

Highlights from the Advancing Oral Health Prevention in Primary Care Affinity Group

Background

Dental caries (tooth decay) is the most common chronic disease in the United States. Fluoride treatments, including fluoride varnish (FV), can prevent and reverse the early stages of dental caries (Box 1).¹ Untreated caries can cause pain and discomfort and lead to costly medical care.

Despite the importance of oral health, less than half of children covered by Medicaid and the Children's Health Insurance Program (CHIP) attend annual dental visits.² Therefore, incorporating oral health prevention into primary care can be an important way to improve access to oral health care services.

Box 1. What is Fluoride Varnish?

FV is a professionally applied high-dose fluoride designed to adhere to the tooth surface. FV is widely accepted for preventing caries and is especially appropriate for children younger than age 6, due to concerns about fluoride ingestion related to gels and foams. FV promotes the remineralization of tooth enamel. The varnish is usually applied two or four times per year depending on the individual caries risk assessment.

The United States Preventive Services Task Force (USPSTF) recommends that primary care providers (PCPs) apply FV to the primary teeth of all infants and children younger than five years.³ While Medicaid and CHIP programs generally include coverage for FV application performed by medical professionals during well-child visits, the utilization of this preventive service is low.⁴ In federal fiscal year 2022, a median of 19.6 percent of Medicaid and CHIP-enrolled children ages 1 to 20 received 2 or more topical fluorides from any source (dental or medical).⁵

Recognizing the need to improve access to preventive oral health care by increasing FV application rates for young children, the Centers for Medicare & Medicaid Services (CMS) convened the Advancing Oral Health Prevention in Primary Care Affinity Group. From February 2021 to March 2023, 14 states participated in the affinity group (Figure 1, next page).

¹ Fluoride and Caries Prevention. Mark E. Moss DDS, PhD, Domenick T. Zero DDS, MS, in Burt and Eklund's Dentistry, Dental Practice, and the Community, 2021, available at <https://www.sciencedirect.com/science/article/abs/pii/B9780323554848000253>

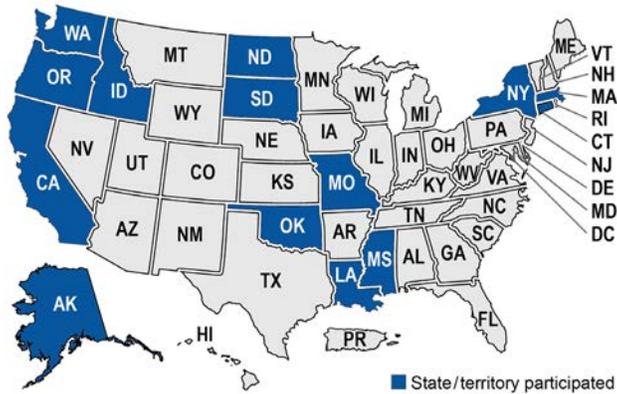
² 2023 Medicaid & CHIP Beneficiaries at a Glance: Oral Health available at <https://www.medicaid.gov/medicaid/benefits/downloads/2023-oral-health-at-a-glance.pdf>.

³ The USPSTF recommendation is available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/prevention-of-dental-caries-in-children-younger-than-age-5-years-screening-and-interventions1>.

⁴ American Academy of Pediatrics, Medicaid Payment of Preventive Oral Health Services, available at <https://downloads.aap.org/AAP/Excel/OralHealthReimbursementChart.xlsx>

⁵ Performance on Child Core Set Measures, FFY 2022 available at <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/childrens-health-care-quality-measures/index.html>

Figure 1. State Participation in the Advancing Oral Health Prevention Affinity Group



State Fluoride Varnish Quality Improvement Projects

A principal objective of the affinity group was to support states in developing sustainable solutions for improving the delivery of FV by PCPs for children enrolled in Medicaid and CHIP. CMS supported state teams in conducting quality improvement (QI) projects and facilitated peer-to-peer learning and sharing of promising practices across states.

During the two years of the affinity group, state teams received technical assistance (TA) on the Model for Improvement.⁶ Each state team designed, tested, implemented, and assessed their own QI project to improve FV application rates in primary care.

Applying the Model for Improvement

As a first step, state teams developed aim statements that identified (1) what they wanted to achieve, (2) what population they would focus on, (3) how they wanted to measure improvement, and (4) by when they wanted to achieve improvement. State teams then developed a measurement strategy to understand whether their QI project led to improvement. Many teams used the Topical Fluoride for Children (TFL-CH) measure to monitor changes in the delivery of FV (Box 2).

⁶ More information about the Model for Improvement is available at <https://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>

⁷ A driver diagram is a visual display of what “drives” or contributes to improvements in fluoride varnish. An example fluoride varnish driver diagram is available at

Box 2. Topical Fluoride for Children (TFL-CH)

The TFL-CH quality measure assesses the percentage of enrolled children ages 1 through 20 who received at least two topical fluoride applications within the measurement year. The Dental Quality Alliance (DQA) is the measure steward. The measure was added to the Medicaid and CHIP Child Core Set in 2022.

With their aim in mind, state teams used QI tools such as driver diagrams to understand the opportunities for improvement and to identify QI strategies, also known as change ideas, to test.⁷

Implementing Plan-Do-Study-Act Cycles

After state teams identified QI strategies, they used Plan-Do-Study-Act (PDSA)⁸ cycles to design, test, and assess whether the strategies showed promise for their populations or in a particular setting. If they showed promise, state teams continued testing the strategies with small adjustments to see whether refinements increased the chances of achieving and sustaining the desired improvement. If PDSA tests showed that a QI strategy did not show promise, state teams worked with the TA team to find another QI strategy to test.

Massachusetts used PDSA cycles to refine and improve provider training on applying FV in primary care settings. Testing and refining the FV application training videos with a small group of providers gave the state team confidence in the content of the final product.

Idaho recruited two pediatric practices for FV training. The trainees reported that incorporating the FV applications into their workflows was more manageable than expected. The feedback encouraged the state team to continue developing a training series with other practices.

<https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/oral-health-quality-improvement-resources/index.html>

⁸ More information about PDSA cycles is available at <https://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>.

Connecticut learned that a social media strategy did not have the intended effect of increasing FV application. The state team refocused its efforts and tested other solutions that achieved success (Box 3).⁹ The state team continued to scale and spread successful interventions throughout the affinity group period, which contributed to an 18 percent increase in the number of children receiving FV applications and oral health assessments from state fiscal year (SFY) 2020 (16,451 children) to SFY 2022 (19,457 children).

Box 3. Spotlight on Connecticut: Start Small, Learn, Revise

Connecticut's experience illustrates how states can improve their QI approach through iterative small tests of change. At first, the state team conducted a series of PDSA tests on an FV-related social media strategy with little to no measurable impact. The state team then tested a new idea by partnering with a pediatric practice to test the impact of provider and practice-level scorecards that highlighted missed opportunities for FV. The state team created utilization and revenue reports that quantified the missed revenue of not providing FV and oral health assessments during well-child visits. They also provided FV training and support in integrating the service into the practice's workflows. Following these interventions, the practice increased FV and oral assessments during well-child visits from 55 percent in January 2022 to 84 percent in January 2023. The state team continued to spread and scale these interventions. Their goal was a 2 percent statewide increase in FV applications by PCPs. By the end of the affinity group, they achieved an 18 percent increase.

Partnering for Success

State teams often found that engaging partners was essential for their QI projects. State team partners included, but were not limited to, managed care plans (MCPs), providers, and state and local public health agencies. These partners brought expertise that complemented the Medicaid and CHIP program staff, such as data capabilities and provider relationships.

⁹ The State Spotlights in Advancing Oral Health Prevention in Primary Care webinar provides additional information on Connecticut's QI project, available at <https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/oral-health-quality-improvement-resources/index.html>.

South Dakota collaborated with Delta Dental of South Dakota, an MCP, to train medical clinic staff and nursing/medical students on applying FV in primary care settings. This collaboration combined Delta Dental's extensive experience working directly with providers and the Medicaid and CHIP program's robust data infrastructure, enabling the team to launch and monitor the intervention. The training led to a three-percentage point increase in FV applications within 24 months.

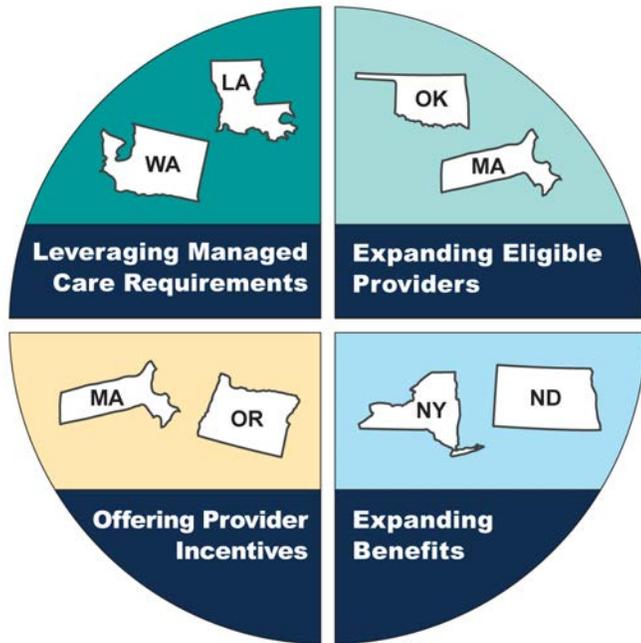
California collaborated with the county of San Luis Obispo (SLO) public health department. The SLO team provides FV education to providers, which enabled them to identify a provider at a local Federally Qualified Health Center (FQHC) that acted as the state team's clinical champion. The FQHC supported efforts to increase the administration of FV by pediatricians and increase referrals to dental providers co-located in the same FQHC for additional oral health care.

Louisiana worked with the state chapter of the American Academy of Pediatrics (AAP) to survey medical providers on their barriers to applying FV in primary care settings. The survey identified a lack of support and guidelines for best practices for PCPs. To address these barriers, the state team plans to partner with the AAP to host a webinar on integrating FV applications into well-child visits, workflow solutions, and Medicaid reimbursement.

Sustaining and Spreading Improvements through Program and Policy Changes

When PDSAs showed that a QI strategy held promise, state teams sought to sustain and spread the improvement through program and policy changes. Among the 14 states in the affinity group, program and policy changes included leveraging managed care requirements (2 states), expanding the providers eligible to offer and bill for FV applications (2 states), offering incentives to providers (2 states), and expanding FV benefits (2 states) (Figure 2, next page). Additional participating states focused on practice-level QI efforts.

Figure 2. Advancing Oral Health Prevention Affinity Group Program and Policy Changes



Leveraging Managed Care Requirements

Two state teams sought to drive and sustain improvements in FV rates through managed care requirements, such as performance improvement projects (PIPs) and performance measure reporting.

Louisiana required its MCPs to conduct a PIP to improve FV application in children by PCPs. Eight months after launching the PIP, the state team learned that the MCPs had already exceeded the PIP’s target for the number of providers billing for FV applications.

Washington added reporting requirements to its MCP contracts. MCPs are now required to report (1) the number of Medicaid beneficiaries ages 0 to 5 who received a topical fluoride application by a PCP during any medical visit and (2) a description of the MCP’s effort to increase utilization if a minimum rate of 3 percent fluoride applications is not obtained for Medicaid beneficiaries ages 1 through 3. Adding these reporting requirements has allowed the state to monitor each MCP’s performance and provide TA.

¹⁰ More information on the Oregon incentive measure is available at [https://www.oregon.gov/oha/HPA/ANALYTICS/CCOMetrics/2020-2021-specs-\(Topical-Fluoride-Varnish\)-final-20201215.pdf](https://www.oregon.gov/oha/HPA/ANALYTICS/CCOMetrics/2020-2021-specs-(Topical-Fluoride-Varnish)-final-20201215.pdf)

Expanding Eligible Providers

Three state teams increased the number of providers offering FV by expanding scopes of practice or easing program requirements.

Massachusetts removed training requirements for PCPs to apply FV because the requirements were perceived to deter PCPs from offering FV. In place of the requirements, the state provides training resources and assistance. The state team also worked with the state licensing board to add FV application to the scope of practice for community health workers. This change went into effect in January 2022.

Oklahoma made a policy and rules change through the state’s medical advisory committee and legislative approval that removed FV training requirements for PCPs after the state team’s barrier analysis showed that FV training requirements made it more challenging for PCPs to offer the service. With the requirement for an approved training course removed, primary care providers may now be reimbursed for FV applications up to two times each year for children ages 6 months to 5 years. The state team also trained medical assistants at a pediatric clinic on FV applications and integrated the service into the well-child visit workflow.

Offering Provider Incentives

Other state teams sought to incentivize providers using value-based payment (VBP) contracts.

Massachusetts included targets for FV applications in accountable care organization (ACO) VBP contracts. This became a Tier 1 requirement in April 2023, with ACOs bearing no financial risk but receiving a share of savings and bonuses for reaching quality targets.

Oregon included quality payments for incentive metrics related to oral health care utilization in its coordinated care organization (CCO) contracts. The incentives are tied to the state-developed Topical Fluoride Varnish measure¹⁰ based on the TFL-CH measure.

Expanding Benefits

Some state teams expanded the FV benefits offered by the state's Medicaid and CHIP programs by adjusting claims processing rules.

North Dakota expanded benefits by creating separate service limits for CPT (medical) codes and CDT (dental) codes for FV application, to reduce denied dental claims and prompt more providers to offer the service. Dental providers may provide 3 applications per patient per year, and medical providers may provide 2 per year.

New York expanded its FV benefits to include beneficiaries ages 0 through 20. Expanding the age group makes it easier for pediatricians to integrate the service into clinical workflows because it is a process update for all patients, not just young children.

Peer-to-Peer Learning and Knowledge Sharing

The affinity group provided a framework for a large group of states to work on a common issue, where QI principles could help address common problems. While each state team developed its own aim, the projects were broadly aligned around increasing FV application rates for children.

To support states' efforts, CMS' TA team convened periodic workgroups to share information from experts and provide state teams a forum to discuss their progress and challenges with their peers on other state teams. The TA team also held periodic one-on-one calls with each state team and facilitated small-group calls among teams working on similar activities (such as provider training). The group and one-on-one convenings promoted a sense of shared purpose and supported state teams in maintaining project momentum, even amid challenges like changes in leadership and the disruptions of the COVID-19 pandemic. State teams were also invited to share their work externally through avenues such as the CMS Quality Conference, CMS' Oral Health Technical Advisory Group, and the affinity group Spotlight webinar.¹¹

¹¹ The state Spotlight webinar recording, slides, and transcript are available at <https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/oral-health-quality-improvement-resources/index.html>.

For More Information

More information about the Advancing Oral Health Prevention in Primary Care Learning Collaborative is available at <https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/oral-health-quality-improvement-resources/index.html>.

TA resources are available to help states develop their own FV QI projects. To obtain TA, please email MedicaidCHIPQI@cms.hhs.gov.

More information about other Medicaid and CHIP QI initiatives is available at <https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/index.html>.

More information on the Topical Fluoride for Children (TFL-CH) measure and other dental and oral health measures in the Child Core Set is available at <https://www.medicaid.gov/sites/default/files/2023-04/dentaloralhealth-ta-resource-2023.pdf>.

About the CMS Medicaid and CHIP Quality Improvement (QI) Program

The CMS Medicaid and CHIP QI Program provides state Medicaid and CHIP programs and their QI partners with the information, tools, and expert support they need to improve access, care, and outcomes for Medicaid and CHIP beneficiaries. TA is available to help states build QI knowledge and skills; develop QI projects; and implement, spread, and scale up QI initiatives. Participation is voluntary and involves collaboration between Medicaid and CHIP program leaders and other partners, including MCOs and public health agencies.