

Spotlight on North Carolina

Adult Use of Emergency Departments for Non-Traumatic Dental Conditions



Oral health is directly linked to overall health. When oral health deteriorates, it can have far-reaching consequences and health effects that go beyond the [mouth](#).

Most oral disease is almost entirely preventable. However, routine dental care is out of reach for millions of Americans due to [high costs of care](#), [lack of dental coverage](#), [a shortage of dental professionals in rural areas](#) and of dentists who accept public and/or private insurance, and [the lack of integration between the medical and dental health care systems](#).

Lack of access to care can leave people with few or no viable options other than visiting hospital emergency departments (EDs) for oral health care. Most EDs are not equipped to provide dental treatment, and patients are treated for symptomatic pain or possible infection without definitive diagnosis and appropriate treatment for the underlying problem. These visits are costly — to patients, health systems, state Medicaid programs, and taxpayers — and often respond to unmet oral health needs that would be more effectively addressed by dental professionals in dental offices, clinics, and community locations.

The use of EDs for non-traumatic dental conditions (NTDCs), dental issues that would ordinarily not require care in an ED, unfortunately is not new, yet the COVID-19 pandemic has further highlighted and exacerbated this issue. At a time when ED capacity is strained and in high demand, reducing the number of preventable dental visits in these settings is imperative.

Let us know! The information included in the At a Glance section was compiled using available online data from state and national sources. We encourage readers to contact us if they know of more recent information that is available for their state.



North Carolina at a Glance

Total Population	10,439,388
Medicaid Expansion State	No
Adult Eligibility	North Carolina Medicaid provides health coverage to eligible low-income adults, children, pregnant women, seniors, and people with disabilities. The program is jointly funded by North Carolina and the federal government. Childless adults are ineligible for coverage, and parents are eligible for coverage up to 41% of the federal poverty level.
Total Medicaid Enrollment (as of June 2022)	2,249,516
Total Adult (19+) Medicaid Enrollment (as of June 2022)	895,727¹

Medicaid Enrollment by Gender (2019)

Male	38.8%
Female	61.2%

Medicaid Enrollment by Race (2019)

White	40.1%
Black	34.7%
Hispanic	16.9%
Asian/Native Hawaiian and Pacific Islander	1.5%
American Indian/Alaska Native	2.1%
Multiple Races	4.6%

Uninsured Population by Age (2020)

0–18 years	5.4%
19–64 years	14.3%
Total	11.9%

Uninsured by Race (2020)

White	8.4%
Black	11.2%
Hispanic/Latino	29.8%
Asian/Native Hawaiian and Pacific Islander	data not available
American Indian/Alaska Native	7.7%
Multiple Races	data not available

Provides an Extensive Medicaid Adult Dental Benefit (as of 2020)

No

Dental Health Professional Shortage Areas (DHPSA)²

Total number of DHPSAs	203
Total number of residents living in a DHPSA	3,725,658
Percentage of total population living in a DHPSA	35.6%³

1 Data comes from [June 2022 Medicaid & CHIP Enrollment Data Highlights](#). Total adult (19+) Medicaid enrollment has been calculated by subtracting *Total Medicaid and CHIP Child Enrollment* from *Total Medicaid and CHIP Enrollment*.

2 “Dental” is one of three categories of Health Professional Shortage Areas (HPSA) designations. HPSA designations are used to identify areas and population groups within the US that are experiencing a shortage of health professionals. The primary factor used to determine a HPSA designation is the number of health professionals relative to the population, with consideration of high need. Federal regulations stipulate that, in order to be considered as having a shortage of providers, an area must have a population-to-provider ratio of a certain threshold. For dental care, the population to provider ratio must be at least 5,000 to 1 (4,000 to 1 if there are unusually high needs in the community).

Dental Care Health Professional Shortage Areas. Kaiser Family Foundation. <https://www.kff.org/other/state-indicator/dental-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

3 Data comes from [Designated Health Professional Shortage Area Statistics](#), as of September 30, 2022. Percentage of total population living in a DHPSA has been calculated by dividing total residents living in a DHPSA by the total population of the state.

Emergency Department Use for NTDCs: What it is and why it is insufficient

While many EDs are equipped to provide care for dental trauma, most do not have adequate staff training or equipment to evaluate, diagnose, and treat non-traumatic dental conditions. As a result, EDs focus on managing pain or infections rather than addressing the cause of the dental problem. Furthermore, EDs often lack systems for oral health provider referrals, leaving many patients to return to the ED again for treatment.

In most cases, patients would be better served by a dental professional, likely in an office or clinic setting. In fact, research indicates that nearly 79% of ED visits for NTDCs could have been addressed in a dental office.

Care received in the ED is expensive, and state Medicaid programs and the uninsured largely bear the costs. Most patient needs could be addressed at a dental office or clinic at a much lower cost.



In the US, every **15 seconds**, an individual visits an ED for a dental condition.

Dental trauma is an injury to the teeth, gums, or nearby tissue, including the lips and tongue.

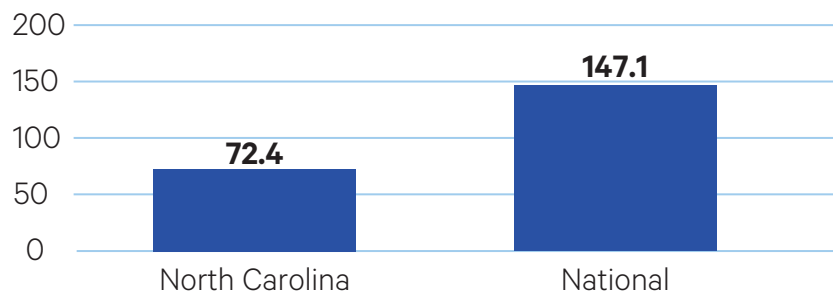
Non-traumatic dental conditions are dental issues that would ordinarily not require care in an ED.

Nationally, the rate of outpatient visits (per 10,000 people) for NTDCs in EDs **decreased by 24%** from 2014 to 2019. In 2019 there were a total of **1,804,619 ED visits** (weighted estimate) for NTDCs. The rate of ED visits for NTDCs in that year was **147.1 per 10,000 people.**

During the same year (2019), there were a total of **75,934 ED visits** (weighted estimate) for NTDCs in North Carolina. The rate of ED visits for NTDCs in that year was **72.4 per 10,000 people.**

Rate of ED Visits for NTDCs per 10,000 People

North Carolina vs. National 2019



Use of Emergency Departments for NTDCs

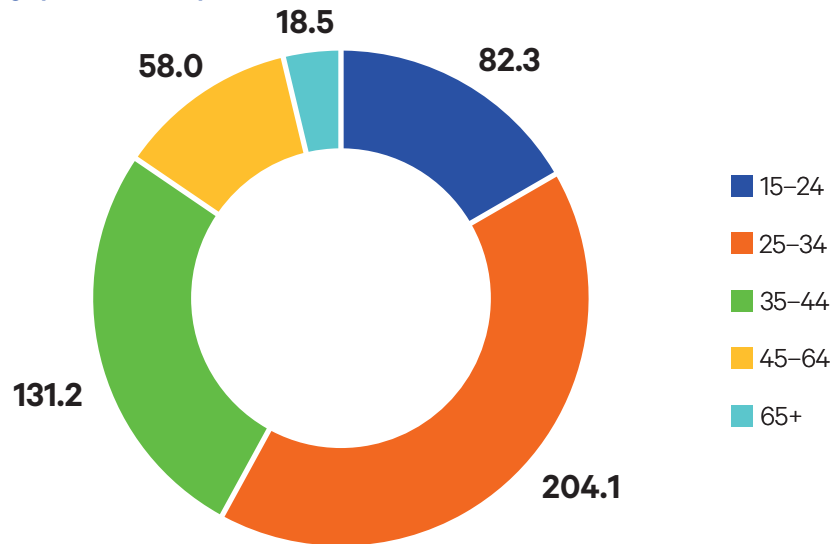
By age and race

In North Carolina

Adults ages **25–34** have the **highest rate of ED use** among all age groups for NTDCs, with **204.1 visits per 10,000 people.**

Adults ages **65 and older** have the **lowest rate of ED use** for NTDCs across all age groups, with **18.5 visits per 10,000 people.**

Average Yearly ED NTDC Visits by Age per 10,000 People
North Carolina 2017–2020



Across all demographic groups represented in the [HCUP Dashboard](#), **Black residents of all ages** in North Carolina have the **highest rate of ED use** for NTDCs, with **149.8 visits per 10,000 people**. This is more than double the rate for white residents (62.3 visits per 10,000 people) and nearly 4.5 times higher than the rate for Hispanic residents (33.6 visits per 10,000 people).

Black men ages 25–34 in North Carolina have the **highest rate of ED use** for NTDCs across all demographic groups represented in the HCUP Dashboard, with **372.8 visits per 10,000 people**. This is more than double the rate for white men in the same age group (173.5) and more than six times higher than the rate for Hispanic men (60.4) in this age group.

Black women ages 25–34 in North Carolina have the **second-highest rate of ED use** for NTDCs across all demographic groups represented in the HCUP Dashboard, with **370.5 visits per 10,000 people**. This is more than double the rate for white women (175.4) and more than five times the rate for Hispanic women (64.8) in this age group.

Wide disparities exist in oral health.

Although most oral disease is almost entirely preventable, routine dental care is out of reach for millions of Americans, leading to unmet dental needs. [Like many chronic conditions, the largest burden of disease occurs among marginalized groups](#), including those living in poverty; Black, Indigenous, and People of Color (BIPOC) communities; frail elders; immigrant populations; and those with special health care needs.

Contributing Factors to Unmet Dental Needs

Coverage: [Over 74 million Americans lack access to dental coverage](#), three times the number of people without medical insurance.

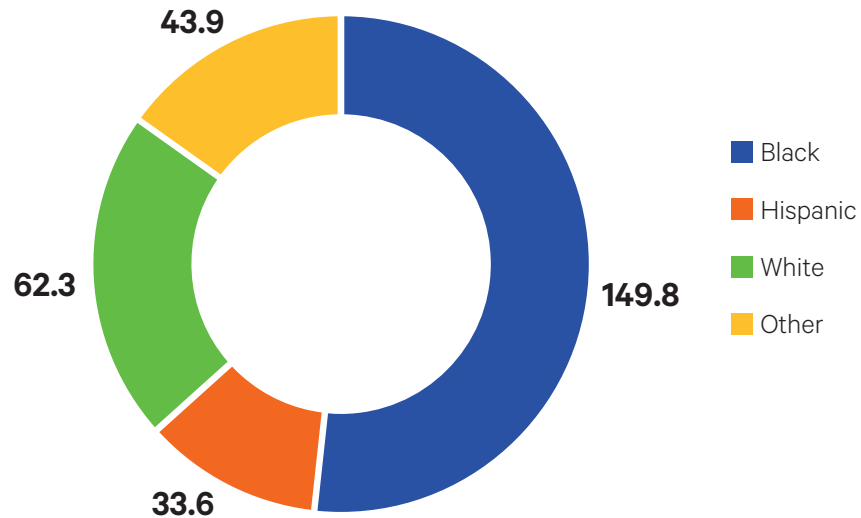
Cost: [Expensive out-of-pocket costs](#) can be prohibitive. The share of their income that low-income families spend on dental care is 10 times that of wealthier families. Without dental coverage or the ability to afford care, many adults postpone treatment until their condition becomes too painful to endure. This means they need more expensive and extensive oral care than they would if they had seen a dentist earlier in the disease process.

Provider Availability: Due to [trouble finding a dentist](#), 41% of adult Medicaid beneficiaries report that they did not visit a dentist within the last 12 months. This can be attributed to an overall shortage of dentists in their area and/or a lack of dentists who accept Medicaid.

In North Carolina, more individuals with high income cited trouble finding a dentist as a reason not to visit a dentist (31%) compared to those with low (17%) or middle income (7%) levels. However, more individuals with middle income (81%) cited cost as a barrier to seeing a dentist, compared to those with low (69%) or high (45%) income.

Average Yearly ED NTDC Visits by Race* per 10,000 People

North Carolina 2017–2020



*The HCUP Dashboard's race categories are constructed from the HCUP and US Census race categories. "Other" includes American Indian or Alaska Native, Asian, Native Hawaiian and other Pacific Islander, and two or more races.

Use of Emergency Departments for NTDCs

By insurance coverage status



Adults ages 21–64 enrolled in Medicaid and those without insurance are the most likely to seek dental care through EDs for NTDCs. Conversely, adults in this age group enrolled in Medicare are the least likely to seek such care.

Nationally

Nearly **7 in 10 ED visits** for NTDCs among patients ages **21–64** were made by those **enrolled in Medicaid** (38.8%) or who were **uninsured** (29.8%).⁴

In comparison, **20.8% of all ED visits** nationally for this same age group were made by adults with **private insurance**.

In North Carolina

More than **7 in 10 ED visits** for NTDCs among patients ages **21–64** were made by those **enrolled in Medicaid** (17.9%) or who were **uninsured** (55.3%).

In comparison, in North Carolina, **20.9% of all ED visits** for this age group were made by adults with **private insurance**.

Use of Emergency Departments for Non-Traumatic Dental Conditions by Adults Ages 21–64

Medicaid, Uninsured, Private Insurance

North Carolina vs. National 2017–2020

	North Carolina	National
Medicaid	17.9%	38.8%
Uninsured	55.3%	29.8%
Private	20.9%	20.8%
Total	94.1%	89.4%

⁴ Please see *Charges and Payers* tab within the [HCUP Dashboard](#). Users may adjust the age range displayed in the *Average Charge by Insurance*, *% of Visits by Insurance*, and *% of Total Charges by Insurance* tables.

Nationally and in North Carolina

Adults ages 25–34 who are **enrolled in Medicaid** or who are **uninsured** make up the **highest percentage of ED visits** for NTDCs.

In North Carolina

Adults ages 25–34 enrolled in **Medicaid** make up **20.7% of all ED visits**, while **uninsured** adults make up **61.0% of all such visits**.

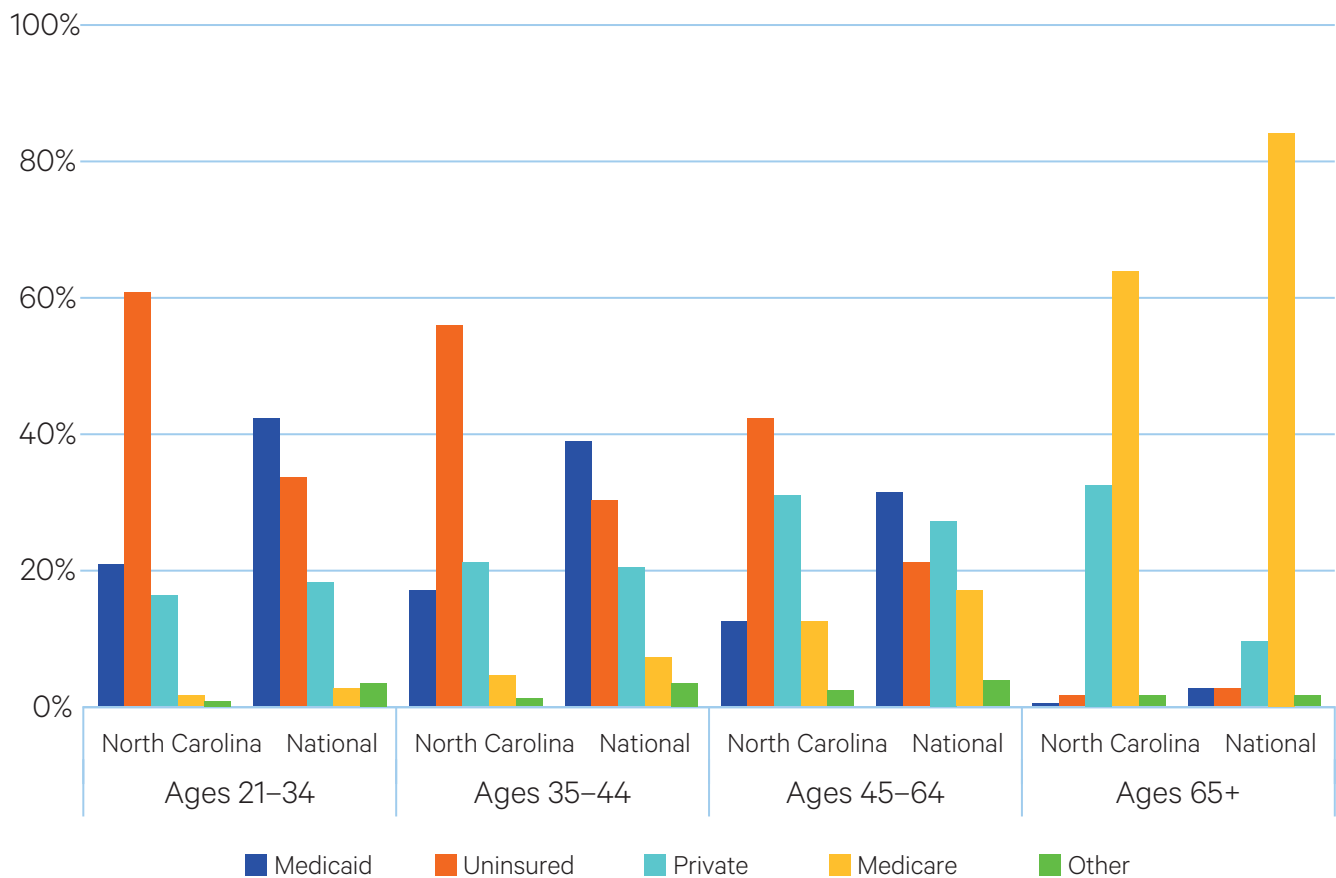
Use of Emergency Departments for Non-Traumatic Dental Conditions By Adults Ages 25–34 Medicaid, Uninsured, Private Insurance

North Carolina vs. National 2017–2020

	North Carolina	National
Medicaid	20.7%	42.9%
Uninsured	61.0%	34.0%
Private	15.7%	16.7%
Total	97.4%	93.6%

Non-Traumatic Dental Conditions Visits to Hospital Emergency Departments by Age Group and Primary Payors

North Carolina vs. National 2017–2020



Use of Emergency Departments for NTDCs

The high cost of care

Costs vary widely by insurance status.

Nationally, **patients with Medicaid ages 21–64** make up **38.8% of all ED visits** for NTDCs and account for **34.1% of all costs**. The average charge per visit for patients with Medicaid is \$1,500.

- In North Carolina, adults with Medicaid ages 21–64 make up **17.9% of all ED visits** for NTDCs and account for **16.9% of all costs**. The average charge per visit for adult Medicaid beneficiaries is \$1,300.

Nationally, **uninsured adults ages 21–64** make up **29.8% of all ED visits** for NTDCs and account for **29.7% of all costs**. The average charge per visit for uninsured adults is \$1,500.

- In North Carolina, uninsured adults ages 21–64 make up **55.3% of all ED visits** for NTDCs and account for **52.5% of all costs**. The average charge per visit for uninsured adults is \$1,300.

Nationally, **adults ages 21 and older with Medicare** make up **11.7% of all ED visits** for NTDCs and account for **15.2% of all costs**. The average charge per visit for Medicare beneficiaries is \$2,200.

- Adults with Medicare within this age group make up **7.3% of all ED visits** for NTDCs in North Carolina and account for **9.3% of all costs**. The average charge per visit for Medicare beneficiaries in North Carolina is \$1,800. This is the highest average charge of all payors for this group.

Nationally, the estimated **total charges for ED visits** for NTDCs were nearly **\$3.4 billion** in 2019.

During the same year (2019), the estimated total charges for NTDCs were nearly **\$115,950,803** in North Carolina.

Nationally, the average charge for an ED visit for NTDCs across all ages and insurance statuses was **\$1,872** in 2019.

In North Carolina in 2019, the average charge was **\$1,527**.

Meanwhile, a similar visit to a dental office or clinic for dental pain typically costs **\$90–\$200**.

Did you know?

Medicare coverage is available for adults ages 65 and older and certain younger people with disabilities. The program covers 60 million people, yet it does not include a dental benefit. As a result, **37 million enrollees lack coverage for oral health care**.

Percentage of Non-Traumatic Dental Conditions Visits to Hospital Emergency Departments and Average Charge by Coverage Type

Ages 21–64

North Carolina vs. National 2017–2020

	Percent of Visits by Insurance		Average Charge by Insurance	
	North Carolina	National	North Carolina	National
Medicaid	17.9%	38.8%	\$1,300	\$1,500
Uninsured	55.3%	29.8%	\$1,300	\$1,500
Private	20.9%	20.8%	\$1,600	\$1,800
Medicare	4.7%	7.2%	\$1,500	\$1,800
Other	1.2%	3.4%	\$1,600	\$1,900

Use of Emergency Departments for NTDCs

Reasons for ED visits

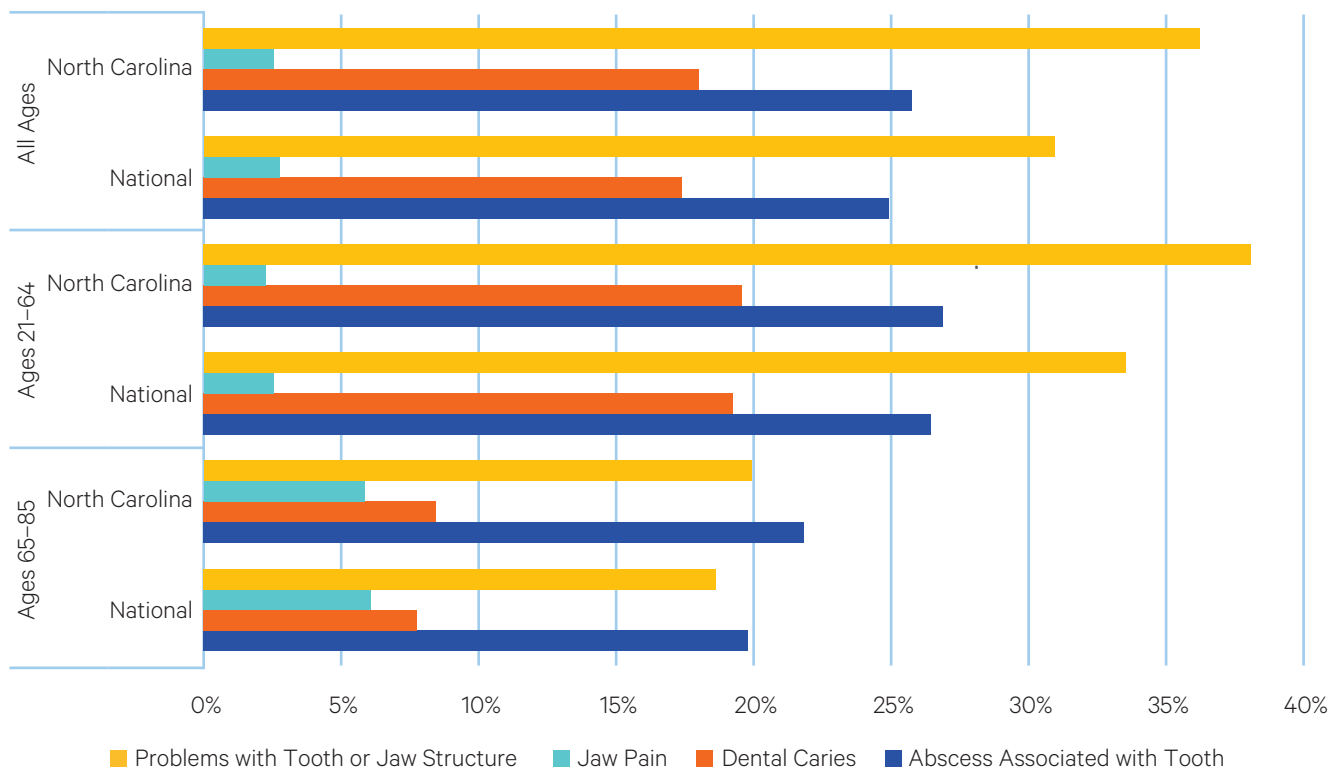


Children and adults seek care in EDs for a variety of dental concerns and problems.

The most common dental problems across all ages are abscess, dental caries/decay, jaw pain, and other problems with the structure of a tooth or the jaw.

Top Diagnoses Given for Non-Traumatic Dental Conditions Visits to Hospital Emergency Departments by Age Group

North Carolina vs. National 2017–2020



Promising Solutions to Expand Access to Care

The oral health care system in the United States is failing millions of Americans each year. Barriers such as high cost of care, lack of dental coverage, cultural and linguistic issues, transportation issues, and provider shortages exist and persist. Improving access to care is a key component of creating an equitable oral health care system that promotes better health and allows every person to reach their full potential. Promising solutions to improve and expand access are available and should be explored by community and state leaders.

Expanding coverage within Medicaid

As of 2020, North Carolina does not offer an extensive Medicaid adult dental benefit. According to the [Medicaid Adult Dental Coverage Checker](#), the state's Medicaid dental benefits package earns a score of 17 out of 32, which places it below the designation of "extensive." In order to meet the definition of extensive, the state would need to cover additional preventive, restorative, endodontic, and prosthodontic services.⁵

⁵ The Medicaid Adult Dental Coverage Checker is an interactive tool that displays where a given state's Medicaid adult dental benefits package falls on a continuum from no dental benefits to extensive benefits. It looks at coverage of specific procedures and services, including allowed frequency, in eight service categories. The Coverage Checker displays results that were self-reported by state dental directors or their equivalent in a survey conducted in spring 2020. The survey, known as the Rubric for Assessing Extensiveness of State Medicaid Adult Dental Benefits, will be released again in early 2023, and results will be updated in the Medicaid Adult Dental Coverage Checker.

Furthermore, Medicaid coverage for adult North Carolinians is limited to those with extremely low incomes, and it is estimated that [an additional 600,000 adults would gain access to Medicaid coverage](#) if the state approves Medicaid expansion through the Affordable Care Act.

New research shows that [access to extensive dental benefits plays a crucial role in increasing access to and utilization of preventive care and reducing disparities in dental care visits and in use of preventive and treatment services](#). Providing dental coverage to adults also increases the likelihood that their children will receive timely and appropriate care. Furthermore, adults with dental coverage are more likely to enter and remain in the workforce.

[Policy changes can be made at the federal and state level to improve oral health access](#). At the federal level, Congress should make comprehensive coverage for adults a permanent part of the Medicaid program and establish a baseline of covered services for all states. At the state level, program administrators and policymakers should continuously examine their Medicaid adult dental benefit offerings to ensure that they are covering procedures, frequencies, and innovative delivery models that positively affect the oral and overall health of Medicaid beneficiaries. States that have not yet expanded Medicaid under the Affordable Care Act should do so.

Establishing a dental benefit within Medicare

Medicare provides health care coverage for 60 million older adults and people with disabilities but does not cover preventive or restorative dental care. Advocates and policymakers are calling for expanded coverage for medically necessary oral health care. This is an interim step toward the ultimate goal of expanding Medicare to include a comprehensive dental benefit in Medicare Part B.

Ensuring transparency and consistency in data reporting across states

As Medicaid is administered separately by each state, there is no consistent way that individual states report enrollment data or spending on dental and other healthcare costs. This lack of transparency on Medicaid enrollment and spending on the part of some states is a barrier to understanding clearly the gaps in health care coverage and inequities that affect underserved and marginalized communities. Changes to Medicaid and Medicare should include consistent reporting requirements to ensure transparency across states regarding health care spending.

CareQuest Institute for Oral Health® is committed to transforming the oral health care system by creating a more equitable, accessible, and integrated health system designed for everyone, through our work in grantmaking, research, health improvement programs, policy and advocacy, and education. Each of these areas allows us to drive meaningful change in reducing oral health disparities.

About the Healthcare Cost and Utilization Project:

The data in this report comes from the Healthcare Cost and Utilization Project (HCUP). The HCUP dashboard reports state trends in emergency department visits for non-traumatic dental conditions and includes information on patient demographics, frequencies, diagnoses, charges accrued, and insurance status by state. CareQuest Institute for Oral Health uses this data to inform and engage communities and policymakers about existing oral health inequities and to support state and federal efforts to expand adult dental benefits in Medicare and Medicaid.

Access the data: https://public.tableau.com/app/profile/carequest/viz/HCUPEDVisitsforNTDCs_16358680892720/VisitandDxRates

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