

Primary Caries Prevention Intervention as Part of ~~Well/III Child~~ Primary Care Medical visit: ~~as Offered by Primary Care Medical Providers~~ Topical Fluoride Applications delivered by Primary Care Health Professional

Measure Description:

Percentage of Apple Health enrolled children aged 5 years and under who received topical fluoride applications during a Primary Care Medical visit.

The measure a) tracks the extent to which the ~~PCMP-Primary Care health professional~~ or clinic ~~(determined by the provider number used for billing)~~ applies Fluoride Varnish (FV) as part of routine ~~preventive health~~ visits in primary care and b) tracks the degree to which each billing entity's use of the FV code increases from year to year (more children receiving varnish and more children/youth receiving FV at least two times a year according to ADA and USPSTF Grade B recommendations).

This ~~provider level~~ measure addresses how well primary care ~~medical provider teams~~ are providing preventive FV for prevention of dental caries, ~~at either the provider or health plan level~~. Evidence exists regarding the benefits of FV reversing demineralization and enhancing remineralization of tooth enamel; both actions reducing caries. The USPSTF recommends that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption (B recommendation). This measure addresses the need for greater access to preventive dental care. This measure also meets the National Priority of population health.

Numerator Statement:

Total number of patients (Age 0- 6), who received a Fluoride Varnish application (FV) during a routine preventive health visit (with primary care medical provider or clinic).

Numerator Details: Unduplicated number of Apple Health enrolled children under age 6 who received a visit by a Primary Care health professional or clinic that included the provision of fluoride varnish application. See section below under Coding for all information required to collect/calculate the denominator, including all codes, logic and definitions.

Denominator Statement:

Unduplicated number of Apple Health enrolled children under age 6.

~~Total number of patients (Age 0- 6), receiving a routine preventive health visit (with primary care medical provider or clinic).~~

Rate calculation: NUM/DEN.

Direction of Improvement: The Higher ~~the~~is better

Exclusions

Patients age 7 years and up

National Quality Strategy Priorities:

- Health and Well-Being
- Prevention
- Population health

Use in Federal Programs:

Meaningful Use Stage 2 (EHR Incentive Program) – Eligible Professionals, Physician Quality Reporting System (PQRS)

Actual/Planned Use:

Public Reporting, Quality Improvement (internal to the specific organization).

Care Setting:

Ambulatory Care: Clinician Office/Clinic

Data Source:

Administrative Claims

Possible Levels of Analysis:

- Group/Practice, Clinician: Individual, Facility, Health Plan
- Population: Health Service Area, County, State or National

IOM Quality Domain:

Effectiveness

Measure Type:

Process

Target Population:

Children's Health

Benefits (improvements in quality) envisioned by use of this measure:

Caries (the process of which the end result is the cavity) is the most common chronic disease of childhood (five times more common than Asthma and seven times more common than hay fever).

The Centers for Disease Control (CDC) estimates that in the United States approximately 40 percent of children have caries by the time they enter kindergarten; more than 50 percent have caries by second grade, and 80 percent have caries by the time they graduate high school.

The impact of oral health in the U.S. is dramatic and widespread. Pain and suffering due to untreated oral diseases can lead to problems in eating, speaking, and attending to learning. Chronic dental infections can impact overall health and create a cost burden on the healthcare system. Additionally, because tooth decay and periodontal disease are progressive and cumulative, poor oral health and dental disease often continue from childhood into adulthood. Children are 2.6 times more likely to have medical coverage than dental coverage.

Starting several decades ago the Scandinavian countries began to use topically applied FV as a way of preventing caries. Wentraub recently showed that one application of FV will cut the caries rate by 50% and a second application will cut it by another 50%. 47 state Medicaid programs are currently reimbursing PCMP for offering caries prevention intervention (CPI) as part of well/ill child care. The procedure takes little time, less than 2 minutes for a child with a full set of primary teeth, and is noninvasive. FV reverses demineralization and enhances remineralization of the enamel of the tooth. Both actions will lead to the reduction of caries.

Supporting documentation:

USPSTF Grade B Recommendation: Apply Fluoride Varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption. The USPSTF concludes with moderate certainty that there is a moderate net benefit of preventing future dental caries with fluoride varnish application in all children starting at the age of eruption of primary teeth to age 5 years. Although the evidence to support varnish is drawn from higher-risk populations, the provision of varnish to all children is reasonable, as the prevalence of risk factors is high in the US population, the number needed to treat is low, and the harms of the intervention are small to none.

The USPSTF limited its consideration of caries screening and prevention by primary care clinicians to infants and preschool-aged children. The rationale for this decision was that, at the present time, non-dental primary care clinicians are more likely than dentists to have contact with children ages 5 years and younger in the United States; this situation changes as children reach school age and beyond. In addition, as children grow older, dental professionals use sealants rather than fluoride varnish. This recommendation should not be construed to imply that preventive interventions for dental caries should cease after 5 years of age.

USPSTF website citation: *Final Recommendation Statement: Dental Caries in Children from Birth Through Age 5 Years: Screening*. U.S. Preventive Services Task Force. December 2014.

<http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/dental-caries-in-children-from-birth-through-age-5-years-screening>

Original publication, in journal *Pediatrics*: Moyer VA. Prevention of dental caries in children from birth through age 5 years: US Preventive Services Task Force recommendation Statement. *Pediatrics* 2015. 133(6).

JA. Wentraub, F. Ramos-Gomez, B. Jue, S. Shain, CI. Hoover, JDB. Featherstone, and SA. Gansky. Fluoride Varnish Efficacy in Prevention ECC. *J Dent Res* 85(2): 172-176, 2006.

Measure Steward and Source:

Dental Quality Alliance and NQF 1419 (revised by not limiting the measure to EPSDT visits/claims during an ill/well child visit)

Website URL:

<http://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=1419&print=1&entityTypeID=1>

Related Measures

NQF 2528 Prevention: Topical Fluoride for Children at Elevated Caries Risk

NQF 1334: Children who received preventive dental care

AHRQ/CHIPRA (PMCoE) Annual Fluoride Varnish Applications, Percent of patients receiving at least two annual fluoride varnish applications.

Coding:

Numerator Details: The numerator is defined as the unduplicated number of Apple Health enrolled children under age 6 who received at least one fluoride applications as a preventive oral health service by a primary care provider during a child primary care visit in the reporting year. The calculation of the numerator involves identifying enrollees who had a fluoride varnish service by a Primary Care Medical Provider.

Step 2: Receipt of a fluoride varnish by a Primary Care Health Professional

Enrollees must have received fluoride varnish service by a primary care health professional during a routine visit in the measurement year in order to be counted in the numerator. Fluoride varnish applications are identified in Medicaid claims data by selecting CPT 99188, CDT code D1206 or D1208 (ICD Diagnosis Code Z00.129). The numerator reflects the number of children receiving at least one application during a primary care visit in the last fiscal year.

Calculating the Rate: Finally, the rate is calculated based on the unduplicated number of enrollees in numerator and denominator (defined as numerator/denominator *100).

coding for Fluoride Varnish application (age 0-6)

~~CPT 99188 Application of topical fluoride varnish by a physician or other qualified health care professional~~

- ~~• This code was approved to begin January 1, 2015. It only includes varnish application, not risk assessment, education, or referral to a dentist.~~
- The USPSTF recommended this for children up to 6 years of age. Therefore Code 99188 must be covered by most-commercial insurers by May 2015 for children up to age 6. They are not mandated to cover older children. Check with insurers for specifics.
- No RVU have been set by CMS because Medicare does not cover dental related services

Coding for Fluoride Varnish application (age 0-6):

CPT Modifier 33 - Preventive Services: When the primary purpose of the service is the delivery of an evidence based service in accordance with a US Preventive Services Task Force A or B rating in effect and other preventive services identified in preventive services mandates (legislative or regulatory), the service may be identified by adding 33 to the procedure. For separately reported services specifically identified as preventive, the modifier should not be used.

Preventive medicine services (office visit services) represented by codes 99381-99387, 99391-99397, 99401-99404, and 99406-99412 are distinct from problem-oriented evaluation and management office visit codes and are inherently preventive. Therefore, modifier 33 would not be utilized with these codes.

CDT D1206 - Topical application of fluoride varnish. This CDT code is used by the Washington State Health Care Authority's Medicaid Dental program to reimburse qualified primary care providers for delivering fluoride varnish application during EPSDT visits with Medicaid enrolled children/youth (Age 0-18).

Note: It is not uncommon for health plans to treat the D1206 code and CPT 99188 or CPT 33 modifier codes as interchangeable, and reimburse claims using either.

Numerator coding specific to Medicaid enrolled families:

| CDT Code | Description |
|--|---|
| D 1206 or D 1208 (considered to be equivalent codes) | Topical application of fluoride varnish for children/youth (Age 0-18) |

Denominator Details: The calculation of the denominator involves selecting Medicaid enrollees who meet criteria based on age (no high risk or continuous enrollment restrictions apply). The age is calculated for each enrollee based on the end date of the measurement year and the enrollee’s date of birth. For FY 2017, enrollees are included in the denominator if they are ages 0 to 5 years as of June 30, 2017. For example, if an enrollee is 5 years and 360 days on June 30, 2017, he or she would be included in the denominator for FY 2017 reporting. If the date of birth for an enrollee is missing, the enrollee is not included in the measure calculation.

~~**coding for Well-Child or EPSDT visits (age 0-21)** The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit provides comprehensive and preventive health care services for children under age 21 who are enrolled in Medicaid. The EPSDT program is a standard set of recommended screenings, tests and referrals which was structured to reflect the professional pediatric standard of care and emphasizes early and preventive health care to optimize child development. The Office of Medicaid Policy and Planning recognizes the alignment of EPSDT services with the Bright Futures™ guidelines. The components of the EPSDT program include a comprehensive health and developmental history, an unclothed physical exam, appropriate immunizations, laboratory tests and health education or anticipatory guidance. In addition, dental, vision and hearing services are required including appropriate screening, diagnostic, and treatment.~~

Calculation Notes and Comments:

This revised measure calculation focuses on percentage of Apple Health enrolled children/youth under 6 years of age who received topical fluoride applications as part of any primary care medical visit. It does not limit the data filter in the Medicaid Claims to EPSDT claims type. It extends the criteria to include all fluoride varnish applications provided by professional providers (non-dental/primary care health professionals: Nurse practitioners, physician assistants, family practitioners, pediatricians, nurses, medical assistants) during a child’s primary care medical visit.