CONTRA COSTA HEALTH PLAN
A Division of Contra Costa Health Services

# Agenda

**Quarterly Community Provider Network (CPN) Meeting**

Time: 12:30 PM – 2:00 PM

Date: July 30, 2019*

Location: Pittsburg Health Center
2311 Loveridge Rd.,
Classroom B - 1st Floor*
Pittsburg, CA 94565

***Please note new date and conference room.**

| | | |
|---|---|---|
| **I.** | **CALL TO ORDER and INTRODUCTIONS** | Christine Gordon, RN, BSN, PHN, DHCS-MT |
| **II.** | **REVIEW and APPROVAL of Previous Meeting Minutes** | Christine Gordon, RN, BSN, PHN, DHCS-MT |
| **III.** | **IHA, SHA, USPSTF** | |
| | • IHA, SHA, USPSTF | Christine Gordon, RN, BSN, PHN, DHCS-MT |
| **IV.** | **GUEST SPEAKERS** | |
| | • HPV Immunization Update<br>• Measles Outbreak<br>• General Immunizations Update<br>• Dental Varnish | Kristin Burnett, MPH<br>Immunization Program Manager<br>Co-Chair, Immunization Task Force<br>Public Health/Communicable Diseases<br><br>Jody Adelberg RN, PHN, MSN<br>CHDP Liaison PHN<br>Public Health Nursing, Pediatrics |
| **V.** | **REGULAR REPORTS** | |
| | 1. Legislative / CCHP Update<br>• Governors Budget May Revision (no materials)<br>• Blood lead screening (page from CDPH)<br>• Cultural Competency (care matters)<br>2. CCHP Benefits update<br>• STAT Med Concussion Program (care matters)<br>3. Quality<br>• HEDIS (Page from Dashboard)<br>• Lung Cancer screening (page from USPSTF)<br>• PIP updates (Pending)<br>4. Pharmacy<br>• Review Care Matters<br>5. Utilization Management<br>• Gastric Bypass Surgery – no revision if non-compliant (no materials)<br>• Q and A (no materials) | Jose Yasul, MD<br>Medical Director, CCHP |
| **VI.** | **CLAIMS Q&A** | Claims Unit Staff |

**Our next scheduled meeting is October 22, 2019**
**CPN meeting reimbursement will be prorated based on length of time attendee is present in the meeting.**

# CONTRA COSTA HEALTH PLAN

East County

Quarterly Community Provider Network (CPN)

**Meeting Minutes - July 30, 2019**

**Attending:**

**CCHP Staff:** Jose Yasul, MD, Medical Director; Christine Gordon, RN, BSN, DHCS-MT; Jonel Sangalang, Clerical Support

**CPN Providers:** C. Cave, NP; J. Sequeira, MD; C. Som, DO, X. Yang, MD

**Guest** Kristin Burnett, MPH; Michelle Rivero

| Discussion | | Action | Accountable |
|---|---|---|---|
| | Meeting called to order at 12:35 A.M. | | Christine Gordon, RN, BSN, DHCS-MT |
| **I.** | Agenda was approved with no revisions. | | Jose Yasul, MD Medical Director, CCHP |
| **II.** | **Reminders**<br>• Facility, site and medical record review tools from DHCS<br>o Extensive review<br>o Spend more time at the facilities<br>o USPSTF screenings<br>o PowerPoint will be sent to the PCPs<br>• Initial Health Assessment (IHA)<br>o DHCS recently completed an audit<br>▪ Percentage of IHA assessment is not high enough.<br>o Must be completed within 120 days of enrollment into the health plan or documented within the 12 months prior to Plan enrollment.<br>o If member assigned to new PCP, IHA must be completed within 120 days of that assignment if no IHA documented within the past 12 months.<br>o IHA includes H&P, IHEBA and Bright Futures (SHA), USPSTF screenings, ensure up-to-date immunizations per ACIP.<br>o Lung cancer screenings | | Christine Gordon, RN, BSN, DHCS-MT |
| **III.** | **Guest Speaker**<br>**Immunization Updates Summer 2019 CPN WEST**<br>• HPV: Human Papilloma Virus<br>o High-risk HPV types can cause six types of cancer<br>o The most common high-risk types are HPV 16 and 18<br>o More than 33,000 men and women are diagnosed with a cancer caused by HPV infection in the US each year<br>o 79 million in the U.S. are infected with HPV<br>o 14 million new infections each year<br>▪ 50% of new infections occur in 15-24 year olds<br>o 2 doses if series started at ages 9-14<br>o 3 doses if series started at ages 15-26 | | Kristin Burnett, MPH |

- CDC, ACS and others recommend that series is completed by age 13
- The vaccine is best when given younger because:
  - More cancers are prevented if we vaccinate before opportunity for infection occurs
  - Better immune response in 11-14yr olds, so fewer shots needed
  - Pair with Tdap immunization visit (required for 7th grade in CA)
- Trending in HPV vaccination
  - CCRMC hospital/health centers, as well as some other clinics have begun prompting for HPV vaccination beginning at 9 years old
  - Rationale: easier to complete the series when the patient returns for Tdap and meningococcal vaccine at 11-12 years of age
  - This will help us meet goal to complete HPV series by age 13!
- Estimated vaccination coverage with selected vaccines and doses among adolescents ages 13-17 years by HHS, NIS Teen, US, 2017, 2017, 2012
  - Females 60%
  - Males 47%
- Legislation to add HPV to required vaccinations
- Why is HPV vaccine coverage so low?
  - Parents
    - Not offered vaccination
    - Perceive it as an optional vaccine
    - HPV vaccine my paralyze my child
  - Provider
    - Reluctant to give multiple shots per visit
    - Don't give a strong recommendation
    - Recommend vaccination based on their estimation of sexual activity
- Transferred by mucus membrane contact (kissing) and heavy petting
- Structure of an effective vaccine recommendation
  - Mention child's age
  - Announce that child is due for __XYZ___ vaccinations at this age
  - Say you will vaccinate today
  - Always frame HPV vaccine as **cancer prevention**
  - **Note:** HPV is a "sensitive service" and minors age 12 and up in CA can get vaccine without parental consent
- HPV vaccination rates based on males and females 11-13 year olds for CPN providers in west county
  - Small sample size (Scale of percentages)

- Measles
  - As of 7/11/19 there have been **1,123** cases of measles reported in US
  - **58** of these cases were in California
    - Under vaccination or non-vaccinated individuals
  - Measles vaccine is **97%** effective in preventing measles
  - ACIP routine recommendations for MMR:
  - 1st dose at 12-15 months
  - 2nd dose at 4-6 years
  - However, if 2nd dose is given at least 28 days after 1st dose, it is considered valid

- Who is protected from Measles?
  - CDC considers you **protected** from measles if you have written documentation (records) showing at least **one** of the following:
    - You received **two** doses of measles-containing vaccine, and you are —
      - A school-aged child (grades K-12)
      - An adult who will be in a setting that poses a **high risk** for measles transmission, including college students, healthcare personnel, and international travelers.
    - You received **one** dose of measles-containing vaccine, and you are —
      - A preschool-aged child
      - An adult who will **not** be in a high-risk setting for measles transmission.
    - A laboratory confirmed that you are immune to measles
    - You were born before 1957
- Measles and international travel
  - All persons **traveling internationally**, through an **international airport** or **visiting destinations popular with international tourists (i.e. Cruise ships, Disneyland)** should verify that they are immune to measles beforehand.
- Who needs a booster shot of MMR?
  - Anyone who does not know their immune status to measles (i.e. no vaccination records or titer test showing immunity)
  - Anyone who received only one dose of MMR **and** will be in a high risk setting:
    - College student
    - Healthcare worker
    - International traveler or visiting destinations popular with international travelers
    - Lives in/visiting area where there is a known measles outbreak

- Shingrix update
  - Please advise patients that there is a national shortage of Shingrix that is affecting **all** clinics
  - Patients can be referred to Walgreens if you do not have Shingrix in stock
  - Receiving the 2nd dose of Shingrix past the recommended interval is OK. They will **not** need to start over!
  - Shingrix supply is expected to be caught up by the end of 2019
- New Adult Hepatitis B Vaccine
  - **Heplisav-B** is a **2 doses series** given **one month apart**
  - Better effectiveness rates than Engerix-B however CDC is not making preferential recommendation
  - Twinrix adult hepatitis A/B combination vaccine can still be offered with no changes (3 dose series)
  - Pediatric hepatitis B vaccines are unchanged
- Highlights: ACIP meeting June 2019
  - **HPV**
    - Catch up schedule for males now matches female

| | | | |
|---|---|---|---|
| | recommendation (vaccinate up through age 26)<br>▪ Males and females ages 27-45 may be vaccinated "based on shared clinical decision-making"<br>o **PCV13 for healthy adults age 65 and older**<br>▪ Downgraded from category A recommendation to "based on shared clinical decision-making"<br>o **Meningococcal serogroup B**<br>▪ More booster doses for high-risk groups (clinical, occupational, or during outbreaks)<br>o **New 6-valent pediatric vaccine (Vaxelis)**<br>▪ Will be on the market in 2021<br>▪ Will be part of Vaccines for Children (VFC) program<br>• Flu season 2019-2020<br>o Due to WHO delaying the pick of H3N2 strain to include in next flu season's vaccine, some manufacturers are predicting a **3-4 week delay** in shipment of flu vaccine<br>o CDC recommends routine vaccination for flu beginning in **October** and continuing **through the spring** of each year<br><br>**Fluoride Dental Varnish**<br>• How many CHDP providers?<br>• Fluoride application training for provider offices in the fall<br>• High topic with the state<br>• Application takes a few minutes<br>• Medi-Cal pays for 3 applications<br>• Inexpensive kits<br>• Done during well child visits | | Michelle Rivero |
| **IV** | **Regular Reports - CCHP Updates**<br><br>• New provider online search engine<br>o HealthX instead of PRISM<br>o New online search engine link<br>• Cultural competency training<br>o Only to be done once<br>o Provide certificate form other location<br>• Between 8 to 9 million dollars to cover undocumented<br>o Increased age range 18 – 26 years old<br>o Effective 1/1/2020<br>• Optional benefits restored<br>o Podiatry<br>o Skin Therapy<br>o Optical<br>• State wants to take all the Medi-Cal pharmacies from the health plan<br>• Blood Lead Screening plan<br>o Verify how providers are doing the screening<br>o It's listed on the Bright Futures schedule<br>• STAT MED<br>o Refer patients that may have a concussion to call the Advice Nurse at 877-800-7423 (Option 1)<br>o Locations in Concord and Lafayette<br>o Patients will receive a physical and a BrainScope EEG<br>o If BrainScope indicates a concern, the patient will be referred to NorCal | | Jose Yasul, MD Medical Director, CCHP |

| | | | |
|---|---|---|---|
| | Imaging for a CT scan<br>o CCHP will pay for transportation to STAT MED<br>• Recommendations for Preventive Pediatric Health Care<br>o Bright Futures/American Academy of Pediatrics<br>o USPFTF recommendations<br>• Lung cancer screening<br>o Annually if they smoke<br>o Low dose CT scan<br>• Blood Lead Screening<br>o Pushed by the state<br>o State asked to make a policy<br>• Pharmacy and Therapeutics<br>o PCP will be able to prescribe Hepatitis C medication<br>o Addition of Vitamin B-2 (riboflavin) to the formulary<br>• Gastric Bypass Surgery<br>o They should be really sure they want the surgery and stay on the program<br>o A fistula is ok<br>o If they stretch their pouch and after gastric bypass surgery and there's no documentation and they kept post op not to be medically necessarily<br><br>Q: How to qualify patients for gastric bypass surgery<br>A: Medically supervised weight loss program (6 monthly weight checks, 2 dietary visits and 9 support groups meetings in a 3 month period). The patient needs to keep up with the schedule to be compliant. | | |
| **Adjournment:**<br>Meeting adjourned at 1:50 P.M. | | | |
| **Next meeting October 22, 2019** | | | |

ANNA M. ROTH, RN, MS, MPH
HEALTH SERVICES DIRECTOR

DAN PEDDYCORD, RN, MPA/HA
DIRECTOR OF PUBLIC HEALTH

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May 2019

Dear CHDP Providers,

The Contra Costa County Child Health Disability Prevention (CHDP) Program, is now recommending fluoride varnish to all children ages six months (or after the eruption of the first tooth) thru five years old. This is in order to maintain and improve the oral health of young children in primary settings and also for the prevention of caries, as per the American Academy of Pediatrics (AAP), Recommendations for Preventive Pediatric Health Care Periodicity Schedule, regarding children's oral health, since 2015. (See www.aap.org/periodicityschedule).

Fluoride varnishing that is now recommended 2-4 times annually, or every 3-6 months, has been shown to decrease and prevent oral caries, by supporting healthy tooth enamel while preventing bacterial damage to dentition. See article "Fluoride Use in Caries Prevention in the Primary Care Setting." (http://pediatrics.aappublications.org/content/134/3/626). If parents have concerns regarding the benefits vs risks of fluoride varnish usage, please refer them to their primary care providers.

This procedure of brush varnishing, the dentition with a protective resin coating with sodium fluoride, can be done in the primary care provider's office setting. It also can be done in the dentist's office, that has been established after a child's first birthday. Medi-Cal will pay physicians for the application of fluoride varnish. See pages 20-21 of the December 2018, "California CHDP/EPSDT Dental Training: Fluoride Varnish" manual, regarding Medi-Cal billing, CPT codes and purchasing fluoride varnish kits for office usage. (http://www.dhcs.ca.gov/services/chdp/Pages/FluorideVarnish.aspx)
Also, the complete fluoride varnish training is provided in the "California CHDP/EPSDT Dental Training: Fluoride Varnish," manual, as referenced above.
Please review this training manual.

Contra Costa County CHDP staff, will be providing additional training for your office staff, as needed. We will contact you in the coming weeks, with further information regarding these trainings.

Thank you,

Michelle Rivero
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American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

Guidance for the Clinician in Rendering Pediatric Care

CLINICAL REPORT

# Fluoride Use in Caries Prevention in the Primary Care Setting

## abstract

FREE

Dental caries remains the most common chronic disease of childhood in the United States. Caries is a largely preventable condition, and fluoride has proven effectiveness in the prevention of caries. The goals of this clinical report are to clarify the use of available fluoride modalities for caries prevention in the primary care setting and to assist pediatricians in using fluoride to achieve maximum protection against dental caries while minimizing the likelihood of enamel fluorosis. *Pediatrics* 2014;134:626–633

Melinda B. Clark, MD, FAAP, Rebecca L. Slayton, DDS, PhD, and SECTION ON ORAL HEALTH

**KEY WORDS**

enamel fluorosis, fluoride, fluoride varnish, formula mixing, systemic fluoride supplements, toothpaste, water fluoridation

**ABBREVIATIONS**

AAP—American Academy of Pediatrics
ADA—American Dental Association
CDC—Centers for Disease Control and Prevention
EPA—Environmental Protection Agency



Dental caries (ie, tooth decay) is an infectious disease in which acid produced by bacteria dissolves tooth enamel. If not halted, this process will continue through the tooth and into the pulp, resulting in pain and tooth loss. This activity can further progress to local infections (ie, dental alveolar abscess or facial cellulitis), systemic infection, and, in rare cases, death. Dental caries in the United States is responsible for many of the 51 million school hours lost per year as a result of dental-related illness, which translates into lost work hours for the parent or adult caregiver.[1] Early childhood caries is the single greatest risk factor for caries in the permanent dentition. Good oral health is a necessary part of overall health, and recent studies have demonstrated the adverse effects of poor oral health on multiple other chronic conditions, including diabetes control.[2] Therefore, the failure to prevent caries has health, educational, and financial consequences at both the individual and societal level.

Dental caries is the most common chronic disease of childhood,[1] with 59% of 12- to 19-year-olds having at least 1 documented cavity.[3] Caries is the "silent epidemic" that disproportionately affects poor, young, and minority populations.[1] The prevalence of dental caries in very young children increased during the period between the last 2 national surveys, despite improvements for older children.[4] Because many children do not receive dental care at young ages, and risk factors for dental caries are influenced by parenting practices, pediatricians have a unique opportunity to participate in the primary prevention of dental caries. Studies show that simple home and primary care setting prevention measures would save health care dollars.[5]

Development of dental caries requires 4 components: teeth, bacteria, carbohydrate exposure, and time. Once teeth emerge, they may become colonized with cariogenic bacteria. The bacteria metabolize carbohydrates

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and create acid as a byproduct. The acid dissolves the mineral content of enamel (demineralization) and, over time with repeated acid attacks, the enamel surface collapses and results in a cavity in the tooth. Protective factors that help to remineralize enamel include exposing the teeth to fluoride, limiting the frequency of carbohydrate consumption, choosing less cariogenic foods, practicing good oral hygiene, receiving regular dental care, and delaying bacterial colonization. If carious lesions are identified early, the process can be halted or reversed by modifying the patient's individual risk and protective factors. Certain American Academy of Pediatrics (AAP) publications (*Oral Health Risk Assessment Timing and Establishment of the Dental Home*[6] and *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*[7]) discuss these concepts in greater depth and provide targeted preventive anticipatory guidance. The Medical Expenditure Panel Survey demonstrated that 89% of infants and 1-year-olds have office-based physician visits annually, compared with only 1.5% who have dental visits.[8] For primary prevention to be effective, it is imperative that pediatricians be knowledgeable about the process of dental caries, prevention of the disease, and available interventions, including fluoride.

Fluoride is available from many sources and is divided into 3 major categories: tap water (and foods and beverages processed with fluoridated water), home administered, and professionally applied. There has been substantial public and professional debate about fluoride, and myriad information is available, often with confusing or conflicting messages. The widespread decline in dental caries in many developed countries, including the United States, has been largely attributable to the use of fluoride. Fluoride has 3 main mechanisms of action: (1) it promotes enamel remineralization; (2) it reduces enamel demineralization; and (3) it inhibits bacterial metabolism and acid production.[9] The mechanisms of fluoride are both topical and systemic, but the topical effect is the most important, especially over the life span.[10]

## RISK OF FLUOROSIS

The only scientifically proven risk of fluoride use is the development of fluorosis, which may occur with fluoride ingestion during tooth and bone development. Fluorosis of permanent teeth occurs when fluoride of sufficient quantity for a sufficient period of time is ingested during the time that tooth enamel is being mineralized. Fluorosis is the result of subsurface hypomineralization and porosity between the developing enamel rods.[11] This risk exists in children younger than 8 years, and the most susceptible period for permanent maxillary incisor fluorosis is between 15 and 30 months of age.[12–14] The risk of fluorosis is influenced by both the dose and frequency of exposure to fluoride during tooth development.[15] Recent evidence also suggests that individual susceptibility or resistance to fluorosis includes a genetic component.[16]

After 8 years of age, there is no further risk of fluorosis (except for the third molars) because the permanent tooth enamel is fully mineralized. The vast majority of enamel fluorosis is mild or very mild and characterized by small white striations or opaque areas that are not readily noticeable to the casual observer. Although this type of fluorosis is of no clinical consequence, enamel fluorosis has been increasing in frequency over the last 2 decades to a rate of approximately 41% among adolescents because fluoride sources are more widely available in varied forms.[17] Moderate and severe forms of enamel fluorosis are uncommon in the United States but have both an aesthetic concern and potentially a structural concern, with pitting, brittle incisal edges, and weakened groove anatomy in the permanent 6-year molars.

In 2001, the AAP endorsed the guidelines from the Centers for Disease Control and Prevention (CDC), "Recommendations for Using Fluoride to Prevent and Control Dental Caries in the United States."[15] Dental and governmental organizations (American Dental Association [ADA], American Academy of Pediatric Dentistry, the Department of Health and Human Services, and the CDC) have more recently published guidelines on the use of fluoride, but current AAP publications do not reflect these newer evidence-based guidelines. Table 1 provides a simple explanation of fluoride use for patients at low and high risk of caries.

The present report has 2 goals: (1) to assist pediatricians in using fluoride to achieve maximum protection against

**TABLE 1** Summary of Fluoride Modalities for Low- and High-Risk Patients

| Fluoride Modality | Low Caries Risk | High Caries Risk |
|---|---|---|
| Toothpaste | Starting at tooth emergence (smear of paste until age 3 y, then pea-sized) | Starting at tooth emergence (smear of paste until age 3 y, then pea-sized) |
| Fluoride varnish | Every 3–6 mo starting at tooth emergence | Every 3–6 mo starting at tooth emergence |
| Over-the-counter mouth rinse | Not applicable | Starting at age 6 y if the child can reliably swish and spit |
| Community water fluoridation | Yes | Yes |
| Dietary fluoride supplements | Yes, if drinking water supply is not fluoridated | Yes, if drinking water supply is not fluoridated |

dental caries while minimizing the likelihood of enamel fluorosis; and (2) to clarify the advice that should be given by pediatricians regarding fluoride in the primary care setting.

## CURRENT INFORMATION REGARDING FLUORIDE USE IN CARIES PREVENTION

The following information aims to assist pediatricians in achieving maximum protection against dental caries for their patients while minimizing the likelihood of enamel fluorosis. Sources of ingested fluoride include drinking water, infant formula, fluoride toothpaste, prescription fluoride supplements, fluoride mouth rinses, professionally applied topical fluoride, and some foods and beverages.[18]

### Fluoride Toothpaste

Fluoride toothpaste has consistently been proven to provide a caries-preventive effect for individuals of all ages.[15,19] In the United States, the fluoride concentration of over-the-counter toothpaste ranges from 1000 to 1100 ppm. In some other countries, toothpastes containing 1500 ppm of fluoride are available. A 1-inch (1-g) strip of toothpaste translates to 1 or 1.5 mg of fluoride, respectively. A pea-sized amount of toothpaste is approximately one-quarter of an inch. Therefore, a pea-sized amount of toothpaste containing 1000/1100 ppm of fluoride would have approximately 0.25 mg of fluoride, and the same amount of toothpaste containing 1500 ppm of fluoride would have approximately 0.38 mg of fluoride. Most fluoride toothpaste in the United States contains sodium fluoride, sodium monofluorophosphate, or stannous fluoride as the active ingredient. Parents should supervise children younger than 8 years to ensure the proper amount of toothpaste and effective brushing technique. Children younger than 6 years are more likely to ingest some or all of the toothpaste used. Ingestion of excessive amounts of fluoride can increase the risk of fluorosis. This excess can be minimized by limiting the amount of toothpaste used and by storing toothpaste where young children cannot access it without parental help.

Use of fluoride toothpaste should begin with the eruption of the first tooth. When fluoride toothpaste is used for children younger than 3 years, it is recommended that the amount be limited to a smear or grain of rice size (about one-half of a pea). Once the child has turned 3 years of age, a pea-sized amount of toothpaste should be used.[20,21] Young children should not be given water to rinse after brushing because their instinct is to swallow. Expectorating without rinsing will both reduce the amount of fluoride swallowed and leave some fluoride in the saliva, where it is available for uptake by the dental plaque. Parents should be strongly advised to supervise their child's use of fluoride toothpaste to avoid overuse or ingestion.

High-concentration toothpaste (5000 ppm) is available by prescription only. The active ingredient in this toothpaste is sodium fluoride. This agent can be recommended for children 6 years and older and adolescents who are at high risk of caries and who are able to expectorate after brushing. Dentists may also prescribe this agent for adolescents who are undergoing orthodontic treatment, as they are at increased risk of caries during this time.[22]

### Fluoride Varnish

Fluoride varnish is a concentrated topical fluoride that is applied to the teeth by using a small brush and sets on contact with saliva. Advantages of this modality are that it is well tolerated by infants and young children, has a prolonged therapeutic effect, and can be applied by both dental and nondental health professionals in a variety of settings.[23] The concentration of fluoride varnish is 22 600 ppm (2.26%), and the active ingredient is sodium fluoride. The unit dose packaging from most manufacturers provides a specific measured amount (0.25 mg, providing 5 mg of fluoride ion). The application of fluoride varnish during an oral screening is of benefit to children, especially those who may have limited access to dental care. Current American Academy of Pediatric Dentistry recommendations for children at high risk of caries is that fluoride varnish be applied to their teeth every 3 to 6 months.[24] The 2013 ADA guideline recommends application of fluoride varnish at least every 6 months to both primary and permanent teeth in those subjects at elevated caries risk.[25] The US Preventive Services Task Force recently published a new recommendation 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).[26]

In most states, Medicaid will pay physicians for the application of fluoride varnish. Information regarding fluoride varnish application reimbursement and which states currently provide payment can be found on the AAP Web site (http://www2.aap.org/oralhealth/docs/OHReimbursementChart.pdf) and the Pew Charitable Trusts Web site (http://www.pewstates.org/research/analysis/reimbursing-physicians-for-fluoride-varnish-85899377335). Because state regulations vary regarding whether fluoride varnish must be applied within the context of a preventive care code, this information should be determined before billing.

#### *Indications for Use*

In the primary care setting, fluoride varnish should be applied to the teeth of all infants and children at least once every 6 months and preferably every 3 months, starting when the first tooth

erupts and until establishment of a dental home.

### *Instructions for Use*

Fluoride varnish must be applied by a dentist, dental auxiliary professional, physician, nurse, or other health care professional, depending on the practice regulations in each state. It should not be dispensed to families to apply at home. Application of fluoride varnish is most commonly performed at the time of a well-child visit. Teeth are dried with a 2-inch gauze square, and the varnish is then painted onto all surfaces of the teeth with a brush provided with the varnish. Children are instructed to eat soft foods and not to brush their teeth on the evening after the varnish application to maximize the contact time of the varnish to the tooth. The following day, they should resume brushing twice daily with fluoridated toothpaste.

## Over-the-Counter Fluoride Rinse

Over-the-counter fluoride rinse provides a lower concentration of sodium fluoride than toothpaste or varnish. The concentration is most commonly 230 ppm (0.05% sodium fluoride). Expert panels on this topic have concluded that over-the-counter fluoride rinses should not be recommended for children younger than 6 years because of their limited ability to rinse and spit and the risk of swallowing higher-than-recommended levels of fluoride.[27] A teaspoon (5 mL) of over-the-counter fluoride rinse contains approximately 1 mg of fluoride. For children younger than 6 years, this type of rinse provides an additional, low-dose topical fluoride application that may assist in the prevention of enamel demineralization. However, the evidence for an anticaries effect is limited. The daily use of a 0.05% sodium fluoride rinse may be of benefit for children older than 6 years who are at high risk of dental caries; however, there is no additional benefit beyond daily use of fluoridated toothpaste for children at low risk of caries.[28,29]

## Dietary Fluoride Supplements

Dietary fluoride supplements should be considered for children living in communities in which the community water is not fluoridated or who drink well water that does not contain fluoride.[26] Because there are many sources of fluoride in the water supply and in processed food, it is essential that all potential sources of fluoride be assessed before prescribing a dietary supplement, including consideration of differing environmental exposures (eg, dual homes, child care). As a general guideline, if the primary source of water is fluoridated tap or well water, the child will not require fluoride supplementation, even if he or she primarily drinks bottled water, because the teeth are exposed to fluoride through cooking and brushing. The risk of fluorosis is high if fluoride supplements are given to a child consuming fluoridated water.[30] Information about the fluoridation levels in many community water systems can be found on the CDC Web site entitled My Water's Fluoride (http://apps.nccd.cdc.gov/MWF/Index.asp). Not all communities report this information to the CDC; therefore, it may be necessary to contact the local water department to determine the level of fluoride in the community water. Well water must be tested for fluoride content before prescribing supplements; such testing is available in most states through the state or county public health laboratory.

### *Guidelines for Use*

CDC recommendations regarding fluoride supplementation are provided in Table 2. Supplements can be prescribed in liquid or tablet form. Tablets are preferable for children old enough to chew, because they gain an additional topical benefit to the teeth during the chewing process. Liquid supplements are recommended for younger children and should ideally be added to water or put directly into the child's mouth. Addition of the fluoride supplement to milk or formula is not recommended because of the reduced absorption of fluoride in the presence of calcium.[31] The risk of mild fluorosis can be minimized by health care providers verifying that there are no other sources of fluoride exposure before prescribing systemic fluoride supplements.

### *Other Sources of Fluoride*

Fluoride is present in processed foods and beverages and may be naturally occurring in some areas of the country. The presence of fluoride in juices and carbonated beverages does not counteract the cariogenic nature of these beverages.

## Reconstitution of Infant Formula

In a study of infant feeding practices, 70% to 75% of mothers who fed their infants formula used tap water to reconstitute the powdered formula.[32] According to CDC data from 2012, approximately 67% of US households using public water supplies received

**TABLE 2** Fluoride Supplementation Schedule for Children

| Age | Fluoride Ion Level in Drinking Water[a] | | |
|---|---|---|---|
| | <0.3 ppm | 0.3–0.6 ppm | >0.6 ppm |
| Birth–6 mo | None | None | None |
| 6 mo–3 y | 0.25 mg/d[b] | None | None |
| 3–6 y | 0.50 mg/d | 0.25 mg/d | None |
| 6–16 y | 1.0 mg/d | 0.50 mg/d | None |

Source: Centers for Disease Control and Prevention.[43]

[a] 1.0 ppm = 1 mg/L.

[b] 2.2 mg of sodium fluoride contains 1 mg of fluoride ion.

optimally fluoridated water (between 0.7 and 1.2 ppm).[33]

### *ADA Evidenced-Based Clinical Recommendations*

In 2011, the ADA Council on Scientific Affairs examined the existing evidence and made 2 recommendations. The first recommendation supported the continued use of optimally fluoridated water to reconstitute powdered and liquid infant formula, being cognizant of the small risk of fluorosis in permanent teeth. The second recommendation stated that if there was concern about the risk of mild fluorosis, the formula could be reconstituted with bottled (nonfluoridated) water.[18] It should be noted that most bottled water has suboptimal levels of fluoride and that fluoride content is not listed unless it is added.

## Community Water Fluoridation

Community water fluoridation is the practice of adding a small amount of fluoride to the water supply. It has been heralded as 1 of the top 10 public health achievements of the 20th century by the CDC.[34] Community water fluoridation is a safe, efficient, and cost-effective way to prevent tooth decay and has been shown to reduce tooth decay by 29%.[35] It prevents tooth decay through the provision of low levels of fluoride exposure to the teeth over time and provides both topical and systemic exposure. It is estimated that every dollar invested in water fluoridation saves $38 in dental treatment costs (http://www.cdc.gov/fluoridation/benefits/). Currently, although more than 210 million Americans live in communities with optimally fluoridated water, there are more than 70 million others with public water systems who do not have access to fluoridated water.[33] The fluoridation status of a community water supply can be determined by contacting the local water department or accessing the Web site My Water's Fluoride (http://apps.nccd.cdc.gov/MWF/Index.asp).

### *Recommended Concentration*

Water fluoridation was initiated in the United States in the 1940s. In January 2011, the US Department of Health and Human Services proposed a change to lower the optimal fluoride level in drinking water. The proposed new recommendation is 0.7 mg of fluoride per liter of water to replace the previous recommendation, which was based on climate and ranged from 0.7 mg/L in the warmest climates to 1.2 mg/L in the coldest climates.[36] The change was recommended because recent studies showed no variation in water consumption by young children based on climate and to adjust for an overall increase in sources of fluoride (foods and beverages processed with fluoridated water and fluoridated mouth rinses and toothpastes) in the American diet.

### *Evidence Supporting Community Water Fluoridation*

Despite overwhelming evidence supporting the safety and preventive benefits of fluoridated water, community water fluoridation continues to be a controversial and highly emotional issue. Opponents express a number of concerns, all of which have been addressed or disproven by validated research. The only scientifically documented adverse effect of excess (nontoxic) exposure to fluoride is fluorosis. An increase in the incidence of mild enamel fluorosis among teenagers has been cited as a reason to discontinue fluoridation, even though this condition is cosmetic with no detrimental health outcomes. Recent opposition has sometimes centered on the question of who decides whether to fluoridate (elected/public officials or the voters), possibly reflecting a recent trend of distrust of the US government. Many opponents believe fluoridation to be mass medication and call the ethics of community water fluoridation into question, but courts have consistently held that it is legal and appropriate for a community to adopt a fluoridation program.[37] Opponents also express concern about the quality and source of fluoride, claiming that the additives (fluorosilicic acid, sodium fluoride, or sodium fluorosilicate), in their concentrated form, are highly toxic and are byproducts of the production of phosphate fertilizer and may include other contaminants, such as arsenic. The quality and safety of fluoride additives are ensured by Standard 60 of the National Sanitation Foundation/American National Standards Institute, a program commissioned by the Environmental Protection Agency (EPA), and testing has been conducted to confirm that arsenic or other substances are below the levels allowed by the EPA.[38] Finally, there have been many unsubstantiated or disproven claims that fluoride leads to kidney disease, bone cancer, and compromised IQ. More than 3000 studies or research papers have been published on the subject of fluoride or fluoridation.[39] Few topics have been as thoroughly researched, and the overwhelming weight of the evidence—in addition to 68 years of experience—supports the safety and effectiveness of this public health practice.

### *Naturally Occurring Fluoride in Drinking Water*

The optimal fluoride level in drinking water is 0.7 to 1.2 ppm, an amount that has been proven beneficial in reducing tooth decay. Naturally occurring fluoride may be below or above these levels in some areas. Under the Safe Drinking Water Act (Pub L No. 93-523 [1974]), the EPA requires notification by the water supplier if the fluoride level exceeds 2 ppm. In areas where naturally occurring fluoride levels in drinking water exceed 2 ppm, people should consider an alternative water source or home water treatments to reduce the risk of

fluorosis in young children.[40] Well water should be tested for the level of fluoride; this testing is most commonly performed through the health department.

### *Fluoride Toxicity*

Toxic levels of fluoride are possible, particularly in children, as a result of ingesting large quantities of fluoride supplements. The toxic dose of elemental fluoride is 5 to 10 mg of fluoride per kilogram of body weight.[41] Lethal doses in children have been calculated to be between 8 and 16 mg/kg. When prescribing sodium fluoride supplements, it is recommended to limit the quantity prescribed at one time to no more than a 4-month supply. Parents should be advised to keep fluoride products out of the reach of young children and to supervise their use.

### *Fluoride Removal Systems*

There are a number of water treatment systems that are effective in the removal of fluoride from water,[42] including reverse osmosis and distillation. Parents should be counseled on the use of these and activated alumina filters in the home and, should they choose to use one that removes fluoride, the potential effect on their family's oral health. Commonly used home carbon filters (eg, Brita [Brita LP, Oakland, California], PUR [Kaz USA, Incorporated, Southborough, MA]) do not remove fluoride. These can be recommended for families who are concerned about heavy metals or other impurities in their home water supply but who wish to retain the benefits of fluoridated water.

## SUGGESTIONS FOR PEDIATRICIANS

1. Know how to assess caries risk. As recommended by the AAP's *Oral Health Risk Assessment Timing and Establishment of the Dental Home*[6] and *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*,[7] pediatricians should perform oral health risk assessments on all children at preventive visits beginning at 6 months of age. An oral health risk assessment tool has been developed by the AAP/Bright Futures and endorsed by the National Interprofessional Initiative on Oral Health. This tool can be accessed at http://www2.aap.org/oralhealth/RiskAssessmentTool.html. There are currently no validated early childhood caries risk assessment tools. The aforementioned tool is a guide to help clinicians counsel patients about oral health and best identify risk.
2. Know how to assess a child's exposure to fluoride and determine the need for topical or systemic supplements.[43]
3. Understand indications for fluoride varnish and how to provide it. Fluoride varnish can be a useful tool in the prevention of early childhood caries. Additional training on oral screenings, fluoride varnish indications and application, and office implementation can be found in the Smiles for Life Curriculum Course 6: Caries Risk Assessment, Fluoride Varnish and Counseling[44] at www.smilesforlifeoralhealth.org. In addition, the AAP Children's Oral Health Web site is a resource for oral health practice tools (http://www2.aap.org/oralhealth/PracticeTools.html).
4. Advocate for water fluoridation in the local community. Public water fluoridation is an effective and safe method of protecting the most vulnerable members of our population from dental caries. Pediatricians are encouraged to advocate on behalf of public water fluoridation in their communities and states. For additional information and water fluoridation facts and detailed questions and answers, see http://www.ada.org/sections/newsAndEvents/pdfs/fluoridation_facts.pdf, http://www.cdc.gov/fluoridation/, and http://www.ilikemyteeth.org.


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# Fluoride Use in Caries Prevention in the Primary Care Setting

Melinda B. Clark, Rebecca L. Slayton and SECTION ON ORAL HEALTH

*Pediatrics* 2014;134;626
DOI: 10.1542/peds.2014-1699 originally published online August 25, 2014;

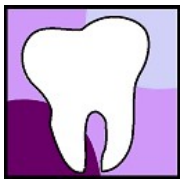
# California CHDP/EPSDT Dental Training:

# Fluoride Varnish

Child Health and Disability Prevention (CHDP) Program
Oral Health Subcommittee
**December 2018**

CHDP Dental Training: Fluoride Varnish Materials
http://www.dhcs.ca.gov/services/chdp/Pages/FluorideVarnish.aspx

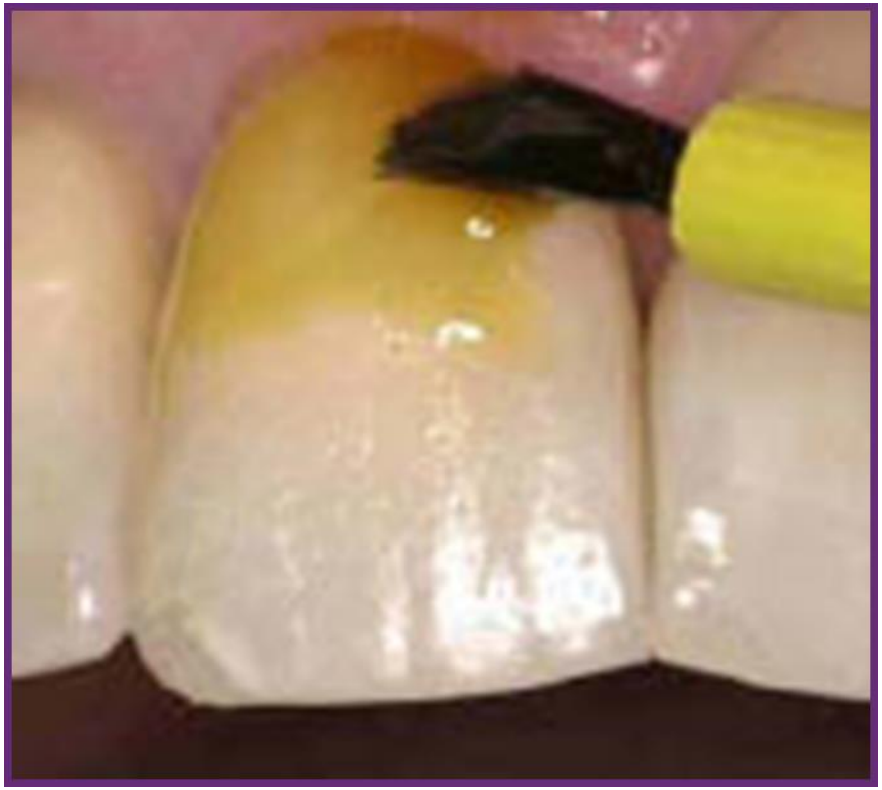
# Training Objectives



- Identify children at risk for dental decay and who would benefit from fluoride varnish.
- Recognize the importance of providing fluoride varnish to high risk children (0 up to 6 years) in the medical office.
- Establish a protocol to implement fluoride varnish application in the medical office.
- Apply fluoride varnish and share information with other office staff.

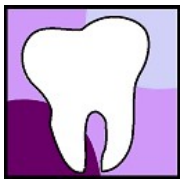
# Fluoride Varnish

## The CHDP/EPSDT Medical Provider Role



Fluoride Varnish: an Evidence-Based Approach – Research Brief (astdd)
https://www.astdd.org/www/docs/fl-varnish-research-brief.pdf

# CHDP Providers Prevent Dental Decay

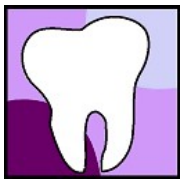


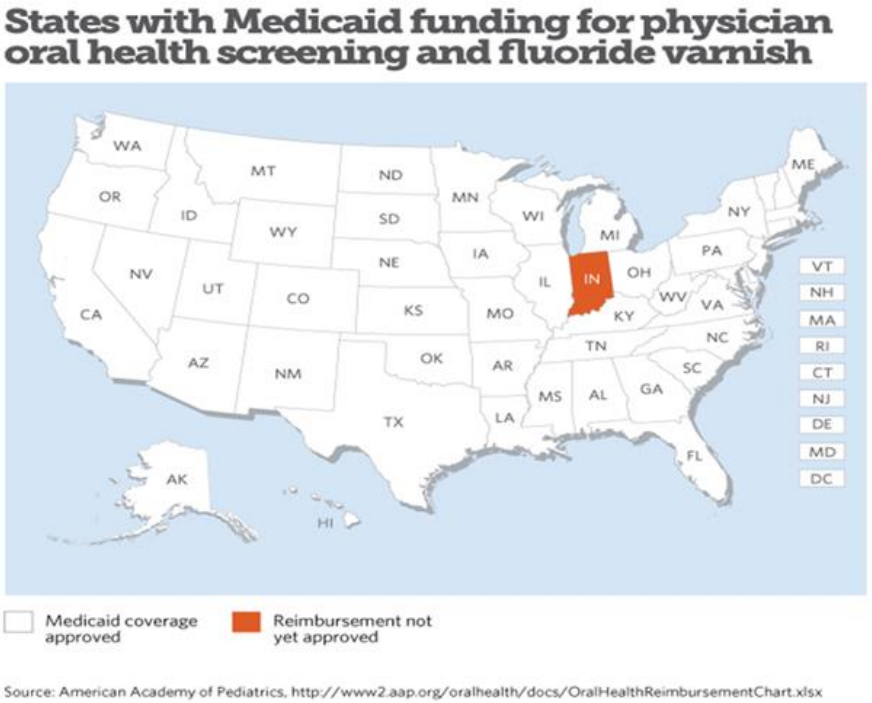
- Young children are seen earlier and more frequently by medical providers than by a dentist
- Low income young children are often at higher risk for dental decay
- Medical providers are now placing fluoride varnish to prevent decay
- Research shows high **efficacy** of fluoride varnish*

*Fluoride Varnish Efficacy in Preventing Early Childhood Caries
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2257982/?tool=pubmed

# Fluoride Varnish

## Nationwide Effort by Medical Providers



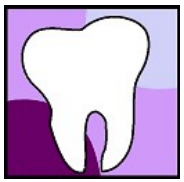



**2011**

**In 2017, Indiana was the final state to provide compensation through Medicaid to pediatric health professionals for fluoride varnish services.**

Reimbursing Physicians for Fluoride Varnish
http://www.pewtrusts.org/en/research-and-analysis/analysis/2011/08/29/reimbursing-physicians-for-fluoride-varnish

# Fluoride Varnish – Who Needs It?

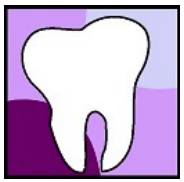


## Caries Risk Factors:

- **Low Socioeconomic Status (SES)**
- **Active or Past Tooth Decay**
  - In parents, siblings, caregivers or child
  - White spot lesions on teeth
- **Poor Feeding Habits**
  - Frequent sipping and snacking on:
    - Carbohydrates – not just refined sugars
  - Bottle while sleeping/napping
  - Bottle after age 1

Oral Health Risk Assessment Tool (AAP)
https://brightfutures.aap.org/Bright%20Futures%20Documents/Oral%20Health%20Risk%20Assessment%20Tool.pdf

# Fluoride Varnish – Who Needs It?



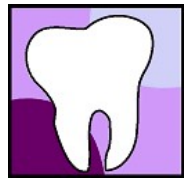
## Caries Risk Factors (continued):

- **Lack of Fluoride Exposure***
- **No Recent Dental Visit**
  - Within the last year
- **Poor Homecare**
  - Lack of daily brushing and flossing
- **Children with Special Health Care Needs**

*California Water Board: List of Fully Fluoridated Water Systems (Fluoridation by Public Water)

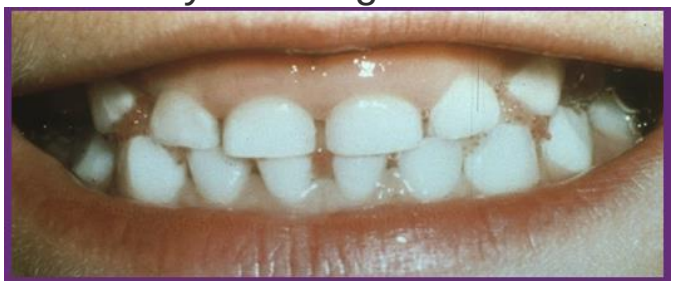
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html

# Fluoride Varnish – Which Teeth Benefit?



## No Visible Decay

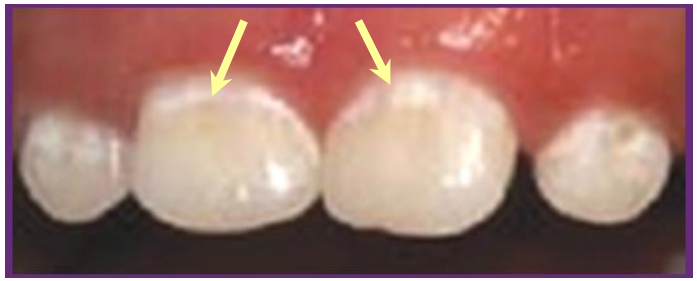
but may have high risk factors



**Preventable** with fluoride varnish and good home care

## Beginning Decay

white chalky decalcification near gum line



**Reversible** with fluoride varnish and improved home care to inhibit progression of caries

## Advanced Decay

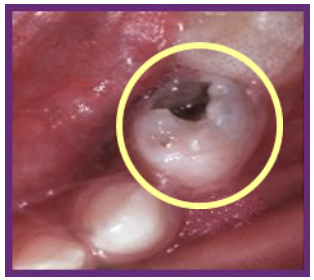
Destroyed enamel

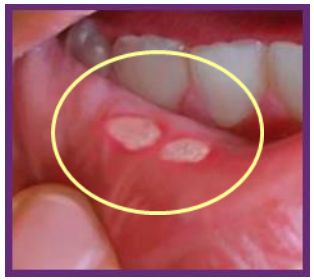
**Irreversible,** however with fluoride varnish decay progression is inhibited

Dental treatment needed ASAP

## DO NOT Apply to Teeth with

**pulp exposure or tissue lesions**

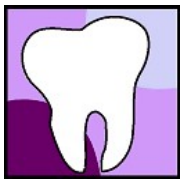




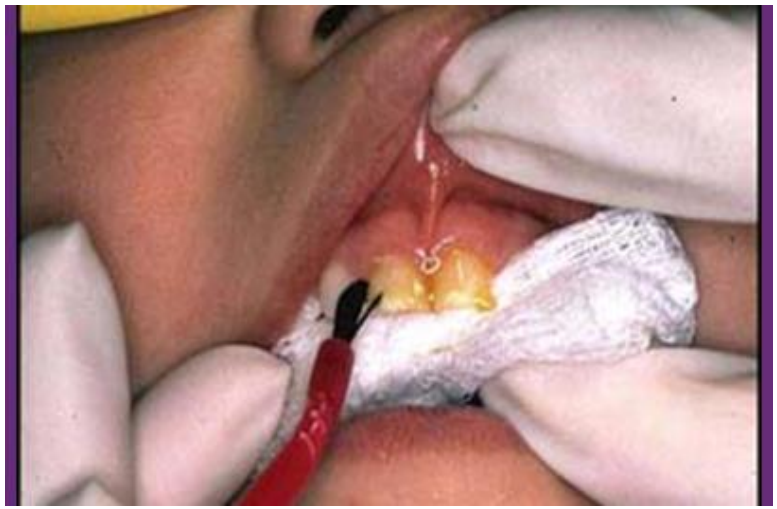
**Avoid** these areas, but apply fluoride varnish to all other teeth in the mouth.

Immediate treatment needed for severe decay

# Fluoride Varnish - Facts



- A protective resin coating with sodium fluoride
- Brushed on teeth in 1-2 minutes
- 1 application can reduce decay risk up to 59%*
- Applied up to 5x per year
  - 3x in medical office
  - 2x in dental office



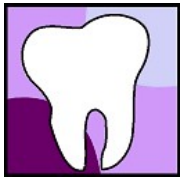
Fluoride Varnish: an Evidence-Based Approach – Research Brief (astdd)
https://www.astdd.org/www/docs/fl-varnish-research-brief.pdf

# Frequency of Application

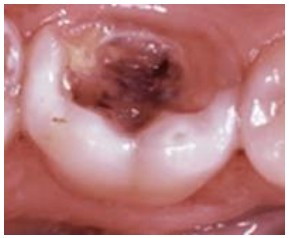
- Apply during a well child exam, follow-up visit, or stand-alone appointment.
- After the first fluoride varnish treatment, subsequent treatments can be applied every 3-4 months.


Pediatric Dental Care: Prevention and Management Protocols Based on Caries Risk Assessment
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3470809/

# Fluoride Varnish Safety



- Fluoride varnish is recommended even if other types of fluoride are being used, including:
  - Systemic fluoride (e.g. water fluoridation, tablets or drops)
  - Other topical fluorides (e.g. fluoridated toothpaste, mouth rinses, foam or gel trays)
- Contraindications:
  - Allergy to colophony (resin from conifers) - rare
  - Ulcerative gingivitis and/or stomatitis
  - Pulp exposure or deep decay



*Recommendations for Using Fluoride to Prevent and Control Dental Caries in United States (CDC)
https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5014a1.htm

# Fluoride Varnish – Who Can Apply?

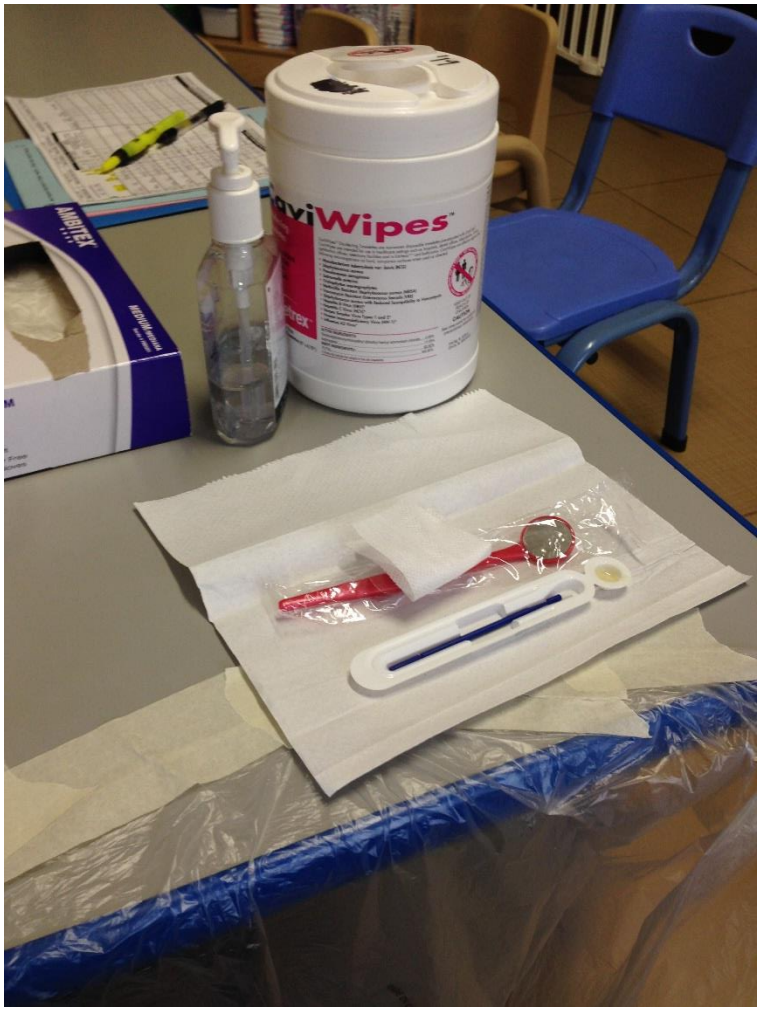
- Medical Office Setting
  - MD
  - Trained nurses and assistants
    - With MD/NP order *

- Community Setting**
  (School, health fair or government program)
  - Any trained person
    - With signed parent/guardian permission
    - Under a doctor's (or dentist's) prescription
    - Following doctor's (or dentist's) protocol

*CHDP Provider Information Notice No.:06-08 & **Policy Pick: Topical Fluoride Varnish and AB667
http://www.dhcs.ca.gov/services/chdp/Documents/Letters/chdppin0608.pdf
http://www.dhcs.ca.gov/services/chdp/Documents/CHDPDental/FVAB667.pdf

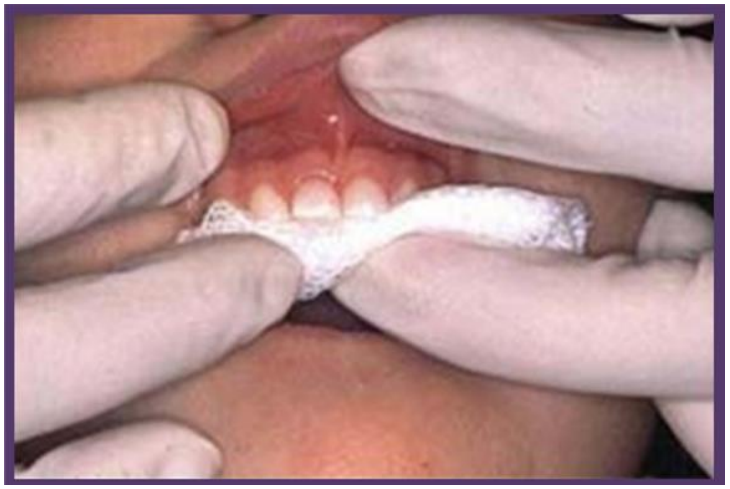
# Fluoride Varnish – Supplies Needed

- Gauze
- Gloves
- Varnish Packet
- Tray or napkin(s)
- Hand sanitizer
- Optional
  - Mouth Mirror
  - Toothbrush
- Post Procedure - FV Brochure

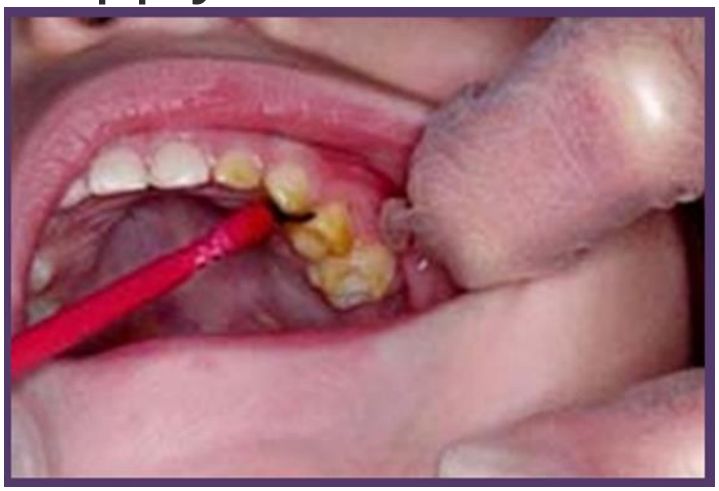


# Fluoride Varnish – How to Apply?

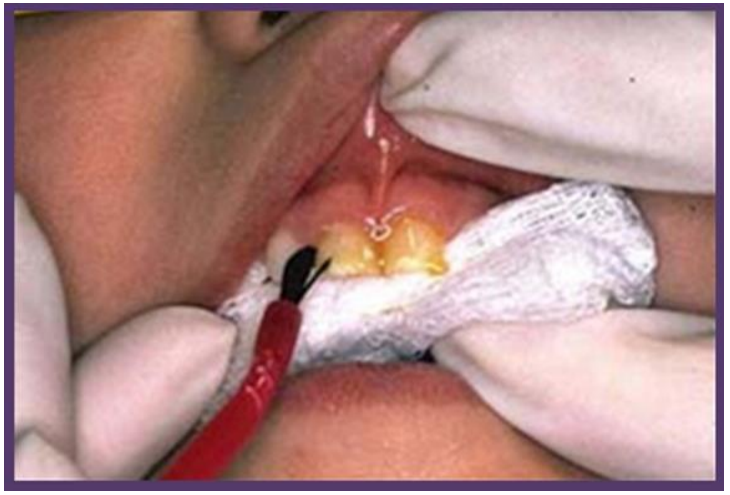
1. Dry teeth with gauze



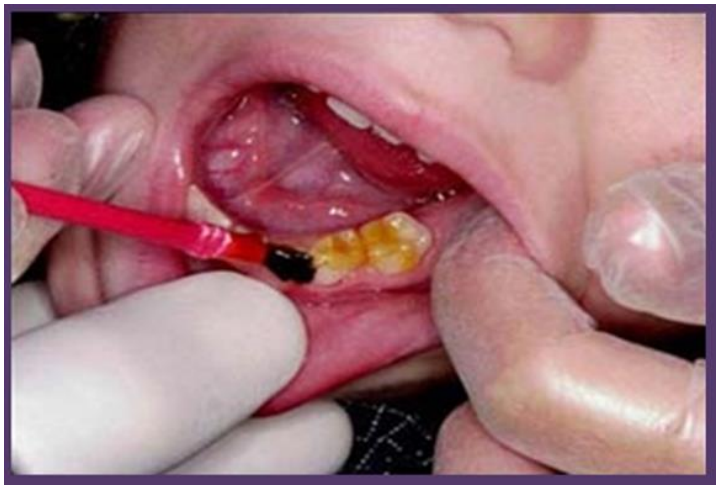
2. Apply to all surfaces



3. Apply to front teeth



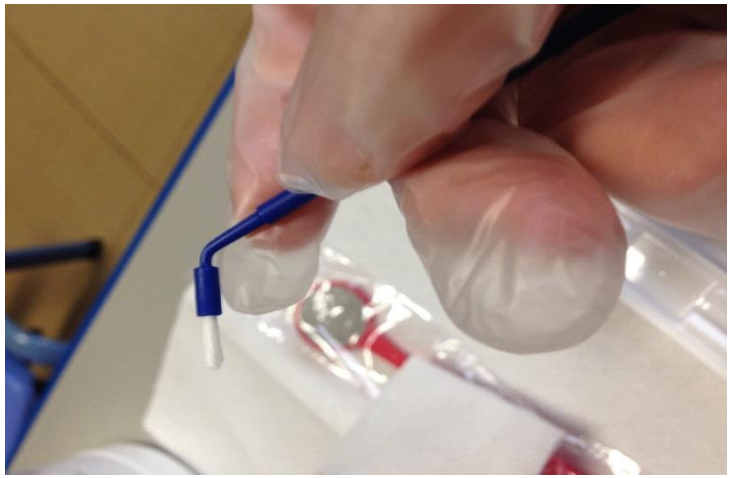
4. Apply to bottom teeth



# Fluoride Varnish Procedure

Prepare for treatment before positioning child

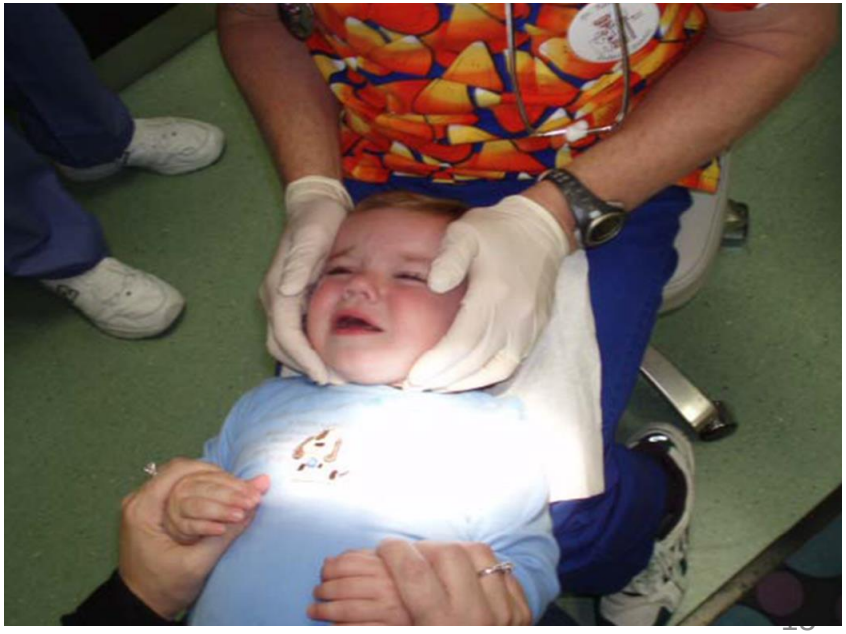
1. OPEN the packet of varnish
2. BEND the Brush
3. WRAP the gauze around finger



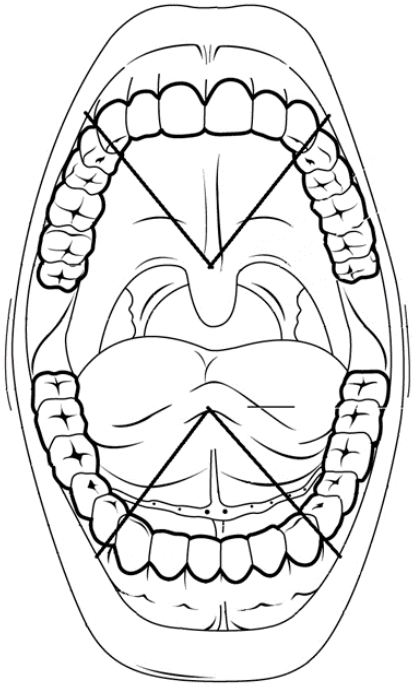
Next - position the child securing arms and legs

4. STIR varnish with applicator
5. DRY teeth lightly with gauze

# Fluoride Varnish – Positioning



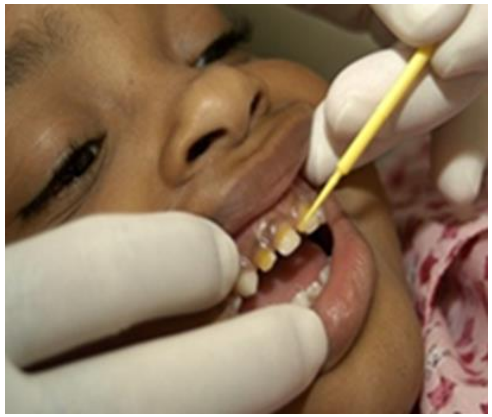
# Fluoride Varnish Procedure - continued



6. Work in sections
7. Retract cheeks with gauzed finger
8. Begin with upper right section of teeth.
9. Repeat on left side
10. Continue this method on lower right and left sections

Brush all surfaces of teeth focusing on:

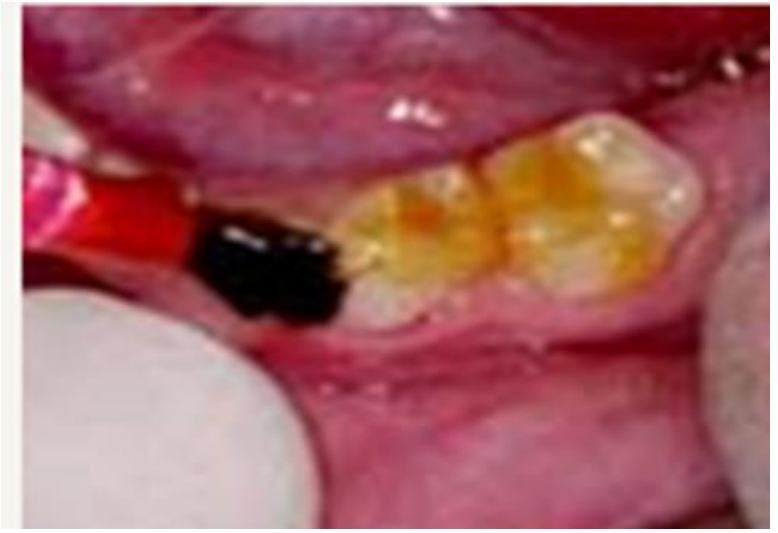
- Where gums and teeth meet
- Chewing surfaces of molars
- Upper front teeth – do not forget "tongue" side (lingual)



# Fluoride Varnish Procedure –
## Key Point: Focus on Critical Teeth Surfaces

Apply to:

- Chewing surfaces of molars, into fissures and between teeth
- Upper front teeth – do not forget “tongue” side
- Where gums and teeth meet



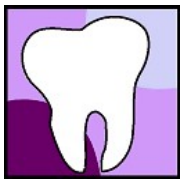
# Fluoride Varnish – Parent Information

- No water restrictions after application
- Avoid crunchy, chewy, and hot foods/drinks for the rest of the day
- Do not brush/floss until the next day
- Fluoride Varnish may leave a light color coating that will be brushed off the next day

**Brochure**

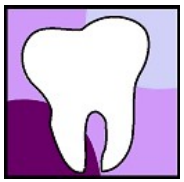

Print copies of *Fluoride Varnish – Helping Smiles Stay Strong* brochure
http://publichealth.lacounty.gov/cms/docs/FluorideVarnish.pdf

# Fluoride Varnish – Talking Points



- Fluoride Varnish does not take the place of:
  - A dental visit
  - Brushing with fluoride toothpaste twice a day
  - Limiting sweets or sugary snacks
  - Drinking fluoridated tap water
- In addition to fluoride varnish at medical offices, dentists can also provide fluoride varnish or other topical fluoride treatments twice a year.

# Fluoride Varnish - Billing



## Reimbursable 3 times (in a 12 month period) for children age 0 through 5

- Fee-for-Service Medi-Cal
  - Billing code: CPT 99188*
  - Reimbursement - $18 per application
- Managed Care Medi-Cal
  - Reimbursement varies
  - Contact individual plan
- FQHC/RHC/IHS
  - Not billable as a separate procedure

*Medi-Cal Rates (Codes 94799 thru 99600) (DHCS)
http://files.medi-cal.ca.gov/pubsdoco/rates/rates_information.asp?num=22&first=94799&last=99600

# Fluoride Varnish – How to Order

## Three Ways:

1. Directly:
   - Center for Oral Health 909-469-8300
     https://centerfororalhealth.org/store/
2. Choose from list:
   - AAP Ordering list
     https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Oral-Health/Documents/fluoride-varnish-manufacturers.pdf
3. Internet search:
   - Use search term “fluoride varnish buy”

# Fluoride Varnish –
## How to Implement in Your Practice

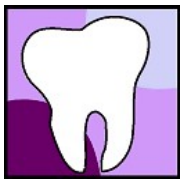
- Establish Health Records (EMR) for documentation
- Engage staff - information meetings
- Practicum training
- Identify champion(s)
- Identify workflow
- Train on documentation
- Publicize to patient parents
- Set start date
- Share progress

**Medical team provides fluoride varnish**

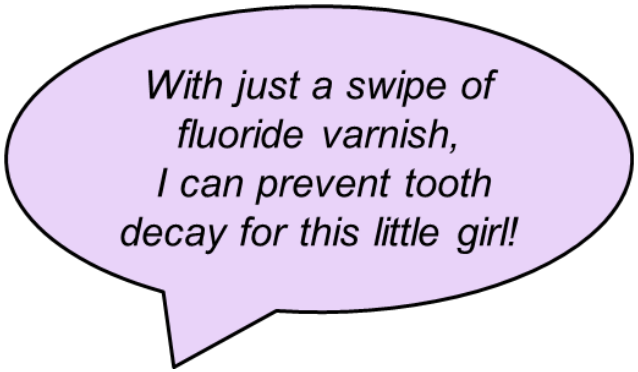
# Fluoride Varnish – Establish a Protocol

- Identify:
  - ages to get FV
  - interval periods
- Establish standing order - Rx
- Assign duties to MA, or other trained staff
- Document in health record
- Give post procedure instructions
- Start slowly

# Easy and Effective



- Can be delegated to nursing and medical assistant staff, which empowers them to be the front line against oral disease.
- Can be applied at any time after the oral assessment.
- Can prevent a cavity with a swipe of a fluoride varnish brush.




# Fluoride Varnish
## Online Trainings

### Videos

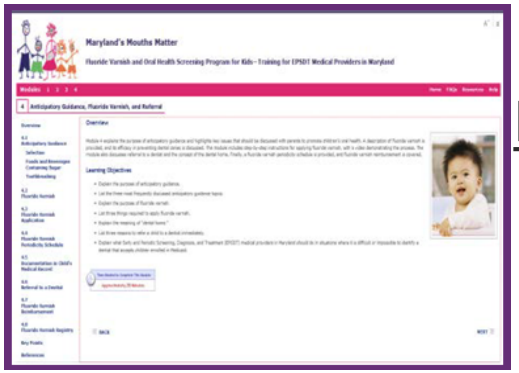
[American Academy of Pediatrics Television]

http://www.youtube.com/watch?v=zNOlGS1ggSg&feature=player

[Smiles for Life University of Connecticut]

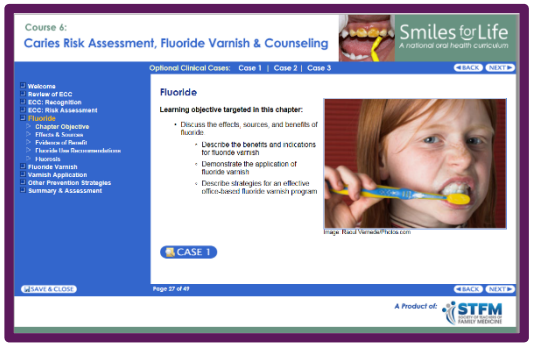
http://www.youtube.com/watch?v=cV5OmL7C8K4&feature=player

### Modules




[Maryland's Mouths Matter Module 4]

http://www.mchoralhealth.org/flvarnish/mod4_0.html

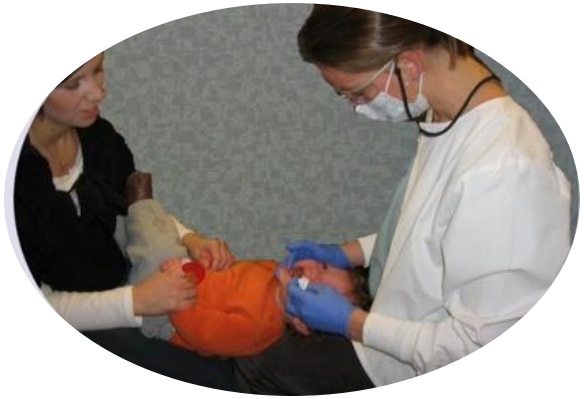



[Smiles for Life Training: Course #6]

https://www.smilesforlifeoralhealth.org/buildcontent.aspx?pagekey=66053&lastpagekey=64596&userkey=13873165&sessionkey=4170799&tut=584&customerkey=84&custsitegroupkey=0

# Working Together

Medical Providers



Dental Providers

**Together we can stop the epidemic of oral disease!**

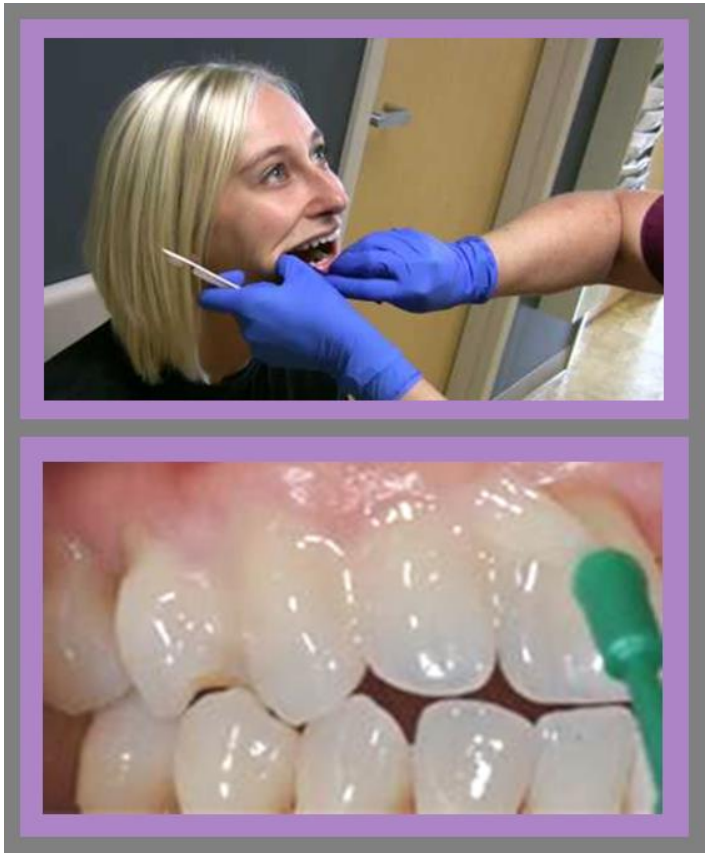
Parents/Caregivers

Individuals

Local CHDP Program Contact Information

http://www.dhcs.ca.gov/services/chdp/Pages/CountyOffices.aspx

# Questions?

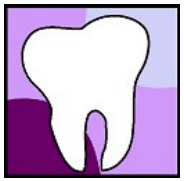


# Fluoride Varnish - Practicum -

- Speaker Demonstration
- Participant Practice

California Child Health & Disability Prevention (CHDP) Program
Oral Health Subcommittee
**December 2018**

CHDP Training and Resource Material
http://www.dhcs.ca.gov/services/chdp/Pages/Training.aspx



# Thank you!

**To view resources for this training, visit the References page**

(http://www.dhcs.ca.gov/services/chdp/Documents/CHDPDental/Slide19.pptx)

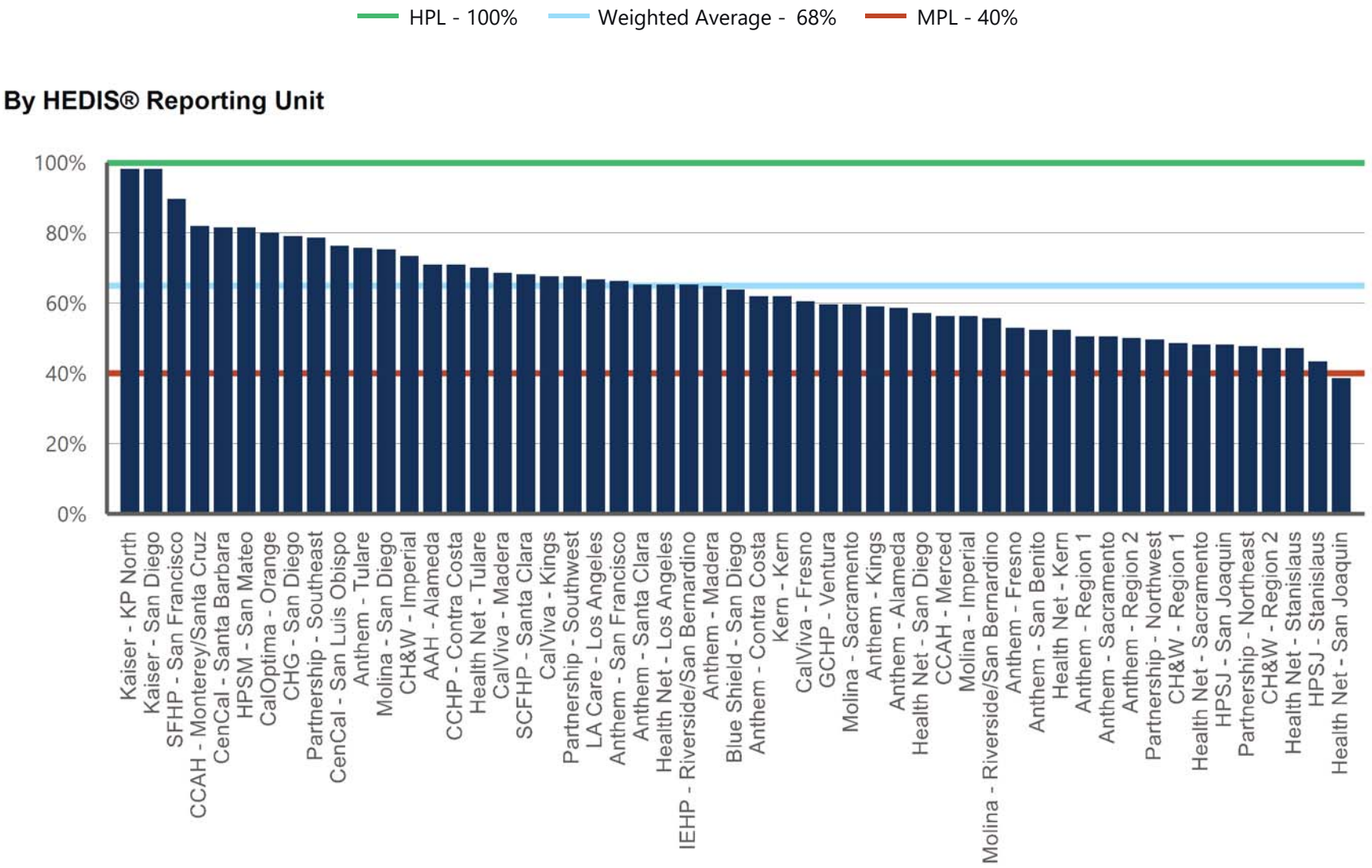
**To access this training, visit CHDP Dental and other trainings**

(www.dhcs.ca.gov/services/chdp/Pages/Training.aspx)

**Visit the CHDP County Offices website for your local CHDP contact information**

(www.dhcs.ca.gov/services/chdp/Pages/CountyOffices.aspx)

*2018 HEDIS® Aggregated Quality Factor Score (AQFS)*




*Source: Enterprise Performance Monitoring System*
*Note: Data in this dashboard is preliminary and subject to change*

# GLOSSARY

## *Metrics*

**Certified Eligible**: A certified eligible is a beneficiary deemed qualified for Medi-Cal services by a valid eligibility determination, and who have enrolled into the program. This classification excludes beneficiaries who have a monthly share-of-cost obligation that has not been met. Enrollment counts exclude information related to applications received or any other eligible members that may be in the process of becoming certified eligible.

**Member Month**: A member month represent one certified eligible for one month of enrollment. Counts of Member months represent the number of certified eligible individuals enrolled in a health plan or Fee-For-Service each month.

**Per 1,000 Members**: Rates per 1,000 members were calculated by dividing overall utilization of a given service (e.g., Emergency Room Visits) by the total number of members for the same time period and multiplying the result by 1,000.

**Abbreviated Numbers:** Numbers in millions (M) that are less than 50,000 are displayed as 0.0M. Numbers in thousands (K) that are less than 50 are displayed as 0.0K.

**Percentages:** Percentage metrics are displayed as whole numbers. Charts may add up to 99%, 100%, or 101%.

**MO-**: Indicates Medi-Cal Only. See Non-Dual definition for more information.

## *Population Aid Code Groups*

**Affordable Care Act (ACA):** This population consists of the following Adult Expansion aid codes: M1, M2, L1, and 7U.

**Optional Targeted Low Income Children (OTLIC):** This population consists of the following OTLIC aid codes: 2P, 2R, 2S, 2T, 2U, 5C, 5D, E2, E5, E6, E7, H1, H2, H3, H4, H5, M5, T0, T1, T2, T3, T4, T5, T6, T7, T8, and T9.

**Seniors and Persons with Disabilities (SPD):** This population consists of the following SPD aid codes: 10, 13, 14, 16, 17, 1E, 1H, 20, 23, 24, 26, 27, 2E, 2H, 36, 60, 63, 64, 66, 67, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6R, 6V, 6W, 6X, 6Y, C1, C2, C3, C4, C7, C8, D2, D3, D4, D5, D6, and D7.

**Other Populations (OTHER):** This population consists of all aid codes not categorized under ACA, OTLIC, or SPD.

*Source: Enterprise Performance Monitoring System*
*Note: Data in this dashboard is preliminary and subject to change*

*Medicare Status*

**Dual:** This population consists of any Medi-Cal eligible member who has active Medicare coverage. Active Medicare coverage means one or more of the following Medicare portions are active: Part A, B, or D. Dual members are not identified by an aid code.

**Non-Dual:** This population consists of any Medi-Cal eligible member who is Medi-Cal Only (MO) and has no active Medicare coverage.

*New Enrollments*

This population consists of members who were newly eligible for Medi-Cal Managed Care enrollment. The enrollment types are defined below:

**Auto Assigned:** Members who made no choice that were assigned by default algorithm.

**Passive/Prior:** Members who were passively enrolled and members defaulted because they were previously a member or because other family members were already assigned to the plan.

**Regular:** Members who made a choice or selected a health plan by submitting an enrollment form.

*Utilization Measures for Certified Eligible Managed Care Members*

Utilization is tracked by aid code population and Medicare status.

**Emergency Room (ER) Visits:** This measure captures the number of ER visits per month. The results from this measure are used to calculate ER visits with an inpatient admission. A visit consists of a unique combination between provider, member, and date of service. This measure is displayed per 1,000 members.

**Emergency Room (ER) Visits with an Inpatient (IP) Admission:** This measure captures the number of ER visits that resulted in an inpatient admission per month. The results of this measure are a subset of ER visits and IP admissions. The service date and member identification are linked to create this measure. An admission consists of a unique combination between member and date of admission to a facility. This measure is displayed per 1,000 members.

**Inpatient (IP) Admissions:** This measure captures the number of inpatient admissions per month. The results from this measure are used to calculate ER visits with an inpatient admission. An admission consists of a unique combination between member and date of admission to a facility. This measure is displayed per 1,000 members.

*Source: Enterprise Performance Monitoring System*
*Note: Data in this dashboard is preliminary and subject to change*

**Outpatient (OP) Visits:** This measure captures the number of outpatient visits per month. A visit consists of a unique combination between provider, member, and date of service. This measure is displayed per 1,000 members.

**Prescriptions:** This measure captures the number of prescriptions per month. A prescription consists of a unique combination between National Drug Code, member, and date of service. This measure is displayed per 1,000 members.

**Mild to Moderate Mental Health Visits:** This measure captures the number of visits per month related to selected Psychotherapy Services and Diagnostic Evaluations. The selected procedure codes aim to capture mild to moderate mental health visits. A visit consists of a unique combination between provider, member, and date of service. This measure is displayed per 1,000 members.

*Grievances, State Fair Hearings, and Medical Exemption Requests*

**Grievances:** Grievance data is collected quarterly and is plan reported. A single member can have multiple grievances, and a single grievance can have multiple reasons. Grievance reasons include Accessibility, Benefits, Quality of Care, and Referral. The count of grievances that do not fall into one of the above mentioned categories will be noted as “Other”.

**State Fair Hearings:** Hearing data is reported from the Department of Social Services. Hearing outcomes have been grouped into three outcomes types: Denied or Dismissed, Granted, and Withdrawal or Non-Appearance.

**Medical Exemption Requests (MERs):** A MER is a request to be exempt from mandatory enrollment into a Managed Care health plan. If a MER is approved a beneficiary can stay in Medi-Cal fee-for-service for a period of 12 months. If a MER is denied a member is required to enroll into a Managed Care health plan.

*Network Adequacy*

**Provider Ratios:** These metrics are designed to showcase the number of Primary Care Physicians (PCPs) per 2,000 plan enrollees and all Physicians per 1,200 plan enrollees.

*Health Effectiveness Data and Information Set (HEDIS®) Aggregated Quality Factor Score (AQFS)*

The HEDIS® measures and specifications were developed by and are owned and copyrighted by the National Committee for Quality Assurance (“NCQA”). The HEDIS® AQFS is a single score that accounts for plan performance on all DHCS selected HEDIS® indicators. It is a composite rate calculated as percent of the National High Performance Level (HPL). The High Performance Level is 100%. The Minimum Performance Level is 40%. The State Population Weighted Average is calculated annually. A HEDIS® reporting unit is a combination of one health plan in a county or region.

*Source: Enterprise Performance Monitoring System*
*Note: Data in this dashboard is preliminary and subject to change*

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# Lung Cancer: Screening

Release Date: December 2013

This topic is in the process of being updated. Please go to the Update in Progress section to see the latest documents available.

## Recommendation Summary

***Summary of Recommendation and Evidence***

| Population | Recommendation | Grade (What's This?) |
|---|---|---|
| Adults Aged 55-80, with a History of Smoking | The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery. | B |

**Read Full Recommendation Statement**
PDF Version (PDF Help)

View archived versions of this recommendation

Read the Full Recommendation Statement

## Supporting Documents

- **Final Evidence Review**
  PDF Version (PDF Help)
- **Evidence Summary**
  PDF Version (PDF Help)
- **Modeling Report**
  PDF Version (PDF Help)

## Clinical Summary

Clinical summaries are one-page documents that provide guidance to primary care clinicians for using recommendations in practice.

This summary is intended for use by primary care clinicians.

View Clinical Summary
PDF Version (PDF Help)

## Related Information for Consumers

- Screening for Lung Cancer: Consumer Guide

## Related Information for Health Professionals

**There is no related information for health professionals.**

*Current as of: July 2015*

**Internet Citation:** *Final Update Summary: Lung Cancer: Screening.* U.S. Preventive Services Task Force. July 2015.

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

# Recommendations for Preventive Pediatric Health Care

## Bright Futures/American Academy of Pediatrics

Bright Futures
prevention and health promotion for infants, children, adolescents, and their families™

Each child and family is unique; therefore, these Recommendations for Preventive Pediatric Health Care are designed for the care of children who are receiving competent parenting, have no manifestations of any important health problems, and are growing and developing in a satisfactory fashion. Developmental, psychosocial, and chronic disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits. Additional visits also may become necessary if circumstances suggest variations from normal.

These recommendations represent a consensus by the American Academy of Pediatrics (AAP) and Bright Futures. The AAP continues to emphasize the great importance of continuity of care in comprehensive health supervision and the need to avoid fragmentation of care.

Refer to the specific guidance by age as listed in the *Bright Futures Guidelines* (Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents.* 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017).

The recommendations in this statement do not indicate an exclusive course of treatment or standard of medical care. Variations, taking into account individual circumstances, may be appropriate.



| | INFANCY | | | | | | | | EARLY CHILDHOOD | | | | | | | MIDDLE CHILDHOOD | | | | | | ADOLESCENCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **AGE**[1] | **Prenatal**[2] | **Newborn**[3] | **3-5 d**[4] | **By 1 mo** | **2 mo** | **4 mo** | **6 mo** | **9 mo** | **12 mo** | **15 mo** | **18 mo** | **24 mo** | **30 mo** | **3 y** | **4 y** | **5 y** | **6 y** | **7 y** | **8 y** | **9 y** | **10 y** | **11 y** | **12 y** | **13 y** | **14 y** | **15 y** | **16 y** | **17 y** | **18 y** | **19 y** | **20 y** | **21 y** |
| **HISTORY** Initial/Interval | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **MEASUREMENTS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Length/Height and Weight | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Head Circumference | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | | | | | | | | | |
| Weight for Length | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | | | | | | | | | | |
| Body Mass Index[5] | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Blood Pressure[6] | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **SENSORY SCREENING** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vision[7] | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ● | ● | ● | ● | ★ | ● | ★ | ● | ★ | ● | ★ | ★ | ● | ★ | ★ | ★ | ★ | ★ |
| Hearing | | ●[8] | ●[9] → | | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ● | ● | ● | ★ | ● | ★ | ● | ← | | ●[10] | → | ← | ● | → | ← | | ● | → |
| **DEVELOPMENTAL/BEHAVIORAL HEALTH** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Developmental Screening[11] | | | | | | | | ● | | | ● | | ● | | | | | | | | | | | | | | | | | | |
| Autism Spectrum Disorder Screening[12] | | | | | | | | | | | ● | ● | | | | | | | | | | | | | | | | | | | |
| Developmental Surveillance | | ● | ● | ● | ● | ● | ● | | ● | ● | | ● | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Psychosocial/Behavioral Assessment[13] | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Tobacco, Alcohol, or Drug Use Assessment[14] | | | | | | | | | | | | | | | | | | | | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ |
| Depression Screening[15] | | | | | | | | | | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Maternal Depression Screening[16] | | | | ● | ● | ● | ● | | | | | | | | | | | | | | | | | | | | | | | | |
| **PHYSICAL EXAMINATION**[17] | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| **PROCEDURES**[18] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Newborn Blood | | ●[19] | ●[20] → | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Newborn Bilirubin[21] | | ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Critical Congenital Heart Defect[22] | | ● | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Immunization[23] | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Anemia[24] | | | | | | ★ | | | ● | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ |
| Lead[25] | | | | | | | ★ | ★ | ● or ★[26] | | ★ | ● or ★[26] | | ★ | ★ | ★ | ★ | | | | | | | | | | | | | | | |
| Tuberculosis[27] | | | | ★ | | | ★ | | ★ | | | ★ | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ |
| Dyslipidemia[28] | | | | | | | | | | | | ★ | | | ★ | | ★ | | ★ | ← | ● → | ★ | ★ | ★ | ★ | ★ | ← | | | ● | → | |
| Sexually Transmitted Infections[29] | | | | | | | | | | | | | | | | | | | | | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ |
| HIV[30] | | | | | | | | | | | | | | | | | | | | | | ★ | ★ | ★ | ★ | ← | | ● | → | ★ | ★ |
| Cervical Dysplasia[31] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ● |
| **ORAL HEALTH**[32] | | | | | | | ●[33] | ●[33] | ★ | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | | | | | | | | | | | | | | |
| Fluoride Varnish[34] | | | | | | | ← | | | | ● | | → | | | | | | | | | | | | | | | | | | |
| Fluoride Supplementation[35] | | | | | | | ★ | ★ | ★ | | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | | | | |
| **ANTICIPATORY GUIDANCE** | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

1. If a child comes under care for the first time at any point on the schedule, or if any items are not accomplished at the suggested age, the schedule should be brought up-to-date at the earliest possible time.
2. A prenatal visit is recommended for parents who are at high risk, for first-time parents, and for those who request a conference. The prenatal visit should include anticipatory guidance, pertinent medical history, and a discussion of benefits of breastfeeding and planned method of feeding, per "The Prenatal Visit" (http://pediatrics.aappublications.org/content/124/4/1227.full).
3. Newborns should have an evaluation after birth, and breastfeeding should be encouraged (and instruction and support should be offered).
4. Newborns should have an evaluation within 3 to 5 days of birth and within 48 to 72 hours after discharge from the hospital to include evaluation for feeding and jaundice. Breastfeeding newborns should receive formal breastfeeding evaluation, and their mothers should receive encouragement and instruction, as recommended in "Breastfeeding and the Use of Human Milk" (http://pediatrics.aappublications.org/content/129/3/e827.full). Newborns discharged less than 48 hours after delivery must be examined within 48 hours of discharge, per "Hospital Stay for Healthy Term Newborns" (http://pediatrics.aappublications.org/content/125/2/405.full).
5. Screen, per "Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report" (http://pediatrics.aappublications.org/content/120/Supplement_4/S164.full).
6. Screening should occur per "Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents" (http://pediatrics.aappublications.org/content/140/3/e20171904). Blood pressure measurement in infants and children with specific risk conditions should be performed at visits before age 3 years.
7. A visual acuity screen is recommended at ages 4 and 5 years, as well as in cooperative 3-year-olds. Instrument-based screening may be used to assess risk at ages 12 and 24 months, in addition to the well visits at 3 through 5 years of age. See "Visual System Assessment in Infants, Children, and Young Adults by Pediatricians" (http://pediatrics.aappublications.org/content/137/1/e20153596) and "Procedures for the Evaluation of the Visual System by Pediatricians" (http://pediatrics.aappublications.org/content/137/1/e20153597).
8. Confirm initial screen was completed, verify results, and follow up, as appropriate. Newborns should be screened, per "Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs" (http://pediatrics.aappublications.org/content/120/4/898.full).
9. Verify results as soon as possible, and follow up, as appropriate.
10. Screen with audiometry including 6,000 and 8,000 Hz high frequencies once between 11 and 14 years, once between 15 and 17 years, and once between 18 and 21 years. See "The Sensitivity of Adolescent Hearing Screens Significantly Improves by Adding High Frequencies" (http://www.jahonline.org/article/S1054-139X(16)00048-3/fulltext).
11. See "Identifying Infants and Young Children With Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening" (http://pediatrics.aappublications.org/content/118/1/405.full).
12. Screening should occur per "Identification and Evaluation of Children With Autism Spectrum Disorders" (http://pediatrics.aappublications.org/content/120/5/1183.full).
13. This assessment should be family centered and may include an assessment of child social-emotional health, caregiver depression, and social determinants of health. See "Promoting Optimal Development: Screening for Behavioral and Emotional Problems" (http://pediatrics.aappublications.org/content/135/2/384) and "Poverty and Child Health in the United States" (http://pediatrics.aappublications.org/content/137/4/e20160339).
14. A recommended assessment tool is available at http://crafft.org.
15. Recommended screening using the Patient Health Questionnaire (PHQ)-2 or other tools available in the GLAD-PC toolkit and at http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Documents/MH_ScreeningChart.pdf.
16. Screening should occur per "Incorporating Recognition and Management of Perinatal and Postpartum Depression Into Pediatric Practice" (http://pediatrics.aappublications.org/content/126/5/1032).
17. At each visit, age-appropriate physical examination is essential, with infant totally unclothed and older children undressed and suitably draped. See "Use of Chaperones During the Physical Examination of the Pediatric Patient" (http://pediatrics.aappublications.org/content/127/5/991.full).
18. These may be modified, depending on entry point into schedule and individual need.

*(continued)*

**KEY:** ● = to be performed ★ = risk assessment to be performed with appropriate action to follow, if positive ← ● → = range during which a service may be provided

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*(continued)*

19. Confirm initial screen was accomplished, verify results, and follow up, as appropriate. The Recommended Uniform Screening Panel (https://www.hrsa.gov/advisory-committees/heritable-disorders/rusp/index.html), as determined by The Secretary's Advisory Committee on Heritable Disorders in Newborns and Children, and state newborn screening laws/regulations (http://genes-r-us.uthscsa.edu/home) establish the criteria for and coverage of newborn screening procedures and programs.
20. Verify results as soon as possible, and follow up, as appropriate.
21. Confirm initial screening was accomplished, verify results, and follow up, as appropriate. See "Hyperbilirubinemia in the Newborn Infant ≥35 Weeks' Gestation: An Update With Clarifications" (http://pediatrics.aappublications.org/content/124/4/1193).
22. Screening for critical congenital heart disease using pulse oximetry should be performed in newborns, after 24 hours of age, before discharge from the hospital, per "Endorsement of Health and Human Services Recommendation for Pulse Oximetry Screening for Critical Congenital Heart Disease" (http://pediatrics.aappublications.org/content/129/1/190.full).
23. Schedules, per the AAP Committee on Infectious Diseases, are available at http://redbook.solutions.aap.org/SS/Immunization_Schedules.aspx. Every visit should be an opportunity to update and complete a child's immunizations.
24. Perform risk assessment or screening, as appropriate, per recommendations in the current edition of the AAP *Pediatric Nutrition: Policy of the American Academy of Pediatrics* (Iron chapter).
25. For children at risk of lead exposure, see "Prevention of Childhood Lead Toxicity" (http://pediatrics.aappublications.org/content/138/1/e20161493) and "Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention" (http://www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf).
26. Perform risk assessments or screenings as appropriate, based on universal screening requirements for patients with Medicaid or in high prevalence areas.
27. Tuberculosis testing per recommendations of the AAP Committee on Infectious Diseases, published in the current edition of the AAP *Red Book: Report of the Committee on Infectious Diseases*. Testing should be performed on recognition of high-risk factors.
28. See "Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents" (http://www.nhlbi.nih.gov/guidelines/cvd_ped/index.htm).
29. Adolescents should be screened for sexually transmitted infections (STIs) per recommendations in the current edition of the AAP *Red Book: Report of the Committee on Infectious Diseases*.
30. Adolescents should be screened for HIV according to the USPSTF recommendations (http://www.uspreventiveservicestaskforce.org/uspstf/uspshivi.htm) once between the ages of 15 and 18, making every effort to preserve confidentiality of the adolescent. Those at increased risk of HIV infection, including those who are sexually active, participate in injection drug use, or are being tested for other STIs, should be tested for HIV and reassessed annually.
31. See USPSTF recommendations (https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-screening2). Indications for pelvic examinations prior to age 21 are noted in "Gynecologic Examination for Adolescents in the Pediatric Office Setting" (http://pediatrics.aappublications.org/content/126/3/583.full).
32. Assess whether the child has a dental home. If no dental home is identified, perform a risk assessment (https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Oral-Health/Pages/Oral-Health-Practice-Tools.aspx) and refer to a dental home. Recommend brushing with fluoride toothpaste in the proper dosage for age. See "Maintaining and Improving the Oral Health of Young Children" (http://pediatrics.aappublications.org/content/134/6/1224).
33. Perform a risk assessment (http://www2.aap.org/oralhealth/docs/RiskAssessmentTool.pdf). See "Maintaining and Improving the Oral Health of Young Children" (http://pediatrics.aappublications.org/content/134/6/1224).
34. See USPSTF recommendations (http://www.uspreventiveservicestaskforce.org/uspstf/uspsdnch.htm). Once teeth are present, fluoride varnish may be applied to all children every 3–6 months in the primary care or dental office. Indications for fluoride use are noted in "Fluoride Use in Caries Prevention in the Primary Care Setting" (http://pediatrics.aappublications.org/content/134/3/626).
35. If primary water source is deficient in fluoride, consider oral fluoride supplementation. See "Fluoride Use in Caries Prevention in the Primary Care Setting" (http://pediatrics.aappublications.org/content/134/3/626).

## Summary of Changes Made to the Bright Futures/AAP Recommendations for Preventive Pediatric Health Care

(Periodicity Schedule)

This schedule reflects changes approved in December 2018 and published in March 2019.
For updates and a list of previous changes made, visit www.aap.org/periodicityschedule.

### CHANGES MADE IN DECEMBER 2018

#### BLOOD PRESSURE

- Footnote 6 has been updated to read as follows: "Screening should occur per 'Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents' (http://pediatrics.aappublications.org/content/140/3/e20171904). Blood pressure measurement in infants and children with specific risk conditions should be performed at visits before age 3 years."

#### ANEMIA

- Footnote 24 has been updated to read as follows: "Perform risk assessment or screening, as appropriate, per recommendations in the current edition of the AAP *Pediatric Nutrition: Policy of the American Academy of Pediatrics* (Iron chapter)."

#### LEAD

- Footnote 25 has been updated to read as follows: "For children at risk of lead exposure, see 'Prevention of Childhood Lead Toxicity' (http://pediatrics.aappublications.org/content/138/1/e20161493) and 'Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention' (https://www.cdc.gov/nceh/lead/ACCLPP/Final_Document_030712.pdf)."

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| | AAB | | | ABA | | | PCR Total | | | AMR | | | BCS | | | CBP | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate |
| **Lifelong** | **5** | **24** | **21%** | **3** | **3** | **100%** | **19** | **120** | **16%** | **99** | **155** | **64%** | **197** | **417** | **47%** | **7** | **14** | **50%** |
| 1019022P | 2 | 7 | 29% | 1 | 1 | 100% | 4 | 38 | 11% | 19 | 32 | 59% | 53 | 137 | 39% | 4 | 6 | 67% |
| 1019025P | 3 | 16 | 19% | 2 | 2 | 100% | 15 | 66 | 23% | 44 | 60 | 73% | 128 | 250 | 51% | 3 | 7 | 43% |
| 1019038P | | | NA | 0 | 0 | NA | 0 | 9 | 0% | 4 | 6 | 67% | 16 | 30 | 53% | 0 | 1 | 0% |
| 1019042P | 0 | 1 | 0% | 0 | 0 | NA | 0 | 3 | 0% | 2 | 2 | 100% | | | NA | 0 | 0 | NA |
| 1050035P | | | NA | 0 | 0 | NA | 0 | 4 | 0% | 13 | 26 | 50% | | | NA | | | NA |
| 1059334P | | | NA | 0 | 0 | NA | | | NA | 17 | 29 | 59% | | | NA | | | NA |
| | | | | | | | | | | | | | | | | | | |
| **La Clinica** | **5** | **13** | **38%** | **9** | **10** | **90%** | **27** | **217** | **12%** | **92** | **144** | **64%** | **403** | **593** | **68%** | **17** | **21** | **81%** |
| 1019028P | 1 | 3 | 33% | 4 | 4 | 100% | 9 | 73 | 12% | 44 | 61 | 72% | 131 | 191 | 69% | 5 | 5 | 100% |
| 1019030P | 1 | 2 | 50% | 2 | 3 | 67% | 8 | 67 | 12% | 23 | 35 | 66% | 117 | 167 | 70% | 4 | 8 | 50% |
| 1019032P | 3 | 8 | 38% | 3 | 3 | 100% | 10 | 77 | 13% | 25 | 48 | 52% | 155 | 235 | 66% | 8 | 8 | 100% |
| 1051448P | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA |

| | CCS | | | CDC-A1c | | | CDC - >9 | | | CDC <8 | | | CDC Eye | | | CDC Neph | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate |
| **Lifelong** | **17** | **23** | **74%** | **12** | **15** | **80%** | **12** | **15** | **80%** | **3** | **15** | **20%** | **3** | **15** | **20%** | **12** | **15** | **80%** |
| 1019022P | 5 | 5 | 100% | 2 | 4 | 50% | 4 | 4 | 100% | 0 | 4 | 0% | 1 | 4 | 25% | 3 | 4 | 75% |
| 1019025P | 9 | 14 | 64% | 9 | 10 | 90% | 8 | 10 | 80% | 2 | 10 | 20% | 2 | 10 | 20% | 8 | 10 | 80% |
| 1019038P | 3 | 4 | 75% | 1 | 1 | 100% | 0 | 1 | 0% | 1 | 1 | 100% | 0 | 1 | 0% | 1 | 1 | 100% |
| 1019042P | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA |
| 1050035P | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA |
| 1059334P | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA |
| | | | | | | | | | | | | | | | | | | |
| **La Clinica** | **15** | **21** | **71%** | **33** | **37** | **89%** | **27** | **37** | **73%** | **8** | **37** | **22%** | **25** | **37** | **68%** | **34** | **37** | **92%** |
| 1019028P | 8 | 9 | 89% | 12 | 13 | 92% | 9 | 13 | 69% | 3 | 13 | 23% | 9 | 13 | 69% | 12 | 13 | 92% |
| 1019030P | 3 | 3 | 100% | 5 | 5 | 100% | 5 | 5 | 100% | 0 | 5 | 0% | 2 | 5 | 40% | 5 | 5 | 100% |
| 1019032P | 4 | 9 | 44% | 16 | 19 | 84% | 13 | 19 | 68% | 5 | 19 | 26% | 14 | 19 | 74% | 17 | 19 | 89% |
| 1051448P | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA |

| | CDC+C17+AL1:BC15 | | | CIS Combo 10 | | | IMA Combo 2 | | | MPM ACE/ARB | | | MPM Diuretic | | | PPC Pre | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate |
| **Lifelong** | **9** | **15** | **60%** | **15** | **28** | **54%** | **15** | **30** | **50%** | **276** | **319** | **87%** | **147** | **181** | **81%** | **16** | **18** | **89%** |
| 1019022P | 3 | 4 | 75% | 3 | 6 | 50% | 5 | 8 | 63% | 71 | 79 | 90% | 42 | 54 | 78% | 2 | 3 | 67% |
| 1019025P | 5 | 10 | 50% | 6 | 12 | 50% | 4 | 13 | 31% | 194 | 228 | 85% | 103 | 125 | 82% | 13 | 13 | 100% |
| 1019038P | 1 | 1 | 100% | 1 | 2 | 50% | 1 | 3 | 33% | 11 | 12 | 92% | 2 | 2 | 100% | 1 | 2 | 50% |
| 1019042P | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA | | | NA | | | NA | 0 | 0 | NA |
| 1050035P | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA |
| 1059334P | 0 | 0 | NA | 5 | 8 | 63% | 5 | 6 | 83% | | | NA | | | NA | 0 | 0 | NA |
| | | | | | | | | | | | | | | | | | | |
| **La Clinica** | **30** | **37** | **81%** | **3** | **8** | **38%** | **10** | **24** | **42%** | **473** | **541** | **87%** | **194** | **224** | **87%** | **19** | **20** | **95%** |
| 1019028P | 10 | 13 | 77% | 1 | 2 | 50% | 3 | 8 | 38% | 156 | 178 | 88% | 49 | 55 | 89% | 4 | 4 | 100% |
| 1019030P | 3 | 5 | 60% | 0 | 0 | NA | 1 | 2 | 50% | 114 | 124 | 92% | 60 | 69 | 87% | 2 | 2 | 100% |
| 1019032P | 17 | 19 | 89% | 2 | 6 | 33% | 6 | 14 | 43% | 203 | 239 | 85% | 85 | 100 | 85% | 13 | 14 | 93% |
| 1051448P | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA |

| | PPC Post | | | W34 | | | WCC BMI | | | WCC Nutrition | | | WCC Physical Activity | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate | Num | Denom | Rate |
| **Lifelong** | **14** | **18** | **78%** | **19** | **28** | **68%** | **21** | **22** | **95%** | **19** | **22** | **86%** | **17** | **22** | **77%** |
| 1019022P | 2 | 3 | 67% | 5 | 7 | 71% | 5 | 5 | 100% | 5 | 5 | 100% | 5 | 5 | 100% |
| 1019025P | 10 | 13 | 77% | 10 | 15 | 67% | 9 | 9 | 100% | 8 | 9 | 89% | 6 | 9 | 67% |
| 1019038P | 2 | 2 | 100% | 1 | 1 | 100% | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA |
| 1019042P | 0 | 0 | NA | | | NA | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | NA |
| 1050035P | | | NA | | | NA | 1 | 2 | 50% | 1 | 2 | 50% | 1 | 2 | 50% |
| 1059334P | 0 | 0 | NA | 3 | 5 | 60% | 6 | 6 | 100% | 5 | 6 | 83% | 5 | 6 | 83% |
| | | | | | | | | | | | | | | | |
| **La Clinica** | **15** | **20** | **75%** | **9** | **11** | **82%** | **12** | **12** | **100%** | **11** | **12** | **92%** | **10** | **12** | **83%** |
| 1019028P | 2 | 4 | 50% | 1 | 1 | 100% | 3 | 3 | 100% | 3 | 3 | 100% | 3 | 3 | 100% |
| 1019030P | 2 | 2 | 100% | 2 | 2 | 100% | 1 | 1 | 100% | 0 | 1 | 0% | 0 | 1 | 0% |
| 1019032P | 11 | 14 | 79% | 6 | 8 | 75% | 8 | 8 | 100% | 8 | 8 | 100% | 7 | 8 | 88% |
| 1051448P | | | NA | | | NA | | | NA | | | NA | | | NA |

| | CCHP Medi-Cal HEDIS Measures | 2018 CCHP | **2019 CCHP** | 2018 RMC | **2019 RMC** | 2018 CPN | **2019 CPN** | 2018 KSR | **2019 KSR** | 2019 MPL | 2019 HPL | **2018 Medi-Cal Weighted Averages** | **2018 BLUE CROSS** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **WCC** | Nutrition counseling given for children | 80.05% | 82.96% | 86.79% | 86.32% | 64.90% | 74.47% | 92.08% | 89.83% | 59.85% | 83.45% | **78.87%** | **67.02%** |
| | Physical activity counseling for children | 80.05% | 82.59% | 86.16% | 85.47% | 65.56% | 74.47% | 92.08% | 89.83% | 52.31% | 78.35% | **72.34%** | **63.56%** |
| **W34** | *Yearly well child visit 3-6 yr. | 74.70% | 73.83% | 69.94% | 77.04% | 71.92% | 70.18% | 88.04% | 73.83% | 67.15% | 83.70% | **75.44%** | **80.41%** |
| **CIS** | *Combo 3 immunizations | 77.62% | 76.16% | 80.00% | 76.32% | 72.22% | 70.43% | 80.00% | 82.08% | 65.45% | 79.56% | **70.47%** | **73.68%** |
| **PPC** | *First trimester prenatal | 86.37% | 88.22% | 87.44% | 88.48% | 82.86% | 83.53% | 87.91% | 93.06% | 76.89% | 90.75% | **82.74%** | **87.32%** |
| | Postpartum visit 21-56 days | 70.56% | 74.43% | 73.02% | 76.96% | 60.95% | 63.53% | 75.82% | 80.56% | 59.61% | 73.97% | **64.41%** | **72.30%** |
| **LBP** | Avoiding Use of Imaging for Low Back Pain | 79.57% | 79.22% | 77.60% | 78.88% | 80.66% | 77.80% | 83.62% | 81.49% | 67.19% | 79.88% | **74.52%** | **79.30%** |
| **BCS** | Breast Cancer Screening | 58.94% | 60.10% | 58.01% | 58.97% | 47.82% | 50.79% | 83.13% | 81.23% | 51.78% | 68.94% | **59.29%** | **47.43%** |
| **CCS** | *Cervical cancer screening | 66.59% | 69.00% | 62.41% | 70.18% | 62.67% | 57.78% | 84.29% | 80.95% | 54.26% | 70.68% | **59.86%** | **50.12%** |
| **CDC** | Diabetes Eye Exam 2 yrs. | 61.88% | 58.88% | 61.75% | 64.34% | 59.18% | 48.94% | 69.05% | 46.67% | 50.85% | 68.61% | **60.87%** | **50.85%** |
| | *Diabetes HbA1c testing | 89.41% | 91.73% | 91.58% | 92.28% | 78.57% | 87.23% | 100.00% | 97.78% | 84.93% | 92.70% | **87.20%** | **86.62%** |
| | Diabetes HbA1c(>9%) (lower is better) | 40.47% | 37.71% | 30.53% | 31.25% | 67.35% | 62.77% | 38.10% | 24.44% | 47.20% | 29.68% | **34.91%** | **33.58%** |
| | Diabetes HbA1c (<8%) | 48.24% | 51.82% | 55.44% | 57.35% | 26.53% | 29.79% | 52.38% | 64.44% | 44.44% | 59.49% | **53.5%** | **55.23%** |
| | Diabetes Nephropathy screen or treatment | 88.47% | 88.81% | 88.07% | 88.24% | 87.76% | 86.17% | 92.86% | 97.78% | 88.56% | 93.43% | **90.92%** | **88.56%** |
| | Diabetes BP <140/90 | 68.47% | 77.37% | 68.77% | 78.31% | 61.22% | 74.47% | 83.33% | 77.78% | 56.20% | 77.50% | **66.40%** | **61.56%** |
| **AAB** | Avoidance of Antibiotics in Adults With Acute Bronchitis | 46.56% | 51.73% | 47.28% | 53.85% | 41.81% | 44.24% | 53.54% | 55.56% | 27.63% | 44.64% | **33.87%** | **60.94%** |
| **IMA-2** | Immunizations for Adolescents: Combo 2 | 38.44% | 46.72% | | 40.37% | | 41.36% | | 68.18% | 26.28% | 46.72% | **37.84%** | **36.74%** |
| **AMR** | Asthma Medication Ratio | 52.52% | 64.45% | 35.86% | 53.26% | 49.59% | 63.22% | 90.07% | 89.72% | 56.85% | 71.93% | **61.71%** | **59.80%** |
| **CBP** | *Controlling High Blood Pressure | 69.59% | 69.10% | 71.91% | 69.42% | 54.26% | 62.63% | 86.00% | 85.29% | 49.15% | 71.04% | **63.47%** | **60.83%** |
| **CDF** | Screening for Depression and follow up--Screening | 16.30% | 16.54% | 22.67% | 32.17% | 0.93% | 1.31% | 19.20% | 0.21% | | | | |
| | Screening for Depression and follow up--Follow Up | 38.42% | 3.08% | 43.06% | 62.14% | 40.74% | 61.29% | 29.14% | 38.46% | | | | |
| **ACR** | All-Cause Readmissions (lower is better) | 15.09% | 15.54% | 15.92% | 16.37% | 12.89% | 14.12% | 12.57% | 11.06% | | | **16.27%** | **21.64%** |
| | All-Cause Readmission, SPDs | 17.30% | 19.15% | 18.51% | 20.95% | 14.75% | 14.61% | 12.80% | 12.00% | | | | |
| | All-Cause Readmission, Non SPDs | 13.15% | 13.11% | 13.72% | 13.24% | 10.96% | 13.79% | 12.37% | 10.48% | | | | |
| **MPM** | Monitoring for Patients on persistent Medications - ACE or ARB | 87.74% | 88.83% | 86.82% | 87.93% | 86.34% | 87.98% | 93.98% | 93.23% | 85.97% | 92.87% | **88.24%** | **85.61%** |
| | Monitoring for Patients on persistent Medications - Diuretics | 87.70% | 88.57% | 86.58% | 88.04% | 86.23% | 85.23% | 92.61% | 93.15% | 86.06% | 92.90% | **87.88%** | **87.57%** |
| **AMB** | Ambulatory Care - Outpatient Visits per 1000 Member Months | 295.57 | 452.10 | 268.25 | 243.49 | 258.58 | 106.71 | 432.73 | 101.90 | 307.98 | 467.96 | **284.64** | **193.34** |
| | Ambulatory Care - Emergency Department Visits per 1000 Member Months | 51.47 | 50.25 | 58.19 | 29.31 | 43.69 | 12.75 | 44.01 | 8.19 | 50.63 | 82.21 | **44.10** | **44.94** |
| **CAP** | Children and Adolescents' Access to Primary Care Practitioners - 12-24 Months | 93.32% | 93.97% | 92.39% | 94.77% | 90.71% | 90.20% | 98.33% | 97.25% | 93.64% | 97.71% | **92.99%** | **94.33%** |
| | Children and Adolescents' Access to Primary Care Practitioners - 25 Months-6 Years | 83.45% | 85.04% | 82.52% | 84.06% | 80.30% | 83.94% | 89.92% | 88.46% | 84.39% | 92.88% | **84.43%** | **89.86%** |
| | Children and Adolescents' Access to Primary Care Practitioners - 7-11 Years | 85.55% | 86.42% | 83.60% | 85.52% | 83.14% | 85.78% | 92.61% | 88.95% | 87.73% | 96.18% | **86.85%** | **89.22%** |
| | Children and Adolescents' Access to Primary Care Practitioners - 12-19 Years | 82.42% | 83.66% | 80.75% | 83.16% | 76.94% | 81.27% | 91.98% | 87.76% | 85.81% | 94.75% | **84.44%** | **86.28%** |

below Minimum Performance Level (MPL), national Medicaid 25th

above High Performance Level (HPL), national Medicaid 90th

*included in default algorithm