

2022
Cumberland Public
Health District
Oral Health Profile



Children's
Oral Health
Network
of Maine



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

Introduction4

Cumberland Public Health District Demographics5

Dental Insurance Coverage6

Access Points 8

Schools 13

HeadStart 15

Primary Care 16

Utilization..... 17

Workforce..... 20

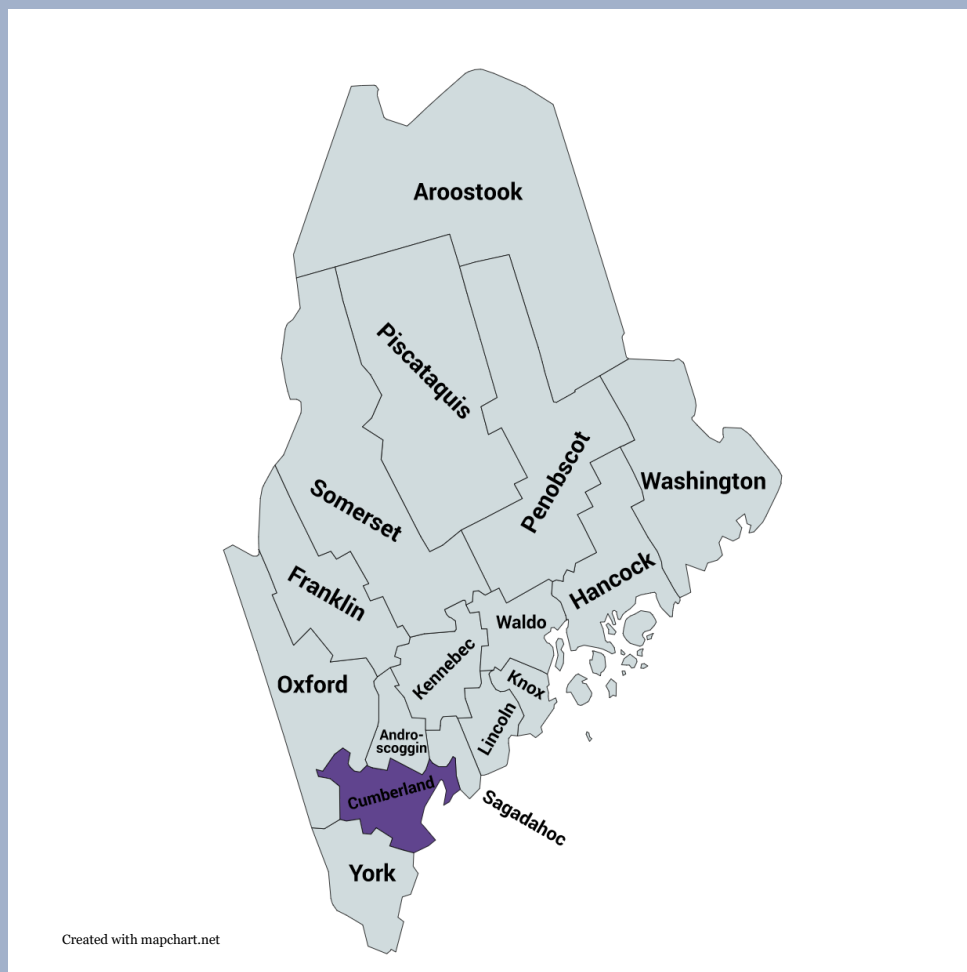
Methods..... 21

References 22



Introduction

Oral health has long been an area of concern in Cumberland County. In November 2022, the Cumberland County Public Health Department released a 4-year County Health Improvement Plan which names supporting access to dental care as a public health priority for the County⁸. It has become clear through discussions to address inequities in Cumberland County communities that not enough information was available on the status of oral health services. To inform efforts to improve the oral health of this population, there was a need for an in-depth analysis of the status of oral health and access to care. The results of this oral health profile will guide the development of initiatives to increase access to preventive oral healthcare for children and reduce the burden of dental disease on the community.



Cumberland Public Health District: Cumberland County

Cumberland County is home to just under 290,000 Mainers with a median household income of \$73,072¹, the highest median income in the State³. Approximately 54,000 children reside in Cumberland county², 9.2% of whom live in poverty.¹

As the county with the highest population density in the state, Cumberland County is the most urban county. The County's three cities, Portland, South Portland, and Westbrook house a great number of residents with Portland being the most populous city in the State.³ With only 33.3% of the residents living in rural areas¹, Cumberland County has the lowest percentage of rural residents in the State.³

Cumberland County is the most racially diverse county in the state³ with 91.7% of residents being white, 3% black/African American, 2.2% Asian, 2.1% Hispanic, and 2.5% two or more races.¹

Table 1. Demographic indicators of Cumberland County

Demographic indicator	Cumberland	State
Total population ¹	286,246	1,344,212
Children under age 5, 2020 ²	14,135	63,380
Children ages 5 -17, 2020 ²	40,327	184,572
Square miles ⁴	853	32,215
Population density per sq. mile	336	42
% living in rural areas ³	33.3%	61.3%
Median household income 2015-2019 ¹	\$73,072	\$57,918
% children in poverty 2019 ¹	9.2%	13.8%

Dental Insurance Coverage

From 2019 to 2021, claims data showed an increase in the number of Cumberland County 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 6,000 children from 2019-2021, with a slight dip in commercial insurance during 2020. In 2019, there were 15,583 children with dental coverage for only part of the year, and that number dropped to 12,325 in 2021. When compared to the State, Cumberland County children have a higher ratio of consistent commercial insurance compared to MaineCare or intermittent coverage, and lower % MaineCare coverage rate (31.5% compared to the State average of 43.8%¹). However, Cumberland County has the highest number of total children enrolled in MaineCare out of all 16 Counties, holding 15% of the State’s total child MaineCare enrollment.

Figure 1. Number of Maine Children 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).

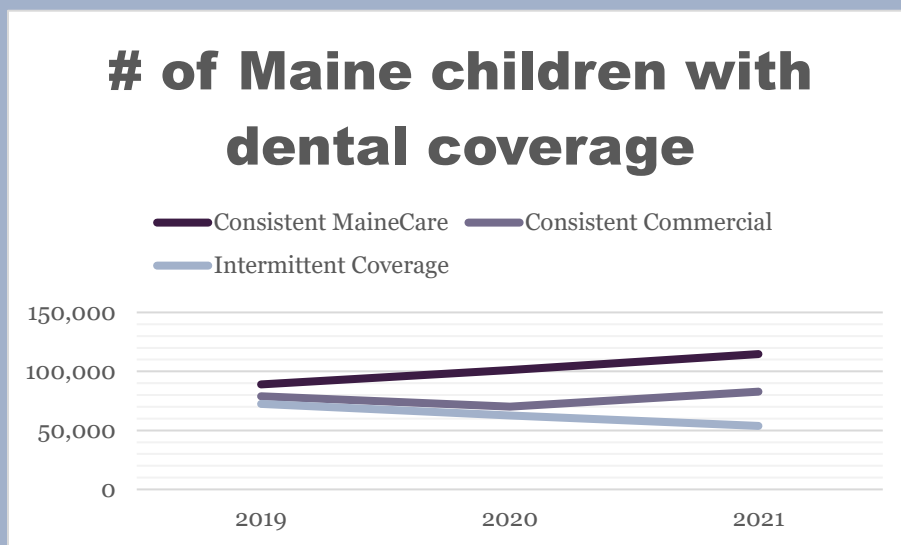


Figure 2. Number of Cumberland County Children with dental insurance, by type, either consistently (coverage at least 11 months out of the year) or intermittently (coverage for less than 11 months out of the year).

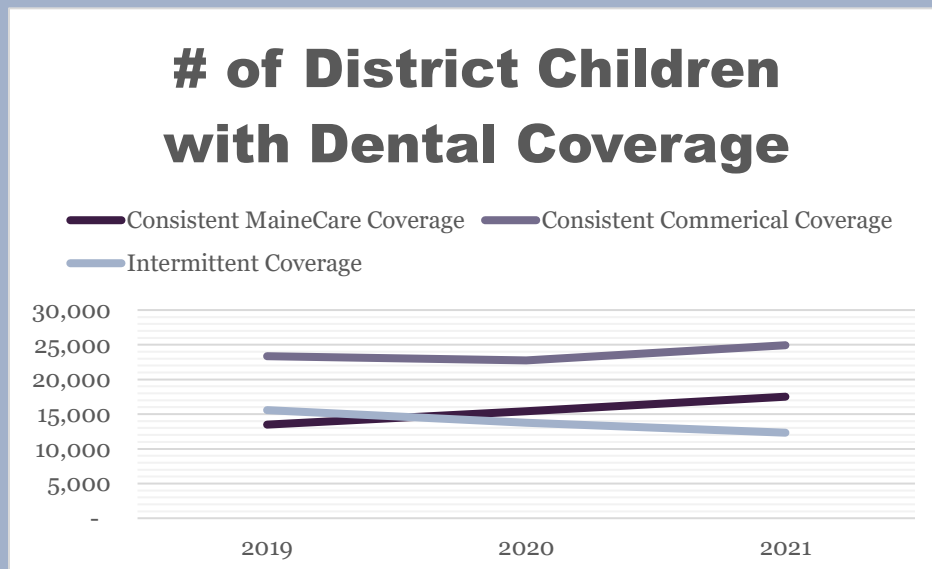
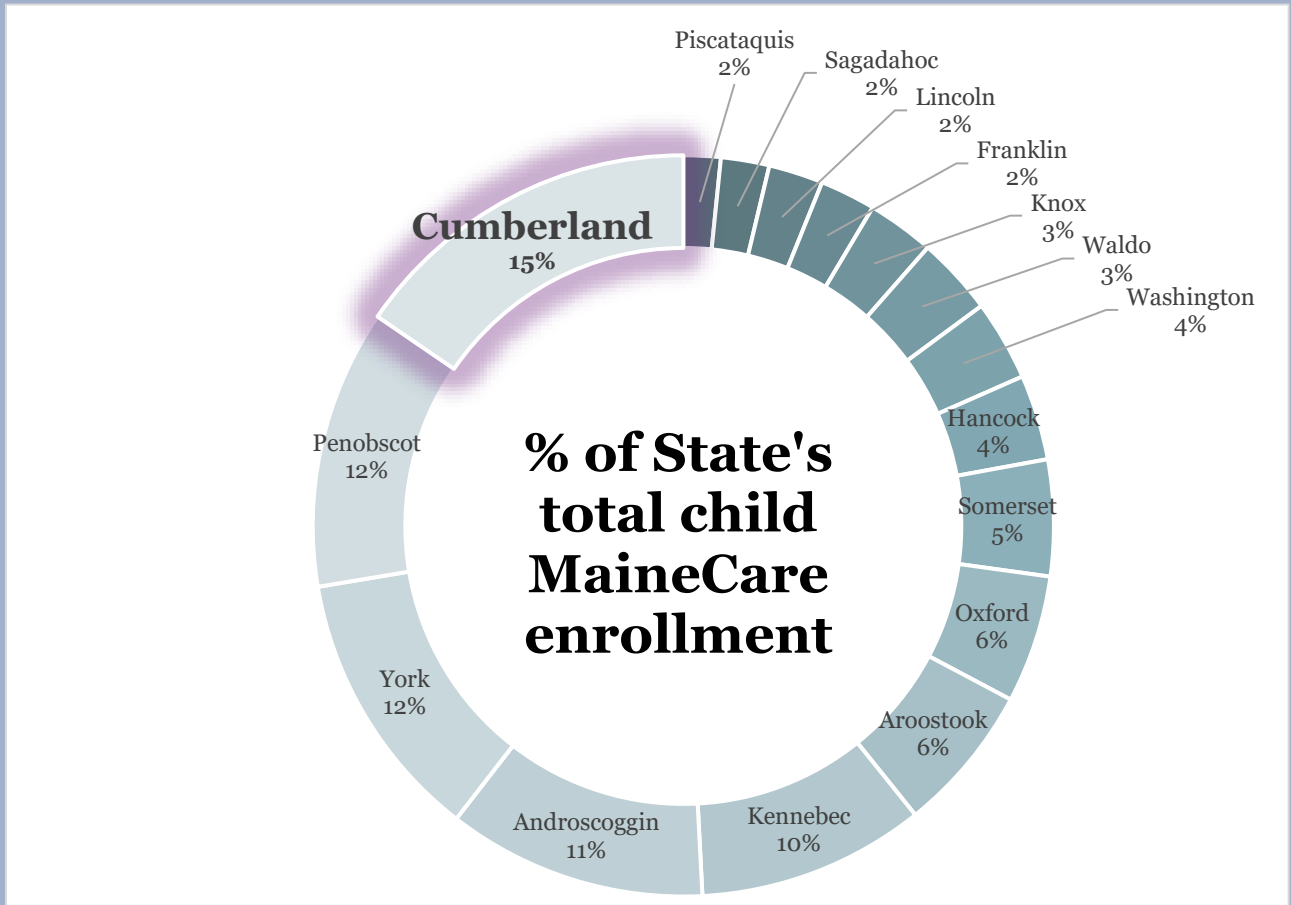


Figure 3. % of State's total child MaineCare enrollment, by County



Access Points

Cumberland County has the highest number of dental offices in the State, and a lower population to dentist ratio than the State average (1,880 people per dentist compared to 2700). However, this ratio does not account for the number of people who live outside of Cumberland County in surrounding communities but access care from a dentist located in Cumberland County. Of the 28 towns and cities in Cumberland County, 17 have dental practices.

Table 2. Dental care access indicators in the Central Public Health District¹

Access indicator	Cumberland	Maine
Rate (n population:1 dentist) in 2019	1880	2700

There are 94 access points in Cumberland County for restorative and preventive dental care, excluding school based-health clinics. These access points include 1 independent practice dental hygiene (IPDH) office, 5 non-profit dental clinics (2 locations of Greater Portland Health, The Root Cellar, Community Dental, and the University of New England College of Dental Medicine), and 88 private practice dental offices.

Note: The access point data in this report includes responses from only 61 of the 94 total sites (70% response rate) as 33 sites did not respond to the survey, despite multiple attempts to reach them.

Of the 61 access points who responded, 50 reported accepting new patients. Only 10 practices accept MaineCare insurance, and only 6 of those practices report accepting new pediatric patients with MaineCare insurance; 4 of those sites also accept new adult patients covered by MaineCare. Wait times for new patient appointments may be quite long.

In Cumberland County, 55 of the 61 responding practices report accepting private insurance, but 13 of these 55 are not in network with any insurance plans, and 18 are only in network with Delta Dental. In addition to the survey responses, information on insurance was gathered from the websites of 28 of the 33 practices that did not respond to the survey. The website review showed that 21 additional offices indicate they accept private or commercial insurance, but 9 are not in network with any insurance plans, and 6 are only in network with Delta Dental.

The minimum age of acceptance into dental offices across the sites ranges from whenever the first tooth appears (generally around 6 months of age) to age 21 with the most common minimum age being 2-3 years of age. Most practices in Cumberland County accept patients with special needs but many note that they treat these patients on a case-by-case basis and refer them out as needed, most commonly for sedation needs.

For information about the timing and process for collecting this data, please see the methods section at the end of this document.

Figure 4. Locations of Cumberland County access points that responded to the survey.

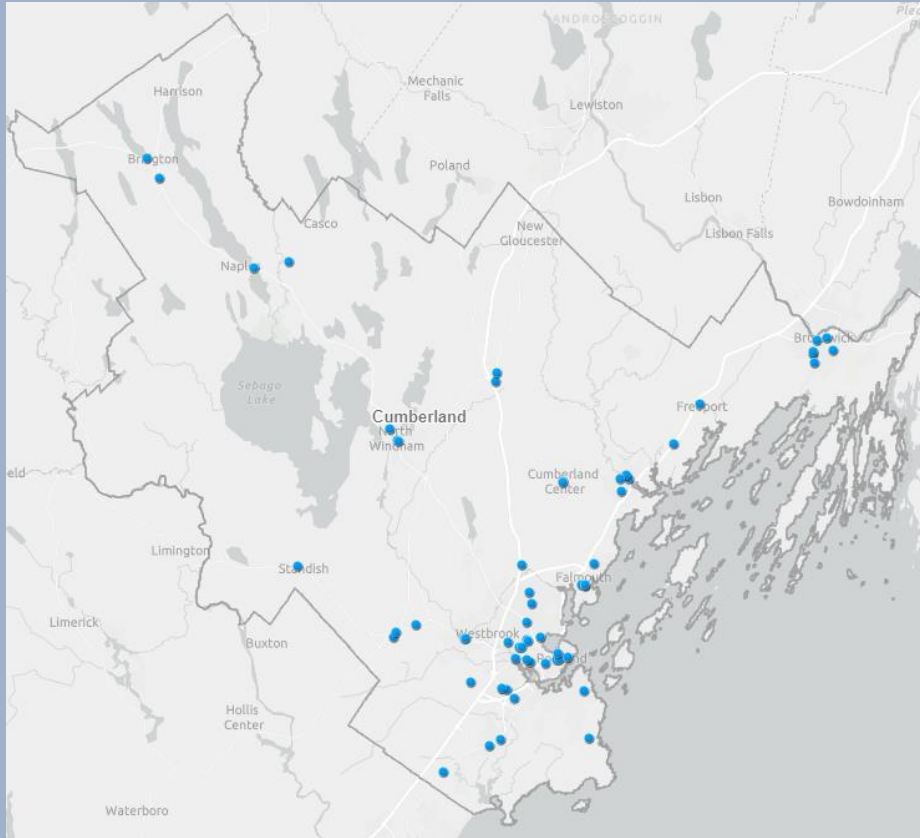


Figure 5. Cumberland County access points that responded to the survey that accept new patients.

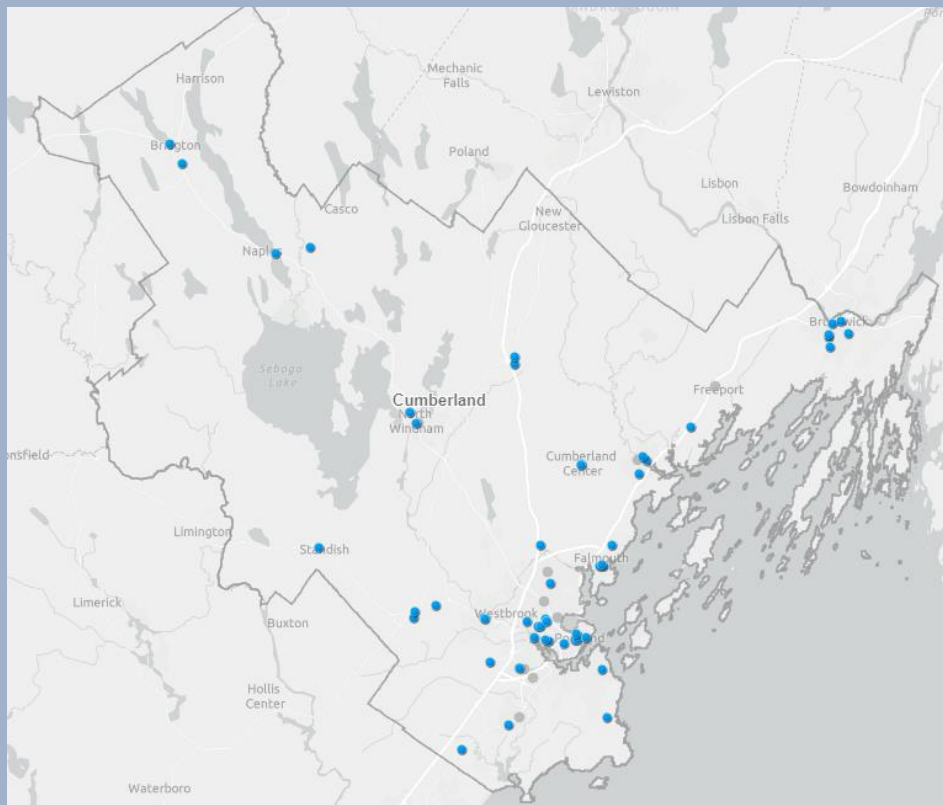


Figure 6. Location of Cumberland County access points that responded to the survey that accept MaineCare.

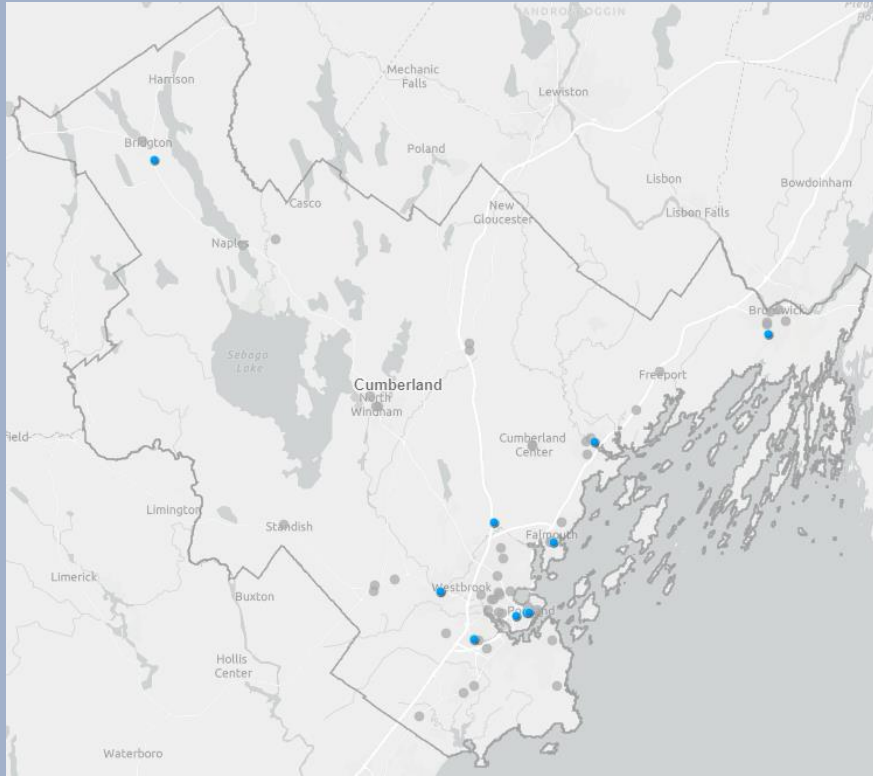


Figure 7. Location of Cumberland County access points that responded to the survey that accept new MaineCare pediatric patients.

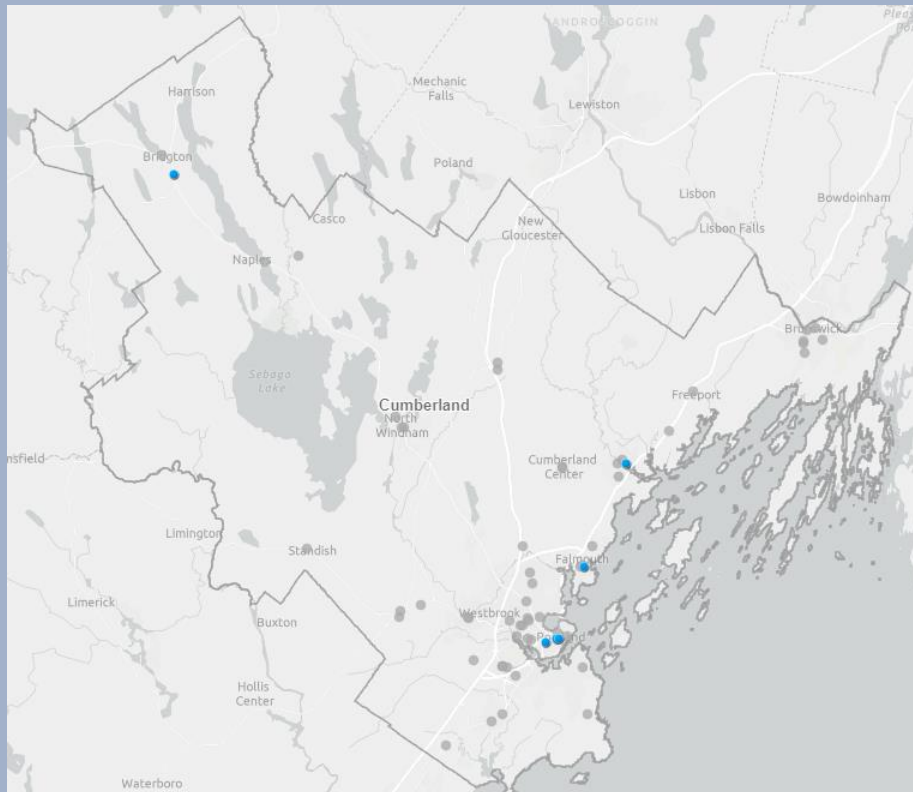


Figure 8. Location of Cumberland County access points that responded to the survey that accept new MaineCare adult patients.

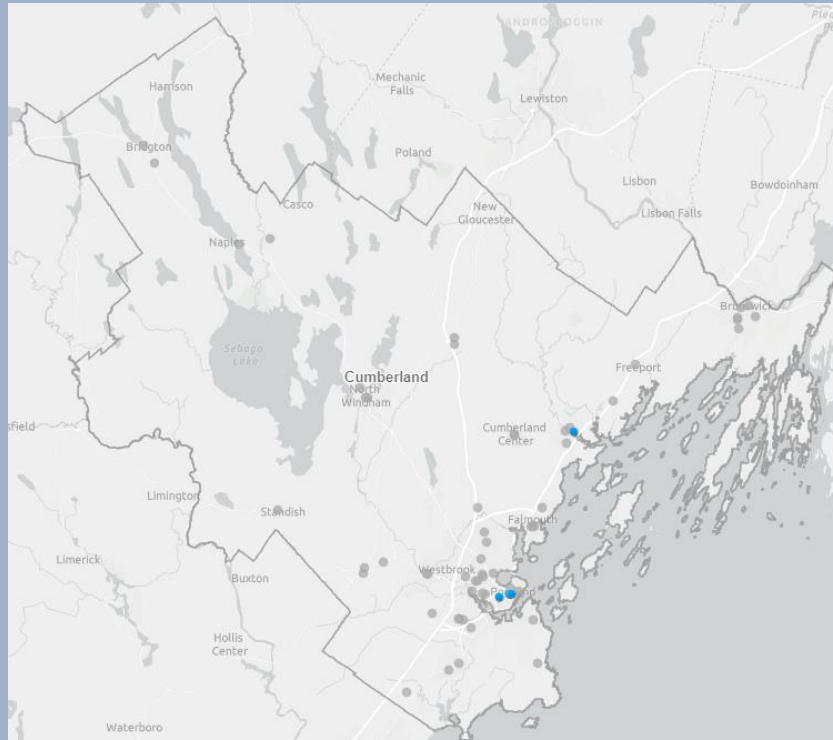


Figure 9. Location of Cumberland County access points that responded to the survey that accept at least one private insurance.

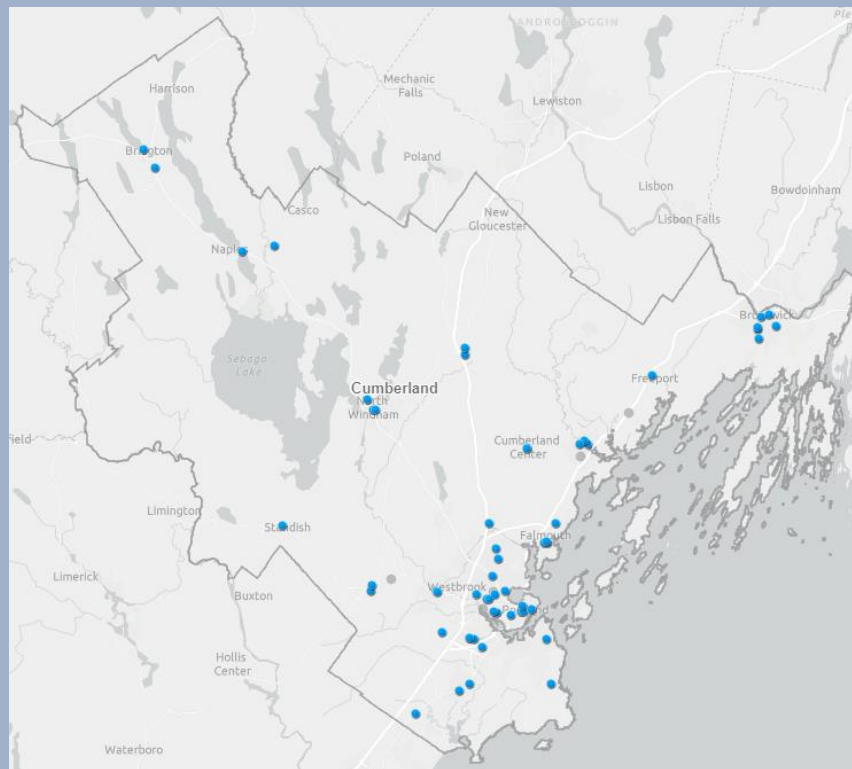


Figure 10. Location of Cumberland County access points that responded to survey that are in network with multiple private insurances.

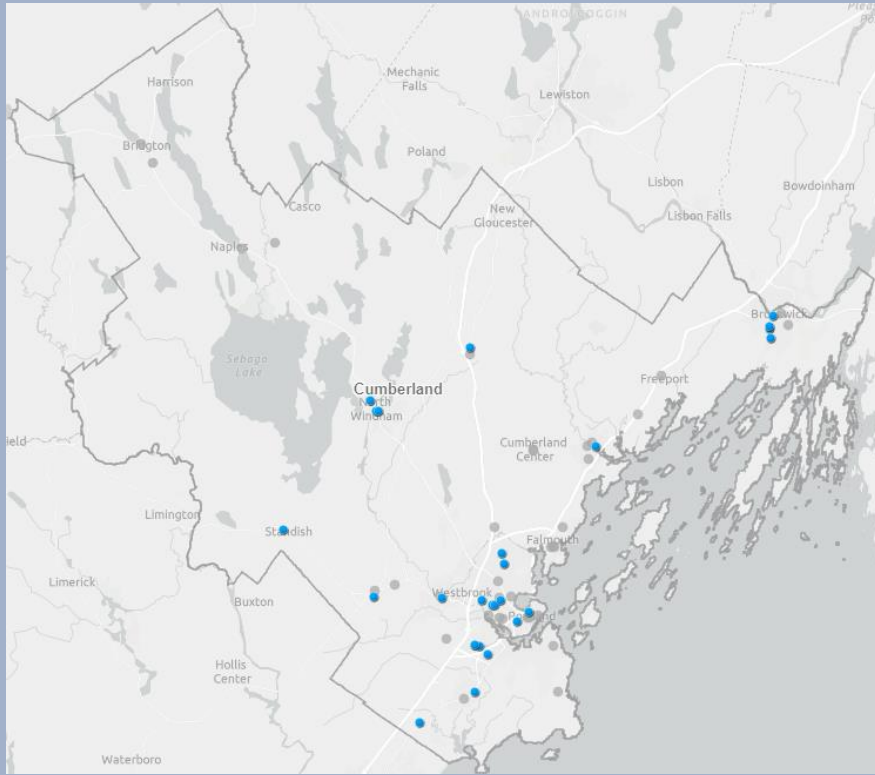
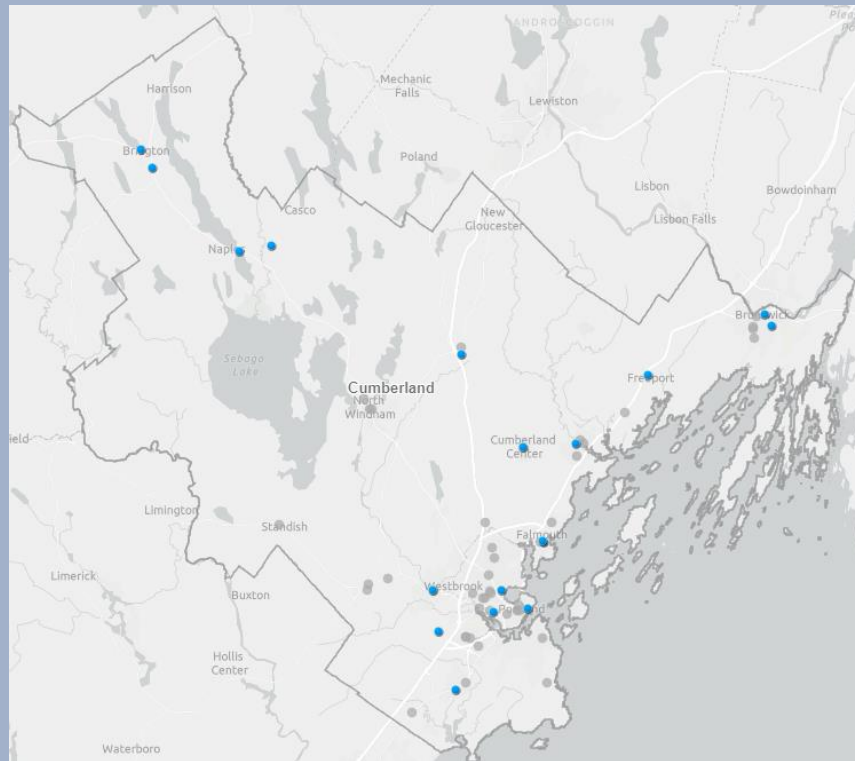


Figure 11. Location of Cumberland County access points that responded to the survey that are in network only with Delta Dental.



Schools

There are 101 schools in Cumberland County (53 elementary schools, 5 combined elementary and middle schools, 18 middle schools, 1 combined middle and high school, 20 high schools, and 4 schools that serve all grades). Eleven of these are private schools and one is a virtual school.

In the Fall of 2022, 4 elementary schools in Cumberland County participated in the Maine State CDC’s School Oral Health Program (SOHP). Trained professionals contracted by the SOHP conduct oral health screenings, apply fluoride varnish, and provide education and referrals for follow-up care as needed. In the Fall of 2022, SOHP contracted hygienists provided oral screenings to 265 children and of those children 35% were found to have active tooth decay and 15 of the children seen had oral health needs that were classified as “urgent”.

Additionally, in the Fall of 2022, dental services were provided in 23 Cumberland County Schools by Greater Portland Health (6 high schools, 4 middle schools and 13 elementary schools). Children in schools served by this program have access to a wide range of preventive and restorative dental services provided by dentist and dental hygienists. In the Fall of 2022, children served by dentists in Greater Portland Health school-based health clinics received 574 restorations, 84 extractions, and a total of 1414 procedures.

When other schools were asked if they provide on-site dental services, 11 responded that they contract with Mainely Teeth, an independent practice dental hygiene (IPDH)-led non-profit mobile program, and one contracts with Tooth Protectors, an IPDH-led business. The services provided by IPDH organizations include a wide range of preventive services such as cleanings, radiographs, caries arrest treatments, and temporary fillings, 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. Thirty schools do not offer on-site dental services. The status of on-site dental services in 24 schools remains unknown due to lack of response. It seems logical to assume that these schools are also not providing on-site dental services.

Figure 12. On-site dental services in Cumberland County Schools in 2022.

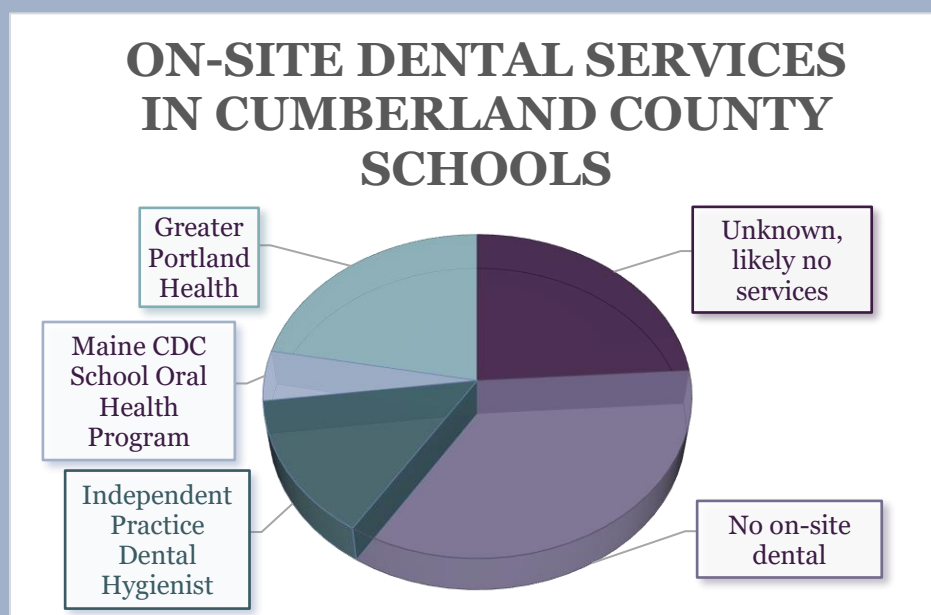
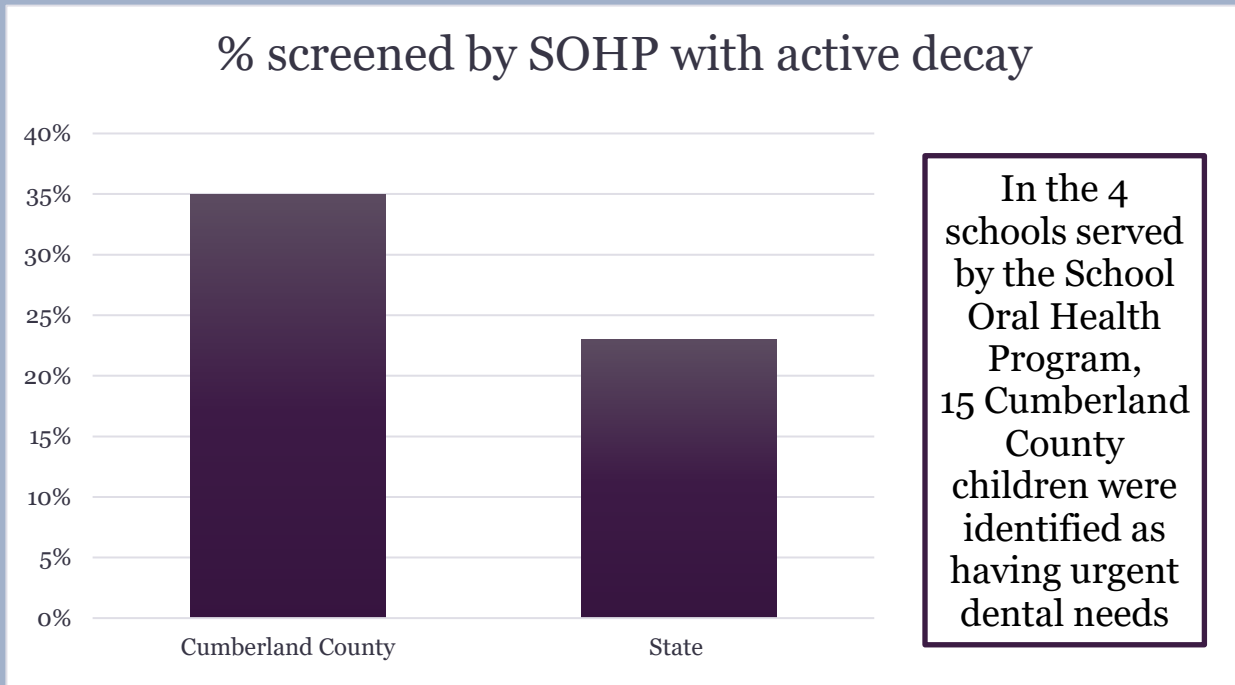


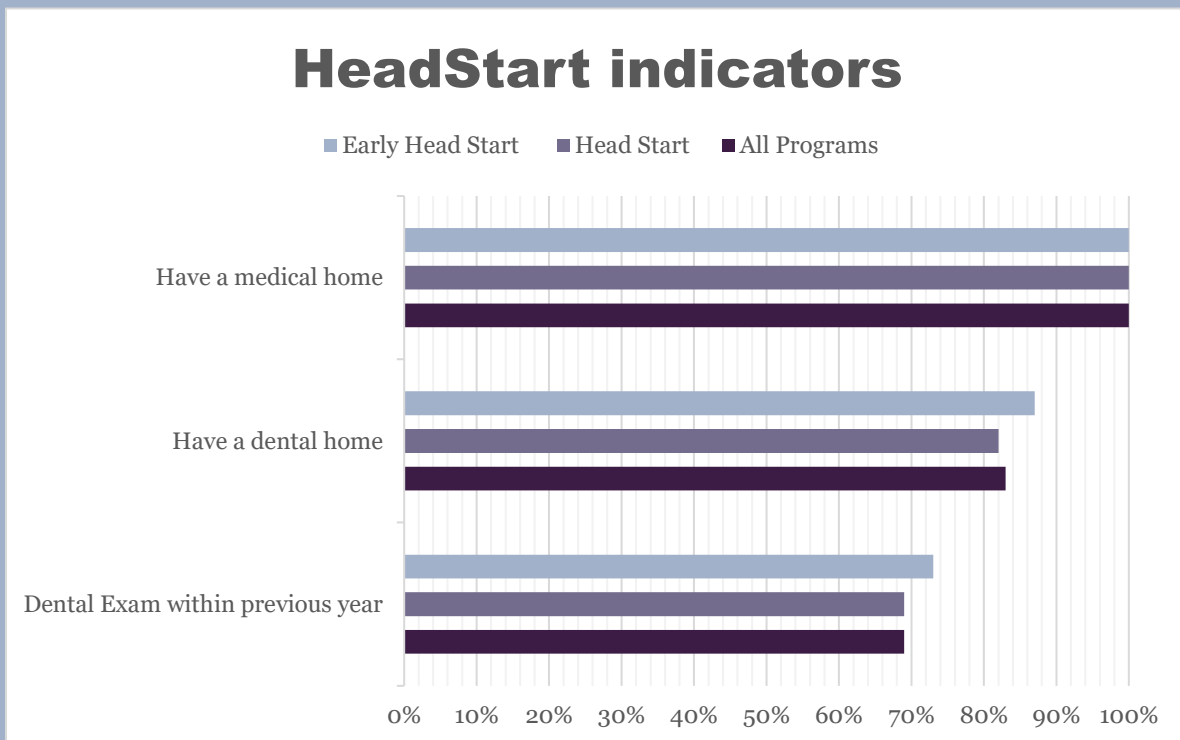
Figure 13. % of Cumberland County children screened by the SOHP in Spring 2022 with active tooth decay.



HeadStart

In the Fall of 2022, there were 99 children enrolled in Head Start Programs in Cumberland County including 15 in Early Head Start Programs. Fifteen Head Start children lack a dental home as well as 2 Early Head Start children while all children in both groups have a medical home. Cumberland County comes closer to meeting the federal requirement that all HeadStart programs ensure that all children establish a dental home and receive a dental exam within 90 days of enrolling in the program than many other HeadStart organizations. It is of note that all HeadStart programs in this region participate in the Virtual Dental Home Program offered by Mainely Teeth in which families have the option of their child receiving routine dental care, including a virtual dental exam, on-site in their HeadStart location.

Figure 14. Health indicators for children enrolled in Cumberland County HeadStart Program in Fall 2022.



Primary Care

With 103 primary care practices, Cumberland County contains more access points for primary care than any other county in the state. Of the 103 practices, 1 is a Federally Qualified Health Center with 5 locations (4 in Portland and 1 in South Portland).³ There are also 6 school-based health centers operated by Greater Portland health.

Table 4. Primary Care Indicators

Primary care indicator ³	Cumberland	State
Primary Care Practices	103	463
Sites per 10,000 population	3.6	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 5 years of age.⁵ Of the 103 primary care practices in Cumberland County, 56 primary care practices treat pediatric patients. Of these 56 practices, 36 have received training with the FTFT Program and 24 have fully or partially fully implemented the program into their practice.

Figure 15. FTFT adoption in the Cumberland Public Health District primary care practices that serve children.

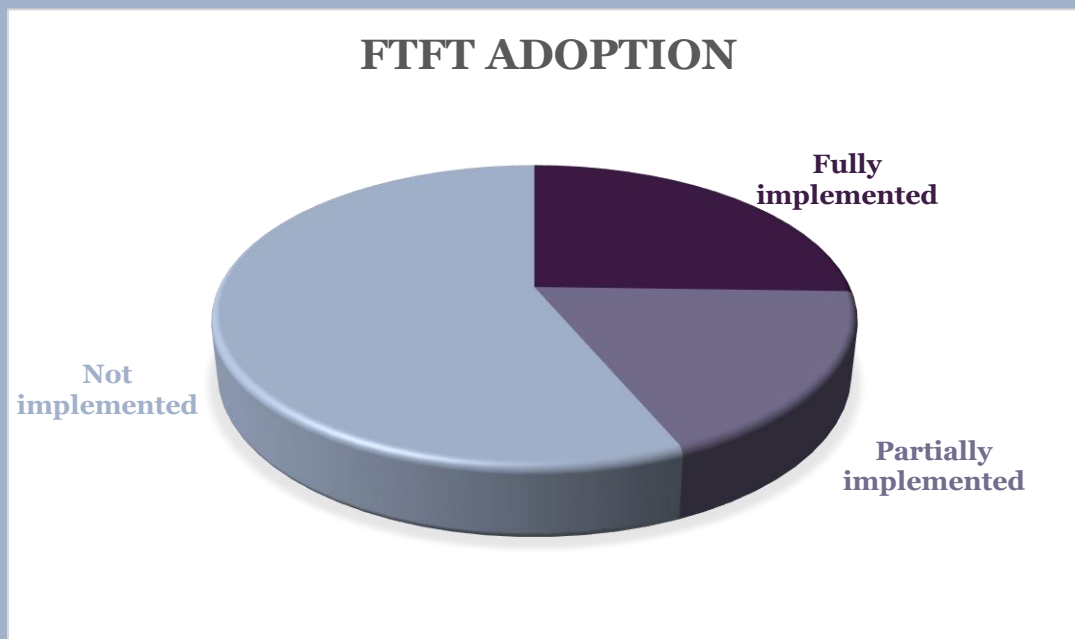
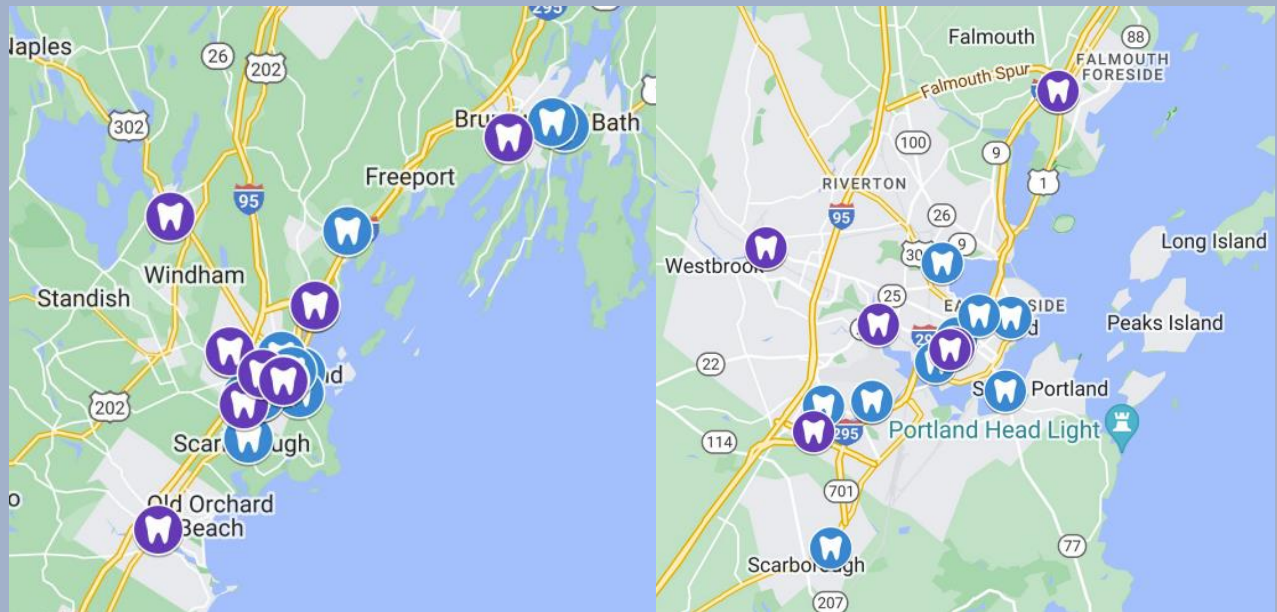


Figure 16. FTFT fully (purple) or partially (blue) implementing sites in the Cumberland Public Health District.



Utilization

Based on claims data⁷, half of all children covered by MaineCare insurance for at least 11 months out of the year in Cumberland County received no dental services in 2021. Even more did not have a preventive dental claim. The Cumberland Public Health District followed State trends from 2019-2021 with a drop in services at the start of the COVID-19 pandemic. Cumberland County demonstrates the state’s largest disparity in preventive care utilization between commercially insured children and those covered by MaineCare insurance. This may be in part because Cumberland County saw slightly higher service utilization by commercially insured children than the State average. Additionally, Cumberland County relies on the emergency room for dental needs at a rate well below the State average.¹

Table 5. Emergency room utilization for dental care¹

Indicator	Cumberland	State average
2016-2018 dental emergency department rates for children per 10,000 population	10.7	17.9
2016-2018 dental emergency department rates for adults per 10,000 population	81.7	136.9

Source for Figures 17-19: Maine Health Data Organization, All-Payer Claims Database. Analysis by USM Cutler Institute for the Partnership for Children’s Oral Health
“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.

Figure 17. Comparison of % of insured children under age 21 with any dental services by insurance type (commercial dental insurance and MaineCare).⁷

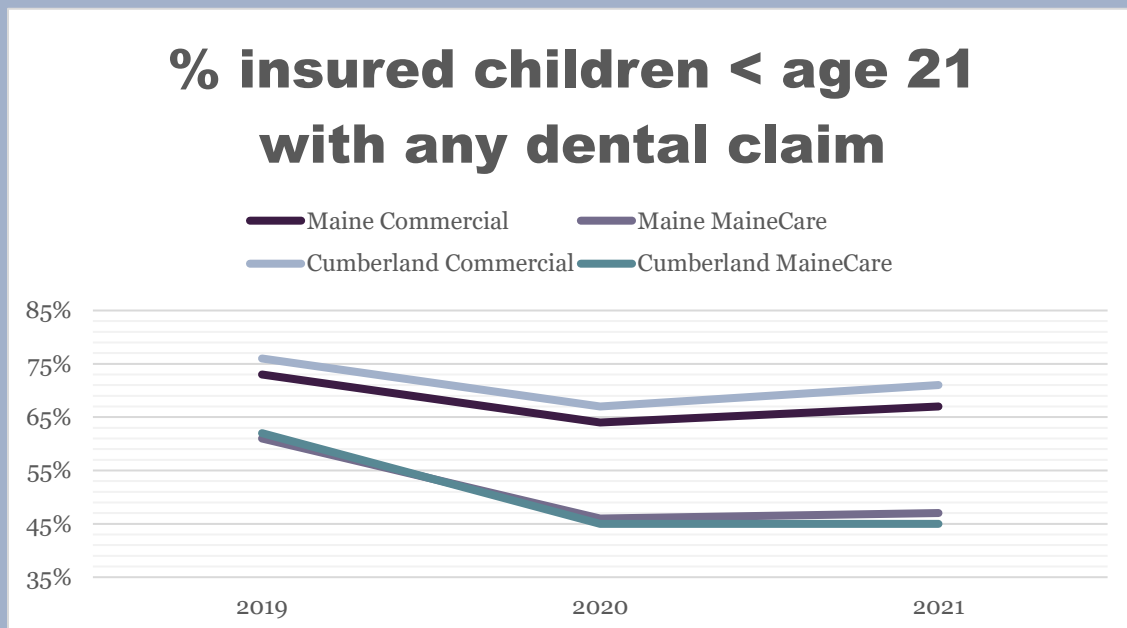
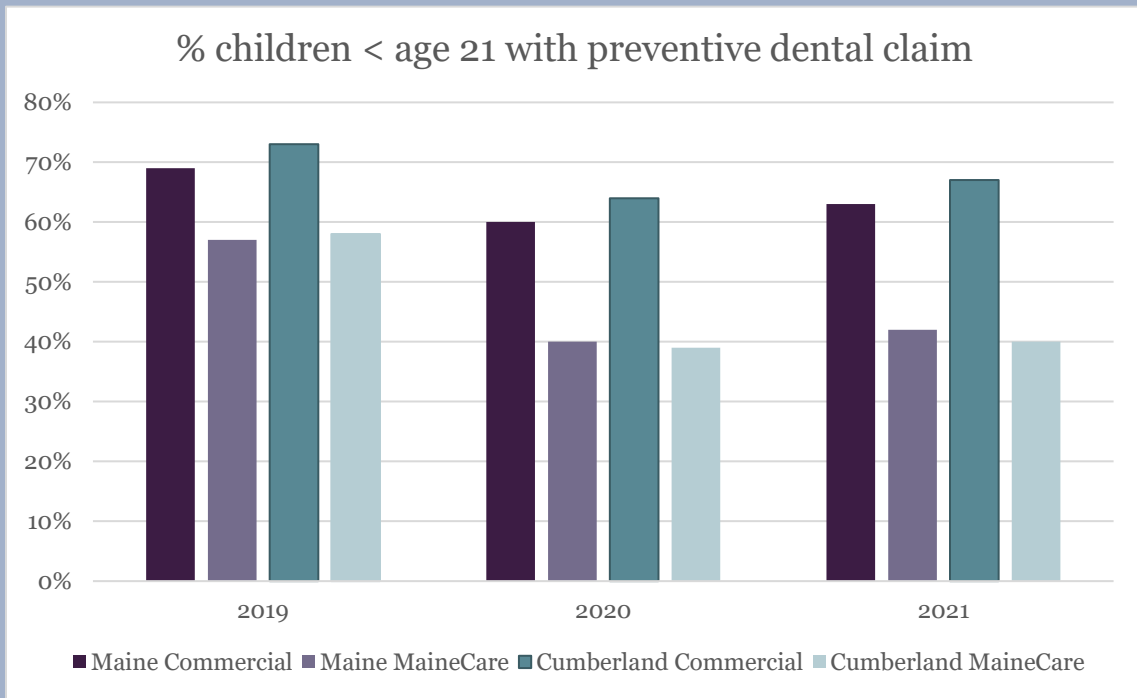


Figure 18. Comparison of % of insured children under age 21 with at least one preventive dental claim by insurance type (commercial dental insurance and MaineCare).⁷



Workforce

In the 61 access points that responded to the survey, there were 96 dentists and 184 hygienists treating patients. One dental hygienist treats patients in an Independent Practice Dental Hygiene office. In addition, as of June 2022, there are a reported 40 vacant positions within these dental practices. (1 dentist, 22 hygienists, 10 dental assistant, and 7 administrative staff).

Figure 14. Existing workforce numbers (dentists) by location.

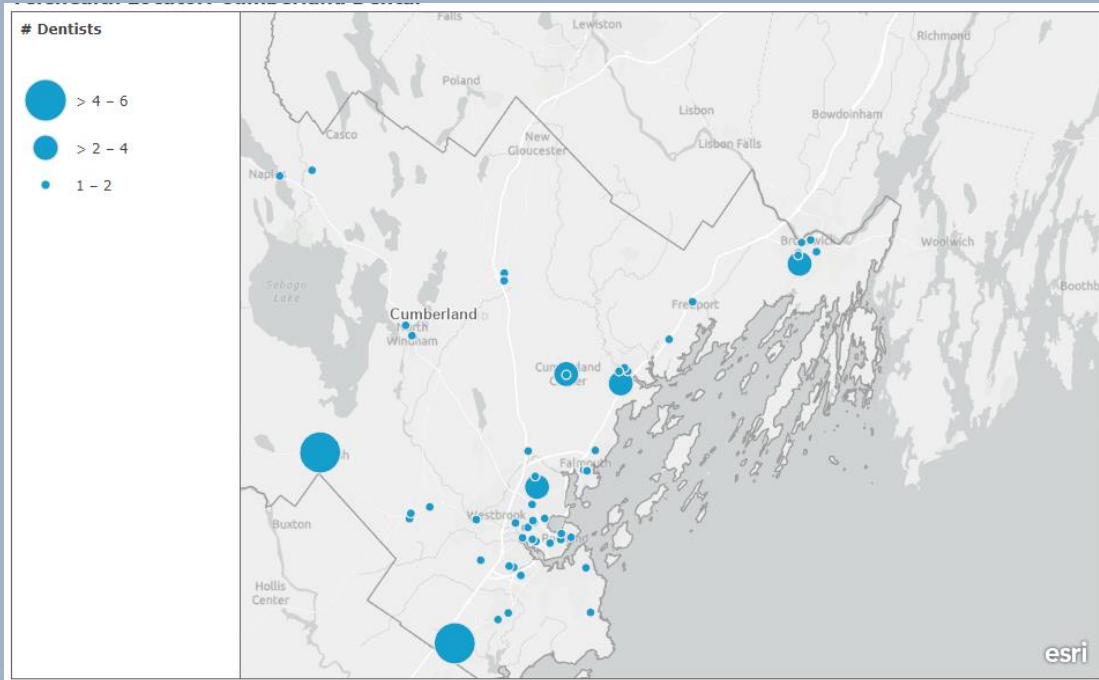


Figure 21. Existing workforce numbers (hygienists) by location.

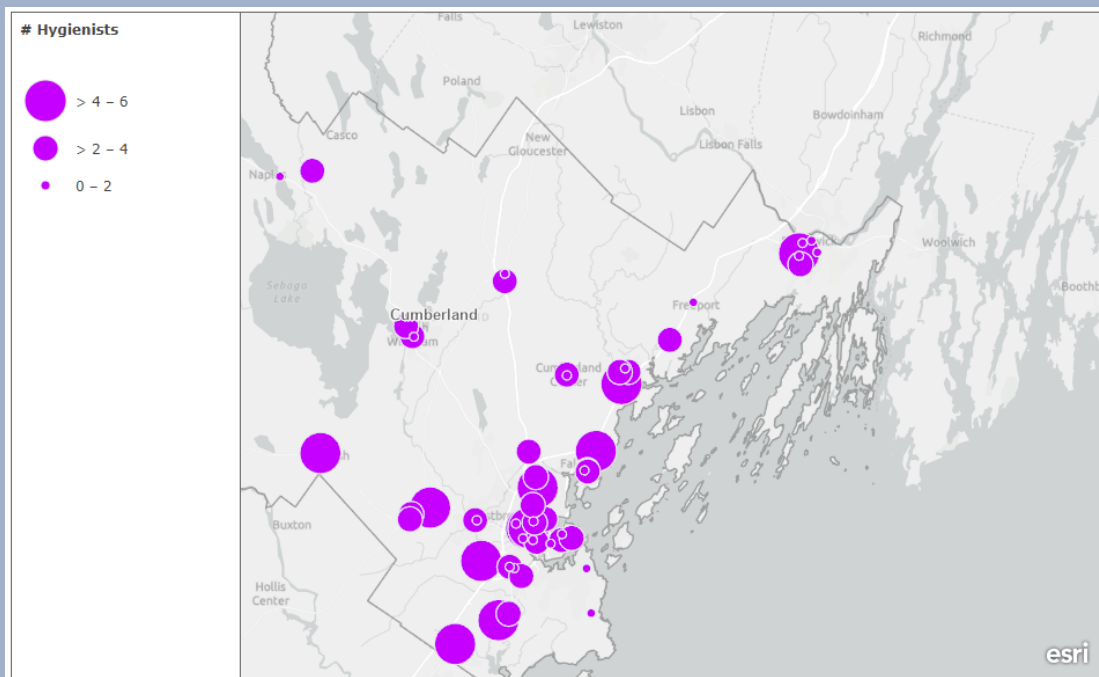
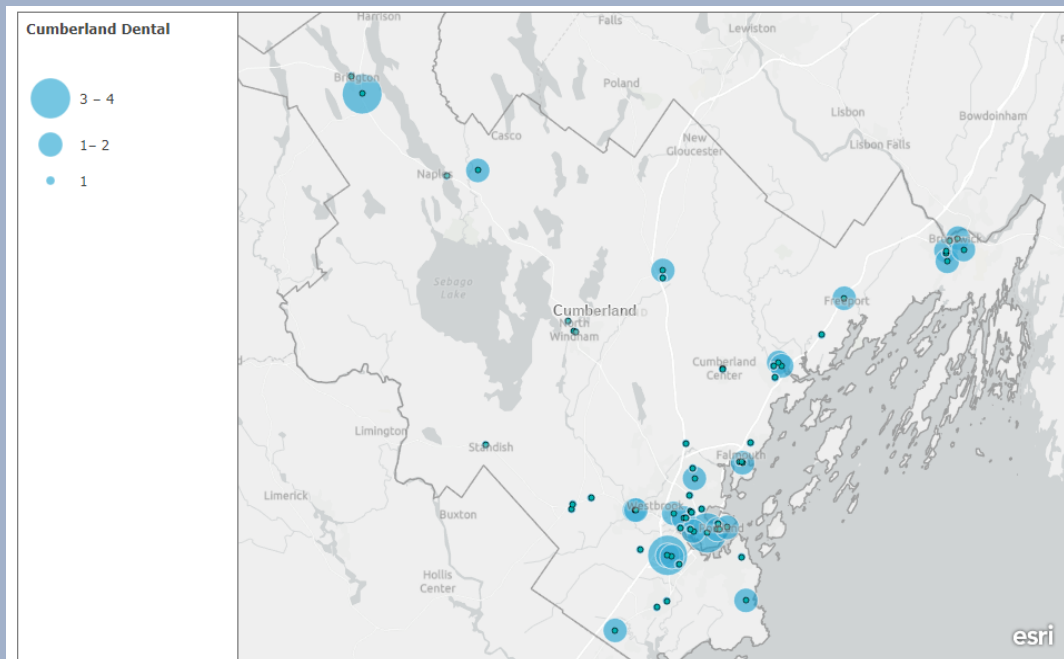


Figure 22. Open staff positions by location (including dentists, hygienists, assistants and administrative staff).



Methods

Methods of data collection for this descriptive report included review of existing reports (see reference list) and telephone/email communication with primary care practices, schools, and dental providers. Researchers contacted dental practices, schools, HeadStart agencies, and primary care locations in the spring/summer of 2022. Researchers collected workforce data during phone calls/emails with dental practices. Each practice was contacted multiple times before being counted as not responding. The School Oral Health Program and the From the First Tooth Program provided current county level data from their respective programs in summer 2022.

Utilization and insurance data was obtained from the Maine Health Data Organization's 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 Maine Health Data Organization is a state agency that collects healthcare 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. This data was analyzed by the USM Cutler Institute for the Children's Oral Health Network of Maine.

References:

1. Maine CDC. Health Profiles. Maine Shared Community Needs Assessment. 2021. <https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/health-profiles.shtml>
2. Maine Children's Alliance. 2022 County Data Profiles. 2022. https://mainechildrensalliance.org/site/assets/files/1985/cumberland_kc2022.pdf
3. Muskie School of Public Service Maine Rural Health Research Center. Maine Rural Health Profiles. Cumberland County. September, 2016. https://mehaf.org/wp-content/uploads/maine-rural-health-profiles_cumberland_september-2016_hyperlinksfixed.pdf
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. 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 Partnership for Children's Oral Health.
8. Cumberland County Community Health Improvement Plan. 2022. www.cumberlandcounty.org/publichealth



Children's Oral Health Network of Maine