

Issue BRIEF



Reducing Early Childhood Tooth Decay: Strategies for State Medicaid and CHIP Dental Program Managers

Young children who are enrolled in Medicaid or the Children’s Health Insurance Program (CHIP) can be at risk for developing early childhood caries (ECC). ECC is a chronic bacterial infection that causes severe tooth decay and can begin to develop before baby teeth erupt. Along with asthma and obesity, ECC is one of the most common chronic diseases of childhood in the United States, and it is much more likely to affect low-income children than others. Although clinical guidelines recommend ways to prevent and manage ECC—using strategies similar to those for other chronic diseases—many children in Medicaid and CHIP do not receive appropriate preventive and management services. As a result, many cases of ECC worsen until costly hospital-based restoration or surgical removal of decayed teeth is unavoidable.

As states improve their health care systems to advance high quality services, good health outcomes, and cost reduction, Medicaid and CHIP program managers can contribute to these broad system goals by taking steps to promote ECC prevention and management. The prevention and management of ECC follows these clinical and program objectives:

- Ensuring fluoride varnish is applied periodically to the baby teeth of children younger than 6
- Ensuring children younger than 6 are assessed periodically for ECC risk
- Ensuring that a care plan is developed and implemented for high-risk children
- Educating and engaging families in ECC prevention and management

This document presents some of the direct strategies that Medicaid and CHIP program managers can use to help meet these objectives (Table 1). It also highlights states that are already taking action. Figure 1 illustrates the general implementation process. Several strategies involve medical and nonclinical providers in addition to dental providers.

Figure 1. Process for promoting ECC prevention and management in Medicaid and CHIP

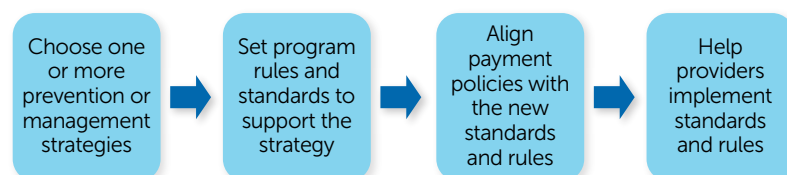


Table 1. Implementation of strategies to support ECC prevention and management goals in Medicaid and CHIP

Strategies	Program rules and standards	Payment policies	Provider compliance
Ensure fluoride varnish application for children younger than 6			
Make fluoride varnish application a standard component of well-child visits for children younger than 6	<p>Consider submitting a SPA to receive a 1 percent increase in federal matching funds for providing ACA Section 4106 preventive services at no cost to Medicaid beneficiaries</p> <p>Revise Medicaid EPSDT medical and dental periodicity schedules to require fluoride varnish application at appropriate intervals</p>	<p>If necessary, submit a payment methodology SPA to reimburse medical providers such as pediatricians and family physicians for fluoride varnish</p> <p>Adopt CPT billing code 99188 and CDT billing code D1206</p>	<p>Develop provider guides and handbook instructions based on AAP guidelines; include billing instructions^a</p> <p>Offer web-based or on-site training to medical providers on fluoride varnish application and billing^b</p>
Ensure caries risk assessment for children younger than 6			
Make caries risk assessment a state-required service for all children in Medicaid or CHIP	<p>Revise Medicaid EPSDT medical and dental periodicity schedules to require caries risk assessment at appropriate intervals</p> <ul style="list-style-type: none"> Adopt the AAPD dental periodicity schedule and AAP Bright Futures periodicity schedule, which require a caries risk assessment and oral health risk assessment, respectively 	<p>If necessary, submit a payment methodology SPA to reimburse medical and dental providers for administering risk assessments</p> <p>Adopt CDT billing codes D0601, D0602, and D0603 to allow Medicaid and CHIP health care providers to be reimbursed for caries risk assessment</p>	<p>Include caries risk-assessment tools, instructions for use, and instructions for billing in provider guides and handbooks</p> <p>Offer web-based or on-site training to dental and medical providers on use of caries risk assessment^b</p> <p>Adopt a standard caries risk assessment tool for use by medical and dental providers. The CAMBRA and AAPD risk assessment forms are two options; some states have developed their own</p>
Ensure individualized care plans for high-risk children younger than 6			
Make the development and implementation of individualized ECC care plans for high-risk children a required dental service	<p>Revise Medicaid EPSDT medical and dental periodicity schedules to clarify that the delivery of oral health care services is based on a provider's assessment of a child's risk (as indicated on a caries risk-assessment tool)</p> <p>Clarify periodicity schedules so that dental visits and oral health services are not explicitly limited, without consideration of a child's level of risk or risk assessment and care plan</p> <p>Revise contracts with Medicaid plans to eliminate benefit limits on oral health services that might be in conflict with EPSDT and risk-based care management protocols</p>	<p>Develop complementary program integrity checks to ensure the validity of risk determinations and subsequent service delivery</p>	<p>Include treatment and management protocols based on caries risk assessment in provider guides and handbooks; protocols are available from AAPD and CAMBRA</p> <p>Offer web-based training to dental and medical providers on developing care plans and individual self-management goals for patients at elevated risk^b</p>
Educate and engage families in ECC management			
Conduct ECC risk assessment, outreach, education, and care coordination for families with high-risk children in Medicaid or CHIP	<p>Identify staff in your state Medicaid agency who are responsible for administrative claiming and ask them what kinds of ECC management services are claimable</p>	<p>Submit claims for federal matching funds for disease management as an administrative function</p>	<p>Develop training programs for nonclinicians such as WIC staff members on how to coordinate oral health care across medical and dental providers</p>

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Strategies	Program rules and standards	Payment policies	Provider compliance
Performance measurement and quality improvement			
Improve your state's performance on the CMS Child Core Set dental measures by requiring or encouraging medical MCOs to conduct PIPs related to ECC ^c	States using a managed care delivery system already must comply with certain federal requirements, including standards to assess and monitor the quality of care provided by contracted managed care plans	At their discretion, MCOs could design PIPs that provide monetary incentives or reimbursement to primary care physicians for ECC prevention and management activities	At their discretion, MCOs could design PIPs that include interventions aimed at providers, such as educating primary care physicians on ECC guidelines and best practices and training on risk assessment and fluoride varnish application

^a See Bright Futures. "Promoting Oral Health." 2004. Available at https://brightfutures.aap.org/pdfs/Guidelines_PDF/8-Promoting_Oral_Health.pdf.

^b State Improvement Partnerships may be a logical training venue. More information is available at <http://www.uvm.edu/medicine/nipn>.

^c To learn more about the dental measures in the CMS Child Core Set, see "Use of Dental Services in Medicaid and CHIP" at <http://www.medicaid.gov/medicaid-chip-program-information/by-topics/benefits/downloads/secretarys-report-dental-excerpt.pdf>; and the "2015 Child Core Set," at: <http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-child-core-set.pdf>.

AAP = American Academy of Pediatrics; AAPD = American Academy of Pediatric Dentistry; ACA = Patient Protection and Affordable Care Act of 2009; CAMBRA = caries management by risk assessment; CDT = Code on Dental Procedures and Nomenclature; CMS = Centers for Medicare & Medicaid Services; CPT = Current Procedural Terminology; ECC = early childhood caries; EPSDT = early and periodic screening, diagnostic, and treatment; MCO = managed care organization; PIP = performance improvement project; SPA = state plan amendment; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

STATE IMPLEMENTATION HIGHLIGHTS

The following examples illustrate state Medicaid and CHIP efforts to implement some of the prevention, risk-assessment, care plan and quality-improvement strategies presented in Table 1.

Like ECC prevention and management strategies, community water fluoridation can benefit Medicaid in the long run. A study in New York state showed Medicaid savings of about \$24 per person, per year because of cavities prevented by fluoridated water.¹ About one-third of the U.S. population does not receive fluoridated water.²

Ensure fluoride varnish application. As part of its Child & Teen Checkups program, Minnesota allows a variety of medical providers to apply fluoride varnish. Allowable providers include physicians, physician assistants, nurse practitioners, nurses, and licensed professionals under the supervision of a physician or dentist. Minnesota includes fluoride varnish application protocols in its provider guide and encourages providers through its early and periodic screening, diagnostic, and treatment (EPSDT) periodicity schedule to apply fluoride varnish as often as every three months if necessary.³

Ensure risk assessments. The District of Columbia requires that an oral health risk assessment be provided as part of EPSDT well-child visits for children ages 4 months to 6 years.⁴ North Carolina's oral health periodicity schedule recommends that a caries risk assessment be provided periodically to all Medicaid-enrolled children from birth through adolescence. In addition, the North Carolina Division of Medical Assistance allows either a medical or dental provider to provide this risk assessment, but specifies that children determined to be at risk for ECC be referred to a dentist as early as 6 months of age.⁵

Connecticut adopted the Code on Dental Procedures and Nomenclature codes for caries risk assessment, issuing a bulletin in fall 2014, specifying the revised Medicaid and CHIP fee schedule for codes D0601-D0603.⁶ Texas began using these caries risk assessment codes in its First Dental Home program beginning January 2014.⁷

North Carolina's Into the Mouths of Babes program trains medical providers on oral health risk assessment; referral to dental providers; fluoride varnish application; and parent/caregiver counseling about diet, tooth brushing, and establishing age-appropriate oral health behavior plans. Program evaluations showed that frequent visits with fluoride varnish applications (four or more times per year) were associated with a 17 percent reduction in dental treatments or tooth decay, on average.⁸

Individualized care plans for high-risk children. The Texas First Dental Home program offers enhanced payment via bundling to pediatric and general dental providers who administer a caries risk assessment and establish a care plan for children based on the results of the assessment. Providers must undergo training to be eligible for enhanced payment and must demonstrate 11 components of prevention and disease management, including risk assessment, fluoride varnish, establishment of oral health goals, and a schedule of follow-up care based on risk level.⁹

The Montana Bright Smiles program encourages individualized care protocols based on caries risk level. Trained physicians and dental providers can bill for services to determine level of risk and disease management and dental providers can see high-risk children up to six times per year. The fee schedule in the Medicaid state plan outlines the additional services available for reimbursement by trained providers.¹⁰

Family education and engagement. The Program for Improving Community Oral Health, managed by Community Dental Care in Minnesota, conducts caries risk assessments and motivational interviewing for children in primarily non-English-speaking families and works to manage families' oral health goals and follow-up care.¹¹ Health educators contact families between visits to check on progress toward each child's goals and make appointments for families of children needing additional care in a dentist's office. Medicaid is billed for treatment and intensive motivational interviewing for high-risk children when a dental provider recommends those services.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Dental Days, a project in Sonoma, California, uses registered dental hygienists in alternative practice to train staff in WIC clinics. Training focuses on providing culturally competent oral health information to parents along with the customary WIC nutritional messaging. Trained WIC staff then conduct caries risk assessments for young children using an iPad application with built-in electronic records and Medicaid-billing capabilities. They also give parents oral health cards that feature their children's oral health goals as determined by risk assessment. Staff and families reevaluate and modify goals periodically and refer children to follow-up dental care when necessary.

The West Virginia Health Initiative Project, a partnership between the state's department for Health and Human Resources and the National Pharmaceutical Council, performs a range of disease-management activities for Medicaid enrollees with diabetes and claims them as Medicaid administrative expenses. A similar approach, involving dental and primary care provider training and patient care tracking, could be used for ECC disease management. For example, the West Virginia program used educational materials from the Centers for Disease Control and Prevention and American Diabetes Association to train Medicaid providers on evidence-based treatment guidelines, improved patient communication, and disease monitoring. In addition to training providers and promoting the use of disease-management protocols, the program notified providers of their performance in comparison to their peers with regard to patients' use of the emergency room and hospital costs.¹²

Performance measurement and quality improvement. From 2012 to 2014, New Jersey required all four of its managed care organizations (MCOs) to implement a performance improvement project (PIP) aimed at promoting early childhood dental care. Two of the MCOs achieved notable improvements in use of dental care through this PIP. One increased and sustained the rate of annual dental visits for children ages 1 and 2 years; the other increased the rate of dental visits for children ages 2 and 3 years by 27.9 percent.

Both PIPs used member and provider interventions, including (1) member education on good oral hygiene; (2) a small monetary incentive for members who complete a dental visit; (3) the distribution of a pediatric dentist directory; (4) a fluoride varnish incentive program for primary care physicians (PCPs) who refer members to dentists, with an additional incentive after a dental visit is completed; (5) PCP education on guidelines and best practices; and (6) encouraging PCPs to apply fluoride varnish for children with ECC through training and reimbursement for this service.¹³

ENDNOTES

- ¹ Jayanth Kumar, Olubunmi Adekugbe and Thomas Melnik. “Geographic Variation in Medicaid Claims for Dental Procedures in New York State: Role of Fluoridation Under Contemporary Conditions.” *Public Health Reports*, vol. 125, no. 5, 2010, pp. 647-54.
- ² Centers for Disease Control and Prevention. “2012 Water Fluoridation Statistics.” Available at: <http://www.cdc.gov/fluoridation/statistics/2012stats.htm>.
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- ⁶ Connecticut Medical Assistance Program. “Update to the Medicaid Dental Services Fee Schedule and Policy.” Hartford, CT: Department of Social Services, 2014. Available at http://www.husky-healthct.org/providers/provider_postings/Medicaid_Dental_Services_Fee_Schedule-Policy.pdf.
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- ⁸ Pahl, B.T., R.G. Rozier, S.C. Stearns, and R.B. Quiñonez. “Effectiveness of Preventive Dental Treatments by Physicians for Young Medicaid Enrollees.” *Pediatrics*, vol. 127, no. 3, 2011, pp. e682–e689.
- ⁹ Texas Department of State Health Services. “First Dental Home.” Austin, TX: Texas Department of State Health Services, 2014. Available at <http://www.dshs.state.tx.us/dental/FDH.shtm>.
- ¹⁰ Bright Smiles Montana. “AbCd Caries Risk Assessment Tool: Birth to age 36 months.” Helena, MT: Montana Dental Association. Available at <http://www.brightsmilemontana.com/downloads/AbCd%20Montana%20CRA%20Tool.pdf>.
- ¹¹ Motivational interviewing is an evidence-based conversational technique that a provider may use to encourage a person to change a health-related behavior. Information is available at <https://www.centerforebp.case.edu/practices/mi>.
- ¹² The Council of State Governments. “State Official’s Guide to Chronic Illness.” Lexington, KY: The Council of State Governments, 2003. Available at <http://www.csg.org/knowledgecenter/docs/SOG03ChronicIllness.pdf>.
- ¹³ Centers for Medicare & Medicaid Services. “Use of Dental Services in Medicaid and CHIP.” Baltimore, MD: CMS, 2015. Available at <http://www.medicare.gov/medicaid-chip-program-information/by-topics/benefits/downloads/secretarys-report-dental-excerpt.pdf>.

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About this series

This document is part of a series of products about redesigning the approach to early childhood caries (ECC)—away from treatment and toward prevention and management—in Medicaid and CHIP. The series is produced as part of the Centers for Medicare & Medicaid Services’ Oral Health Initiative by Mathematica Policy Research and the Children’s Dental Health Project.