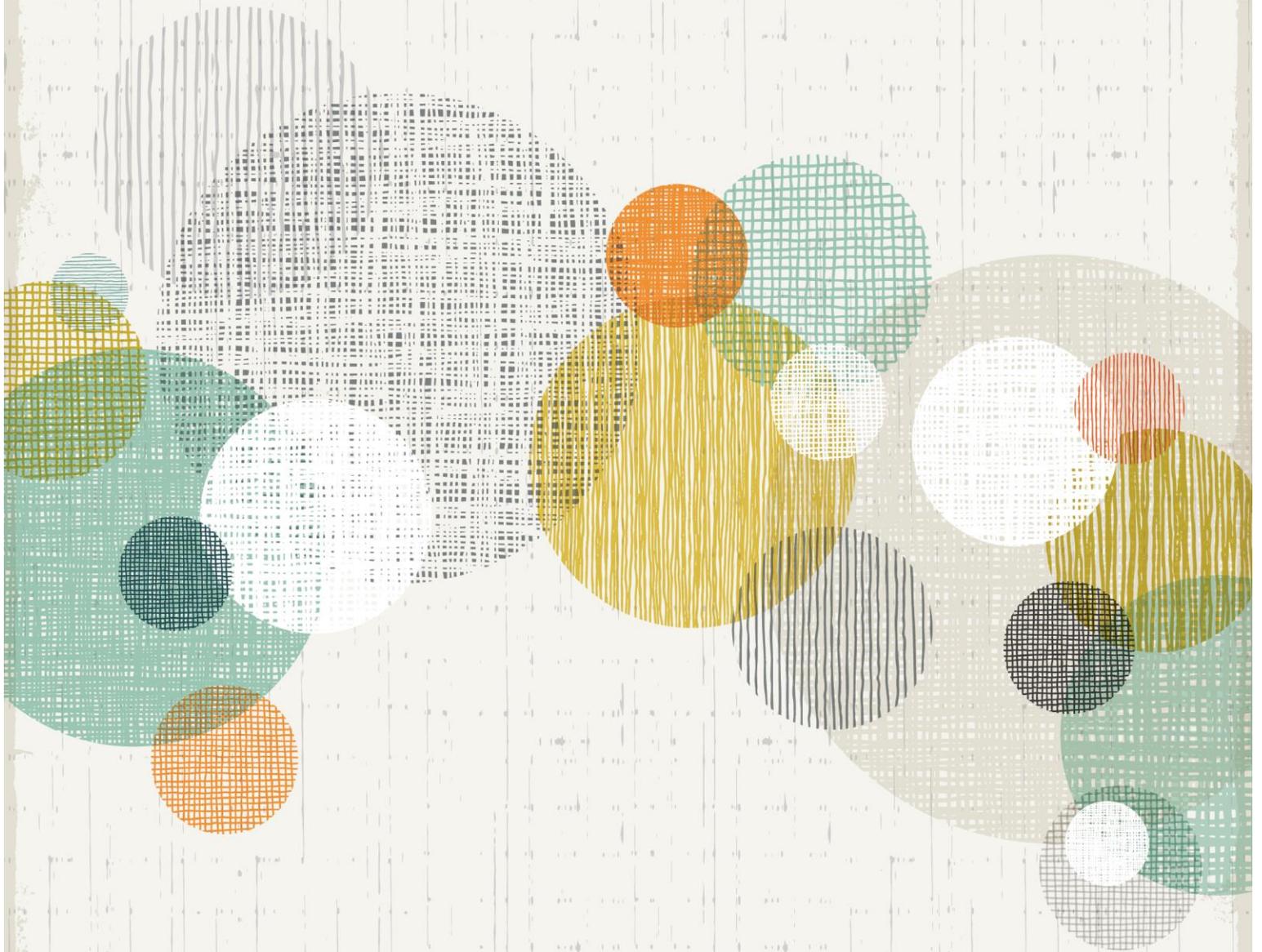


WISCONSIN'S ROADMAP TO IMPROVING ORAL HEALTH

2020-2025



WISCONSIN
Oral Health
COALITION

★ Children's Health
Alliance of Wisconsin



INTRODUCTION AND ROADMAP DEVELOPMENT

The mouth is vital to everyday life. It serves to nourish our bodies as we take in water and nutrients. It is how we communicate. Oral health is an essential and integral component of overall health. Oral health includes more than just healthy teeth. It includes the entire mouth: teeth, gums, hard and soft palate, lining of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws. Oral health is more than being free of tooth decay and gum disease. It also means being free of chronic oral pain, oral cancer and other conditions that affect the mouth and throat. Good oral health includes the surgical correction and treatment of birth defects, such as cleft lip and palate. Oral health includes the ability to carry on the most basic human functions such as chewing, swallowing, speaking and smiling. The mouth is an integral part of the human anatomy and oral health is intimately related to the health of the rest of the body. For example, mounting evidence suggests infections in the mouth such as periodontal (gum) disease may increase the risk for heart disease and premature delivery in pregnant women, and has been shown to complicate controlling blood sugar for diabetics. Furthermore, changes in the mouth are often early indicators of problems elsewhere in the body, such as infectious diseases, immune disorders, nutritional deficiencies and cancer.

VISION FOR ORAL HEALTH CARE IN WISCONSIN

Vision for Wisconsin: Everyone has access to quality oral health care across their lifespan. To improve the oral health of all Wisconsin residents, it is important to promote sustainable concepts and strategies that accomplish the following:

- Identify and eliminate barriers that contribute to oral health disparities;
- Promote disease prevention in the personal, community and professional settings;
- Promote the delivery of oral health services in a variety of settings;
- Develop and support a diverse and competent workforce that is adequately compensated, qualified and authorized to provide evidence-based care;
- Promote collaborative and multidisciplinary teams working across the health care spectrum; and
- Encourage continuous improvement and innovation.

ACRONYMS

- Department of Health Services (DHS)
- Department of Health Services Oral Health Program (DHS-OHP)
- Federally Qualified Health Center (FQHC)
- Health Maintenance Organization (HMO)
- Wisconsin Oral Health Coalition (WOHC)
- Wisconsin's Roadmap for Improving Oral Health (Roadmap)

ROADMAP DEVELOPMENT

The overall goal of *Wisconsin's Roadmap to Improving Oral Health* is to reduce the prevalence of oral disease and reduce disparities in oral health status among populations. The vision of access to quality oral health care across the lifespan is the driving force in the development of the *Roadmap*. Many Wisconsin residents do not enjoy the benefit of good oral health, yet oral health is integral and essential to overall health. Furthermore, there are segments of the population bearing an uneven distribution of the burden of disease and have difficulty accessing oral health services. Public health surveillance is



important for the purpose of identifying areas of greatest need, and to target limited resources where needed most. For the purpose of this report, background and surveillance information was compiled using a variety of available sources.

Wisconsin's Roadmap to Improving Oral Health was created in 2013. The WOHC steering committee agreed to utilize the 2013 *Roadmap* as a starting point for this *Roadmap*. The WOHC steering committee reviewed and revised the existing strategic areas and goals and added a list of activities to address each goal, which are included in this *Roadmap*. Once the steering committee reached consensus on the revised strategic areas, goals and activities, the *Roadmap* was distributed to WOHC members for comment. WOHC member comments were incorporated into the *Roadmap*, which was sent to the WOHC steering committee for final approval.

HOW THIS ROADMAP SHOULD BE USED

Wisconsin's Roadmap to Improving Oral Health is meant to be a guide for partners and organizations to use to promote the vision of access to quality oral health care across the lifespan. The *Roadmap* has identified key issues and priorities across the state, and should be used as a starting point to drive the conversation around oral health. WOHC recognizes that not all of the strategic areas and goals will be priorities for every stakeholder. Individuals and organizations can choose to prioritize pieces of the *Roadmap*, while still supporting the overall statewide vision. Furthermore, by collaborating on specific goals partners can maximize their impact.

Comprehensive strategies to achieve the *Roadmap's* goals are important to develop actionable change. Included in this *Roadmap* are activities for how to create this actionable change for each goal. These activities are not meant to be comprehensive, but a starting point to improve the oral health of Wisconsin residents.

CAUSE FOR CONCERN

Disparities in oral health status exist throughout Wisconsin by race, ethnicity, gender, geographic location, education and insurance status. In addition, there are many populations in the state with an increased disease burden that needs to be addressed, including: people with disabilities, long-term care residents, individuals with HIV/AIDS and those in the correctional system.

PREVALENCE OF DISEASE AND UNMET NEEDS AMONG CHILDREN AND ADOLESCENTS

Nationally, dental caries (tooth decay) is four times more common than childhood asthma and seven times more common than hay fever. In Wisconsin, approximately 80,000 children ages 0 to 5 on Medicaid that visited their physician did not have a dental encounter.¹

Wisconsin conducted the *Healthy Smiles Healthy Growth* survey on the oral health and height and weight status of Wisconsin's third-grade children in 2017-18. Approximately 18 percent of Wisconsin's third-grade children have untreated dental decay and 5 percent have an urgent condition causing pain



and/or infection. Results were compared to similar surveys conducted in 2001–02, 2007–08, and the 2012–13 school years. While there has been a decrease in untreated decay, nearly 1 in 5 Wisconsin third graders still have untreated decay. Overall, it was found that in the 2017–18 school year, tooth decay and obesity continue to be a problem for Wisconsin's children.²

The *Healthy Smiles Survey* assessed the oral health of Wisconsin's ninth grade students in 2014-15. Tooth decay is prevalent among Wisconsin adolescents in addition to younger children. In Wisconsin, 55 percent of ninth grade students have experienced tooth decay. Levels of tooth decay and access to protective dental sealants varied significantly by race, ethnicity and income.³

RISK AND PROTECTIVE FACTORS AFFECTING ORAL DISEASES

In the U.S., community water fluoridation has been the basis for the primary prevention of dental caries since 1945 and was recognized by the Centers for Disease Control and Prevention as 1 of 10 great public health achievements of the 20th century. Community water fluoridation is the process of adjusting the natural fluoride concentration of a community's water supply to the optimal level for preventing dental caries. It is an ideal public health method because it is effective, eminently safe, inexpensive and does not depend on access or availability of professional services. Water fluoridation has the potential to be equally effective in preventing dental caries among different socioeconomic, racial and ethnic groups. Fluoridation helps to lower the cost of dental care and helps residents retain their teeth throughout life.⁴ Community water fluoridation is not only effective in preventing dental caries, but it also generates cost savings. In Wisconsin, nearly 90 percent of the population on community water systems has access to optimally fluoridated water.⁵

Since the early 1970s, the incidence of childhood dental caries on smooth tooth surfaces (those without pits and fissures) has declined markedly because of widespread exposure to fluorides. Most decay among school-age children now occurs on tooth surfaces with pits and fissures, particularly the molar teeth. First permanent molars erupt into the mouth at about 6 years of age.

Pit-and-fissure dental sealants—plastic coatings bonded to susceptible tooth surfaces—have been approved for use for many years and are recommended by professional health associations and public health agencies.

The Wisconsin Seal-A-Smile program started in 2000 and more than 30,000 children received dental sealants through the program in the 2018-19 school year.⁶ Over 70 percent of third-grade children in Wisconsin have at least one dental sealant on a permanent molar. This is an improvement over previous surveys and a positive finding as dental sealants are a well-accepted clinical intervention to prevent dental caries. The oral health disparity gap is decreasing for access to dental sealants as children of all races and socioeconomic groups have similar levels of dental sealants. The school-based sealant programs are likely to play a major role in expanding availability of dental sealants to all children.

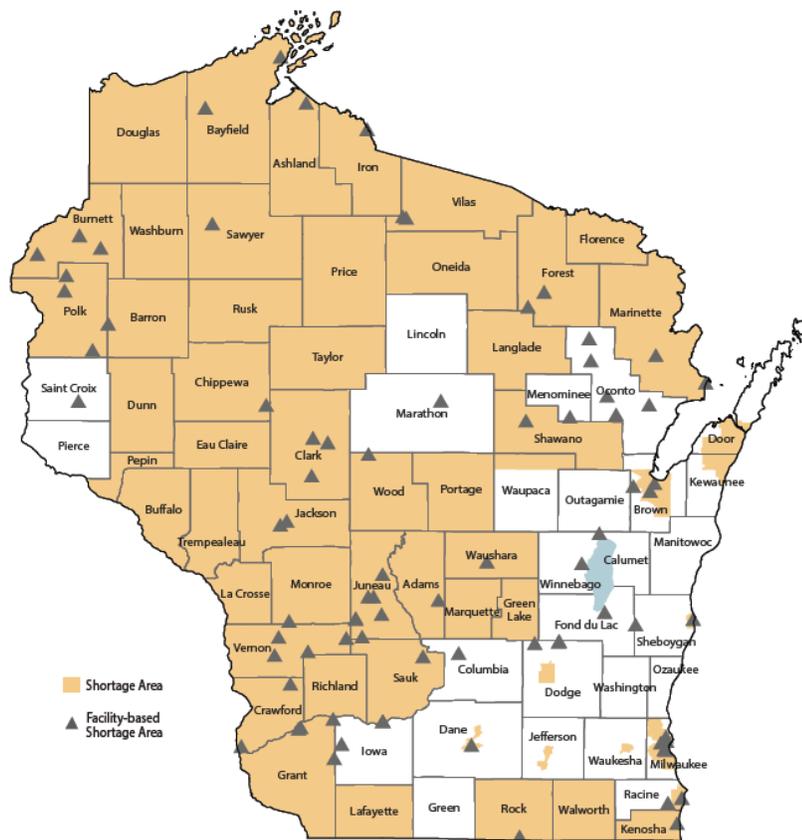
DENTAL WORKFORCE AND CAPACITY

The oral health care workforce is critical to society's ability to deliver high-quality dental care in the United States. Effective health policies intended to expand access, improve quality or constrain costs must take into consideration the supply, distribution, preparation and utilization of the health care workforce.



By the United States Census definition, 97 percent of Wisconsin's land area is considered rural and roughly 30 percent of the population live in rural areas. As of October 2019, 61 of Wisconsin's 72 counties are either partial or entirely dental health professional shortage areas (HPSA). As of April 2019, Wisconsin has 58 critical access hospitals, 97 rural health clinics and 22 federally qualified health centers outside of urbanized areas. Dental HPSAs have a significant shortage of dentists providing care to low-income populations for their service areas (a low-income population to dentist providing care ratio of 4,000:1 dentist or higher). A dental HPSA is a service area where at least 30 percent of the population is below 200 percent of the federal poverty level. HPSA designations are reviewed and redesignated every four years.

**Figure A: Wisconsin Dental Care HPSAs
Federally Designated Health Professional Shortage Areas**



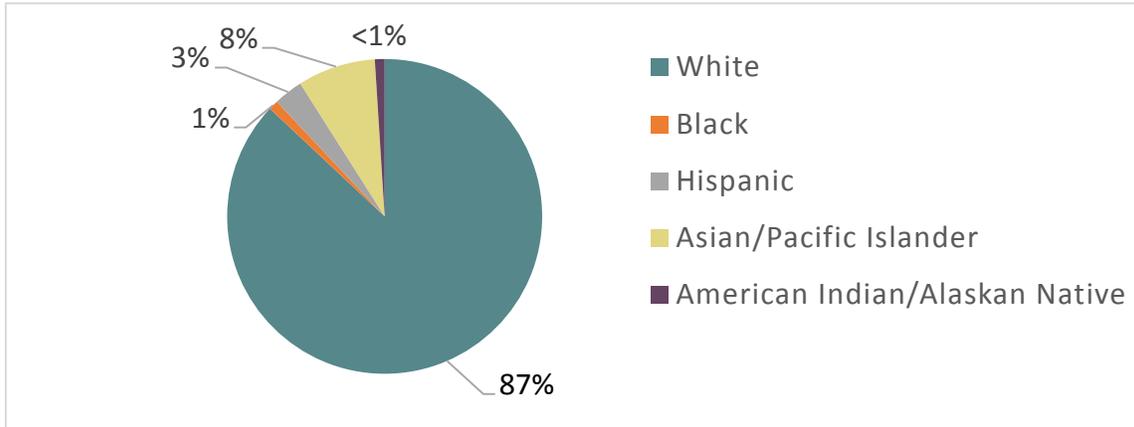
Source: Health Resources and Services Administration, Geospatial Data Warehouse, Oct. 2018.

Diversity in the oral health workforce plays a critical role in improved health care access and patient outcomes. In order to enhance diversity in the oral health profession, concerted efforts must be made to address barriers which prevent underrepresented groups from entering the profession, advancing to levels of leadership and becoming educators. The *Wisconsin Oral Health Workforce Diversity Action Plan* can be used as a guide for statewide partners to implement strategies to increase diversity in Wisconsin's oral health workforce.



In Wisconsin, there are 4,281 currently licensed dentists (Figure B). Of the current dentists with a Wisconsin address, 46.5 percent are missing data on race and ethnicity. Of those dentists with data on race and ethnicity, approximately 87 percent identify as white, 1 percent as black, 3 percent as Hispanic, 8 percent as Asian or Pacific Islander and less than 1 percent as American Indian or Alaska native.⁷

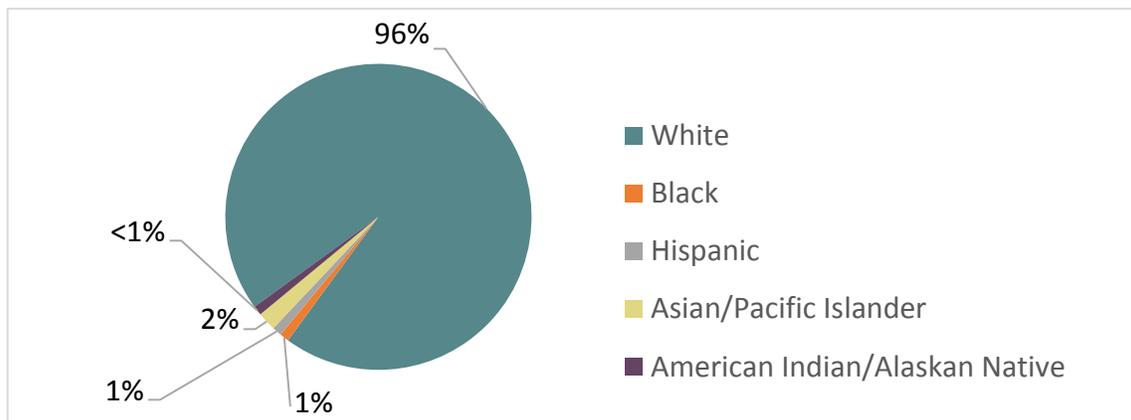
Figure B: Wisconsin Dentists



Source: Wisconsin Oral Health Workforce Diversity Action Plan

There are 4,783 dental hygienists with current licenses and addresses in Wisconsin (Figure C). Approximately 29 percent are missing data on race and ethnicity. Among those reporting race and ethnicity, 96 percent identify as white, 1 percent as black, 1 percent as Hispanic, 2 percent as Asian or Pacific Islander and less than 1 percent as American Indian or Alaska native.

Figure C: Wisconsin Dental Hygienists



Source: Wisconsin Oral Health Workforce Diversity Action Plan



STRATEGIC AREAS AND GOALS

The following section includes high-level strategic areas and goals identified by a working group convened by the Wisconsin Oral Health Coalition. These activities are not meant to be comprehensive, but a starting point to improve the oral health of Wisconsin residents. The goals are not arranged in any particular order or ranking and were created specifically with this vision in mind. The example activities associated with each goal are intended to demonstrate how to address the goal, though they are broad and not all inclusive.

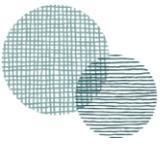
STRATEGIC AREA 1: INFRASTRUCTURE

Table with 2 columns: GOAL and POTENTIAL ACTIVITIES. It lists four goals (Goal 1.1 to 1.4) and their corresponding potential activities, such as advocating for increased Medicaid reimbursement rates, expanding the role of local communities, and improving communication between medical and dental records.



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<p>Goal 1.5 - Maintain and improve the oral health surveillance system to provide comprehensive and timely reporting of oral health needs, outcomes and disparities.</p>	<ul style="list-style-type: none">• Identify funding to employ a full-time epidemiologist in the Department of Health Services' Oral Health Program.• Maintain and regularly update oral health data in the Environmental Public Health Tracking Portal.• Conduct statewide surveillance of oral health and disease trends in priority populations.• Engage local health departments to collect data at a county and local level.• Develop a surveillance plan.• Develop a core set of dental measures for annual Medicaid reporting.
<p>Goal 1.6 - Develop systems to support the evaluation of oral health programs and policies across the state.</p>	<ul style="list-style-type: none">• Promote quality improvement methodology in program design.• Promote data driven decision making.• Promote the collection of uniform dental quality measures.
<p>Goal 1.7 - Promote and support oral health research.</p>	<ul style="list-style-type: none">• Identify funding available for oral health research.• Identify oral health research topics.• Develop a research agenda.• Develop or utilize existing study clubs to discuss, share and analyze available research.• Ensure current oral health data is available and promoted to the public.
<p>Goal 1.8 - Support the Wisconsin Department of Health Services' Oral Health Program to address the identified needs in the state.</p>	<ul style="list-style-type: none">• Advocate for increased funding to support the Department of Health Services' Oral Health Program.• Apply for funding opportunities to support DHS-OHP programs.• Disseminate Wisconsin Department of Health Services' Oral Health Program documents and information.
<p>Goal 1.9 - Maintain, expand and support the Wisconsin Oral Health Coalition.</p>	<ul style="list-style-type: none">• Increase coalition membership.• Collaborate with other coalitions both on a state and national level.• Disseminate Wisconsin Oral Health Coalition resources.• Diversify coalition partners.



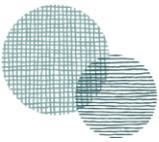
STRATEGIC AREA 2: PREVENTION AND HEALTH PROMOTION

GOAL	POTENTIAL ACTIVITIES
Goal 2.1 - Maintain and expand fluoridation in community water systems.	<ul style="list-style-type: none">• Advocate for community water fluoridation through letters of support.• Support a statewide fluoride response network to defend the use of community water fluoridation in communities considering discontinuing community water fluoridation.• Distribute available community water fluoridation resources.• Provide education on the public health benefit of community water fluoridation.• Maintain a list of communities that maintain optimally fluoridated water.• Recognize communities that maintain optimally fluoridated water.• Support water fluoridation training for DNR staff and water facility operators.
Goal 2.2 - Increase the number of children receiving sealants.	<ul style="list-style-type: none">• Provide dental hygiene services in all authorized practice settings.• Educate parents and school staff on the benefits of dental sealants.• Ensure that sealant program data is inclusive of all statewide programs.• Inform relevant partners (e.g. school nurses and administrators) about available oral health resources and oral health programs available to school districts.• Increase the number of schools served by a Wisconsin Seal-A-Smile program.
Goal 2.3 - Increase the professional use of other evidence-based preventive measures.	<ul style="list-style-type: none">• Provide nutrition counseling and education that explains the link between nutrition and oral health.• Increase cultural competency and health literacy training for dental and dental hygiene students.• Disseminate evidence-based recommendations and encourage implementation among professionals in all practice settings.
Goal 2.4 - Educate the public on evidence-based oral health prevention measures.	<ul style="list-style-type: none">• Ensure that resources are available to oral health stakeholders.• Develop culturally-sensitive/competent patient education messaging.• Increase engagement of the general public in oral health-related initiatives.• Develop and disseminate evidence-based and consistent oral health messages with community-based organizations, policymakers and educators.



STRATEGIC AREA 3: ACCESS

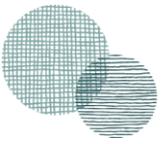
GOAL	POTENTIAL ACTIVITIES
<p>Goal 3.1 - Expand access to early oral health interventions.</p>	<ul style="list-style-type: none"> • Increase health systems’ utilization of dental hygienists. • Increase the number of WIC programs offering oral health services. • Collaborate with Head Start and child care centers to provide oral health services. • Incorporate oral health education into public education curriculum. • Integrate oral health education into parenting and child birth education programs. • Collaborate with statewide and local health promotion wellness initiatives. • Promote and increase the number of children visiting a dentist by age 1.
<p>Goal 3.2 - Improve the accessibility to oral health care services for vulnerable and underserved populations.</p>	<ul style="list-style-type: none"> • Provide letters of support to free clinics, FQHCs and others who depend on federal, state or foundation grants to support access to dental care. • Work with hospitals to ensure patients with special health care needs receive treatment. • Work with hospitals and health systems to support dental providers in their pursuit of obtaining privileges and time to provide care using general anesthesia. • Have more dental providers located in medical settings. • Incorporate multi-disciplinary experiences (e.g. special needs, mobile etc.) into dental and dental hygiene education programs. • Develop a fact sheet outlining transportation options for vulnerable and underserved populations. • Increase available operating room time for non-traumatic dental procedures. • Provide public health nurses with oral health education and resources. • Encourage providers to enroll as a Medicaid provider.
<p>Goal 3.3 - Promote available and affordable options for dental care for all Wisconsin residents.</p>	<ul style="list-style-type: none"> • Promote the utilization of FQHCs. • Maintain an up-to-date list of free and charitable dental clinics. • Increase enrollment of Medicaid eligible individuals. • Encourage dentists to enroll as a Medicaid provider and increase their Medicaid payer mix.
<p>Goal 3.4 - Promote adequate and sustainable funding for publicly-financed dental coverage.</p>	<ul style="list-style-type: none"> • Advocate for a Medicare dental benefit, expanded dental benefits for veterans, and adult dental care in the Affordable Care Act. • Expand eligibility for publicly-financed dental coverage. • Maintain the adult Medicaid dental benefit.



<p>Goal 3.5 - Support and expand school- and community-based oral health programs.</p>	<ul style="list-style-type: none"> • Encourage the establishment of school-based health centers. • Increase the number of schools with a sealant program. • Provide funding and technical support to FQHCs that submit school-based oral health data. • Utilize local media outlets to promote school-based sealant programs. • Build relationships between school sealant programs and community dental clinics.
<p>Goal 3.6 - Reduce oral health-related emergency department visits.</p>	<ul style="list-style-type: none"> • Expand eligibility for publicly-financed dental coverage. • Improve care coordination between hospitals and dental providers. • Public education campaign on early intervention. • Ensure appropriate pain management protocols are in place for emergency department prescribing practices.

STRATEGIC AREA 4: WORKFORCE

GOAL	POTENTIAL ACTIVITIES
<p>Goal 4.1 – Identify strategies to address gaps in the oral health workforce.</p>	<ul style="list-style-type: none"> • Promote and enhance loan repayment plan for dental providers. • Authorize additional oral health providers who are licensed, graduate from an accredited institution and increase access to care. • Increase training and fellowship opportunities for oral health professionals treating patients with special health care needs and underserved populations. • Establish a hospital-based dental residency or general practice residency program. • Increase recruitment, education and financial support for students interested in oral health professions. • Increase the diversity of the oral health workforce. • Improve the portability of dental providers’ licenses.
<p>Goal 4.2 - Increase interdisciplinary clinical and professional knowledge and collaboration.</p>	<ul style="list-style-type: none"> • Facilitate collaboration between medical and dental students and professionals regarding oral health. • Present oral health education information at hospitals’ grand round presentations. • Integrate oral health education into health professional educational curriculum. • Integrate medical services into dental offices (i.e., blood pressure and diabetes screening).



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<p>Goal 4.3 – Promote lifelong learning related to oral health disciplines.</p>	<ul style="list-style-type: none">• Promote career progression/promotion within oral health professions.• Promote and provide cultural competency webinars and continuing education opportunities.• Ensure that the dental workforce is informed on oral health best practices.• Improve and increase recruitment and educational support for students interested in oral health professions.
<p>Goal 4.4 – Promote the education and utilization of public health principles within the oral health community.</p>	<ul style="list-style-type: none">• Promote educational opportunities such as webinars and conferences.• Include public health principles and competencies in dental provider education curriculum.



Citations

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Contact information

If you have questions or concerns, please contact [Children’s Health Alliance of Wisconsin](#).