Ohio’s State Oral Health Plan

2021-2022

- Addressing Ohio’s burden of oral disease across the life span
- Engaging in objectives and strategies for the prevention and treatment of oral disease as a critical component of overall health

An initiative of The HealthPath Foundation of Ohio. Brought to you by:
# Acronym Guide:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA</td>
<td>Patient Protection and Affordable Care Act</td>
</tr>
<tr>
<td>ACEs</td>
<td>Adverse Childhood Experiences</td>
</tr>
<tr>
<td>CHIP</td>
<td>Children’s Health Insurance Program</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>EHS</td>
<td>Early Head Start</td>
</tr>
<tr>
<td>FQHC</td>
<td>Federally Qualified Health Center</td>
</tr>
<tr>
<td>FRPMP</td>
<td>Free and Reduced Price Meal Program</td>
</tr>
<tr>
<td>FV</td>
<td>Fluoride Varnish</td>
</tr>
<tr>
<td>HB</td>
<td>House Bill</td>
</tr>
<tr>
<td>HPSA</td>
<td>(Dental) Health Professional Shortage Area</td>
</tr>
<tr>
<td>HPV</td>
<td>Human Papillomavirus</td>
</tr>
<tr>
<td>HRSA</td>
<td>Health Resources and Services Administration</td>
</tr>
<tr>
<td>MCO</td>
<td>Managed Care Organizations</td>
</tr>
<tr>
<td>MDF</td>
<td>Mobile Dental Facility</td>
</tr>
<tr>
<td>NHSC</td>
<td>National Health Service Corps</td>
</tr>
<tr>
<td>OBGYN</td>
<td>Obstetrics-Gynecology</td>
</tr>
<tr>
<td>ODH</td>
<td>Ohio Department of Health</td>
</tr>
<tr>
<td>ODHLRP</td>
<td>Ohio Dental Hygienist Loan Repayment Program</td>
</tr>
<tr>
<td>ODLRP</td>
<td>Ohio Dentist Loan Repayment Program</td>
</tr>
<tr>
<td>ODM</td>
<td>Ohio Department of Medicaid</td>
</tr>
<tr>
<td>OPAS</td>
<td>Ohio Pregnancy Assessment Survey</td>
</tr>
<tr>
<td>SBH</td>
<td>School-Based Health</td>
</tr>
<tr>
<td>SBHC</td>
<td>School-Based Health Centers</td>
</tr>
<tr>
<td>SDF</td>
<td>Silver Diamine Fluoride</td>
</tr>
<tr>
<td>SHIP</td>
<td>State Health Improvement Plan</td>
</tr>
<tr>
<td>SOHP</td>
<td>State Oral Health Plan</td>
</tr>
</tbody>
</table>

# Table of Contents

Executive Summary ............................................................................................................ 4
What influences oral health .................................................................................................. 8
  Systemic influences ......................................................................................................... 9
  Community conditions ..................................................................................................... 9
  Oral health disparities ..................................................................................................... 10
  Oral health is a public health problem we can solve ...................................................... 11

SECTION I:  
**Oral Health’s Status in Ohio** .......................................................................................... 12
  Pregnancy .......................................................................................................................... 13
  Pre-school age children .................................................................................................... 15
  School-age children ......................................................................................................... 20
  Adults ................................................................................................................................ 24
  Older adults ...................................................................................................................... 29
  Ohio’s oral health workforce ............................................................................................ 32

SECTION II:  
**Ohio’s Oral Health Objectives Plan** ............................................................................ 34
  Goal 1: Advocacy .............................................................................................................. 35
    Ohio policymakers make informed oral health policy decisions
  Goal 2: Health Literacy ...................................................................................................... 40
    Ohioans know the relationship between oral and systemic health
  Goal 3: System Collaboration .......................................................................................... 42
    Integration of oral and overall health across systems
  Goal 4: Health Equity ....................................................................................................... 45
    Equitable systems and access to care

Acknowledgements .............................................................................................................. 49
References ............................................................................................................................ 50
Oral health is necessary for overall health.

In 2018 Oral Health America published *A State of Decay*, a report which measures the progress of state efforts to improve the oral health of Americans age 65 and older.

Ohio’s ranking in the report was fair, demonstrating a clear need for improvement.

Six variables were used to rank states toward progress. While Ohio performed high in several areas, one variable that caused Ohio’s fair ranking was the absence of a State Oral Health Plan (SOHP), which sets the direction and priorities to achieve optimal oral health for Ohioans across the lifespan.
Creating a SOHP was an achievable first step in improving Ohio’s ranking in the report. It also created the opportunity to collaborate with stakeholders from diverse organizations from across the state to establish goals, objectives, and strategies to improve oral health for Ohioans. Stakeholder engagement during the development of this plan helped to ensure that the plan is supported both by those who will implement it and by those intended to benefit from it.

The 2021-2022 SOHP is structured in two sections. Section I is an overview of oral health in Ohio and addresses the burden of oral disease across the life span. Section II is the SOHP with the goals, objectives, and strategies toward the prevention and treatment of oral disease as critical components of overall health for Ohioans. Opportunities for strategy implementation are highlighted in both sections of the report.

The SOHP focuses on 4 goals:

1. Ohio policymakers make informed oral health policy decisions
2. Ohioans know the relationship between oral and systemic health
3. Integration of oral and overall health across systems
4. Equitable systems and access to care
Executive Summary

Plan Overview:

1> **ADVOCACY**

**Goal**: Ohio policymakers make informed oral health policy decisions.

- **OBJECTIVE 1**: Educate Policymakers about Oral Health Prevention, Access & Relationship to Overall Health.
- **OBJECTIVE 2**: Include Oral Health in All Target Areas of the State Health Improvement Plan (SHIP).
- **OBJECTIVE 3**: Adopt K-12 Health Education Standards and/or Curriculum.
- **OBJECTIVE 4**: Advocate for a Dental Benefit in the Medicare Program.

2> **HEALTH LITERACY**

**Goal**: Ohioans know the relationship between oral and systemic health

- **OBJECTIVE 1**: Increase Oral Health Literacy of Ohioans & Non-Oral Health Professionals.
- **OBJECTIVE 2**: Oral Health Clinicians Provide Culturally Competent & Linguistically Appropriate Care.

3> **SYSTEM COLLABORATION**

**Goal**: Integration of oral and overall health across systems.

- **OBJECTIVE 1**: Engage Non-Dental Professionals In Oral Health.
- **OBJECTIVE 2**: Improve Oral Health Education In Schools.
- **OBJECTIVE 3**: Improve Oral Health Education In Long-Term Care Facilities.

4> **HEALTH EQUITY**

**Goal**: Equitable systems and access to care.

- **OBJECTIVE 1**: Preserve The Adult Dental Benefit Under the Medicaid Program.
- **OBJECTIVE 2**: Increase Medicaid Providers.
- **OBJECTIVE 3**: Increase Programs that Provide Prevention Services.
Key Opportunities for Strategy Implementation:

- Improved oral health of pregnant women can reduce children’s future risk of tooth decay
- When oral health is introduced by primary care providers, children are more likely to receive preventive services such as fluoride varnish and sealants
- School-based health care is a powerful tool for achieving health equity among children and adolescents and has a strong focus on disease prevention
- Interprofessional practice has demonstrated positive patient outcomes and reductions in total cost of care
- A dental benefit in the Medicare program will enable older adults and persons with disabilities to get oral health care needed for healthy mouths and bodies

It has been known for decades that oral diseases and disorders affect health and wellbeing throughout life. Poor oral health can affect individuals from infancy to older age and can have a significant negative impact on quality of life and wellbeing. When viewed across the lifespan a clear picture emerges about the impact of poor oral health on a person’s ability to learn, to engage in social relationships, to gain employment, and the impact on their physical and mental health into older adulthood. People who have access to the healthcare they need have better health outcomes than people who do not. We know that for a disproportionate number of Ohio children, the community conditions and systemic barriers that delay and prevent oral health care in childhood, persist into adulthood.

The novel coronavirus (COVID-19) has exposed the deep cracks and has exacerbated longstanding inequities in our oral health care delivery system. Even before COVID-19, millions of Ohioans struggled every day to gain access to oral health care, living with pain and unmet disease and infection. Providing equal access to oral health providers and to the prevention and treatment of oral health disorders must be part of how we develop and refine our health care system in these challenging times. Post-pandemic policy and funding decisions must lead us to the future we want—an oral health care system that serves all patients fairly, is sustainable, can react successfully to challenges, and provides care effectively and efficiently.

We encourage you to use this document to find opportunities you can act on as we move forward and together to improve the oral and overall health of Ohioans.

Sincerely,

Marla Morse  
Program Director, Oral Health Ohio

Susan Lawson  
Chair, Oral Health Ohio
Many factors influence oral health:

- Social Determinants of Access to Care such as dental insurance or transportation to a clinic
- Social Determinants of Health such as proximity to a grocery store, parent’s educational level and children’s exposure to trauma
- Social Determinants of Equity are underlying social, political, and economic forces, such as deeply rooted forms of inequality including race, ethnicity & gender
- Self-Care & Personal Habits such as oral hygiene, tobacco use and sugar consumption
- Workforce Shortages of oral health professionals, especially Medicaid providers, exist in communities across Ohio
- Health Literacy is the ability of consumers to understand health information and providers to deliver health information in a way that consumers can understand their health condition and make informed decisions.
Systematic Influences

There is wide misconception among the public that oral health is less important than general health. This misconception has profound implications for oral health outcomes across the life span and is reinforced to consumers in different ways. For example, oral health is not widely integrated into medicine. Pediatricians, Obstetricians (OB-GYN), Physician Assistants (PA) and Advance Practice Registered Nurses (APRN) are critical yet underused partners in oral health prevention. Today there is too little communication between medical and dental health systems, leading to missed opportunities to further the knowledge base for prevention and treatment efforts that address oral health in the context of overall health.

Another example is that the Medicare program does not include a dental benefit. The absence of a dental benefit implies that oral health is not important as we age. Of course, we know the opposite is true. The risk of chronic disease increases as we age and there is an association between oral health and chronic diseases such as diabetes, cardiovascular disease, pneumonia, and strokes. The absence of a dental benefit in Medicare is not just a health issue but is an economic issue as well. Ohio’s aging and labor force demographics make the older worker an essential part of the state’s future economy and access to affordable dental care has a positive effect on people’s ability to obtain and maintain employment.

Community Conditions

The conditions in which we live explain in part why some Ohioans are healthier than others and why dental treatment and clinical prevention alone will not reduce oral health inequities. These conditions include access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air, and the nature of our social interactions and relationships.¹

While community conditions and family circumstances can affect oral health, the opposite is also true: tooth decay and other dental problems can limit family success. It is well established that, even from an early age, we associate bias and stigma with poor oral health. Poor oral health is falsely associated with limited intelligence, bad parenting, being less professional, of a lower social class, lacking social skills, and less attractive. Research confirms that those with broken, decayed, and missing teeth are less likely to be offered jobs.
Tooth decay and other dental problems can limit family success.

**Oral Health Disparities**

Oral health disparities persist for too many Ohioans. As we will see throughout this report, disparities are felt disproportionately by the poor of all ages, older adults, persons living with a disability and communities of color. Oral health disparities have an impact on all of us. An increase in the number of Ohioans who are both insured and healthy will ultimately lead to an increase in revenue for the state.

Eliminating oral health disparities will also improve the economy by reducing the indirect costs of oral disease. These indirect costs include workdays missed due to oral health conditions, reduced work productivity due to oral conditions, reduced workforce participation due to disability, and productivity lost due to premature mortality.

An increase in the number of Ohioans who are both insured & healthy will ultimately lead to...

An increase in revenue for the state.
Most oral health conditions are largely preventable and can be treated in their early stages. Americans overwhelmingly agree that preventive care is key to a better health system and improved overall health. In 2019, the DentaQuest Partnership for Oral Health Advancement commissioned a large-scale opinion study to understand various perspectives on oral health care in the United States today. Their findings indicate that oral health is the top health concern for patients; even more than cardiac, eye, gastrointestinal, mental, or skin concerns. The subgroups with the highest concern for their oral health are the 35-44 age group (64%) and Black Americans (63%).

Ohio is making positive gains in solving some of these problems. Indeed, Ohio is a model and leader in medical-dental integration in Ohio’s safety net system and access to care through school-based health centers.

DentaQuest findings show a widespread desire for collaborative solutions and an overwhelming consensus on how to fix problems, including:

- Start with preventive oral health care
- Increase medical–dental integration and collaboration
- Expand access via non-traditional care delivery locations
- Improve dental coverage under public insurance programs
- Develop payment models that prioritize healthy outcomes over volume of services
Oral Health’s Status in Ohio

- Pregnancy
- Pre-school age children
- School age children
- Adults
- Older adults
- Ohio’s oral health workforce
Pregnancy

Pregnancy is a unique period during a woman's life and is characterized by complex physiological changes, which may adversely affect oral health. Pregnancy may make women more prone to periodontal (gum) disease and tooth decay. Nearly 60 to 75% of pregnant women have gingivitis, an early stage of periodontal disease. Pregnant women may also be at risk for cavities due to changes in behaviors, such as eating habits.

One way to prevent tooth decay in children is to improve the oral health of pregnant women and women of childbearing age. If a pregnant mother is not aware of the importance of oral hygiene during pregnancy, she may not know to discuss her oral health with her primary care provider. Conversely, if the primary care provider does not discuss the importance of oral health during pregnancy, the opportunity for early prevention for mother and child has been missed.

Visiting the dentist and dental cleanings can mitigate oral health problems in pregnancy. According to the 2018 Ohio Pregnancy Assessment Survey (OPAS), less than 50 percent of pregnant women of all races had a dental cleaning during their pregnancy. This number drops considerably for pregnant women of color, below age 30 and those with incomes below $32,000 a year.

Children are 3x as likely to have tooth decay if their mothers have high levels of untreated tooth decay.

—American Academy of Pediatric Dentistry

Pregnancy is a critical time for bridging primary care and oral health. Visits to the Obstetrician Gynecologist (OBGYN) provide the opportunity to engage patients in oral health education, screening, prevention strategies, and referral/coordination to a dental provider for treatment. The good news is that pregnant women in Ohio are seeking prenatal care creating the opportunity for oral health integration.

2018 Ohio Pregnancy Assessment Survey (OPAS)

- No prenatal care: 2.5% (approx. 3,287)
- Prenatal care initiated in 1st trimester: 86.9% (approx. 114,785)
- Prenatal care initiated after 1st trimester: 10.6% (approx. 14,069)

86.9% of pregnant women in this OPAS survey received prenatal care in the first trimester.
Oral Health’s Status in Ohio

2019 Ohio Pregnancy Assessment Survey

<table>
<thead>
<tr>
<th>Race</th>
<th>Prevalence of Women Who Had Teeth Cleaned DURING Pregnancy:</th>
<th>Prevalence of Women Who Had Teeth Cleaned Year PRIOR to Pregnancy:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>43.89% overall average</td>
<td>44.1% overall average</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>47.7%</td>
<td>48.8%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>35.4%</td>
<td>34.4%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>32.4%</td>
<td>29.6%</td>
</tr>
<tr>
<td>Other, non-Hispanic</td>
<td>33.1%</td>
<td>31.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Prevalence of Women Who Had Teeth Cleaned DURING Pregnancy:</th>
<th>Prevalence of Women Who Had Teeth Cleaned Year PRIOR to Pregnancy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 20</td>
<td>23.9%</td>
<td>24.3%</td>
</tr>
<tr>
<td>20 – 24</td>
<td>32.2%</td>
<td>30.5%</td>
</tr>
<tr>
<td>25 – 29</td>
<td>38.1%</td>
<td>40.4%</td>
</tr>
<tr>
<td>30 – 34</td>
<td><strong>57.2%</strong></td>
<td><strong>57.3%</strong></td>
</tr>
<tr>
<td>35 and older</td>
<td>54.1%</td>
<td>54.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income</th>
<th>Prevalence of Women Who Had Teeth Cleaned DURING Pregnancy:</th>
<th>Prevalence of Women Who Had Teeth Cleaned Year PRIOR to Pregnancy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$32,000 or less</td>
<td>26.4%</td>
<td>27.5%</td>
</tr>
<tr>
<td>$32,001 – $57,000</td>
<td>38.7%</td>
<td>42.3%</td>
</tr>
<tr>
<td>More than $57,000</td>
<td><strong>64.9%</strong></td>
<td><strong>64.2%</strong></td>
</tr>
</tbody>
</table>

For pregnant women in the Early Head Start Program the number of pregnant women who received a professional dental exam is also low. 6

Pregnant Women Dental Services (EHS Programs)

Received professional dental exam(s) and/or treatment since last year’s PIR was reported: **21.2% (of 122 pregnant women)**

Interprofessional, team-based care has the potential to improve care coordination, patient outcomes and produce cost savings.

Finally, pregnancy is also an ideal time for oral health providers to provide education about:

- The importance of primary (baby) teeth which help children chew, speak and smile. They also hold space in the jaw for permanent teeth that are growing under the gums.

- The increased risk of dental problems such as delayed tooth eruption and tooth discoloration in premature infants.
Pre-School Age Children

The impact of tooth decay starts early in life. Primary (baby) teeth are key to a young child’s health and development. Healthy primary teeth are needed for chewing nutritious foods, speech development, socialization and to maintain space needed for the permanent teeth. Parents and caregivers play a crucial role in promoting oral health. The belief that primary teeth are not important because they will eventually fall out is a common misconception among caregivers. Early loss of primary teeth can have negative consequences for permanent teeth.

While Ohio has met 2020 national targets for preschool oral health, significant levels of dental disease persist. Compared to the US, a higher percentage of children in Ohio have experienced tooth decay and have untreated cavities.

Overall findings from the ODH, Oral Health Screening of Preschool Children 2016-2017 indicates that the prevalence of tooth decay among Ohio preschoolers is a public health problem we cannot ignore. Nearly one of every four preschool-age children in Ohio has experienced early tooth decay by age 5 years. Pain from tooth decay (cavities) can impair sleep, growth, and the ability to learn. Poor oral health can be a risk factor for kindergarten readiness because children cannot learn when they are in pain.

![Graph showing percentage of preschool-age children with tooth decay](image-url)

- **23%** Already had one or more cavities in their primary (baby) teeth
- **14%** Had cavities that had not yet been treated
- **10%** Reportedly had a toothache in the past 6 months

**Nearly 1 of every 4 preschool-age children in Ohio has experienced early tooth decay by age 5 years.**
Low socioeconomic status is one of the strongest determinants of tooth decay in children. 

**Far too many Ohio preschoolers are living in poverty.**

- **26.4%** of Ohio children ages 0-5 are living in poverty.
- **30.3%** of Appalachian children ages 0-5 are living in poverty.
- **53.9%** of Black children ages 0-5 are living in poverty.

Dental insurance plays a significant role in children’s use of dental services and their level of unmet dental needs. Uninsured children have the fewest dental appointments, and their parents are most likely to report unmet dental health needs due to cost. When preschool children are insured they have access to preventive dental visits which are associated with reduced restorative oral health care visits and related expenditures during the first years of life.

In Ohio, the Medicaid/Childrens Health Insurance Program (CHIP) is run in combination with the state’s Medicaid program.

**Too many Ohio children are still uninsured.**

In 2019, there were:

- **127,199** uninsured children under the age of 18 in Ohio.
- **139,631** children ages 18 and younger who could not get the dental care they need.

**Regional breakdown of children on Medicaid:**

- **1.25 million children** rely on Medicaid for health coverage.
  (Nearly HALF of Ohio’s 2.6 million children)
- **71,500** additional children have gained Medicaid coverage during the COVID-19 pandemic.

**% Ohio Children Covered by Medicaid per Region:**

- **Appalachia**: 63.1%
- **Metro**: 61.1%
- **Rural**: 48%
- **Suburban**: 40.3%

Data Source: Ohio Children’s Hospital Association
Reasons children may be uninsured:

1. Families are unaware of or confused by enrollment and renewal requirements for Medicaid.
2. There have been deep cuts in federal funding for navigator programs that help families understand how they can qualify for government health coverage.
3. Children are not eligible for Medicaid because of immigration status.

Primary care providers have the opportunity to engage caregivers in oral health education, screening, prevention strategies, and referral/coordination to a dental provider for treatment. This is also an ideal time for primary care providers to educate caregivers about:

1. The role of primary teeth which help children smile, chew, talk, and hold a space for the adult teeth that will fill their space.
2. Health behaviors which promote oral health (diet, sugar consumption).
3. The role of dental sealants in preventing decay on newly erupted permanent molars.

44% of non-dental providers in Ohio, reimbursed by Medicaid, applied FV to children ages five years and younger in 2019.

-IBM Watson
Silver Diamine Fluoride (SDF)

SDF is a topical medication used to slow down or stop dental decay in both primary and permanent teeth. It is particularly useful for providing dental care to individuals who present challenges to receiving traditional treatment because of their age, behavioral issues, or medical conditions.

When used under the supervision of a dentist in a comprehensive dental treatment plan, SDF has the potential to save in real dollars and opportunity costs. Currently, the material costs of SDF are several dollars per patient, whereas the cost of restorative procedures can be hundreds of dollars. SDF is a non-invasive option in arresting tooth decay and can play a role in mitigating the need for more extensive treatment and avoiding anesthesia.

Ohio is fortunate that SDF is a Medicaid covered service. Fewer than 20 state Medicaid programs cover SDF even though dental procedures are a common Medicaid expense.

We can do more:

- By expanding the number of dentists who apply SDF, we can give more Ohio children access to quality oral health care.

- Fewer than 30 percent of pediatric dentistry residency programs currently use SDF. By expanding the number of residency programs that use SDF, more children will have access to quality oral health care.
Enrollment in Early Head Start/Head Start

Head Start programs help pregnant women and parents understand the benefits of good oral health, the need to prevent oral diseases, and the importance of establishing a dental home and seeking care. Head Start programs also promote good oral hygiene in the classroom and at family meetings.

In 2019, 33,957 Ohio preschoolers, infants and toddlers were served by Head Start programs.

- Preschool children completing professional dental exams = 72%
- Preschool children needing professional dental treatment who received a professional dental exam = 20%
- Children needing dental treatment who received treatment = 58%

Ohio Children (Enrolled in Head Start) with a Dental Home:

<table>
<thead>
<tr>
<th>At BEGINNING of Enrollment Year</th>
<th>At END of Enrollment Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,911</td>
<td>5,900</td>
</tr>
<tr>
<td>(55.98%)</td>
<td>(67.26%)</td>
</tr>
</tbody>
</table>


More than 11% of children enrolled in Head Start nationally have a disability that qualifies them for special education and related services.

Data Source: National Center on Early Childhood and Wellness
School-Age Children

Pain Matters!
Dental pain has negative effects on school attendance, psychomotor performance, ability to learn, interpersonal interaction, psychosocial development and social, emotional and psychological well-being. Children are often unable to verbalize dental pain. Teachers may notice a child who is demonstrating effects of pain—anxiety, depression, and withdrawal from normal activities however, may not understand the cause of such behaviors if they are unaware that a child has an oral health problem.

Academic Readiness
As children get older, they experience both more tooth decay and more untreated tooth decay. This is in part due to the increased risk of sugar consumption and use of tobacco products among teens. Children and adolescents with oral health problems are more likely to have problems at school and less likely to complete their homework compared to those without oral health problems. The worse a child’s or adolescent’s oral health status, the more likely the child or adolescent is to miss school as a result of pain or infection.

Among children and adolescents ages 5–18, oral pain and acute asthma similarly impact school attendance.

Absenteism
Chronic, unmanaged health conditions, including pain from tooth decay, is a contributing factor to chronic absenteism, an early warning sign of academic risk and school dropout. Career readiness can be impacted when children fall behind at school and are not able to stay at grade level. Results of the Ohio Department of Health, Oral
Health Screening Survey of Third Grade Schoolchildren in Ohio, 2017-2018 indicate that children living in poverty and those living in Appalachian counties have the highest incidence of tooth decay and untreated tooth decay. These children have a more urgent need to see a dentist because of pain and infection but are less likely to see a dentist on a regular basis.¹⁵

**Career Readiness:**

**Tooth Decay as an Economic Case**
Approximately 1 in 6 Ohio children live in Appalachian Ohio. In order to sustain future economic prosperity, the region’s children must be career ready. Economists predict that baby boomer retirements will leave Ohio’s industries scrambling for skilled workers. Over the next twenty years, it will take virtually every child in the region to replace retiring workers and that does not account for the projected growth in manufacturing employment.¹⁶ With a 60% prevalence of tooth decay and 27% untreated tooth decay among Appalachian third graders in the ODH Third Grade Screening Survey, there is cause for concern that poor oral health could be a barrier to academic and career success.

**Mental Health & Well-Being**
Preventing and treating oral health problems can benefit psychosocial development, particularly as young people move from early to late adolescence when social interactions and peer attachments become more significant. Children and adolescents with oral health problems are more likely to feel worthless, inferior, shy, sad, or depressed.¹⁷ Adolescence is also a time for increased exposure to tobacco products and illicit drugs which can impact oral health and well-being.

With a 60% prevalence of tooth decay, and 27% untreated tooth decay among Appalachian third graders, there is cause for concern that poor oral health could be a barrier to future success.
The Oral Health Status of Ohio Children Has Been Steadily Improving.

Recent studies show that about 50 percent of third grade schoolchildren in Ohio have one or more sealants on their permanent (adult) teeth. Access to school sealant programs is a key factor for this improvement.

**Sealants:**
Dental sealants are an effective tool in both preventing tooth decay and stopping the progression of the disease. Placing dental sealants on molars significantly lowers the probability that decay will progress.

**Tooth decay is:**
- 5x more common than asthma
- 4x more common than early-childhood obesity
- 20x more common than diabetes

In Ohio, children from lower income families are more than twice as likely to have untreated cavities than children from higher income families.

Comparison of 2017-18 Ohio Survey Results to National Targets for 2020:

- **Children with history of tooth decay:**
  - **48%**
  - **49%**

- **Children with untreated cavities:**
  - **20%**
  - **26%**

- **Children with one or more dental sealants:**
  - **28%**
  - **48%**

- **Children who had visited the dentist within the past year:**
  - **49%**
  - **84%**

Data Source: Ohio Department of Health
Adverse Childhood Experiences (ACEs) & Child Trafficking

Oral health professionals have the opportunity to intervene on patients who experience ACEs and child trafficking when they present with craniofacial, head, face and neck injuries. ACEs are potentially traumatic events that occur in childhood (0-17 years) and undermine a child’s sense of safety, stability, and bonding. Child abuse is a common ACE. Child victims of trafficking are recruited, transported, transferred, harbored or received for the purpose of exploitation. Traffickers can use physical abuse as a form of control.

Learn more about preventing Adverse Childhood Experiences >>

Dental patients with a history of traumatic and adverse experiences are more likely to display fear of routine dental care.

Children with Disabilities

Children living with disabilities are at increased risk for a chronic physical, developmental, intellectual, behavioral, or emotional conditions and who require health and related services beyond typical needs. Interprofessional team approaches are critical to meet the oral health care needs of children with disabilities.

Systemic Challenges:

1. Competing demands with other urgent health needs that may seem more important than oral health
2. Difficulty finding a dentist who is trained to care for children with special needs
3. Lack of preventive & timely oral health care may increase a need for costly care & exacerbate systemic health issues
4. Finding a dental home as children with disabilities age into adulthood can be challenging
5. Lack of or inadequate insurance

1. Dental and dental hygiene schools to increase opportunities to learn how to work with and provide care for children with disabilities.
2. Interprofessional teams to integrate oral health services in social, educational, and general health systems.
3. Interdisciplinary, collaborative efforts between dentists, nutritionists, primary care providers and other health professionals.
Oral Health’s Status in Ohio

Adults

We know that community conditions and systemic barriers that delay and prevent oral health in childhood, persist into adulthood. We also know that the bacteria that causes tooth decay in children is a chronic condition that typically lasts into adulthood—with new costs and consequences.

Systemic Conditions that Persist Into Adulthood & Impact Oral Health

ACCESS TO DENTAL CARE

1,261,911 Ohio adults (ages 19–64) could not get needed dental care over a 12-month period.

770,041 Ohio adults (ages 19–64) were uninsured.

EMERGENCY DEPARTMENT (ED) UTILIZATION

While the number of ED visits for non-traumatic dental problems among Ohio adults has decreased in the past three years, the rate at which they receive follow-up care has not improved. Patients who visit the ED for oral pain are typically prescribed painkillers or antibiotics, which do not treat the underlying cause of the problem—making a follow-up dental visit essential.

2017: #ED Visits = 63,463
Follow-up visit within 7 days 36%
Follow-up visit within 30 days 44%
Follow-up visit within 180 days 56%

2018: #ED Visits = 52,286
Follow-up visit within 7 days 37%
Follow-up visit within 30 days 44%
Follow-up visit within 180 days 55%

2019: #ED Visits = 45,110
Follow-up visit within 7 days 38%
Follow-up visit within 30 days 45%
Follow-up visit within 180 days 56%

Data Source: Ohio Dept. of Medicaid

SOCIO-ECONOMIC STATUS

Before the COVID-19 pandemic, more than 1.6 million Ohioans were living in poverty...

Since 2014, more than 1.26 million individuals have enrolled in Ohio Medicaid through its expansion, nearly one-fifth of Ohio’s adult population.20

The number of Ohioans enrolled in Medicaid coverage has increased more than 250,000 since the start of the pandemic.21
Oral Health’s Status in Ohio

Poverty in Ohio Adults by Race/Ethnicity, 2018
(Age 18-64)

- 21% Hispanic
- 25% Black African-American
- 22% Mixed Race
- 12% Asian

Ohioans of color face large gaps in outcomes across socio-economic factors, community conditions and health care. This, in turn, drives poorer and more costly health outcomes among Ohioans of color.22

Vulnerable Populations

Veterans

To quality for VA dental benefits, a veteran must be 100 percent disabled, have been a prisoner of war or have developed a dental condition during their service. Veterans are able to buy a dental plan through the VA, but low-income veterans may not be able to afford insurance. According to the US Surgeon General, poor oral health impacts our nation’s ability to recruit young adults for military service and maintain military readiness.

- 680,310 veterans are living in Ohio.
- 7.2% of Ohio veterans live in poverty and 676 of them are homeless.

Adults with Special Healthcare Needs

- 21% of adults with special healthcare needs had unmet dental needs.
- 22% of adults with a disability had unmet dental needs.

Data Source: State of Poverty in Ohio, 2020, Ohio Association of Community Action Agencies

Learn more about the state of poverty in Ohio from the Ohio Association of Community Action Agencies, >>
Oral health can be compromised by:

- Tooth Decay (Cavities)
- Periodontal (Gum) Disease
- Trauma or Injury to the Oral Cavity
- Viral/Fungal Infections in the Mouth
- Oral Cancer

Oral Disease is Linked to Broader Health Problems.

Periodontal disease (gum disease) is associated with systemic conditions including:

- Heart Disease & Stroke
- Pulmonary Disease
- Diabetes
- Osteoporosis
- Pregnancy Complications
- Inflammatory Disease
- Gastrointestinal Disease
- Kidney Disease

Many medications can lead to a dry mouth, increasing the risk of tooth decay or gum disease.
The oral cavity is the window to general health. There is no health without oral health.

Clinical Consensus

Many medical organizations have reached clinical consensus on the importance of oral and dental health to the management and treatment of disease/conditions within their respective disciplines.

Learn more at: Clinical Consensus on Medically Necessary Dental Care >>

- American Academy of Neurology
- American Association of Clinical Endocrinologists
- American Association of Hip & Knee Surgeons
- American College of Cardiology
- American College of Emergency Physicians
- American College of Gastroenterology
- American College of Physicians
- American College of Rheumatology
- American Diabetes Association
- American Nurses Association
- American Psychiatric Association
- American Society of Clinical Oncology
- American Society of Transplant Surgeons
- American Thoracic Society
- Society for Transplant Social Workers

Chronic health conditions create a massive burden on the health of individuals as well as the entire healthcare system. It is well understood that patients with good oral health require fewer healthcare dollar expenditures than those with poor oral health.

Human Papillomavirus (HPV)

HPV is the most common sexually transmitted infection in the United States. HPV can infect the mouth and throat and cause cancers of the oropharynx (back of the throat, including the base of the tongue and tonsils). This is called oropharyngeal cancer. HPV is thought to cause 70% of oropharyngeal cancers in the United States. Oropharyngeal cancers are now the most common HPV-associated cancer, surpassing cervical cancer. Oropharyngeal cancers are more common among men than women. Tobacco and alcohol are among the most important risk factors for oropharyngeal cancers.

Through visual inspection, dentists and physicians can often detect premalignant abnormalities and cancer at an early stage, when treatment is both less extensive and more successful.

Treating Gum Disease lowers annual medical costs for diabetes, stroke, heart disease and pregnancy by an average of 42% (that's approx. $3,011).

Treating Gum Disease also reduces hospital admissions. 24

HPV: Medical-Dental integration

Oral health professionals educate adolescent patients and their caregivers about HPV, tobacco and alcohol risk factors, and the benefits of HPV immunization in preventing oropharyngeal cancer.

Oral health professionals administer vaccines. *The American Dental Association has offered its support to dentists who are seeking to administer vaccines.
Dental Anxiety/Fear

Fear of dental treatment is a common and significant problem in the United States, impacting patients as well as oral health care providers. Twenty-eight percent of Ohio adults report the reason they do not visit the dentist is due to fear. This is important because we know that adults who go to the dentist take their children to the dentist. ED visits for non-traumatic dental conditions are a significant and costly public health problem for vulnerable individuals. This includes those who delay or forgo dental treatment due to anxiety/fear.

Oral Cavity & Pharynx Cancer

Early detection is critical in the prognosis of oral cancer. Without access to regular dental care for early detection, patients are at a higher risk of developing oral cancer.

A recent study showed disparities based on demographics, with individuals who were a racial/ethnic minority, low income, less educated and uninsured or publicly insured less likely to be screened for oral cancer than those who were white. The study also showed that only about one-third of U.S. adults 30 and older who had visited a dental practice within the last two years reported receiving an oral cancer screening exam.

When consumers are not aware of the importance of oral cancer screening, they may not know to discuss this with their oral health provider. Conversely, if an oral health provider does not discuss the importance of oral cancer screening, the opportunity for early detection has been missed.

Oral cavity and pharynx cancer had a higher proportion of late-stage tumors in Ohio (65%) when compared to the U.S. (61.5%).

Percent of Cancer Cases by Stage at Diagnosis for Oral Cancer Sites/Types in Ohio and the United States, 2012-2016:

<table>
<thead>
<tr>
<th></th>
<th>OHIO</th>
<th>UNITED STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Cavity &amp; Pharynx cancer:</td>
<td>Early Stage = 30.1%</td>
<td>Oral Cavity &amp; Pharynx cancer:</td>
</tr>
<tr>
<td></td>
<td>Late Stage = 65%</td>
<td>Late Stage = 61.5%</td>
</tr>
</tbody>
</table>

Data Source: Ohio Annual Cancer Profile, 2019, Ohio Department of Health

How Do Adults View Their Oral Health?

22% of Ohio adults avoid smiling.

17% of Ohio adults feel embarrassment.

16% of Ohio adults experience anxiety.

Due to the condition of their mouth & teeth...

28% of Ohio adults report the reason they do not visit the dentist is due to fear.
Oral Health’s Status in Ohio

**Ohio’s Aging Environment**

According to the Ohio Department of Aging, by 2022, more than 27 percent of Ohio’s labor force will be age 55 or older. While some policymakers may frame the decision to work longer as a positive development, experts have pointed out that it is often the least healthy older workers who are pushed back into the labor market.

Ohio’s aging and labor force demographics make the older worker an essential part of the state’s future economy and access to affordable dental care has a positive effect on people’s ability to obtain and maintain employment.

**Population Growth of Older Ohioans:**

- **1.6% overall**
  population growth by 2030.
- **30% of age 60+**
  population growth by 2030.
  (from 2.6 million to 3.4 million)

**Females—The Gender Gap Issue**

An aging Ohio workforce poses specific challenges to older women. Women are more likely to experience financial insecurity than men, and this discrepancy becomes even more pronounced later in life. Women at every age earn less than men of the same age, but the gender pay gap is far wider for older working women.

---

**Older Adults & Tooth Loss**

- 39% of adults age 65 and older in Ohio have lost 6 or more teeth;
  17% have lost all their teeth.
- 10 times more older adults with a high school education have lost ALL their teeth, compared to those with a college education (41% vs. 4%).
- Nearly 10 times more older adults with an annual income below $15,000 have lost ALL their teeth, compared to those with an income greater than $75,000 (37% vs. 4%).

Data Source: Ohio BRFSS, 2018

Access to affordable dental care has a positive effect on people’s ability to obtain and maintain employment.
Older Adults

The Medicare Dilemma

The absence of a dental benefit in the Medicare program is an equity, health and economic issue and poses serious challenges to older workers who experience unmet oral health needs and experience chronic disease.

**Access to Dental Insurance:**
- There are 382,600 beneficiaries in the PASSPORT Program, which is Ohio’s dual eligibility program; individuals entitled to Medicare and also eligible for some level of Medicaid benefits.
- There are 859,883 beneficiaries enrolled in Medicare Advantage Plans. These plans are limited, do not include all medically necessary dental care, and usually only pay for basic services, such as cleanings.

**Population Health:**
- Medicare beneficiaries represent 20% of the total Ohio population.
- Among Ohio adults aged 65 years and older, 80.3% have at least one chronic condition, and 46.5% have two or more.
- Almost 35% of Ohioans age 65 and older live with a disability.

**Socioeconomic Status:**
- Almost eight percent of Ohioans age 65 and older live in poverty.
- Nearly 18 percent of people of color, age 60 and older live in poverty.

**Vulnerable Medicare Populations:**

Oral health coverage in Medicare is highly meaningful to the 409,989 disabled Ohioans under age 65 who are eligible for Medicare. A dental benefit in Medicare is a significant factor in this subgroup who may be trying to stay in or get back into the workforce.

Among all Medicare beneficiaries living in the community, disabled adults under age 65 have:

- **the highest rate (33%) of difficulty chewing & eating solid foods due to their teeth.**
- **26 percent** that went without needed dental care in the past year **due to cost.**
- **62 percent** of this sub-group went without a dental visit in 2019.
The Oral Health of Skilled Nursing Facility Residents

Residents living in skilled nursing facilities face health challenges related to oral health.

**Aspiration Pneumonia**
A common consequence of poor oral hygiene in nursing home residents is a risk of aspiration pneumonia. Aspiration pneumonia occurs when food, saliva, liquids, or vomit enters the lungs or airways leading to the lungs, instead of being swallowed into the esophagus and stomach. This risk is greatest when gum disease, tooth decay and poor oral hygiene are compounded by a swallowing disorder, feeding problems and poor functional status.

**Periodontal Disease**
Periodontal (gum) disease is a chronic inflammatory disease that affects the gum tissue and bone supporting the teeth. Untreated tooth decay and gum disease can exacerbate certain diseases such as diabetes and cardiovascular disease, and lead to chronic pain, infections, and tooth loss.

Gum disease is the most common dental disease affecting those living with diabetes. The relationship between periodontal disease and diabetes is important because approximately 25 percent of all nursing home residents have diabetes, and that proportion is expected to increase. People with diabetes are at a higher risk for gum problems because of poor blood sugar control. As with all infections, serious gum disease may cause blood sugar to rise which makes diabetes harder to control. People with diabetes are more susceptible to infections and are less able to fight the bacteria invading the gums.

**Malnutrition**
Oral disease can lead to malnutrition in older adults. According to the American Journal of Public Health at least one-third of all 1.6 million nursing home residents in the U.S may suffer from malnutrition or dehydration. Nutrition is compromised when eating becomes problematic due to pain, broken teeth, and difficulty chewing.

Xerostomia or dry mouth is a side effect of hundreds of medications. Dry mouth significantly increases the risk of tooth decay and loosening dentures. This can lead to painful ulcerations, difficulty chewing or swallowing and altered taste, which can negatively impact nutrition. Incidence of dry mouth increases with the number of medications used.
Ohio’s Oral Health Status in Ohio

Diversity

More needs to be done to recruit oral health professionals to mirror the racial and ethnic diversity of Ohio’s population.

Ohio Population:

- 9% Black
- 12% Other
- 79% White

Data Source: Development.Ohio.gov

Dental Health Professional Shortage Areas

Ohio has a shortage of dental providers who accept Medicaid, which significantly impacts oral health outcomes in Ohio.

- Approximately 30% of licensed Ohio dentists are Medicaid providers.
- Only 14% of licensed Ohio dentists treat a significant number of Medicaid consumers (submitted claims for 250 or more consumers).

There are 10 state-designated dental health resource shortage areas and 149 federally designated dental HPSAs in Ohio. All of these areas need at least one additional dentist to meet federal or state guidelines for minimally acceptable population to dentist ratios.

Data Source: Ohio Department of Health

Dental Hygienists:

- 94% White
- 2% Black
- 4% Other

Dentists:

- 81% White
- 4% Black
- 14% Other

Data Source: Ohio Department of Health

Safety Net Dental Clinics & Dental HPSAs in Ohio:

Click to enlarge >>

Data Source: Ohio Department of Health

- Dental HPSA (whole county)
- Dental HPSA (sub-county: indicates one or more sub-county HPSAs)
- Safety Net Dental Clinics (indicates one or more dental clinics in county)
Workforce: Building Access

Ohio Dentist & Dental Hygienist Loan Repayment Programs

The goal of the ODLRP and the ODHLRP is to increase access to dental care for underserved communities and populations. In exchange for loan repayment assistance, dentists and dental hygienists commit to practice for a minimum of two years at an eligible site in a Dental Health Professional Shortage Area (HPSA) or Dental Health Resource Shortage Area, accept Medicaid, and see patients regardless of ability to pay. In 2019, seven dentists and nine dental hygienists were serving in federal or state designated shortage areas in Ohio.

The Oral Health Improvement through Outreach (OHIO) Project, The Ohio State University

The OHIO project gives senior dental students the opportunity to apply coursework to a real-world setting. In doing so, students experience different types of communities and help underserved populations in Ohio receive dental care. Students are exposed to different models of clinical practice and are able to interact with and provide care to vulnerable populations.

- 3,000 patients have been encountered on the Dental H.O.M.E. Coach each year
- 141,000 patients have been encountered overall
- 331,000 procedures have been performed
- $17.1 million in dental services have been provided

The Ohio Department of Health, Primary Care Office offers additional oral health workforce programs to expand the number of oral health professionals in underserved areas of Ohio.

Learn more at ODH.Ohio.gov >>
Ohio’s Oral Health Plan, 2021-2022

1. ADVOCACY
2. HEALTH LITERACY
3. SYSTEM COLLABORATION
4. HEALTH EQUITY
OBJECTIVE 1 > Educate Policymakers about Oral Health Prevention, Access & Relationship to Overall Health.

Strategy:

- Educate policymakers about the benefit and cost savings of dental sealants in disease prevention.
- Increase the state budget for expansion of school-based sealant programs.
- Ensure dentistry remains included in telehealth rules. Telehealth can benefit a broad range of populations, including Medicare and Medicaid beneficiaries, the uninsured, underserved, and rural populations, people with urgent dental care needs, and people who fear going to the dentist.
- Strengthen Ohio’s dental system in the state budget.

Ohio's Dental System in the State Budget

Ohio has 176 safety net dental clinics.
Federally Qualified Health Centers (FQHC)

- Are part of Ohio’s safety net system
- Offer an innovative model of care that removes barriers and health disparities.
- Lowers health system costs and allows communities to lead in the direction of their own care.
- Leaders in integrating medical care, behavioral health, substance use treatment, dental, vision, pharmacy, and other services all under one roof. Forty-one of Ohio’s 56 FQHCs provide dental services.

Medical Dental Integration

Screening for high blood pressure in FQHC dental practices and the 10-year strong oral health screenings and fluoride varnish initiatives during well child check-ups in the medical exam rooms.

Interprofessional Practice

Three dental centers are piloting a training program addressing tobacco cessation in their patient population and will include referral to behavioral health provider/case manager, pharmacy/pharmacist, medical provider and include a dental prescription written for tobacco cessation medication.

Threats to Ohio’s Oral Health Safety Net System

- Low reimbursement for dentists
- 23 safety net clinics have closed since 2013
- Low medical-dental integration in Medicaid and Medicaid Managed Care Programs
- COVID-19
- Dental safety net budget has decreased while need has increased
- Medical and dental electronic medical records do not communicate with each other
OBJECTIVE 2 > Include Oral Health in All Target Areas of the State Health Improvement Plan (SHIP)

The 2020-2022 State Health Improvement Plan identifies three priority health outcome areas—each having a relationship to oral health: Mental Health & Addiction, Chronic Disease, and Maternal and Infant health. Oral health is necessary for overall health and well-being at all stages of life.

Strategy:
- Incorporate oral health strategies throughout the SHIP to strengthen state and local efforts to improve health, well-being, and economic vitality in Ohio.

OBJECTIVE 3 > Adopt K-12 Health Education Standards and/or Curriculum.

Ohio is the only state in the nation that has not adopted health education standards.

Strategy:
**Adopt K-12 Health Education Standards**
Because oral disease is largely preventable, and costly when treatment is delayed, including oral health in K-12 health education standards has the potential to:
- Create oral health literacy among a population of high-risk children.
- Build lifelong knowledge, skills, and habits essential to oral health.
- Address powerful determinants of oral disease including family and peer influences and access to oral health care.
- Ensure systemic delivery of age-targeted prevention services, such as Fluoride Varnish.
- Develop care-management systems to help families successfully navigate community services and connect children to a dental home.
Include Oral Health in School-Based Drug Prevention Education & Mental Health Promotion Curriculum

Include dental/oral health activities that can be integrated into general content/subject areas (math, science, English).

- Include oral health problems associated with **tobacco use** including stained teeth and tongue, bad breath, dulled taste and sense of smell, slow healing after a tooth extraction or other surgery, gum disease and oral cancer.

- Include oral health problems associated with **illicit drug use** including tooth loss, xerostomia (dry mouth), burning mouth, eating difficulties and burns and sores on the lips, face and inside the mouth.

- Include oral health content related to **sugar sweetened beverages** and the impact of tooth loss and decay on (mal)nutrition.

Support cessation efforts among students.

Include psychosocial factors of substance use disorders and their impact on oral health.

- Neglected self-care, including oral hygiene.

- People facing substance use disorder often seek healthcare at advanced stages of disease, including oral disease.

- Low priority is often given to oral health during periods of drug abuse causing people to seek only emergency treatment.

- Drug withdrawal may result in dental pain which interferes with drug treatment, abstinence, and relapse.

- Self-medication of dental pain by injecting drugs directly into gums and teeth thereby delaying treatment to a dentist.

- Illicit drugs may lead to an increase in risky sexual behavior resulting in the spread of infectious diseases such as HIV/AIDS and oral cancer.
OBJECTIVE 4 > Advocate for a Dental Benefit in the Medicare Program

- Medicare is the primary source of health coverage for older adults and younger individuals with disabilities. Yet, Medicare explicitly excludes coverage for most dental services. Among all Medicare beneficiaries living in the community, disabled adults under age 65 have the highest rate (33%) of difficulty chewing and eating solid foods due to their teeth, and forgoing needed dental care in the past year due to costs (26%).

Strategy:
The Centers for Medicare and Medicaid Services (CMS) has the authority to cover medically necessary oral health care which refers to care that is needed when dental infections/diseases may complicate or stand in the way of receiving important, Medicare-covered medical treatments such as chemotherapy, immunosuppression, organ transplants, orthopedic surgery, and heart valve repair.

Medicare beneficiaries with low incomes, in poor health, and under age 65 with disabilities are most likely to go without needed dental care due to costs.

National organizations leading advocacy efforts to expand dental benefits in the Medicare program:
Justice in Aging, The Center for Medicare Advocacy and Families USA

 Opportunity

- Support national legislative efforts to include expanding oral health care in the Medicare program.
- Support advocacy efforts to petition CMS to cover medically necessary treatment of Medicare-covered diseases, illnesses, and injuries.
OBJECTIVE 1 > Increase Oral Health Literacy of Ohioans & Non-Oral Health Professionals.

The misconception that oral health is less important than general health continues to exist among Ohio citizens including health care workers, legislators, insurance companies, educators, and community leaders. Oral health literacy is not only the capacity to process and understand basic oral health information, but also the ability to navigate a complex health care system and make informed decisions about their oral health.

The problem of limited health literacy is greater among older adults, those who are poor, people with limited education, minority populations, and persons with limited English proficiency. Low oral health literacy is associated with:

- Increased severity of dental disease
- Fewer dental visits
- Low level knowledge about oral health
- Higher rates of failed appointments
- Lower oral health related quality of life

Goal: Ohioans know the relationship between oral and systemic health.

OPPORTUNITY

Include oral-systemic connections in patient education in primary & specialty care practices.

- Managed Care Organizations (MCOs) provide literature on oral-systemic connection to primary and specialty provider practices in their networks.
OBJECTIVE 2 > Oral Health Clinicians Provide Culturally Competent and Linguistically Appropriate Care.

Delivery of oral health services that meet the social, cultural, and linguistic needs of patients can help improve health outcomes and quality of care—and contribute to the elimination of racial and ethnic health disparities.

Oral health professionals may not be aware that a patient is having a problem understanding what is being communicated to them.

Strategy:

- **Implement a health literacy environmental scan** as an actionable way dental practices can determine if services are health literate and patient centered.

- **Build networks** with community and faith-based organizations, social service agencies, and nontraditional partners—such as foster care services, schools, and literacy service providers—to deliver oral health information.

- **Leverage technology** and electronic health tools to deliver health information and services at the time, in the place, and in the multiple formats people need and want.

- **Prepare future oral health leaders** to support the needs of underserved communities.

- **Educate an equity-oriented** current and future oral health workforce.

- **Complete cultural competency instruction** at time of healthcare professionals’ license renewal.

To improve oral health equity we must increase oral health literacy.
**Goal:** Integration of oral and overall health across systems.

**OBJECTIVE 1 >** Engage Non-Dental Professionals in Oral Health.

Many different people play a role in our oral health care system. School nurses, primary care providers, pharmacists and public health officials are important team-players. These professionals, along with oral health providers work together so that all Ohioans have access to good oral health.

**Strategy:**
- Integrate oral health competencies and capabilities into primary care offices and training programs.
- Include oral health screening and referral in primary care practices and medical specialties where there is an association between oral and systemic health (cardiology, endocrinology, OBGYN).
- Include application of FV as standard of care in pediatric offices.
- Increase reimbursement and/or provide incentives for oral health evaluation, application of fluoride varnish, and oral health education for non-oral health providers.
- Educate caregivers to ask their child’s primary care provider to apply fluoride varnish at well-child visits.
- Advocate for a State Dental Director at the Ohio Department of Health, whose role includes working across systems and agencies to elevate the value of oral health in overall health and well-being.
- Integrate oral health education in mental health, addiction, and recovery support services.

**Navigation and care coordination are important interventions to bridge the medical-dental divide.** Because of the lack of physical proximity between dental and medical practices many patients and providers have difficulty navigating this divide.

A variety of different health care team members can provide navigation functions. These include clinical assistants, case managers, community health workers or promotores de salud, and social workers.

In dentistry, a new allied health professional being trained for this role is called a community dental health coordinator.
**OBJECTIVE 2 > Improve Oral Health Education In Schools.**

- Schools are ideal settings in which to reach children and adolescents about oral health education and prevention because it is during this time that health behaviors develop.
- Early tooth loss caused by tooth decay can result in failure to thrive, impaired speech development and reduced self-esteem.
- Children cannot learn when they are in pain.

**SBHCs are a powerful tool for achieving health equity among children and adolescents and has a strong focus on disease prevention.**

**Health equity means that everyone has a fair and just opportunity to be as healthy as possible.**

**Strategy:**

**School-Based Health Centers (SBHCs)** provide students and their families access to health care in a location that is safe, convenient, and accessible. By bringing oral health care out of the dentist office into the school community, children and adolescent are able to thrive in the classroom and beyond. Incorporating dental hygiene in nontraditional practice settings, such as schools, can help expand access to underserved school age children.

**Who Pays for SBHCs?**
There are **61 SBHCs in Ohio**, some of which provide dental services.

Preschool providers and school nurses educate caregivers about the benefits of fluoride varnish and sealants in disease prevention.

**Increase the number of community-based mobile dental facilities that provide preventive services to schools.**

**School-Linked Health Centers (SLHCs)** are health care facilities for children and adolescents that are located beyond school property that have formal or informal relationships to one or more schools in the community.
OBJECTIVE 3 > Improve Oral Health Education In Long-Term Care Facilities.

- Individuals living in long-term care facilities are significantly more likely to have poorer oral health status compared to individuals living independently due to varying degrees of physical and cognitive decline and dependency on caregivers for their oral care.
- Most health professionals have little oral health education in medical/nursing school or certificate programs.

Strategy:
- Oral Health Ohio has submitted best practice recommendations to the Ohio Department of Health, Nurse Aide Training Program to update the oral hygiene section of the Nurse Aide Training and Competency Evaluation Program: Standards and Guidelines. The recommendations are anticipated to be reviewed in 2021-2022.
- Oral Health Ohio has applied for a grant through the Ohio Department of Medicaid, Civil Monetary Penalty Fund to change oral health culture in long-term care facilities through an interprofessional educational quality improvement initiative to raise awareness, comfort and confidence in providing routine care and identifying oral health problems.
HEALTH EQUITY

Goal: Equitable systems and access to care.

OBJECTIVE 1 > Preserve the Adult Dental Benefit Under The Medicaid Program.

Ohio is one of nineteen states with a comprehensive dental benefit. Adult dental benefits are optional in the Medicaid program. An adult dental benefit is critical to maintaining the oral and overall health of Ohio Medicaid beneficiaries.

Preserve Medicaid expansion
Medicaid expansion has dramatically reduced the uninsured rate among Ohioans with the lowest incomes. 526,100 people were covered under Medicaid expansion in 2018. Medicaid expansion has been especially important for those who have lost their jobs during the pandemic with 250,000 enrolled since the start of the pandemic. According to a recent study, Medicaid expansion combined with an adult dental coverage in Medicaid is associated with a reduction in ED utilization for dental visits.

Preserve dentistry in telehealth rules
Medicaid authorized certain telehealth services to promote access to oral health care during the pandemic. Telehealth rules allow healthcare providers, including dentists, to deliver health care, health education, and health information services via telecommunication and digital communication technologies. Telehealth has the potential to reduce health care inequalities by creating a virtual dental home for Ohioans who otherwise do not have access to dental care.

Medicaid Expansion and ED Utilization for Oral Care

States with Expanded Medicaid with Dental Coverage:

- **14% Decrease** in ED utilization for dental care.

States that Did Not Expand Medicaid:

- **up to 28% Increase** in ED utilization for dental care.

Patients with a dental telehealth visit cost 10% less to treat in 2018 than dental patients who don’t use telehealth services.
OBJECTIVE 2 > Increase Medicaid Providers.

Medicaid dental reimbursements are at levels that make it extremely difficult for dentists to participate as providers in the Medicaid program. Ohio dental fees have not changed in the past 20 years with the exception of a modest increase in 2016 for extractions and denture repairs statewide and a 5 percent fee increase for all dental procedures in 52 rural counties.

Medicaid reimbursement rates, in part, determine the success of Medicaid programs. Research has shown that adjusting Medicaid payment rates closer to “market” levels in conjunction with other reforms has a significantly positive effect on access to dental care. Other reforms include incorporating dental hygiene in nontraditional practice settings, including primary care, nursing homes and schools can help expand access to underserved populations.

Ohio Medicaid Reimbursement Fees are far below “market” levels charged by dentists: 45

<table>
<thead>
<tr>
<th></th>
<th>Medicaid Fee-For-Service Reimbursement as a Percentage of Private Dental Insurance Reimbursement, Adult Dental Services, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child dental services</td>
<td>46.8%</td>
</tr>
<tr>
<td>Adult dental services</td>
<td>45.7%</td>
</tr>
</tbody>
</table>

OBJECTIVE 3 > Increase Programs that Provide Prevention Services.

We can reduce the cost of oral health by stopping problems before they start. Prevention programs help people avoid serious problems like gum disease that are expensive to treat. And they help people catch potentially serious problems like cancer before they progress. We need to make sure that all communities have strong prevention programs so we can reduce the cost of health care and avoid unnecessary expenses.

Untreated tooth decay can lead to infections that may spread to other parts of the body. Making sure more children and adolescents have access to oral health services can help reduce untreated tooth decay.

The CPC program is an opportunity to include oral health as a standard for improved access and quality care.
Ohio’s Comprehensive Primary Care (CPC) Program

New infants and young children attend numerous well visits to the pediatrician. When oral health is introduced by the pediatrician, children are more likely to receive preventative services such as fluoride varnish and sealants. Currently, 680,000 children, reflecting over half of all the children in the Ohio Medicaid program, are receiving care through the Comprehensive Primary Care (CPC) Program, which incentivizes providers to meet desired standards of access and quality. The CPC program is an opportunity to include oral health as a standard for improved access and quality care.

- Expand the number of dentists who apply SDF to further efforts to give more Ohio children access to quality dental care.
- Expand the use of community mobile dental facilities for preventative care.
- Expand oral health care in non-traditional settings, including schools, nursing homes, pharmacies, or community centers.
- Direct resources toward keeping people healthy rather than pay to treat the sick.
- Test new reimbursement models that focus on health outcomes and population health, such as value-based care.
- Advocate for a State Dental Director at the Ohio Department of Health.
- Integrate how non-clinical factors, such as how community conditions, influence patient outcomes in the dental setting.
- Advocate to support Ohio’s dental system in the state budget.
- Create pathways of care for people being released from prison to get the oral healthcare they need.
- Health systems to include reducing emergency department utilization for non-traumatic dental problems as a goal to improve health outcomes.
- Advocate for funding for oral health workforce efforts, including community health workers.
Access & Prevention: Ohio Successes

**HB 203 (2019-2020)** requires that patients who receive services on a mobile dental facility (MDF) are provided a copy of their medical record so that efficient and effective services can be provided when seeking follow-up care at a dental office. This legislation provides greater transparency and access to oral health services delivered by MDFs.

**HB 11 (2019-2020)** permits ODM to establish a program to provide dental services to pregnant Medicaid recipients. If the program is established pregnant Medicaid recipients are eligible to receive two dental cleanings per year and ODM must give priority to recipients residing in areas with high preterm birth rates and market the program to Medicaid recipients.

Fluoridation of community water supplies is the single most effective public health measure to prevent tooth decay. Scientific evidence has consistently indicated that fluoridation of community water is safe and effective in reducing tooth decay by more than 25% in children and adults, even with widespread availability of fluoride from other sources, such as fluoride toothpaste. Because of the important role it has played in the reduction of tooth decay, the Centers for Disease Control and Prevention has proclaimed community water fluoridation one of ten great public health achievements of the 20th century.
Acknowledgements:

Special gratitude and thanks go to the following contributors:

Ohio Association of Community Health Centers
Ohio Department of Health
Ohio Dental Association
Ohio Dental Hygienists’ Association
Ohio School Nurse Association
Ohio Department of Medicaid
Nationwide Children’s Hospital
Medina County Health Department
Summit County Public Health
Delta Dental of Ohio
Community Health Foundation
HealthPath Foundation
Dental Center of Northwest Ohio
Fitzgibbon Group
Ohio Association of Free Clinics: Charitable Healthcare Network
Voices for Ohio’s Children
Ohio Federation for Health Equity & Social Justice

We are also grateful to the members of the Oral Health Ohio, Access & Education and Advocacy committees and to Dr. Paul Casamassimo for their editorial contribution to this report.

And a special thank you to Jen Peters at JP Design for the design of this report. www.jpdesignhouse.com
References

1. Social Determinants of Health, Healthy People 2020
2. Reversible Decay: Oral Health is a Public Health Problem We Can Solve
3. Oral Health: Pregnancy
4. Ohio Pregnancy Assessment Survey 2019, Ohio Department of Health
5. Ohio Pregnancy assessment Survey 2019, Ohio Department of Health
7. From the Ground Up: Unearthing Fairness for Ohio Kids
9. Let’s Not Make Children Wait 17 Years
10. Pathways between toothache and children’s oral health-related quality of life
12. Addressing Adolescent Oral Health: A Review
14. The comparative morbidities of acute dental pain and acute asthma on quality of life in children
15. Oral Health Screening Survey of Third Grade Schoolchildren in Ohio, 2017-18, Ohio Department of Health
17. Oral Health and Learning: When Children’s Oral Health Suffers, So Does Their Ability To Learn
18. Ohio Department of Health, Oral Health Program
19. American Academy of Pediatric Dentistry
20. 2018 Ohio Medicaid Group VIII Assessment: A Follow-Up to the 2016 Ohio Medicaid Group VIII Assessment, August 2018
21. Ohio Medicaid rolls increase during pandemic
22. The Health Policy Institute of Ohio, 2019 Health Value Dashboard
23. Pregnancy and Oral Health
24. Impact of Periodontal Therapy on General Health: Evidence from Insurance Data for Five Systemic Conditions
26. Ohio’s Oral Health and Well-Being
27. State Plan on Aging, 2019–2022
28. America’s Elderly Are Twice as Likely to Work Now Than in 1985
29. Kaiser Family Foundation, Distribution of Medicare Beneficiaries, Ohio, 2017
30. Kaiser Family Foundation, Distribution of Medicare Beneficiaries, Ohio, 2017
31. The State of Elder Ohio, Preparing Ohio’s 2019–2022 State Plan on Aging, External Partner Roundtable, 2018, Ohio Department of Aging
33. The Ohio Poverty Report, 2017, Ohio Developmental Service Agency
34. ACL, Aging Integrated Database, AGID, 2016
35. Drilling Down on Dental Coverage and Costs for Medicare Beneficiaries, March 13, 2019, Kaiser Family Foundation
36. American Diabetes Association, “Special Considerations for Older Adults with Diabetes Residing in Skilled Nursing Facilities,” Feb 2014
37. KFF Health, Tracking Poll – February 2019: Prescription Drugs
39. Kaiser Family Foundation, March 13, 2019
40. National Academy of Medicine. Integration of Oral Health and Primary Care: Communication, Coordination and Referral, October 2018, By Kathryn A. Atchison, R. Gary Rozier, and Jane A. Weintraub
41. Ohio and the ACA’s Medicaid expansion Healthinsurance.org
43. Changes in emergency department dental visits after Medicaid Expansion, Hawazin W. Elani BDS, PhD1 • Ichiro Kawachi MB.ChB, PhD2 • Benjamin D. Sommers MD, PhD3
44. Tranby E. and Thakkar Samtani M. Teledentistry is an Effective Tool to Triage Patients and Save Money. DentaQuest Partnership for Oral Health Advancement. Boston, MA; December 2020. DOI: 10.35565/DQP.2020.2026
45. American Dental Association, Health Policy Institute, 2017
Healthy Mouths ➤ Healthy People ➤ Strong Communities

Connect with Us!
@OralHealthOhio

OralHealthOhio.org
720 E. Pete Rose Way, ste 120
Cincinnati, Ohio 45202
513.768.6137