

Fact Sheet

Pediatric and Adolescent Dental Care

Introduction

Oral health is a crucial component of overall health and wellbeing. The average adult in the United States has anywhere between 10 and 17 decayed, missing, or filled permanent teeth, and about half of all adults have gingivitis (gum inflammation).¹ Certain dental issues, like dental caries, also known as cavities, and periodontitis, more commonly known as gum disease, can put one at risk for more life-threatening diseases including endocarditis, an infection of the inner lining of the heart, cardiovascular disease, complications with pregnancy and birth, and even pneumonia.² In fact, dental caries are the most common chronic disease of childhood and are five times more common than asthma which is the second most common chronic illness in children.³ As a result, it is crucial that preventative measures are taken at a young age to promote good dental health and avoid illness later in life.² Preventative measures include encouraging children and adolescents to develop a consistent oral hygiene routine consisting of brushing, flossing, and mouthwash, in addition to receiving regular dental checkups and cleanings.² This dental care is especially important for children from lower-income families, who are twice as likely to have cavities.⁵

Because pediatric/adolescent dental care is a crucial component of the care provided by Medicaid agencies, NC Medicaid uses an array of quality measures* to assess child and adolescent members' access to dental services. This fact sheet provides more information on which quality measures are used to assess pediatric and adolescent dental care, why these measures are important, what they measure, and how NC Medicaid is performing on these measures. Measure topics covered in this fact sheet include oral evaluation, topical fluoride application, and sealant of permanent first molars.

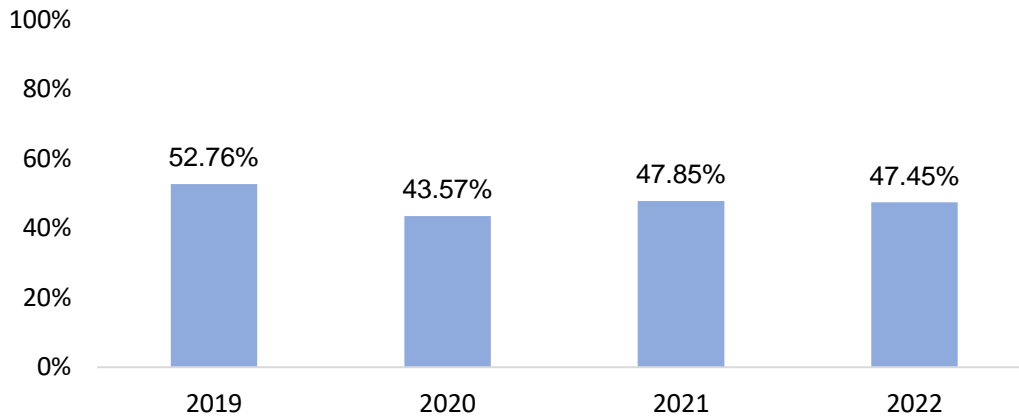
*Quality measures evaluate Medicaid members' access to quality and effective healthcare services. NC Medicaid uses a combination of quality measures created and endorsed by external measure stewards (such as the Centers for Medicare and Medicaid Services (CMS) or National Committee for Quality Assurance (NCQA) as well as internal measures specific to the NC Medicaid population (developed by NC Medicaid). Check out NC Medicaid's [Quality Measurement Technical Specifications Manual](#) for more information!

ORAL EVALUATION, DENTAL SERVICES (OEV)

While rates of cavities in school-age children has been steadily declining, the average child still has one cavity in their permanent teeth by the time they are 9 years of age, 2.6 cavities by the age of 12 years, and 8 cavities by the time they reach 17 years old.¹ To combat this, the American Dental Association (ADA) recommends people of all ages receive regular dental cleanings and check-ups twice a year.³ For most people, these appointments take place every six months, but this can vary depending on one's unique dental health needs.³ Pediatric and adolescent dental check-ups are very similar to appointments for adults, consisting of a thorough cleaning from a dental hygienist followed by a check-up from a dentist, with periodic additional diagnostic and preventative services and treatments, like x-rays and topical fluoride treatments.³

To better understand if members are receiving these crucial annual dental visits, NC Medicaid uses the *Oral Evaluation, Dental Services (OEV)* quality measure, which assesses the number of members, under the age of 21, who have received a comprehensive or periodic oral evaluation with a dental provider during the measurement year.¹ While comprehensive national average data is not available for this measure, in 2022, the median rate among all reporting Medicaid agencies was 43.2%.⁴ As seen in Figure 1, NC Medicaid has historically performed above this median rate indicating that NC Medicaid members are completing these annual oral evaluations more often.⁴

Figure 1: NC Medicaid Oral Evaluation, Dental Services Performance (2019-2022)



Additionally, on the [Medicaid and Children’s Health Insurance Program \(CHIP\) 2023 Scorecard](#), which aims to increase transparency by portraying quality measure performance across Medicaid agencies, NC Medicaid performs at the top of the 2nd quartile for the OEV measure.^{4,5} This means that NC Medicaid performs better than almost 75% of reporting Medicaid agencies across the OEV quality measure.⁴

TOPICAL FLUORIDE FOR CHILDREN (TFL)

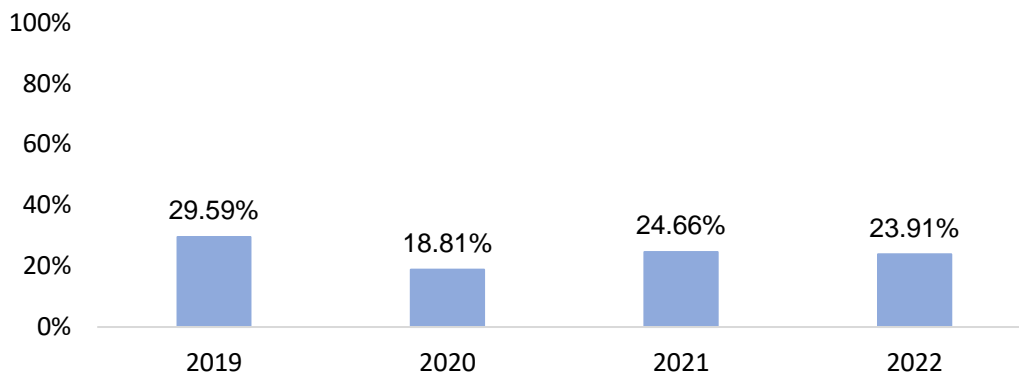
Another way of preventing cavities in children and adolescents is through the application of topical fluoride or fluoride varnish, a gel-like substance that a dental provider spreads on the teeth.^{6,7} Fluoride is a safe and effective way to prevent cavities, as it protects teeth from the acidity of foods and beverages and can reverse early signs of tooth decay.⁷ While cavities can be prevented at home by using a toothpaste or mouthwash that contains fluoride, topical fluoride is often applied two times a year by a dental professional starting as soon as the appearance of a child’s first tooth.^{6,7} In fact, topical fluoride has been found to prevent roughly one-third of cavities in baby teeth.⁶

To better understand if members are receiving regular topical fluoride treatments from their dental care providers, NC Medicaid uses the *Topical Fluoride for Children (TFL)* quality measure.⁸ This measure assesses the percentage of members, ages 1-20 years, who have received at least two topical fluoride applications during the measurement year at one of the following visits: dental or oral health services, dental services, or oral health services.⁸



NC Medicaid's performance on this measure in 2019-2022 ranged from 18.81% to 29.59%. While the rates reflected in Figure 2 might seem low, NC Medicaid ranked tenth for the highest performance on this measure when compared to other state Medicaid agencies.⁹

Figure 2: NC Medicaid Topical Fluoride for Children, Dental or Oral Health Services Performance (2019-2022)



Additionally, NC Medicaid has been a pioneer in developing and implementing an alternative oral health preventative services delivery model. This model, titled Into the Mouth of Babes (IBM), trains non-dental medical providers to deliver preventative oral health services to young children insured under NC Medicaid.¹⁰ These services, which are delivered from the time of tooth eruption until 42 months of age, include oral evaluation and risk assessment, caregiver counseling, referral to dental providers, and topical fluoride application.¹⁰ Since the start of the program, 45-50 other state Medicaid agencies have implemented a similar version of the model.

SEALANT RECEIPT ON PERMANENT FIRST MOLARS (SFM)

One of the most effective ways of preventing cavities among children and adolescents is by applying a dental sealant.⁶ Dental sealants are hard, acrylic coverings that dental professionals apply to the chewing surfaces of the back molars to protect them from cavity-causing bacteria.¹¹ Sealants are most commonly used in children and adolescents, with over 40% of children ages 6-11 and 48% of adolescents ages 12-19 in the United States having sealants on their permanent teeth.¹¹

Because sealants can prevent up to 80% of cavities, NC Medicaid uses the *Sealant Receipt on Permanent First Molars (SFM)* quality measure to assess the percentage of members who turn 10 during the measurement year and received sealants on permanent first molar teeth.⁸ This measure has two submeasures:⁸

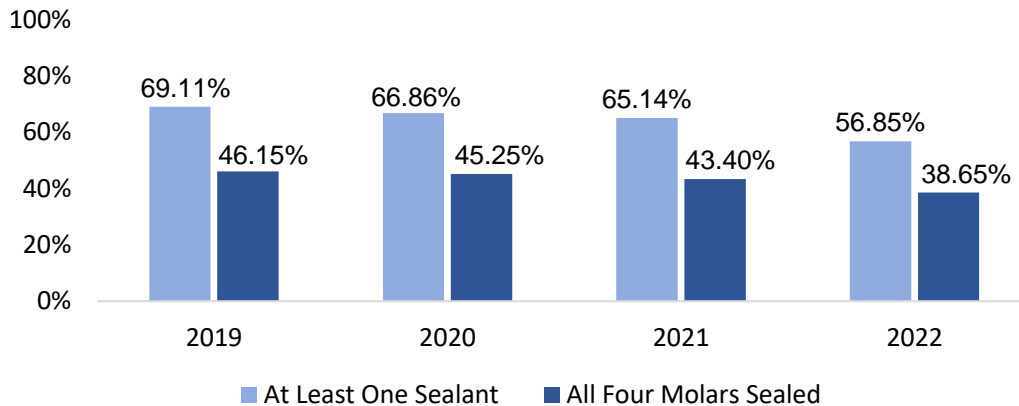
- 1) At least one sealant on a permanent first molar by the 10th birthdate; or
- 2) All four permanent first molars sealed by the 10th birthdate.

As seen in Figure 3, a majority of NC Medicaid members who met the measurement criteria received at least one sealant by their tenth birthday. In contrast, rates of having all four molars sealed were much lower, indicating a potential need for increased continuity of care for dental services. One potential explanation for these lower rates could be that Medicaid's database does not have any



information about the care that a child received prior to being enrolled in Medicaid. Therefore, some children may have had all four of their molars sealed prior to their enrollment, but because this service was not billed under NC Medicaid, they are not counted as having had received this care.

Figure 4: NC Medicaid Sealant Receipt on Permanent First Molars Performance (2019-2022)



NC MEDICAID'S WORK TO IMPROVE THESE RATES

NCTracks is the North Carolina Department of Health and Human Services' (NC DHHS) multi-payer Medicaid Management Information System.¹² This system is the primary processing engine for claims data and serves as a central source of patient and provider information.¹² Traditionally, providers that are enrolled to deliver NC Medicaid services are required to complete a re-certification application if the provider has not submitted any claims data in NCTracks within the last 12 months.¹³ If providers fail to complete re-certification, the provider's contracts will be terminated meaning they can no longer provide services billed under NC Medicaid.¹³ This requirement is intended to verify that a provider's record is still active, but re-certification can be burdensome and lead to provider turnover. This loss of providers is especially impactful for service areas, like dentistry, that already lack provider personnel.

To resolve this issue and ensure that dental providers, even those who only treat a few Medicaid members each year, can continue to provide services under NC Medicaid, NC DHHS lifted this re-certification requirement for dental professionals. The hope is that by discontinuing automatic termination of dental providers, NC Medicaid can recruit and retain more dental service providers.

While NC Medicaid has made strides to increase the retention of dental providers, NC Medicaid's reimbursement rates are still low compared to other state Medicaid agencies.¹⁴ More specifically, while NC Medicaid now covers 200+ dental services, there has only been one rate increase since 2016. This was a 10% increase in reimbursement rates across all services in 2019.¹⁵ In an effort to improve the dental care provided to NC Medicaid members, NC DHHS and the Division of Health Benefits will continue advocating for increased reimbursement rates for dental providers.

ADDITIONAL INFORMATION

The **quality measures** displayed in this fact sheet include:



State of North Carolina • Department of Health and Human Services • Division of Health Benefits (NC Medicaid)
medicaid.ncdhhs.gov • NCDHHS is an equal opportunity employer and provider. April, 2024

- Oral Evaluation, Dental Services (OEV)
- Topical Fluoride for Children (TFL)
- Sealant Receipt on Permanent First Molars (SFM)
 - At Least One Sealant
 - All Four Molars Sealed

For more technical information on these measures, please visit North Carolina’s Medicaid Quality Measurement Technical Specifications found [here](#).

CITATIONS

1. National Committee for Quality Assurance (NCQA). (2022). *HEDIS Measurement Year 2022* (Volume 1).
2. “Oral Health: A Window to Your Overall Health.” *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 28 Oct. 2021, www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475.
3. “Dental Cleanings.” *Cleveland Clinic*, Jan. 2023, my.clevelandclinic.org/health/treatments/11187-dental-check-up.
4. “Oral Evaluation, Dental Services.” *Medicaid and CHIP 2023 Scorecard*, Medicaid.gov, 2022, www.medicaid.gov/state-overviews/scorecard/measure/Oral-Evaluation-Dental-Services?keywords=%5B%22559%22%5D&measure=HC.17&measureView=state&population=999&methodology=320&dataView=pointInTime&chart=map.
5. “About the Medicaid & CHIP Scorecard.” *Medicaid and CHIP 2023 Scorecard*, Medicaid.gov, 2023, www.medicaid.gov/state-overviews/scorecard/about.
6. “Children’s Oral Health.” *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 6 Apr. 2022, www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html.
7. “Fluoride: Topical and Systemic Supplements.” *American Dental Association*, June 2023, www.ada.org/resources/ada-library/oral-health-topics/fluoride-topical-and-systemic-supplements/.
8. *North Carolina’s Medicaid Quality Measurement Technical Specifications Manual*, NC DHHS, 2024, medicaid.ncdhhs.gov/medicaid-managed-care-quality-measurement-technical-specifications-manual/download.
9. “DQA Improvement Initiatives.” *DQA Improvement Initiatives | American Dental Association*, www.ada.org/resources/research/dental-quality-alliance/dqa-improvement-initiatives.
10. “Into the Mouths of Babes (IBM).” *NC DHHS Division of Public Health*, www.dph.ncdhhs.gov/programs/oral-health/partners-providers/mouths-babes-imb.
11. “Dental Sealants.” *Cleveland Clinic*, Mar. 2023, my.clevelandclinic.org/health/treatments/10912-sealants.
12. “NCTracks.” *NC DHHS*, www.ncdhhs.gov/providers/provider-information/mental-health-development-disabilities-and-substance-abuse-services/nctracks. Accessed 6 Mar. 2024.
13. “Provider Enrollment Faqs.” *NCTracks*, www.nctracks.nc.gov/content/public/providers/faq-main-page/faqs-for-providerenrollment.html#:~:text=A%20provider%20will%20be%20required,provider%20record%20is%20still%20active. Accessed 6 Mar. 2024.



14. “Reimbursement Rates for Child and Adult Dental Services in Medicaid by State.” *Health Policy Institute*, American Dental Association , Oct. 2021, www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpigraphic_1021_1.pdf.
15. *North Carolina Medicaid Access Monitoring Review Plan*, North Carolina Department of Health and Human Services, 2022, medicaid.ncdhhs.gov/access-monitoring-review-plan-amrp/download?attachment.

