South Carolina Takes Action: Oral Health for the Young Child

South Carolina Oral Health Advisory Council & Coalition
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Acknowledgements

The assistance, contributions and support of all are gratefully acknowledged.

*Early Childhood Workgroup*

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**Background on Document Development**


In an effort to develop a consistent and comprehensive approach to prevention of early childhood tooth decay, the workgroup developed the following objectives to build consensus and support for oral health standards of care for young children:

7(III).5  By June 2011, DHEC and the SC Oral Health Advisory Council and Coalition will develop and publish clinical practice guidelines established by American Academy of Pediatrics and American Association of Pediatric Dentistry for early childhood oral health in South Carolina

7(III).6  By June 2011, DHEC and the SC Oral Health Advisory Council and Coalition will publish/produce a Health Professionals (dental and medical) Office Toolkit for early childhood oral health that includes, but not limited to, a screening chart, tooth eruption chart, risk assessment forms, and parent/caregiver education materials.

7(III).8  June 2011, DHEC and the SC Oral Health Advisory Council and Coalition will develop an educational campaign for parents and caregivers.

In fulfillment of the above objective the SCOHACC Early Childhood Workgroup has produced South Carolina Takes Action: Oral Health for the Young Child, which provides key recommendations for the oral health of young children for parents, caregivers, medical and dental professionals.
Introduction

Interdisciplinary Approach to Improving Oral Health

The South Carolina Oral Health Advisory Council and Coalition recognizes that in order to improve the oral health of South Carolina’s children it is essential to employ an interdisciplinary approach that not only identifies children at risk of developing tooth decay, but also identifies high-risk mothers during pregnancy. South Carolina Takes Action: Oral Health for the Young Child is based on established guidelines produced by the American Academy of Pediatric Dentistry and the American Academy of Pediatrics and other key professional organizations such as the American Dental Association, Bright Futures, and the Society of Family Medicine. The document, primarily focused on early childhood, will provide the foundation for a collaborative, community approach to improve the oral health status of South Carolina’s young children.

Key to increasing access to both the medical and dental home for our young children are our child health partners, which includes both traditional and non-traditional entities such as:

- Health Educators
- Women, Infants and Children Program (WIC) Nutritionists
- Early Head Start/Head Start Health Coordinators
- Healthy Start Staff
- Outreach Workers from Community Health Centers, Managed Care Organizations, faith-based groups, educational programs such as EdVenture Children’s Museum and other community outreach programs.

Oral Health Care for Pregnant Women

The South Carolina Oral Health Coalition identified early childhood as a priority at the December 2006 Quarterly Advisory Summit. An Early Childhood Workgroup was convened in June 2007 to develop the Population III: Early Childhood Chapter of the State Oral Health Plan. In addition to impacting access to oral health for the young child, the workgroup recognized that current research suggests that some prenatal oral conditions may have adverse health consequences for the mother and the young child. Consequently, the workgroup, in developing a comprehensive approach, included a component and subsequent objectives for Oral Health for Pregnant Women. (SC State Oral Health Plan, Population III: Early childhood, Access at: http://www.scdhec.gov/health/mcb/oral/plan.htm). As a result, the SCOHACC produced in August 2009, “South Carolina Takes Action: for Oral Health Care for Pregnant Women” which discusses the importance of improving the oral health of pregnant women and its potential to improve women’s overall health, to reduce complications of dental disease during pregnancy and to reduce the risk of early childhood tooth decay in their children. This document can be accessed at: http://www.scdhec.gov/health/mcb/oral/pregnant.htm
American Association of Pediatric Dentistry (AAPD) and American Academy of Pediatrics (AAP) Infant Oral Health Policies

In May 2009, the American Academy of Pediatrics (AAP) reaffirmed its 2003 policy statement: “Oral Health Risk Assessment Timing and Establishment of the Dental Home.” To prevent tooth decay in young children, the AAP recommends that high-risk children be identified by six months of age and referred to a dental home between 6 and 12 months of age.

The “Guideline on Infant Oral Health,” updated by the American Academy of Pediatric Dentistry (AAPD) in 2009, also recommends that infants receive an oral risk assessment from their primary health care provider by 6 months of age. In addition, the AAPD recommends that all children should be established in a dental home by age 1.

The National Center for Education in Maternal and Child Health published “Bright Futures in Practice: Oral Health” to promote and improve the oral health and well-being of pregnant women, infants, children and adolescents in 2004 (Casamassimo P, Holt K, eds). In addition, the American Dental Association, the Academy of General Dentistry and the American Academy of Pediatrics have issued statements and/or recommendations for improving the oral health of young children.

Tooth Decay

Science has provided a clear understanding that tooth decay is an infectious, transmissible, destructive disease caused by acid-forming bacteria. Infants and toddlers acquire these bacteria from their mothers or other intimate caregiver shortly after their first teeth erupt (generally around 6 months of age) through saliva-sharing behaviors. In its early stages, the effects of tooth decay are largely reversible through existing interventions (e.g., fluorides) that promote replacement of lost minerals from the outer layer of the tooth (enamel). These findings, combined with epidemiological data on the occurrence of tooth decay in infants and young children, suggest that true primary prevention must begin in the first year of life and that particular attention should be paid to the oral health of expectant and new mothers.

Early Childhood Tooth Decay (Caries)—a Public Health Problem

According to the Report on Oral Health in America: A Report of the Surgeon General, tooth decay is the single most common chronic disease of childhood (DHSS 2000). In 2007, the Centers for Disease Control and Prevention reported that tooth decay in baby teeth has increased 15 percent among U.S. toddlers and preschoolers ages 2 to 5 years old. The CDC reports that more than one in four (28%) preschool children has experienced tooth decay (Dye BA et al, 2007). In South Carolina, the 2007-2008 Oral Health Needs Assessment found that 40 percent of children in kindergarten had experienced tooth decay.
The Impact of Tooth Decay on Children

Untreated tooth decay or dental caries can lead to other health related issues, such as nutritional deficiencies, exacerbations of medical conditions, pain and infection, missed school and poor concentration, speech and eating dysfunction, low self esteem and risks to general health (AAPD 2009). In addition, tooth decay in young children is a predictor for future risk for dental disease (Kumar J, Samelson R, eds. 2006).

Maternal Oral Health and Early Childhood Tooth Decay

Dental caries is an infectious disease that results from an interaction between the oral bacteria and dietary carbohydrates on the tooth surface. Among the bacteria present in the mouth, Mutans streptococci (MS) plays a major role in dental caries. Oral bacteria including MS, adheres to the teeth by creating a tenacious biofilm called plaque. Dental plaque is able to concentrate dietary sugars. Therefore, consuming sugary foods and drinks recharge the plaque with MS and other cavity causing bacteria. Acids produced by bacterial fermentation of carbohydrates reduce the pH of dental plaque to the point at which demineralization of the enamel occurs. The initial cariogenic lesion appears as an opaque white spot on the enamel, and progressive demineralization results in cavitations of the teeth. Dental caries or tooth decay is a process and loss of tooth structure (a cavity) is the end stage of the process (AAP 2008).

While colonization of an infant has been shown to occur after the eruption of the infant’s teeth, current evidence suggests that other surfaces such as the furrows of the tongue may harbor MS. (Guideline on Infant Oral Health Care, AAPD, 2009). The earlier that the infant’s mouth is colonized with MS, the greater the percentage of the child’s plaque that will be compromised with these bacteria. (Kumar J, Samelson R, eds. 2006).

The vertical transmission of MS from the mother to the infant has been established. Thus, the higher level of MS in the mother’s saliva increases the risk of the infant being colonized. It is also important to understand that along with salivary MS, other factors such as mother’s oral hygiene, periodontal disease, snack frequency and socioeconomic status are also associated with colonization (AAPD, 2009). Consequently, counseling of mothers who have experienced extensive past or current tooth decay to avoid early transmission of MS to their infants is strongly indicated (Kumar J, Samelson R, eds. 2006).

Recent reports have shown that horizontal transmission may also be of concern. Horizontal sources include samplings of a similar age and children in a daycare center. (AAPD, 2009)
Prevention of Tooth Decay

Prevention of Tooth Decay Begins During Pregnancy

In 2009, the American Academy of Pediatrics released the following strategies for mothers before, during and after pregnancy:

• Brush teeth twice daily with a fluoride toothpaste and floss daily
• Limit foods containing sugar to mealtimes only
• Choose water or low-fat milk as a beverage. Avoid carbonated beverages during pregnancy.
• Choose fruit rather than fruit juice to meet the recommended daily fruit intake
• Obtain necessary dental treatment before delivery
• Chewing xylitol-containing gums: (four pieces per day by mother)
• Avoiding saliva-sharing behaviors that directly pass saliva from mother or caregiver to child

The First Dental Check
Both the American Academy of Pediatric Dentistry and the American Academy of Pediatrics recommend that infants receive oral health risk assessments from their primary health care provider in their first year of life in order to assess their risk for developing tooth decay, providing oral health education and evaluating and optimizing fluoride exposure.

The Dental Home
Both the AAPD and AAP recommend that parents or caregivers establish a dental home for infants by age 1. The dental home concept is based on the pediatric medical home model, which is designed to improve families' care utilization including preventive services. A dental home is defined as, “the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated and family-centered way” (AAPD, 2005).
In the dental home, the child and parents receive:

- A caries risk assessment
- Preventive dental health plan for child
- Anticipatory guidance about growth and developmental issues
  - oral care including teeth and oral soft tissues
  - nutrition and dietary counseling
- Emergency dental trauma plan
- Comprehensive oral health care
- Referrals to dental specialists when care cannot be provided directly by the dental home (AAP, 2008)

Medical Providers—Filling the Gap

There is not doubt that the dentist and his or her team members, due to their specialized education and training, are the first choice for the young child’s dental home; however, when parents are unable to access a dental home for their child, the pediatric medical provider can play a critical role in providing oral health preventive interventions until the parents are able to establish a dental home. Therefore, medical providers play a key role in enhancing the oral health care delivery system.

Empowering Parents and Caregivers—Community Partners

For our children at high risk for tooth decay it is vital that oral health counseling be integrated to programs that serve them and their families. Beginning with pregnancy, parents can receive prenatal oral health counseling through prenatal classes, WIC, Healthy Start and Early Head Start. With infants, organizations such as First Steps and Family Connections can also provide oral health education and counseling and referrals for age 1 dental checks to medical or dental providers.

S.C. DHEC Oral Health Training for Child Care Centers

While the family is the focus of health supervision, an increasing number of South Carolina’s youngest children are receiving routine daily health supervision in early childhood education programs. SC DHEC has developed two continuing education courses. These courses provide child care providers with the knowledge and skills needed to help prevent dental diseases in young children to assist in the development of healthy habits in children and their families that promote good oral health as part of total health.

Companions to both courses are an Oral Health Activity Guide for Infants, Toddlers and Preschoolers and an Oral Health Parent Information Booklet. These resources, in addition to information on trainings, are available on DHEC’s Web site at: http://www.scdhec.gov/health/mch/oral/early.htm
Caries Risk Assessment

An oral health risk assessment for infants by age 6 months of age allows for the beginning of preventive oral health strategies as the infants teeth begin to erupt. Caries risk assessment should be part of a regular, thorough oral-health assessment visit and begins with the parent interview. Risk assessment is based on the recommendations of the American Academy of Pediatric Dentistry for caries risk assessment in pediatric dental care (AAPD, 2006).

The oral assessment--risk assessment interview and oral/dental screening or exam should identify risk factors such as:

- Inadequate fluoride exposure
- Tooth decay in parents and siblings
- Lack of oral hygiene by parents
- Frequent and prolonged exposure to sugary substances or use of the night time bottle or sippy cup containing anything other than water
- Medications that contain sugar
- Presence of heavy plaque on the upper front teeth or any signs of decalcification (white spot lesions) or cavities.
- Special health care needs

Other areas of risk that need to also be addressed are injury prevention, trauma experience, oral habits and barriers to dental care such as language, cost, fear or transportation problems.

Table 1 on the next page is an adaptation of the American Academy of Pediatric Dentistry's Caries Risk Assessment Tool that can be used to identify risk factors for tooth decay in children. One indicator positively identified in the high category will automatically place the child at high risk for tooth decay. If a child has one “moderate risk” factor and no “high risk” factors, the child would be categorized as having “moderate risk” for tooth decay. A child identified as having “low risk” would not have any “moderate” or “high risk” indicators.
### Table 1: Adaptation of the American Academy of Pediatric Dentistry Caries Risk Assessment Tool

<table>
<thead>
<tr>
<th>Risk Factors to Consider</th>
<th>Risk Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Circle the most accurate response found under the risk indicators</em></td>
<td><strong>HIGH</strong> <strong>MODERATE</strong> <strong>LOW</strong></td>
</tr>
</tbody>
</table>

#### Part 1 – History (parent/caregiver interview)

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special health care needs</td>
<td>YES/NO</td>
</tr>
<tr>
<td>Salivary flow low-dry mouth</td>
<td>YES/NO</td>
</tr>
<tr>
<td>Dental home: established</td>
<td>NO/IRREGULAR/REGULAR</td>
</tr>
<tr>
<td>Infant has had cavities</td>
<td>YES/NO</td>
</tr>
<tr>
<td>Mother has untreated cavities/decay</td>
<td>YES/NO</td>
</tr>
<tr>
<td>Socioeconomic status</td>
<td>LOW/MID-LEVEL/HIGH</td>
</tr>
<tr>
<td>Sugary or starchy foods or drinks between meals (juice, soda, medicinal syrups)</td>
<td>3&gt; 1 TO 2 MEAL TIME ONLY</td>
</tr>
<tr>
<td>Fluoride Exposure</td>
<td>Drinking water NOT fluoridated; NO fluoride supplements; NO toothpaste with fluoride Uses toothpaste with fluoride; Usually does NOT drink fluoridated water and does NOT take fluoride supplements Drinking water is fluoridated; If NOT, takes fluoride supplements; Uses toothpaste with fluoride</td>
</tr>
<tr>
<td>Teeth/gums brushed – times/day</td>
<td>&lt;1 1 2-3</td>
</tr>
</tbody>
</table>

#### Part 2 – Clinical evaluation (determined by examining the child’s mouth)

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible plaque—white, sticky build up on teeth)</td>
<td>PRESENT/ABSENT</td>
</tr>
<tr>
<td>Gingivitis – red puffy gums</td>
<td>PRESENT/ABSENT</td>
</tr>
<tr>
<td>Cavity – Untreated tooth decay</td>
<td>PRESENT/ABSENT</td>
</tr>
<tr>
<td>Enamel demineralization – chalky, white spots</td>
<td>1&gt; 1 NONE</td>
</tr>
<tr>
<td>Enamel defects, deep pits/ fissures</td>
<td>PRESENT/ABSENT</td>
</tr>
</tbody>
</table>

#### Part 3 – Supplemental professional assessment

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiographic enamel caries</td>
<td>PRESENT/ABSENT</td>
</tr>
<tr>
<td>Levels of mutans Streptococci or lactobacilli</td>
<td>HIGH MODERATE LOW</td>
</tr>
</tbody>
</table>

Table 2: Additional Resources for Caries Risk Assessment

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
<th>Downloadable at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Dental Association</td>
<td>Caries Risk Assessment Form (Patients Ages 0–6 Years) and</td>
<td><a href="http://www.ada.org/prof/resources/topics/caries.asp*additional">http://www.ada.org/prof/resources/topics/caries.asp*additional</a></td>
</tr>
<tr>
<td>Smiles for Life - Society of Teachers of Family Medicine</td>
<td>Module 2: Child Oral Health</td>
<td><a href="http://www.smilesforlife2.org/">http://www.smilesforlife2.org/</a></td>
</tr>
</tbody>
</table>

Oral/Dental Assessment

The final component of the risk assessment is the oral/dental examination. The risk assessment interview gives the medical or dental professional the opportunity to develop a positive relationship with the parent and child. In the case of an infant or toddler, the dental screening can be performed in two ways:

1. “Knee to knee” position: the examiner sits face to face with the parent with the child also facing the parent. The child wraps his or her legs around the parent's waist and lies down across the laps of the examiner and parent. The parent stabilizes the child's legs and holds the hands in a position that allows a good view of the infant's oral cavity for observing and learning.

2. Child lying on the exam table: the examiner positions themselves behind the child's head

Once the child is in position the examiner will begin the clinical examination by retracting the lips and evaluating for the presence of:

- Plaque- white, sticky build up on teeth
- White spots- lesions along the cervical margins of the maxillary anterior teeth.
- Cavities- untreated tooth decay
- Gingivitis-red, puffy gums

One of the first signs of tooth decay is a small white spot lesion running along the gumline. Upper front teeth are usually affected first followed by the first molars. At this early stage of decay it is possible to reverse the process by promoting remineralization through the use of fluoride. The most effective way to deliver fluoride to young children to facilitate remineralization is to apply fluoride varnish.
Often tooth decay is not detected at this stage and progresses. Consequently, over time the enamel breaks down and results in loss of tooth structure. Signs and symptoms of early childhood tooth decay include sensitivity, irritability, pain, infection and facial swelling.

Children with special health needs can have some additional conditions such as: enamel hypoplasia, developmental anomalies, delayed tooth eruption, enamel erosion due to frequent reflux, oral reflexes and oral sensitivity and oral injuries due to seizure disorders, abnormal protective reflexes, muscle incoordination and behavioral disorders. Individuals with attention deficit disorders are at high risk for facial and intraoral trauma, some of which may be self-inflicted.

### Table 3: Additional Resources for Oral/Dental Assessment

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
<th>Downloadable at:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smiles for Life Society of Teachers of Family Medicine</strong></td>
<td>Module 7: The Oral Examination</td>
<td><a href="http://www.smilesforlife2.org/powerpoints.html">http://www.smilesforlife2.org/powerpoints.html</a></td>
</tr>
<tr>
<td><strong>Society of Teachers for Family Medicine</strong></td>
<td>Knee to Knee Exam Video</td>
<td><a href="http://www.youtube.com/watch?v=Hw99Aoti7ZE">http://www.youtube.com/watch?v=Hw99Aoti7ZE</a></td>
</tr>
</tbody>
</table>
Assessment of Fluoride Needs

Fluoride contributes to the prevention, inhibition and the reversal of tooth decay. Children should be assessed at all visits for fluoride need based on caries risk and sources of fluoride (water and food inside and outside of the home).

Community Water Fluoridation

Parents need to be educated about the benefits of systemic fluoride action either through an optimally fluoridated water system or through fluoride supplements prescribed by the physician or dentist. The Centers for Disease Control's My Water's Fluoride Web page allows community members to access information about their local community water systems and the levels of fluoride present in their water systems at: http://apps.nccd.cdc.gov/MWF/Indexasp.

Residential Wells and Presence of Fluoride

If fluoride level is unknown, drinking water should be tested for fluoride content before supplements are prescribed. For testing of fluoride content, contact DHEC at: http://www.scdhec.gov/environment/water/dwrwtesting.htm.

Fluoride Supplements

Physicians and dentists should prescribe fluoride supplementation utilizing the information in Table 1: Fluoride Supplement Dosage Schedule. The fluoride supplement guidelines were jointly recommended by the AAPD, the AAP and the ADA and endorsed by the Centers for Disease Control (AAPD, 2009).

Table 4: Fluoride Supplement Dosage Schedule—1994

<table>
<thead>
<tr>
<th>Age</th>
<th>Fluoride Ion Level in Drinking Water (ppm)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;0.3 ppm</td>
</tr>
<tr>
<td>Birth-6 months</td>
<td>None</td>
</tr>
<tr>
<td>6 months-3 years</td>
<td>0.25 mg/day**</td>
</tr>
<tr>
<td>3-6 years</td>
<td>0.50 mg/day</td>
</tr>
<tr>
<td>6-16 years</td>
<td>1.0 mg/day</td>
</tr>
</tbody>
</table>

* 1.0 ppm = 1 mg/liter
** 2.2 mg sodium fluoride contains 1 mg fluoride ion.

Accessed on September 1, 2009 from: http://www.ada.org/public/topics/fluoride/fluoride_article01.asp#dosage
Fluoride Varnish

Fluoride varnish application is indicated for infants and children with a moderate or high risk of developing cavities. The application of fluoride varnish is an effective way to prevent and some cases arrest tooth decay. Fluoride varnish is a thin coating of five percent sodium fluoride resin that is applied to the tooth surface. This forms a sticky layer on the tooth following application, which hardens on contact with saliva. Fluoride is then absorbed into the enamel of the tooth. It is recommended that the varnish be allowed to remain on the teeth for up to four hours for optimal absorption. According to the federal Food and Drug Administration, fluoride varnish falls under the category of drugs and devices that presents minimal risk and is subject to the lowest level of regulation. Fluoride varnishes have been used in Europe for more than 30 years.

The purpose of applying fluoride varnish is to retard, arrest and reverse the process of tooth decay in children at risk for dental caries. Several recent studies found that the application of fluoride varnish prevents or reduces tooth decay in primary teeth of young children (ADA 2006; Weintraub, Ramos-Gomez, June 2006; Lawrence, 2006). The ADA (2006) rates the quality of the evidence for the efficacy of fluoride varnish in preventing an controlling tooth decay in the primary teeth of high risk children as “high” and strongly recommends its use.

Table 5: Additional Fluoride Varnish Information and Training

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description</th>
<th>Downloadable at:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Into the Mouths of Babes: NC Dental Screening and Varnish Project. 2004.</td>
<td>Downloads/ Resources include: Information for Parents: English/ Spanish Screening &amp; Varnish Encounter Form</td>
<td><a href="http://www.ncafp.com/imb/">http://www.ncafp.com/imb/</a></td>
</tr>
<tr>
<td>Society of Teachers of Family Medicine</td>
<td>State Varnish Training</td>
<td><a href="http://www.smilesforlife2.org/statevarnishtraining.html">http://www.smilesforlife2.org/statevarnishtraining.html</a></td>
</tr>
</tbody>
</table>
Table 6: Additional Fluoride Varnish Product Information

<table>
<thead>
<tr>
<th>Product</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duraflor®</td>
<td><a href="http://www.medicom.com/faq.cb2">http://www.medicom.com/faq.cb2</a> (available in unit-dose package)</td>
</tr>
<tr>
<td>CavityShield®</td>
<td><a href="http://www.omninipharma.com/cavitieshield.asp">http://www.omninipharma.com/cavitieshield.asp</a> (available in unit-dose package)</td>
</tr>
<tr>
<td>VarnishAmerica™</td>
<td><a href="http://www.medicalproductslaboratories.com/products/varnishamerica/varnishamerica.html">http://www.medicalproductslaboratories.com/products/varnishamerica/varnishamerica.html</a> (available in unit-dose package)</td>
</tr>
</tbody>
</table>

DHHS Medicaid: Fluoride Varnish Application for Primary Care Physicians

In 2007, the South Carolina Department of Health and Human Services added reimbursement to primary care physicians for the application of fluoride varnish to children up to the age 3.

The guidelines for fluoride varnish application in the primary care setting are as follows:

Ages: Children age 3 and under
When: During the Early Periodic, Screening, Diagnostic and Treatment (EPSDT) well child visits
How often: Two times a year or once every six months
Required Training: Before adding the application of fluoride varnish as part of the EPSDT visit, DHHS requires that primary care physicians complete online training and retain a copy of the post test in office files. The two courses approved by DHHS are:


Early and Periodic Screening, Diagnosis, and Treatment (EPSDT)

EPSDT, through periodic medical screenings, provides comprehensive and preventive health services to Medicaid-eligible children from birth to age 21. The Preventive Medicine Services Evaluation and Management (E&M) Current Procedural Terminology Codes (CPT) 99381 through 99385 and 99391 through 99395 are used for the screening package.
This package includes:

- A comprehensive health and developmental history, including assessment of both physical and mental health development
- Identification of the appropriate immunizations according to age and health history (does not include administration)
- A comprehensive unclothed physical examination
- Health education, including anticipatory guidance
- Vision, Hearing, and Dental screenings

Immunization administration, topical fluoride varnish, laboratory tests, blood level assessments, age-limited screenings and elective tests are covered separately utilizing the appropriate CPT code(s), and billed according to the periodicity schedule outlined in the Physicians, Laboratories, and Other Medical Professionals manual.

Required action steps for the application of fluoride varnish by the medical provider are:

1. Utilize the Caries Assessment Tool (CAT) prior to the application of the fluoride varnish to determine the necessity for the procedure
2. Apply fluoride varnish to children at risk of tooth decay
3. Provide anticipatory guidance on oral health to parents or care givers to promote oral health to children and families. Anticipatory guidance topics include oral development, tooth eruption, gum/tooth cleaning, appropriate use of fluoride, bottle use, and feeding and eating practices.
4. Refer to a dentist in order to establish a dental home

**DHHS Medicaid Billing Information**

The fee for service reimbursement rate for DHHS Code D1206 (fluoride varnish is $16.90.

Reimbursement methodology for the Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC) for Fluoride Varnish Application in Physician Offices are:

- **FQHCs**
  - Reimbursement to a FQHC for the provision of this procedure will be included in the all-inclusive Healthcare Common Procedure Coding System (HCPCS) encounter code T1015 paid to the FQHC.

- **RHCs**
  - RHCs may submit claims, using the D1206 procedure code, for fee-for-service reimbursement in addition to the Healthcare Common Procedure Coding System (HCPCS) encounter code T1015.
  - Claims must be submitted on a CMS 1500 claim form as illustrated in the Dental Provider Manual located online at www.scdhhs.gov.
Anticipatory Guidance and Parent Education

Many parents and caregivers do not understand how to prevent tooth decay or the necessity of regular dental care for primary teeth. By facilitating access to oral health education and anticipatory guidance for children from ages 6 months and older, health professionals have the opportunity to educate parents about their child's oral health. Anticipatory guidance is the counseling of parents and caregivers by health providers on what to expect in a child's current and next developmental stage and about developmental changes that will occur in their children between health visits. This is an important part of preventive care (AAPD, 2009; Casamassimo P, Holt K, eds., 2004).

Table 7: General anticipatory guidance for the mother (or other intimate caregiver) includes the following:

<table>
<thead>
<tr>
<th>Anticipatory Guidance for the Mother of the Young Child</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topic</strong></td>
<td><strong>Action</strong></td>
</tr>
<tr>
<td>Oral hygiene</td>
<td><strong>Brush and Floss:</strong> Encourage parents/caregivers to brush their teeth with fluoride toothpaste and use floss</td>
</tr>
<tr>
<td></td>
<td><strong>Dental check-up:</strong> Encourage mother to obtain dental check-up and, if necessary, treatment before birth of baby</td>
</tr>
<tr>
<td>Diet</td>
<td><strong>Eat a Healthy Diet:</strong> Emphasize eating a healthy diet and limiting number of exposures to sugar snacks and carbonated soda and sugary drinks.</td>
</tr>
<tr>
<td></td>
<td><strong>Limit Frequency of Cariogenic Foods:</strong> Emphasize that it is the frequency of exposures, not the amount of sugar that affects susceptibility to caries</td>
</tr>
<tr>
<td>Fluoride</td>
<td><strong>Evaluate fluoride status in residential water supply.</strong>&lt;br&gt; ✓ Fluoridated Water: Encourage mother to drink fluoridated tap water</td>
</tr>
<tr>
<td></td>
<td><strong>Review topical and systemic sources of fluoride:</strong>&lt;br&gt; ✓ Toothpaste with Fluoride: Use fluoridated toothpaste approved by the American Dental Association&lt;br&gt; ✓ Over the Counter Fluoride Rinses: Rinse with alcohol-free, over the counter mouth rinse containing 0.05% sodium fluoride</td>
</tr>
</tbody>
</table>
### Delay of Colonization of MS

**Saliva Sharing Behaviors:** Avoid saliva sharing behaviors such as sharing spoons, cups, cleaning a pacifier or toy with their mouth

- Helps prevent early colonization of MS in their infants

**Xylitol Chewing Gum**

- Chew gum with xylitol

- Can prevent tooth decay in their children by prohibiting the transmission of MS

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#### Table 8: Anticipatory Guidance for the Young Child (0 to 3 years of age)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Action</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral hygiene</td>
<td><strong>Cleaning Infants Mouth and Teeth:</strong> Emphasize using a washcloth or toothbrush to clean teeth and gums</td>
<td>✓ Reduce bacterial colonization</td>
</tr>
<tr>
<td></td>
<td><strong>Toothbrushing with Toddler:</strong> Review parent’s/caregiver’s role in brushing toddler’s teeth.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Breastfeeding:</strong> Advise mother to wipe baby’s gums/teeth with damp washcloth after feeding</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Flossing:</strong> Begin flossing when adjacent tooth surfaces can not be cleaned with toothbrush</td>
<td>✓ Early detection of tooth decay</td>
</tr>
<tr>
<td></td>
<td><strong>Dental Check:</strong> Encourage parents to request a dental check by their medical professional by 1 year of age</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Age 1 Dental Visit:</strong> Encourage parents to schedule a visit with the dentist.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Smile Check:</strong> Encourage parents/caregivers to check front and back teeth for white, brown, or black spots (signs of cavities)</td>
<td></td>
</tr>
</tbody>
</table>

*Table 8 continued on next page*
### Diet

<table>
<thead>
<tr>
<th><strong>Night time bottle:</strong></th>
<th>Remind parents/caregivers never to put baby to bed with a bottle filled with milk, formula or breastmilk or to allow feeding ‘at will.’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency of Sugar Exposures:</strong></td>
<td>Emphasize that it is the frequency of exposures, not the amount of sugar that affects susceptibility to caries.</td>
</tr>
<tr>
<td>✓ Avoid carbonated beverages and fruit drinks (juice drinks contain high-fructose corn syrup and &lt;100% natural juice)</td>
<td></td>
</tr>
<tr>
<td>✓ Limit children's intake of 100% fruit juice to no more than 4 oz per day</td>
<td></td>
</tr>
<tr>
<td>✓ Dilute fruit juices with water to limit the amount of sugar</td>
<td></td>
</tr>
<tr>
<td><strong>Water:</strong></td>
<td>Encourage children to drink water as an alternative to sugary liquids</td>
</tr>
<tr>
<td><strong>Sippy Cups:</strong></td>
<td>Discourage the extended and repeated use of the sippy cup</td>
</tr>
<tr>
<td><strong>Weaning from bottle:</strong></td>
<td>Encourage weaning from bottle to cup by 1 year of age</td>
</tr>
</tbody>
</table>

### Fluoride*

<table>
<thead>
<tr>
<th><strong>Fluoride status of Community Water:</strong></th>
<th>Evaluate fluoride status of the community water supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Children drinking fluoride deficient water (&lt;0.6 ppm) should be considered for systemically administered fluoride</td>
<td></td>
</tr>
<tr>
<td><strong>Fluoridated Water System:</strong></td>
<td>Encourage drinking fluoridated tap water</td>
</tr>
<tr>
<td><strong>Topical Fluoride:</strong></td>
<td>Based on CAT, consider topical fluoride needs</td>
</tr>
<tr>
<td>✓ <strong>Toothpaste.</strong></td>
<td>Use a pea size amount of fluoridated toothpaste approved by the CDC beginning at age 2 unless advised by a dentist (access at: <a href="http://www.ada.org/prof/resources/positions/statements/fluoride_infants.asp">http://www.ada.org/prof/resources/positions/statements/fluoride_infants.asp</a>)</td>
</tr>
<tr>
<td>✓ <strong>Fluoride varnish</strong> for children a risk for caries</td>
<td></td>
</tr>
</tbody>
</table>

✓ Decreases the child's risk for tooth decay

✓ Optimal exposure of fluoride is important to all infants and children for the prevention and control of caries

*Table 8 continued on next page*
### Injury Prevention

**Age appropriate injury prevention counseling for oro-facial trauma:**
- Review pacifier safety.
- Emphasize use of properly secured car seat.
- Encourage parents and caregivers to keep emergency numbers handy.
- Review child-proofing of home including electrical cord safety and poison control.
- Emphasize use of helmet when child is riding tri/bicycle or in seat of adult bike.

- Prevent oro-facial injuries

### Non-nutritive Habits

**Include:**
- Finger or pacifier sucking
- Bruxism
- Abnormal tongue thrust

- Important to discuss the need to wean infants from finger or pacifier habits before malocclusion or skeletal dysplasias occur.

*Caution is indicated in the use of all fluoride containing products. Fluorosis has been associated with cumulative fluoride intake. Decisions concerning the administration of additional fluoride are based on the unique needs of the patient. (AAPD, Guideline on Infant Oral Health Care, 2009)*
Conclusion
The intent of these guidelines is to: 1) increase the number of medical and dental clinicians who provide risk-based oral health prevention for children age 3 and under and 2) to engage our child health partners in empowering parents and caregivers to conduct oral health risk assessments on their children and educate them on oral promotion and disease prevention intervention. By enhancing awareness and understanding of early childhood tooth decay and risk-based prevention, we hope to reverse the trends in tooth decay in young children living in South Carolina.

DISCLAIMER
South Carolina Recommendations: Oral Health for the Young Child is offered as a resource tool for dentists, physicians and other health care professionals. They are not intended to set specific standards of care or to provide legal or other professional advice. Professionals should always exercise their own professional judgment in a given situation with any given patient and consult with professional advisors for such advice.

References


