

**2023**  
**Central Public**  
**Health District**  
**Oral Health Profile**

Funding for this report has been provided by:



## Children's Oral Health Network of Maine

The [Children's Oral Health Network of Maine](#) (COHN) is a network of organizations and individuals united by a common vision: ensuring that all Maine children can grow up free from preventable dental disease. Creating a Maine where no child experiences dental disease will demand bold solutions, collaborative action, and system change on many levels. The goal of COHN is to catalyze collaboration and innovation in order to expand Maine's capacity to ensure that effective prevention, education, and treatment tools reach all Maine children.

## TABLE OF CONTENTS

Introduction .....	4
Central Public Health District Demographics: Kennebec and Somerset Counties .....	5
Dental Insurance Coverage .....	6
Points of Care .....	8
Schools .....	13
Head Start .....	15
Primary Care .....	16
Utilization .....	18
Workforce .....	21
Methods .....	22
Data Sources Referenced .....	23

## Introduction

The Central Public Health District, comprised of Kennebec and Somerset counties, displays significant disparities in oral health care across the region. While the district's southern region benefits from multiple care access points, the north experiences a different reality. The 2022 Maine Shared Community Health Needs Assessment identified a critical gap in access to oral health care in Somerset County, citing the limited number of options and providers who accept MaineCare as barriers. In addition, the report discusses the connection between oral health and other community issues, such as substance abuse.

As discussions on addressing inequities in accessing oral health care continued in the Central Public Health District, it was discovered that not enough information was available on the status of oral health services in the region.

To communicate efforts about improving oral health in the region, an in-depth analysis of the status of oral health and access to care in the district was identified as a need. The results of this oral health profile will guide the development of initiatives aimed at increasing access to preventive oral health care for children and reducing the burden of dental disease on the community.



## Central Public Health District Demographics: Kennebec and Somerset Counties

The two counties of the Central Public Health District, Kennebec and Somerset, are home to roughly 172,000 residents with an average household income of under \$50,000.<sup>1</sup> There are nearly 33,000 children residing in the district.<sup>2</sup>

With the sixth highest population density in the state, Kennebec County is less rural than many Maine counties; however, even with more urbanized cities, like Augusta, Gardiner, Hallowell, and Waterville, most residents in the county still live in rural areas.<sup>3</sup>

Somerset County is one of the largest counties in the state but has one of the lowest population densities, nearly 70% lower than the state average. The county has only two municipalities with more than 5,000 residents, Skowhegan and Fairfield, with the remainder being less populated towns and unorganized territories.

While Kennebec County has a similar percentage of children living in poverty as the state average (13.9% and 13.8%, respectively)<sup>1</sup>, Somerset County ranks as one of the highest in the state for both unemployment and percentage of children living in poverty.<sup>3</sup>

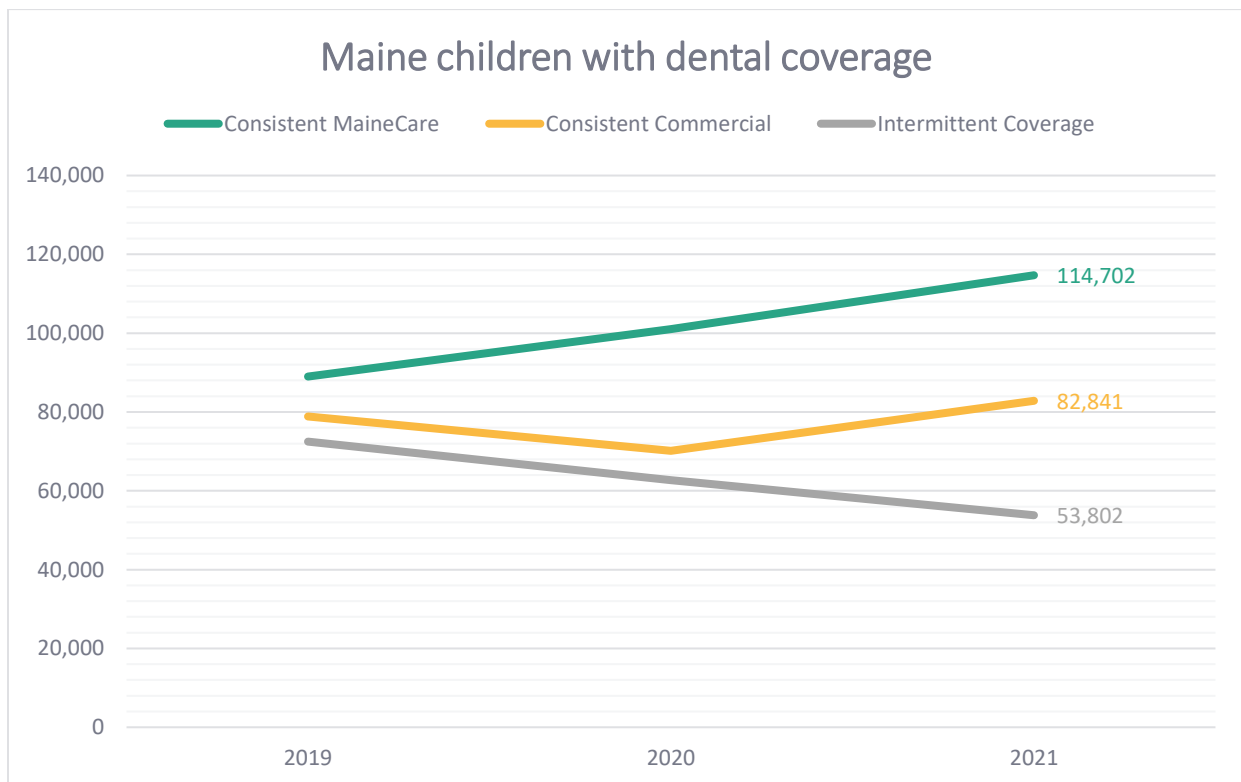
*Table 1. Demographic Indicators of the Central Public Health District*

Demographic Indicator	Kennebec County	Somerset County	Central Public Health District	State of Maine
<b>Total population<sup>1</sup></b>	121,753	50,520	172,273	1,344,212
<b>Children under age 5, 2020<sup>2</sup></b>	5,998	2,344	8,342	63,380
<b>Children aged 5 -17, 2020<sup>2</sup></b>	17,431	6,993	24,424	184,572
<b>Square miles<sup>4</sup></b>	879	3,633	4,512	32,215
<b>Population density per sq. mile</b>	138.51	13.9	---	43.1 <sup>3</sup>
<b>% living in rural areas<sup>3</sup></b>	62.8%	80.5%	---	61.3%
<b>Average annual household income<sup>1</sup></b>	\$55,365	\$44,256	---	\$57,918
<b>% children in poverty, 2021<sup>1</sup></b>	13.9%	22.6%	----	13.8%

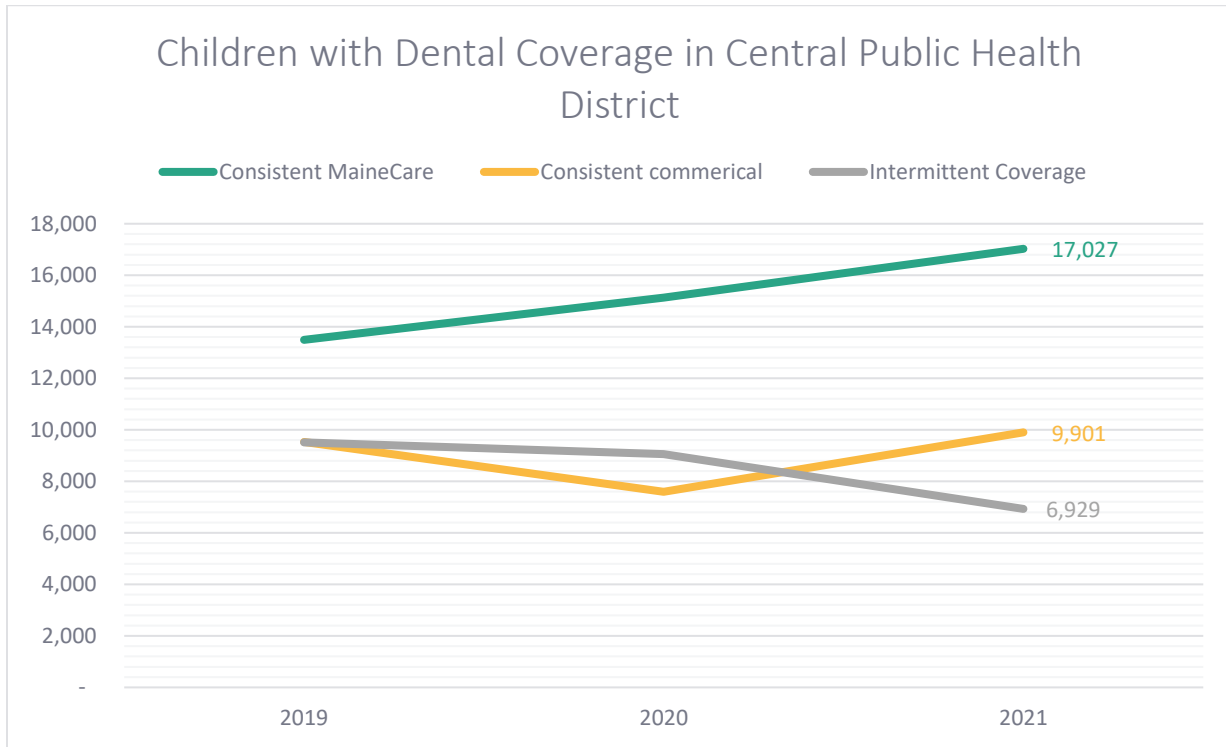
## Dental Insurance Coverage

- From 2019 to 2021, the Central Public Health District saw an increase in the number of children covered by the state’s Medicaid Program, MaineCare. The total number of children with consistent dental coverage (either MaineCare coverage or commercial insurance coverage for at least 11 months out of the year) grew by about 4,000 children from 2019 to 2021, with a slight decrease in commercial insurance during 2020. In 2019, there were 9,512 children with intermittent dental coverage, which dropped to 6,929 in 2021. Similar trends were seen across the state.

Figure 1. Number of children in Maine with dental insurance, by type, either consistently (coverage for at least 11 months out of the year) or intermittently (coverage for less than 11 months out of the year).



**Figure 2.** Number of children in the Central Public Health District with dental insurance, by type, either consistently (coverage at least 11 months out of the year) or intermittently (coverage for less than 11 months out of the year).



**Table 2. Dental Insurance Coverage Rates in the Central Public Health District<sup>1</sup>**

Access indicator	Kennebec	Somerset	Central Public Health District	State average
% of children in 2020 enrolled in MaineCare (ages 0-19)	45.7%	56.8%	48.9%	43.8%

## Points of Care

- The ratio of persons to dentists is below the state average in Kennebec County, yet significantly higher in Somerset County.<sup>1</sup> There are three non-profit dental clinics in Kennebec County, two in Augusta (only one provides care to the general public), and one in Waterville/Oakland. Additionally, there is one federally qualified health center (FQHC) in Somerset County that provides dental services.<sup>3</sup>

**Table 3. Dental care access indicators in the Central Public Health District<sup>1</sup>**

Access indicator	Kennebec	Somerset	State
Rate (n population: 1 dentist) in 2019	2,228	4,839	2,700

- From the 45 access points for preventive and restorative dental care in the Central Public Health District, four are independent dental hygiene (IPDH) practices, two are non-profit dental clinics, two are pediatric dental offices, and one is a FQHC. All of these points of care are located in 20% of the district's towns, leaving 80% of the region without a local access point for dental care.

*Figure 3: Points of restorative and preventive dental care in the Central Public Health District.*

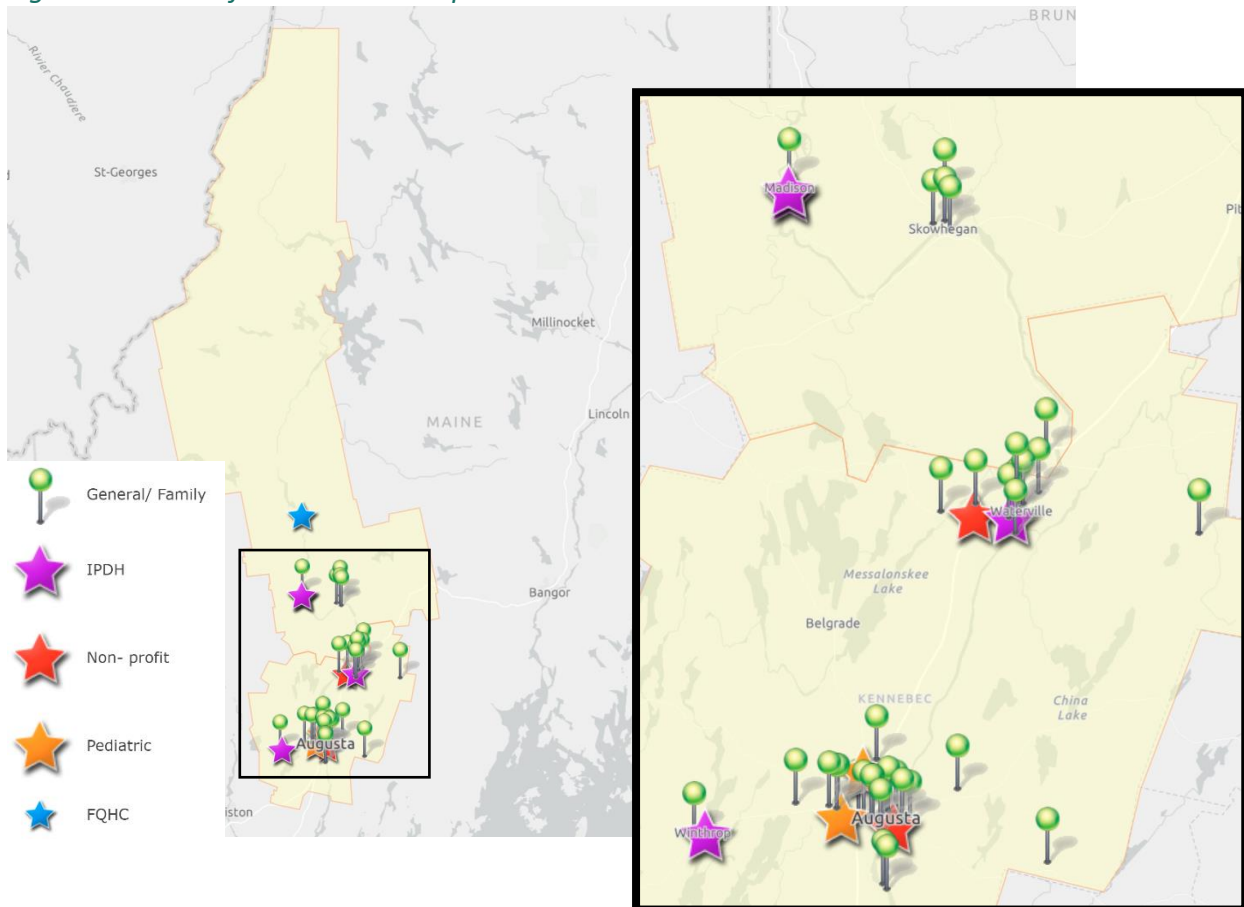
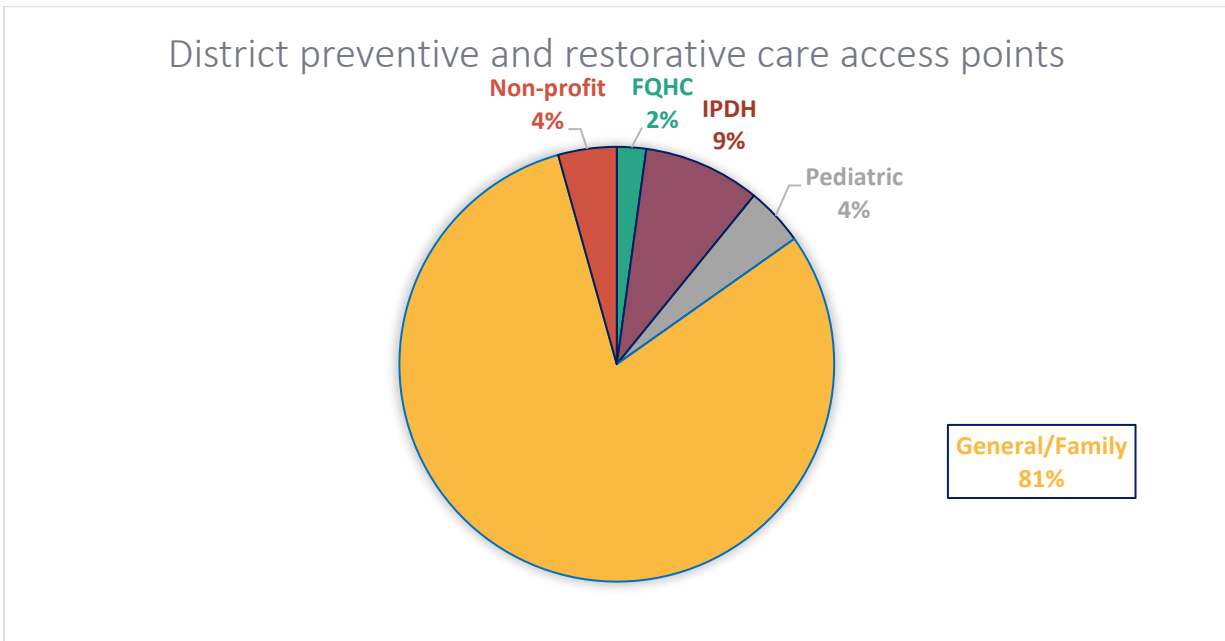




Figure 3. Points of care in the district for preventive and restorative care, by type.



- During the winter of 2022–2023, all points of care received a dental access point survey, with a total of 31 submitting a response. The respondents were 23 general private practice dental offices, two non-profit dental clinics, three IPDH offices, two pediatric dental offices, and one FQHC. Of those, 26 reported that they were accepting new patients; however, only seven points of care reported accepting new patients with MaineCare insurance, and, of those, only five reported accepting both pediatric and adult new patients. On average, more than 3,500 patients are served per location.
- Twenty-eight points of care accept commercial insurance, with 10 being ‘in-network’ with multiple commercial insurances, another 10 being ‘in-network’ with Delta Dental only, and eight not ‘in-network’ with any dental insurances. While an ‘out-of-network’ office might accept an insurance, it commonly means a reduced coverage level. Additionally, seven access points accept MaineCare, and three locations reported not accepting insurance at all.
- In the 26 points of care accepting new patients, those with accepted insurance and urgent dental needs can expect to wait a few days to a few months for an appointment. For routine appointments, waiting time can range from a few weeks to more than six months.

- The minimum patient age accepted across these 31 points of care ranges from 0 to 3 years old with the common minimum being 1 year old. Most practices in the Central Public Health District accept patients with special needs, except for two, with nine only accepting these patients on a case-by-case basis and referring cases to other points of care as needed, most commonly for sedation needs.
- In addition to these 45 dental health points of care, the region also has five denturist offices, one oral surgeon office, four orthodontic practices, one dental clinic inside a mental health facility, and two endodontists. One general dental office that responded to the survey also houses a myofunctional therapist. The access information of these specialists' offices was not collected.

Figure 4. Percentage of district survey respondents accepting new patients, by patient type.

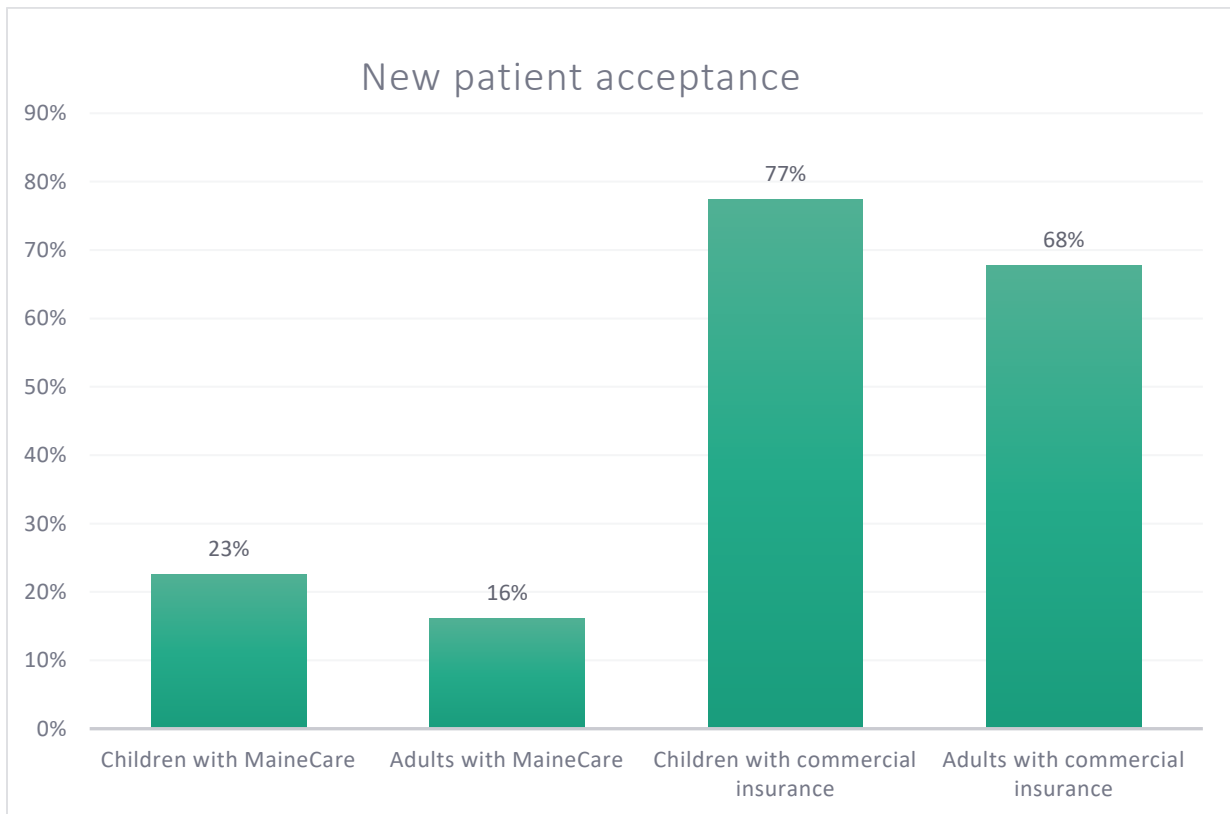


Figure 5. Insurance acceptance among district survey respondents.

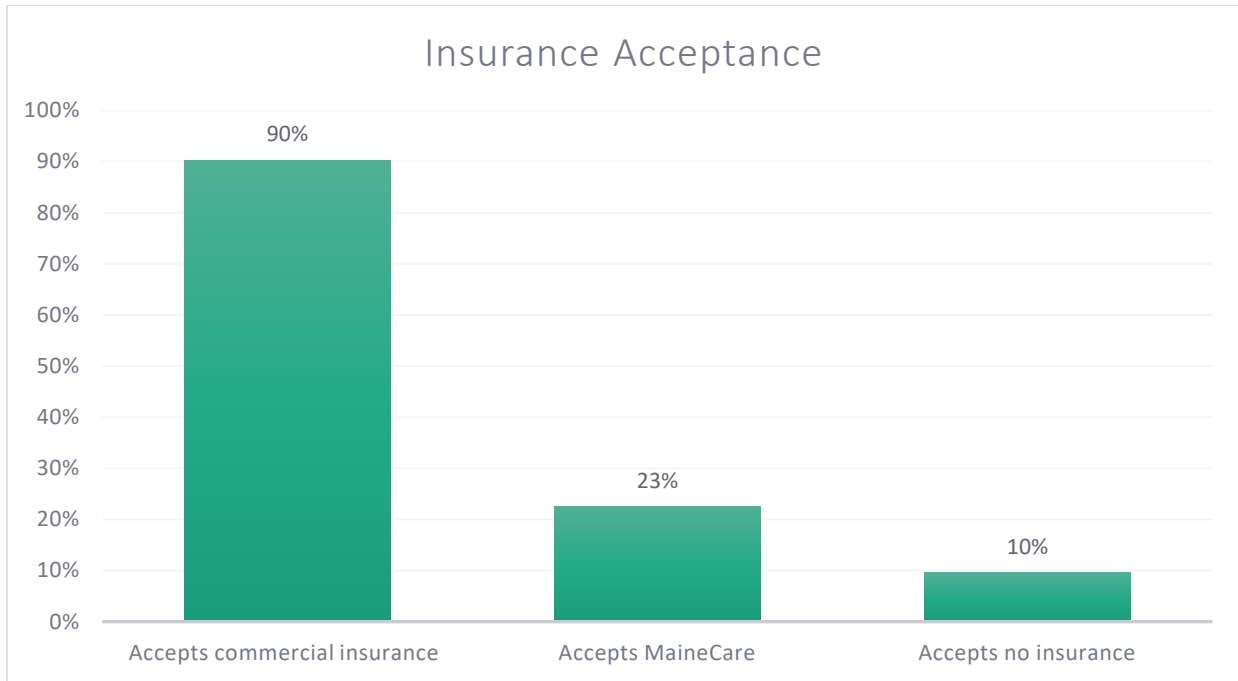


Figure 6. 'In-network' commercial insurance status of district survey respondents who accept commercial insurance.

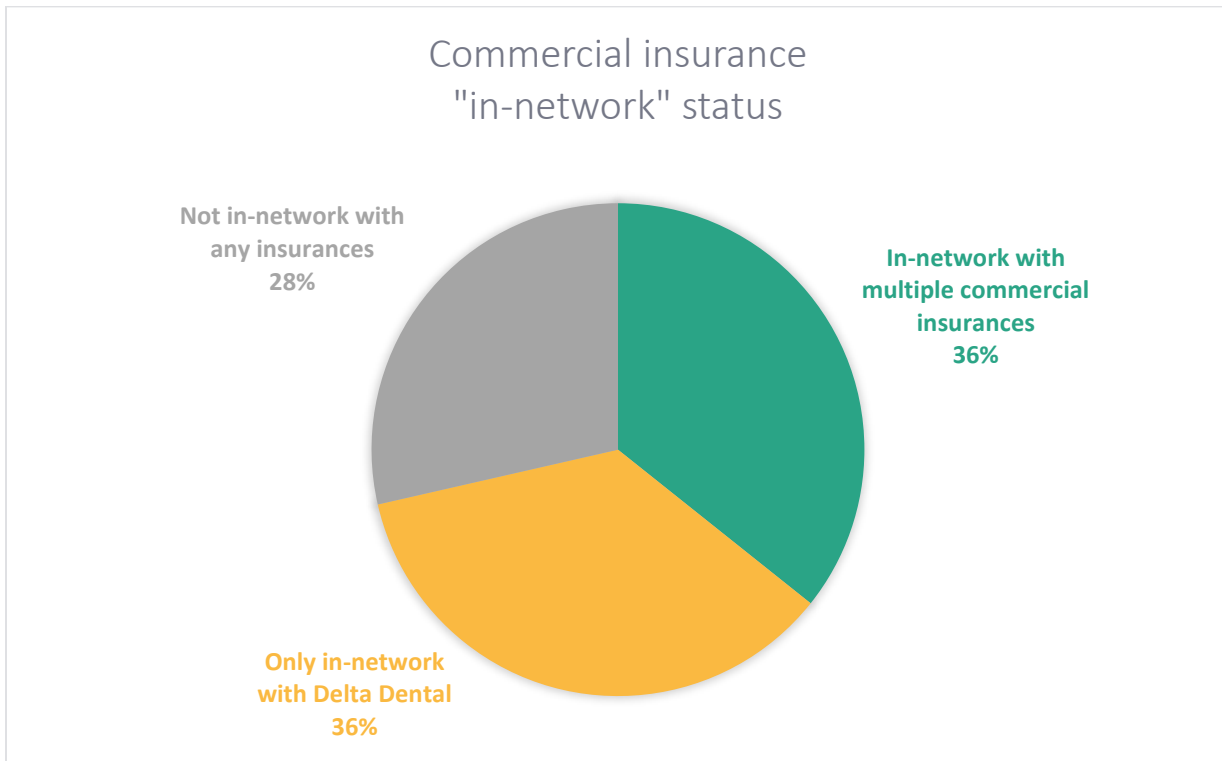


Figure 7. Appointment wait times for urgent needs in those district respondents who are accepting new patients for urgent needs.

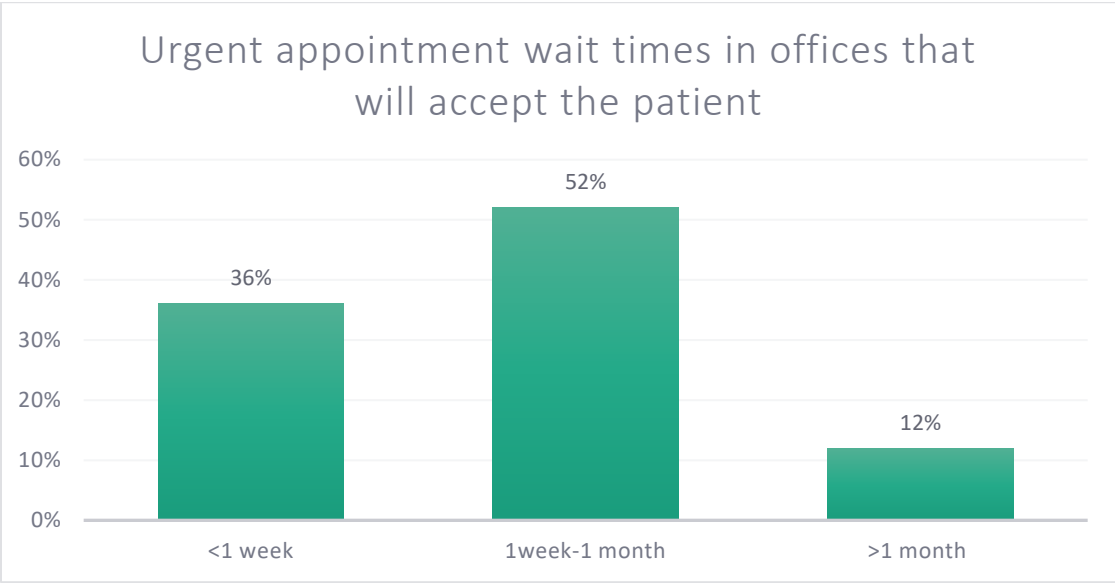
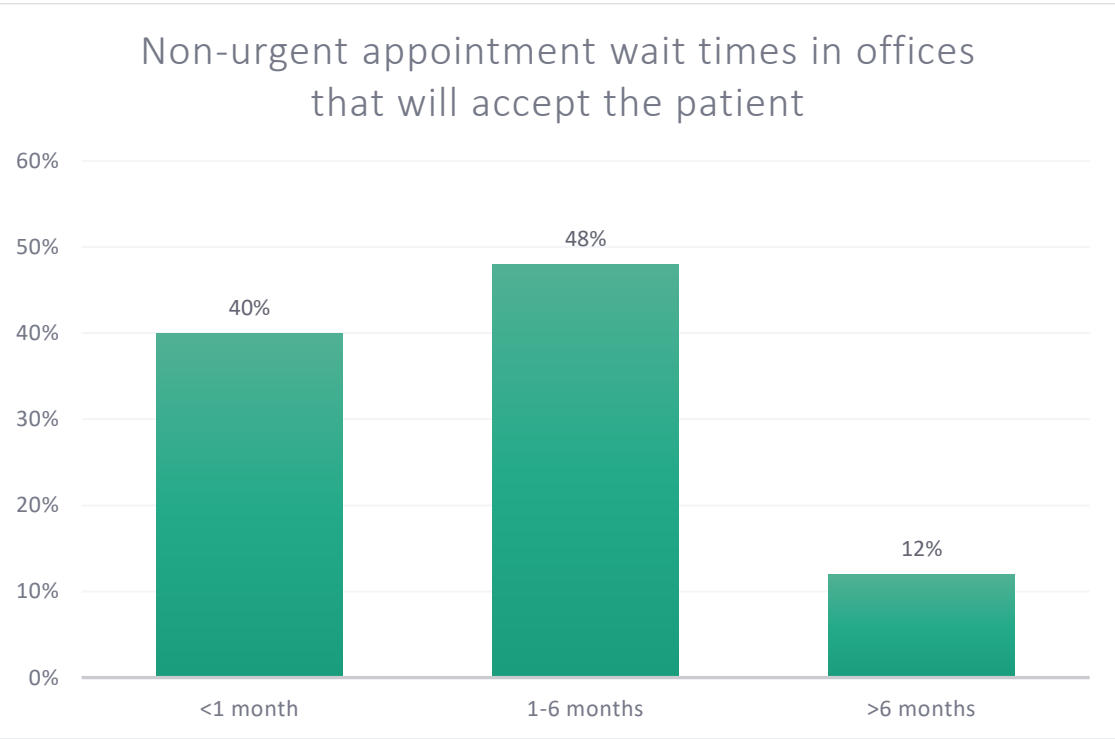


Figure 8. Appointment wait times for non-urgent needs in those district respondents who are accepting new patients for non-urgent needs.



## Schools

- In 2021, around 22,000 students were enrolled in 81 schools in the Central Public Health District, including 14 high schools, 11 middle schools, 46 elementary schools, three combined middle and high schools, four combined elementary and middle schools, and three charter schools. The schools in Kennebec County report that 37% of their children are at or below 180% of the federal poverty level, whereas, in Somerset County schools, that number rises to 64%.
- In fall 2022, 40 schools in the Central Public Health District participated in the Maine State CDC's School [Oral Health Program](#) (SOHP). Trained professionals contracted by the SOHP conducted oral health screenings, applied fluoride varnish, and provided education and referrals for follow-up care as needed.
- The SOHP screened 2,200 children in the region. Data collected shows 22% of children screened in Kennebec County and 17% in Somerset County with active untreated tooth decay and another 16% in the Central Public Health District already had fillings in their teeth. Of the children identified as having active dental decay, three children were classified as having urgent treatment needs, indicating either severe decay or infection.

Figure 9. Fall 2022 participation of schools in the SOHP by county.

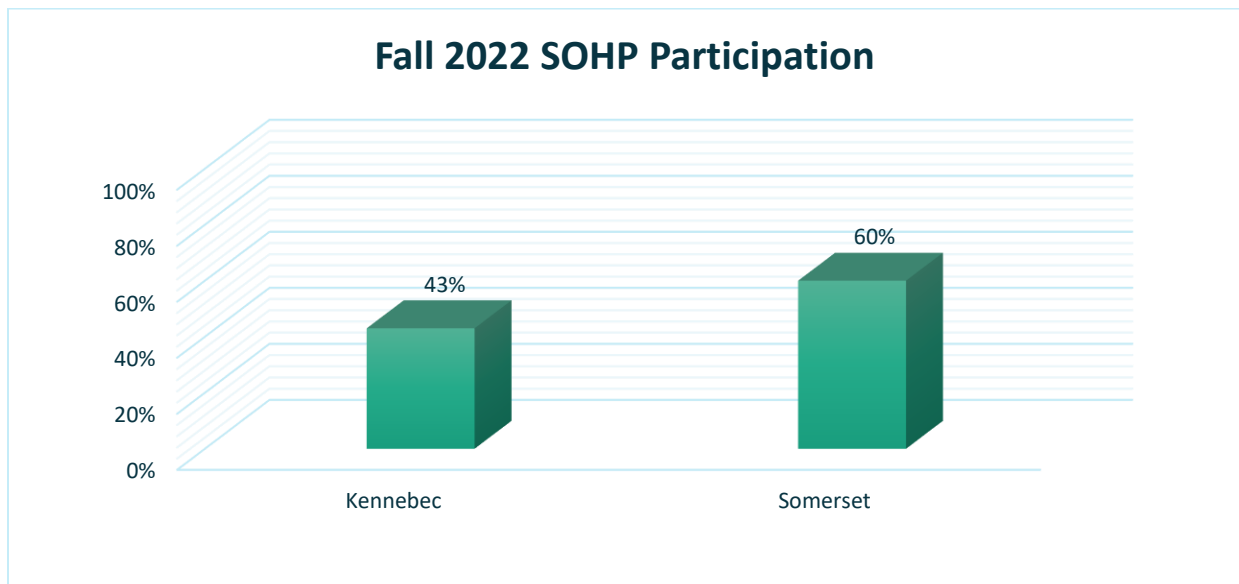
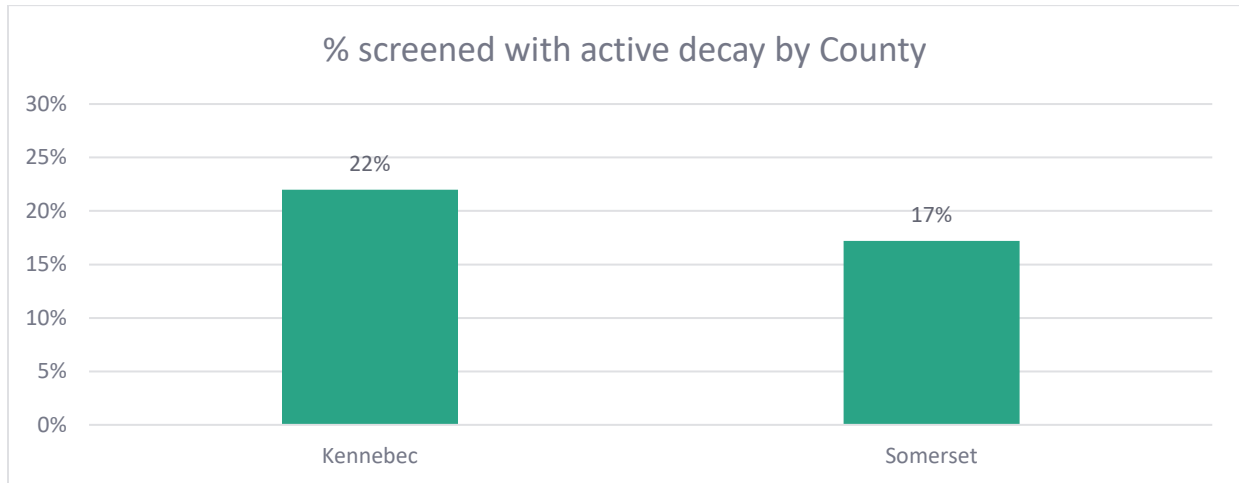
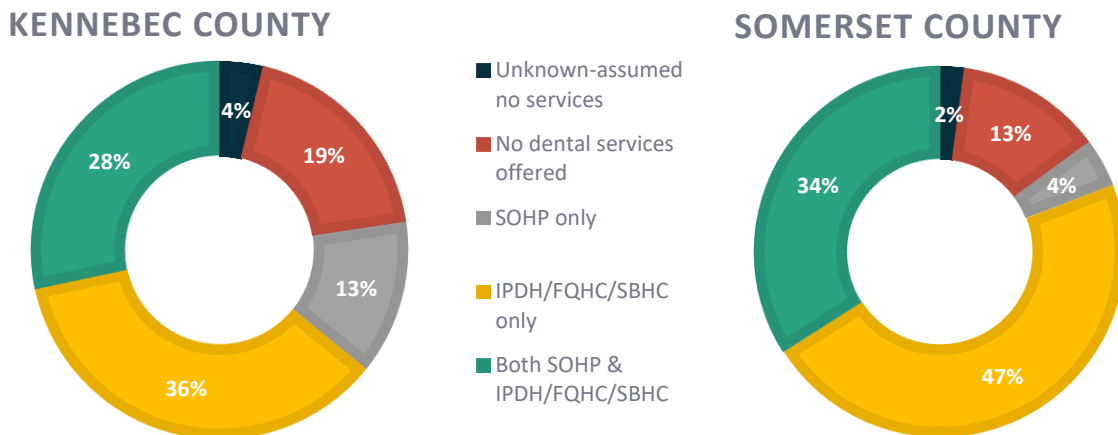


Figure 10 . Percentage of children screened by the SOHP in fall 2022 with active tooth decay.



- Of the 81 schools in the Central Public Health District, 56 contract with seven IPDHs and one FQHC mobile dental program to provide more comprehensive preventive dental hygiene services to students. Two school districts coordinate dental services with an independent practice dental hygienist through their school-based health center (SBHC). The services provided include a wide range of preventive services, such as cleanings, radiographs, and non-invasive caries therapies, along with education and referrals for follow-up care, as needed. There is no aggregate data available on the number of children served by these programs. Of these 56 schools, 31 of them also participate in the SOHP.

Figure 11. Type of on-site dental services offered in Central Public Health District schools.



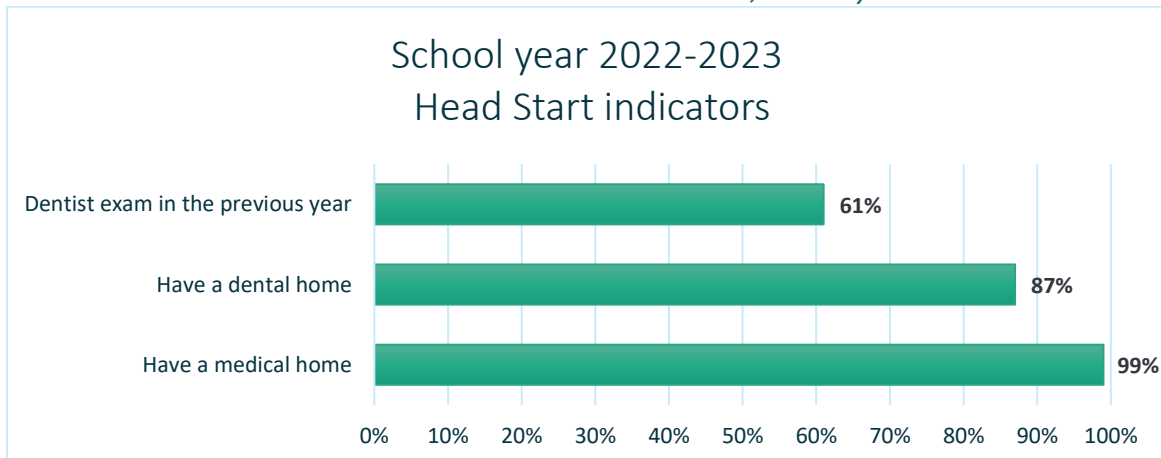
## Head Start

- In the 2022-2023 academic year, there were 602 children in the district enrolled in the [Head Start](#) programs, Early Head Start, and home-based programs or [HomeStart](#). Head Start is a federal program that prepares children from low-income families from birth to age 5 for school. Children enrolled in the home-based programs receive Head Start services in their own home, and those enrolled in HomeStart programs receive services through childcare centers, many of which are facilities within a home. Of the 602 children enrolled in Head Start programs, 79 currently lack a [dental home](#) while nearly 100% have a [medical home](#). Sixty-one percent of enrolled children had a dental exam in the previous year.

To meet the requirements of the federal mandate requiring that Head Start programs ensure all children establish a dental home and receive a dental exam within 90 days of enrolling, historically a challenging benchmark, both agencies that administer Head Start programs in the Central Public Health District collaborate with [Mainely Teeth](#) to provide virtual dentist exams. In this model, a dental hygienist assesses children on-site in the Head Start location and virtually transmits dental records to a dentist for examination. Although the federal requirement has not yet been met, in its first year of implementation, this model has allowed the district’s Head Start programs to increase the number of children with access to a dental home and dentist examination.

Table 4. Head Start Enrollments			
Head Start Enrollment	Kennebec	Somerset	District
Early Head Start	71	16	87
Head Start	295	178	473
Home-based/HomeStart	---	---	42

Figure 12. Central Public Health District Head Start indicators, school year 2022-23.



## Primary Care

- There are 44 primary care practices in Kennebec County, with three located in Winthrop, Waterville, and Augusta dedicated to pediatric patients. The two school-based health centers located in Augusta and Maranacook schools provide dental services, but none of the FQHCs in Kennebec County, located in Albion, Augusta, Belgrade, and Monmouth, provide dental services. However, there is a co-located private dental office in the same building as the Albion FQHC.
- In Somerset County, there are 17 primary care practices. One, located in Skowhegan, is dedicated to pediatric patients. Of the three FQHCs in Bingham, Madison, and Jackman, only the Bingham location provides dental services. There is one school-based health center in Somerset County but no dental services are offered there yet.

Table 5. Primary Care Indicators <sup>3</sup>			
Primary care indicator	Kennebec	Somerset	State of Maine
Primary care practices	44	17	463
Sites per 10,000 population	3.6	3.3	3.5

- [From the First Tooth](#) (FTFT) is an existing preventive oral health program integrated into many Maine primary care practices. The program focuses on prevention of pediatric oral disease by incorporating oral health risk assessment and application of fluoride varnish into well-child visits from 6 months through 20 years of age.<sup>5</sup> From the 35 primary care practices in the Central Public Health District of Maine that treat pediatric patients, 28 have received training with the FTFT program and all but one have partially or fully implemented the program into their practice. Only one primary care practice offers any dental services beyond the FTFT program; there is a co-located dental clinic in the Bingham FQHC.



Figure 13. FTFT adoption in the district primary care practices that serve children.

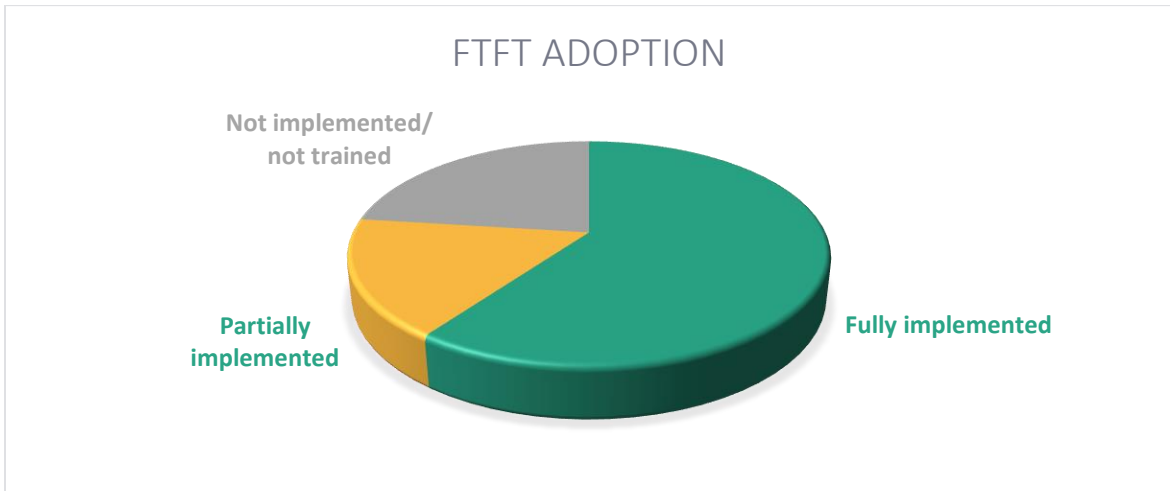
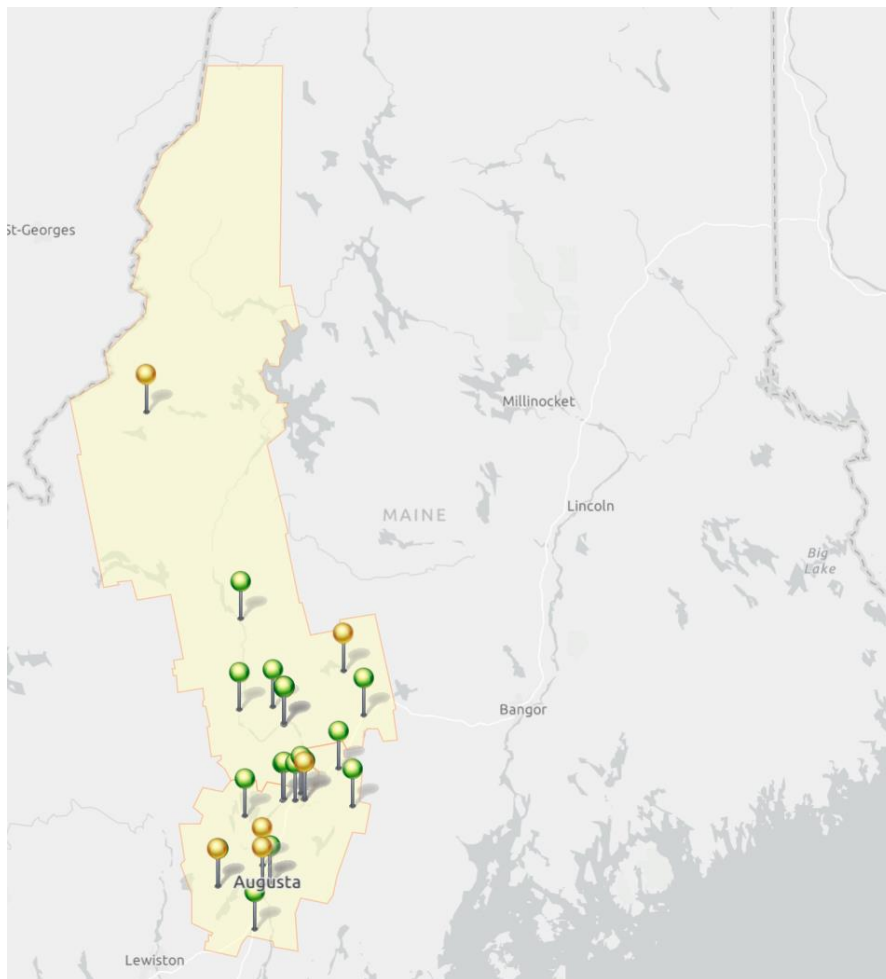


Figure 14. Participation in FTFT in the Central Public Health District.



## Utilization

- Based on data from insurance claims<sup>7</sup>, half of children consistently covered by MaineCare insurance did not receive dental services in 2021. More than half did not have a preventive dental claim. The district followed state trends with a drop in services at the start of the COVID-19 pandemic and little recovery in 2021. Within the district, there are clear disparities in access to dental care, with fewer commercially insured children in Somerset County accessing care than in the rest of the district and state. Additionally, in both counties, there were fewer dental claims for children with MaineCare insurance compared to claims for commercial insurance, although still slightly above the state average.
- The district relies on emergency room (ER) visits for dental care at a rate well above the state average; however, while the use of the ER for children and adults in Kennebec County from 2016 to 2018 was similar to the state average, in Somerset County the use of the ER for dental care was significantly higher, with 31.4 per 10,000 population in children and 306.5 in adults, more than doubling the state average for adults.<sup>1</sup>

**Table 6. Emergency room utilization for dental care<sup>1</sup>**

Indicator	Kennebec	Somerset	Central Public Health District	State average
2016–2018 dental emergency department rates for children per 10,000 population	16.4	31.4	20.7	17.9
2016–2018 dental emergency department rates for adults per 10,000 population	139.3	306.5	186.7	136.6

Figure 15. Percentage of commercially insured children with at least one dental claim of any kind.<sup>7</sup>

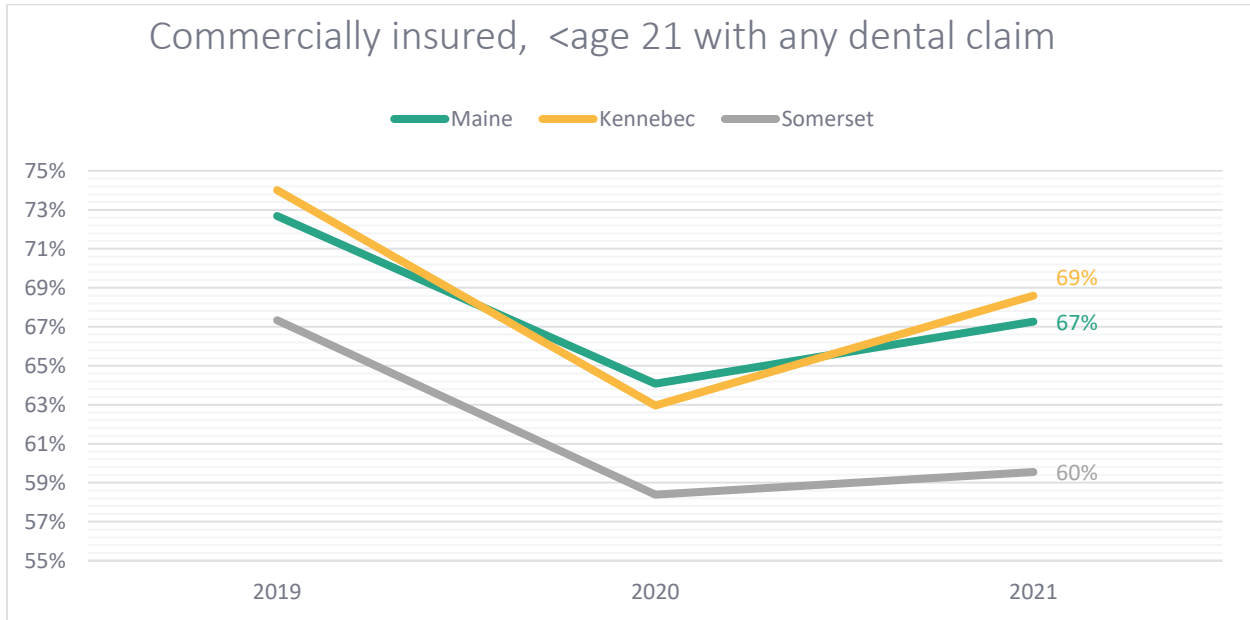


Figure 16. Percentage of MaineCare insured children with at least one dental claim of any kind.<sup>7</sup>

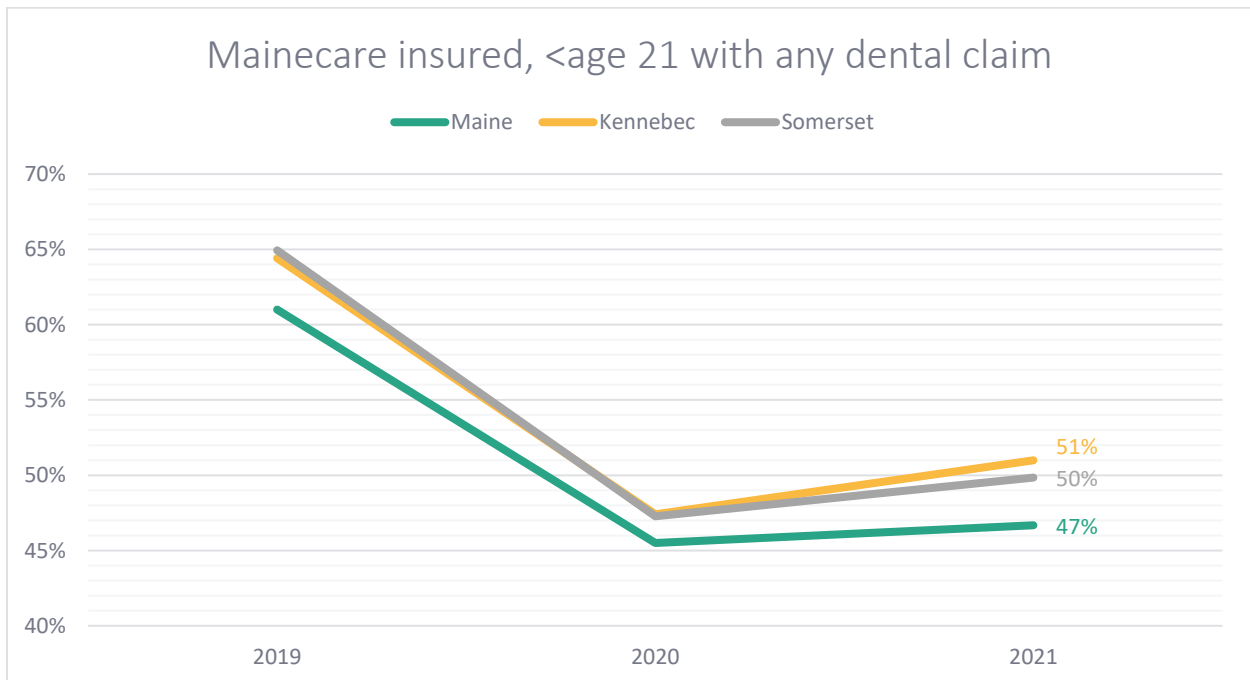


Figure 17. Percentage of District insured children with at least one dental claim, by age.<sup>7</sup>

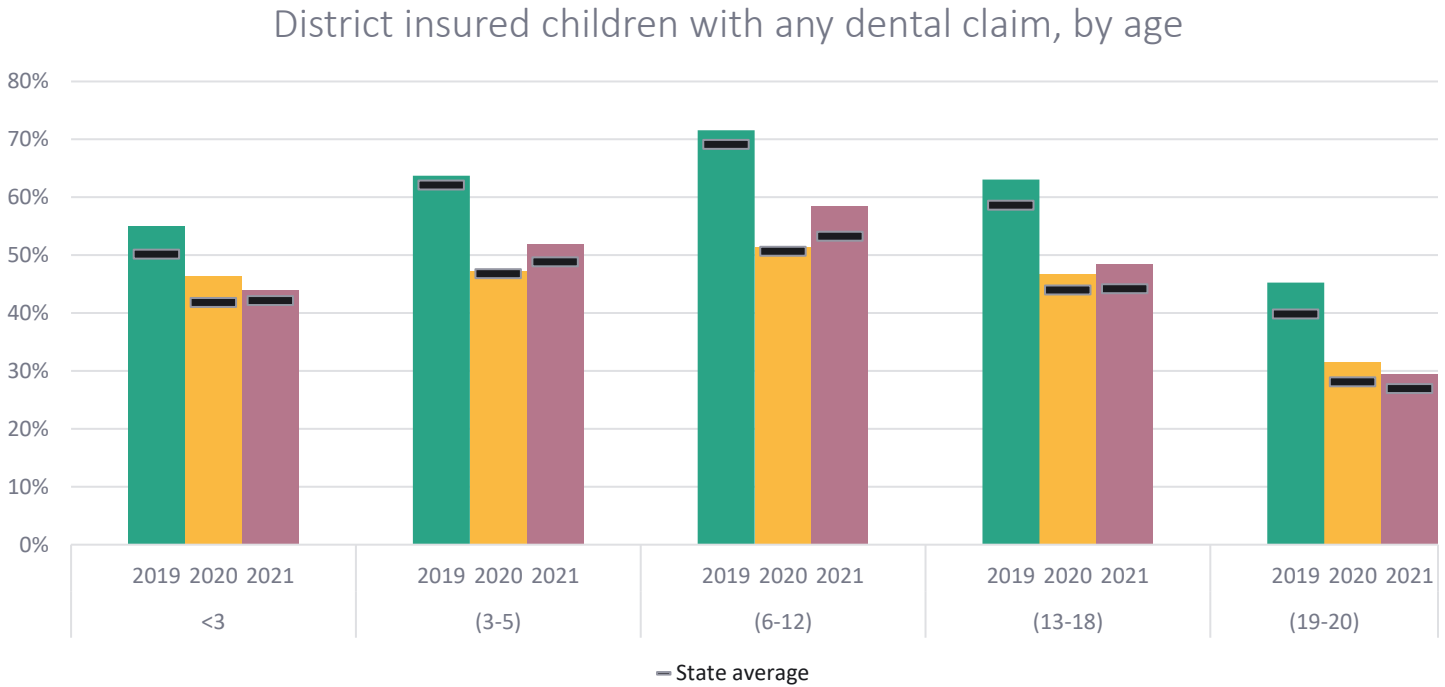
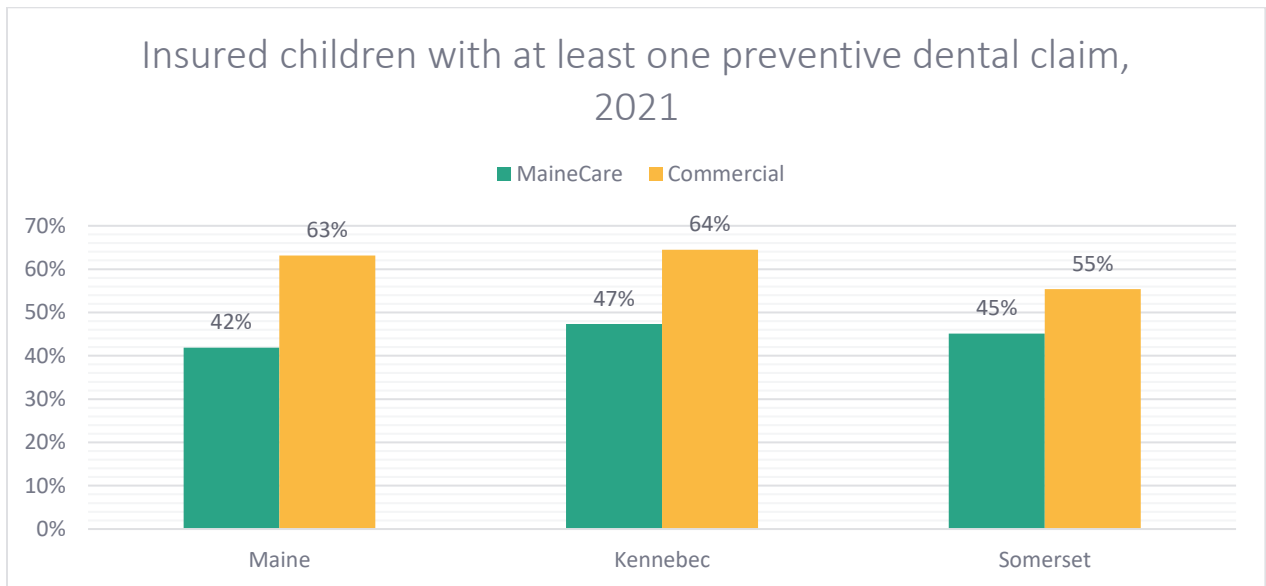


Figure 18. Percentage of insured children with at least one preventive dental claim by insurance type.<sup>7</sup>



- Source for Figures 15-18: Maine Health Data Organization, All-Payer Claims Database.
- Analysis by USM Cutler Institute for the Children’s Oral Health Network.
- “Insured children” includes children under age 21 who are residents of Maine/the identified county and who were enrolled in either MaineCare or a commercial dental plan for at least 11 months of the identified year

## Workforce

- Data collected from the 31 points of care that responded to the survey counted 47 practicing dentists, 95 dental hygienists, 80 dental assistants, and 96 administrative staff employed by those facilities. While nearly all the dentists in these sites work full-time, many of the hygienists work part-time, so the dental-hygiene capacity equates to about 75 full-time dental hygienists among the 95 employed. In addition, as of March 2023, there were 40 vacant positions across the sites that responded to the survey (seven dentists, 17 dental hygienists, nine dental assistants, and seven administrative staff).

Figure 19. Existing oral health workforce in district survey respondents.

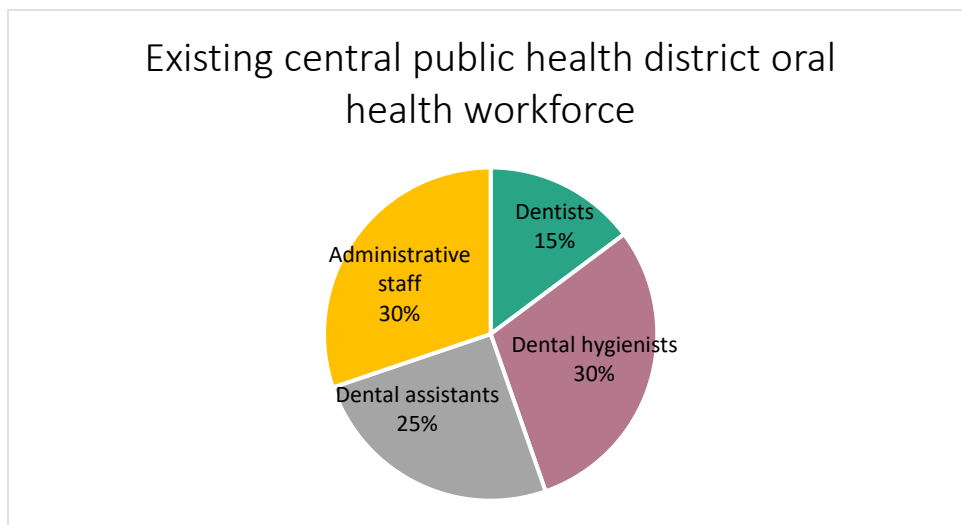
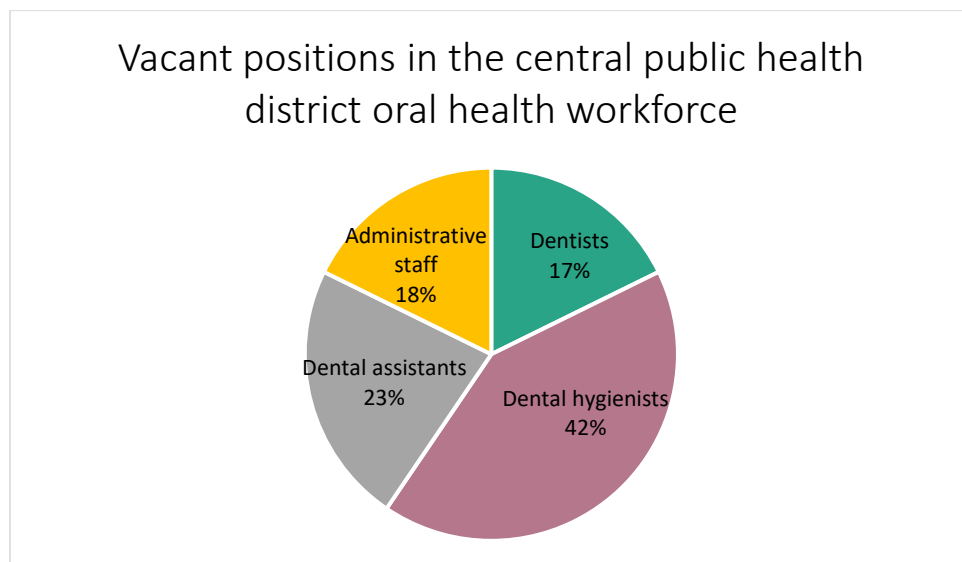


Figure 20. Vacant oral health workforce positions in district survey respondents.



## Methods

Methods of data collection for this descriptive report included review of existing reports (see reference list), distribution of a dental access point survey, and telephone/email communication with primary care practices, schools, and dental providers. Dental access point surveys included questions regarding workforce and access and were distributed in winter 2022–2023 with data collection efforts continuing through March 2023. Each site was contacted multiple times via telephone, email, and social media prior to identifying them as non-responsive. Researchers contacted schools, school-based dental providers, and Head Start agencies in winter 2022–2023. The Maine School Oral Health Program and the From the First Tooth Program provided current county level data from their respective programs in winter 2022–2023.

Utilization and insurance data was obtained from the Maine Health Data Organization's (MHDO) All Payer Claims Database (APCD) per the data release requirements defined in 90-590 C.M.R. ch. 120 *Release of Data to the Public*. The MHDO is a state agency that collects health care claims data from payors, including Medicaid, commercial insurance carriers, and dental benefit administrators, per the requirements in 90-590 C.M.R. ch. 243, *Uniform Reporting System for Health Care Claims Data Sets*. Please refer to the [MHDO website](#) for more details regarding data restrictions and participating insurers. These data were analyzed by the USM Cutler Institute for the Children's Oral Health Network of Maine. For more information, visit <https://www.maineconh.org/assets/stock/2021-COHN-Data-Brief.pdf>

## Data Sources Referenced

1. Maine CDC. 2021. Health Profiles. Maine Shared Community Needs Assessment. <https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/health-profiles.shtml>
2. Maine Children’s Alliance. 2020 County Data Profiles. 2022. <https://www.mekids.org/priorities/kids-count/2022maine-county-profiles/>
3. Kahn-Troster S, Burgess A, Coburn A, et al. Maine Rural Health Profiles. Portland, ME: University of Southern Maine, Muskie School, Maine Rural Health Research Center; September, 2016. [https://mehaf.org/learning\\_resource/maine-rural-health-profiles](https://mehaf.org/learning_resource/maine-rural-health-profiles)
4. Info for ME. Maine Counties. 2019. <https://www.maine.gov/sos/kids/government/counties>
5. From the First Tooth. <https://www.fromthefirsttooth.org/>
6. Maine CDC. 2022. Maine Shared Community Health Needs Assessment. Final CHNA Reports. <https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/final-CHNA-reports.shtml>
7. Maine Health Data Organization, All-Payer Claims Database. Analysis by USM Cutler Institute for the Children’s Oral Health Network of Maine. <https://www.maineconh.org/assets/stock/2021-COHN-Data-Brief.pdf>