas.gov/dental/Fluoride-Cost.shtm

[3] Center for Disease Control and Prevention. (n.d.). *Ten Great Public Health Achievements in the 20th Century*. Retrieved from CDC: https://www.cdc.gov/about/history/tengpha.htm

[4] Center for Disease Control and Prevention. (n.d.). *Community Water Fluoridation*. Retrieved from CDC.gov: https://www.cdc.gov/fluoridation/index.html

[5] ibid.

[6] Delta Dental. (n.d.). *Lifetime Costs of a Cavity*. Retrieved from Children's Dental Health Project: https://www.cdhp.org/resources/298-lifetime-costs-of-a-cavity-by-delta-dental

[7] Texas Fluoridation Project, Department of State Health Services. (2014). *Fluoridation Procedures: A Manual for Water-Utility Operators.* Retrieved from https://s3-us-west-2.amazonaws.com/cdhp-fluoridation/Texas+Fluoridation+Project+Manual.pdf

[8] Wong, Emily. "The Real Cost Of Removing Water Fluoridation: A Health Equity Impact Assessment." The Wellesley Institute, 2013. <http://www.wellesleyinstitute.com/wp-content/uploads/2013/09/The-Real-Cost-of-Removing-Water-Fluoridation.pdf>.

ADULT ORAL HEALTH CARE

BACKGROUND

Most of us take oral health for granted, but for thousands of older adults and individuals with disabilities in Texas, lack of access to appropriate, quality oral health care has enormous and sometimes tragic consequences. Poor oral health can lead to extreme pain, infection, and even death. Oral health disease may also lead to heart disease, gingivitis, stroke, osteoporosis, dementia, malnutrition or inability to eat and respiratory disease. Adults with missing, diseased or damaged teeth often find it difficult to secure employment and be self-sufficient. They not only have physical pain, but also may suffer the emotional pain of self-consciousness, embarrassment, low self-esteem and depression.

According to Wikipedia, "Health professionals often use a person's ability or inability to perform [activities of daily living] (ADLs) as a measurement of their functional status, particularly in regard to people post injury, with disabilities and the elderly."[1] Basic ADLs may include, but are not limited to, functional mobility, bathing or showering, personal hygiene and grooming, dressing, self-feeding and toilet hygiene.

There is no universal definition for disability, but "the World Health Organization (2013) considers disability to be an umbrella term, covering impairments, activity limitations, and participation restrictions. [… Many] individuals are considered to have a disability if they report having serious self-care, hearing, vision, independent living, ambulatory, or cognitive difficulties."[2] "In 2015, the prevalence of disability in Texas was:

- 11.6 percent for persons of all ages
- 10.0 percent for persons ages 21 to 64
- 29.1 percent for persons ages 65 to 74
- 52.8 percent for persons ages 75+"[3]

Prevention and access to services are particularly important for older adults and for adults with disabilities because these groups may require more frequent oral health visits than twice annually. According to a November 2016 issue brief by the Medicaid and CHIP Payment and Access Commission, "Individuals with disability are at risk for poor oral health due to limitations in their ability to maintain preventive oral health practices or difficulty finding a dentist who can deliver care tailored to their needs (for example, exam rooms that can accommodate a wheelchair or specialized training in providing care to individuals with certain developmental disabilities.)"[4]

"Dental caries, the disease process that causes tooth decay, is the most prevalent childhood disease, and, according to the Centers for Disease Control and Prevention (CDC) [… the] problem doesn't cease in adulthood. Twenty-eight percent of those 35 to 44 years of age have untreated tooth decay, and the rate is 18 percent in adults 65 and older."[5]

CHALLENGE

Older adults and patients with disabilities often face disproportionate barriers to receiving dental services. Individuals not able to perform basic ADLs are often treated in the operating room under general anesthesia at a much higher expense to themselves or the state.

"People with developmental disabilities suffer from a high occurrence of tooth decay and gum disease for a number of reasons, ranging from physical conditions like an inability to hold a toothbrush to a simple lack of understanding of how to practice basic personal oral hygiene. These types of disabilities can make people more susceptible to disease and at the same time, make it more difficult for them to obtain treatment."[6]

SOLUTION

Texas Health and Human Services Commission conduct a cost benefits analysis for preventive dental care for adults that cannot perform basic ADLs. This analysis may show potential cost savings for averted disease through preventive services.

Recommended actions to achieve health equity among older adults and individuals with disabilities include:

- Improve daily oral health care. Education and training are necessary for caregivers if they are not licensed oral health providers.

- Address inequitable distribution of resources by increasing access to care. If the patient cannot access the dental office, then oral health providers need to access the patients wherever they may be. Teledentistry and collaborative agreements provide an increase in preventive oral health care for underserved populations and have become the new delivery model that demonstrates "better health care delivery, better health outcomes, and the potential to drive down total health care costs for older adults and people with disabilities."[7]

- Policymakers need data! Having data that includes standard disability items in public health surveys, data analyses, and health reports will help ensure health equity in policy and program development.

SUPPORTING STATEMENT

According to Jane Tilly, DrPH, in a report for the Center of Policy and Evaluation, Administration for Community Living,

> "[older] adults and adults with disabilities have a unique and challenging set of barriers to receiving needed dental preventive and treatment services. Barriers include affordability and accessibility of services. These groups or their caregivers also may not be aware of the importance of hygiene and using oral health services to help preserve their health, and may not be aware of the consequences of poor care until they occur.
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> Consequences of inadequate access to services include increased risk related to certain chronic diseases, avoidable hospital use, and, sometimes, death. Among the options states have for addressing these problems are integrating oral health into primary care; expanding use of dentist extenders, like hygienists; expanding Medicaid dental coverage, and ensuring that older adults and adults with disabilities have access to services through their Medicaid managed care plans and Community Health Centers. Education of older adults, people with disabilities and their caregivers through the Aging and Public Health Networks is critical too."[8]

Much of this "may be prevented with regular visits to the dentist, [however,] many Americans do not have access to regular dental care due to social determinants. […]Addressing these social determinants is key in reducing health disparities and improving the health of all Americans.[9]

Everyone should have the same opportunities to live a healthy life and no one should suffer from a chronic disease that is largely preventable. The Texas Oral Health Coalition appreciates your consideration and urges you to support a study bill on the cost benefits for preventive oral health care for older adults and individuals with disabilities.

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[1] Wikipedia. *Activities of daily living.* December 23, 2016. https://en.wikipedia.org/wiki/Activities_of_daily_living.

[2] Texas Workforce Investment Council . 2016. "People with Disabilities: A Texas Profile." 17. http://gov.texas.gov/files/twic/Disabilities_Profile.pdf

[3] Erickson, W., Lee, C., & von Schrader, S. (2016). 2015 Disability Status Report: Texas. Ithaca, NY: Cornell University Yang Tan Institute on Employment and Disability(YTI). http://www.disabilitystatistics.org/StatusReports/2015-PDF/2015-StatusReport_TX.pdf

[4] Medicaid and Chip Payment and Access Commission. (2016). *Medicaid Access in Brief: Adults' Use of Oral.* Issue Brief. Retrieved from https://www.macpac.gov/wp-content/uploads/2016/11/Adults-Use-of-Oral-Health-Services.pdf

[5] American Dental Association. 2013. "Action for Dental Health: Bringing Disease Prevention Into Communities." 3. https://www.ada.org/~/media/ADA/Public%20Programs/Files/bringing-disease-prevention-to-communities_adh.ashx

[6] American Dental Association, 2013.

[7] Helgeson, M. and Glassman, P. (2013), Oral health delivery systems for older adults and people with disabilities. SPECIAL CARE IN DENTISTRY, 33: 177–189. http://onlinelibrary.wiley.com/doi/10.1111/scd.12038/abstract

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[9] HealthyPeople.gov, 2017.