The Role of Primary Care

The Link Between Primary Care and Oral Health
- Children visit medical providers about six times during the first year of life
- Primary care providers play a major role in educating families about good health practices
- Existing well child care model is easily adaptable to oral health
- Focusing on prevention and advocacy is a long-standing tradition in medicine

Role of the Primary Care Provider
- Incorporate oral health promotion into well child care
- Screening and referral
- Advocacy
- Tools
  - Age appropriate fluoride

Partnerships for Prevention
- Increase interaction between medical and dental communities
- Creative collaborations
  - Pediatric clinic
  - Dental clinic
  - PNCC/WIC
  - Head Start/Schools
  - Other models (ABCD for Kids)
  - KGC(Kids Get Care)

Medical Provider’s Role
- Conduct caries risk assessment
- “Lift the Lip” as part of each well-child exam
- Conduct anticipatory guidance
- Provide caregiver with prevention information (oral hygiene, diet and nutrition, and fluoride)
- Determine “decay risk (caries risk)” and prescribe appropriate fluoride
- Refer the child for follow-up dental care, as needed

Screening and Assessments
Caries Risk Assessment

- Is there visible plaque on the teeth?
- Are there cavities, white spots or enamel hypoplastic areas on the teeth?
- Is there a history of decay in the family?
- Does the child have a history of low birthweight or pre-maturity?
- Is there impaired salivary flow?

How to Screen for Dental Decay

- Position child in caregiver's lap, facing caregiver
- Sit with knees touching knees of caregiver
- Lower the child's head onto your lap
- Child's mouth will automatically open

What to look for:
Check for normal, healthy teeth

What to look for:
Check for tooth defects

A Risk for Decay

What to look for:
Check for early signs of ECC

White Spots

What to look for:
Check for early signs of ECC

Brown Areas
What to look for:
Check for advanced severe ECC

What to look for:
Check for presence of restorations

What to look for:
Check for presence of sealants

Determine what to do next

Risk Level: Low  Disease Status: None
- Counselling to maintain low risk
- Anticipatory guidance
- Primary prevention
- Refer to dentist, identify a dental home
- Record findings
- Monitor
- Risk management program
- Anticipatory guidance
- Primary prevention
- Refer to dentist, identify a dental home
- Record findings
- Monitor
- Reassess in 6 mos

Risk Level: High  Disease Status: Early
- Risk management program
- Anticipatory guidance
- Begin disease management
- Refer to dentist for Dx & Tx
- Record findings
- Monitor
- Reassess in 6 mos

Risk Level: L to H  Disease Status: Advan.
- Risk management program
- Anticipatory guidance
- Advanced disease management
- Refer to dentist for Dx & Tx
- Record findings
- Monitor
- Reassess in 3-6 mos based on risk

Conducting Age-Appropriate Anticipatory Guidance

Anticipatory Guidance
Providing counseling or intervention that helps prevent and/or reduce diseases, disorders and their impact
Anticipatory Guidance
Prenatal
- Review mother’s dental history
- Refer mother for dental care, if needed
- Review the importance of maternal health in the formation of fetal tooth buds

Anticipatory Guidance
0-3 months
- Review the function and importance of primary teeth
- Review feeding practices
- Review comforting tips
- Explain how decay occurs
- Provide oral hygiene instruction

Anticipatory Guidance
6 to 9 months
- Educate regarding causes, effects, and prevention of ECC
- Explain the importance of cleaning baby teeth
- Identify fluoride sources
- Introduce toothbrush and toothpaste use
- Provide guidance on feeding practices (including use of a Sippy cup)
- Demonstrate the "Lift the Lip" technique

Anticipatory Guidance
12 months
- Review diet and feeding patterns (including weaning from bottle)
- Assess risk for decay
- Review importance of regular dental care and provide resources
- Apply fluoride varnish, as appropriate
- Refer for dental visit within 6 months of first tooth

Anticipatory Guidance
Through 36 months
- Review fluoride status
- Review diet, snacking and feeding practices
- Review dental hygiene measures

Caregiver Education
What Caregivers Need to Know

Preventing ECC

Dietary Guidance:
- Avoid prolonged breast- and bottle-feeding, especially at sleep times
- Do not fill bottles with liquids containing sugar
- Limit sugary, sticky snacks and juices
- Do not dip pacifiers in honey or other sugary substances
- Introduce a cup by 6 months of age

Oral Hygiene:
- Wipe infant’s mouth out before first teeth erupt
- Medications may contain sugar which increases the importance of daily oral hygiene
- Schedule the first dental visit by 12 months of age
- Begin tooth brushing when first tooth appears
- Floss teeth that touch each other
- Brush a child’s teeth for them at least once a day until the child is 6 or 7 years old

"Lift the lip"
- “Lift the lip” to examine child’s teeth
- Look for decay on the outside and inside surfaces of the four upper front teeth
- It takes less than one minute!
- Do this at least one time per month

Take Home Messages for Caregivers
- Teeth, including baby teeth, are essential for general health and proper development
- Dental decay in early childhood is a serious infectious disease that is entirely preventable
- Decay develops in the presence of teeth, bacteria and sugars
- A child should have their first dental visit by their first birthday

Treatment and Follow-up
### Fluoride

<table>
<thead>
<tr>
<th>Age</th>
<th>Dietary Fluoride Supplement Fluoride ion level in drinking water (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth - 6 mos</td>
<td>None 0.50 mg/day 1.0 mg/day</td>
</tr>
<tr>
<td>6 mos - 3 yrs</td>
<td>None 0.25 mg/day 0.50 mg/day</td>
</tr>
<tr>
<td>3 - 6 yrs</td>
<td>None 0.50 mg/day 0.50 mg/day</td>
</tr>
<tr>
<td>6 - 16 yrs</td>
<td>1.0 mg/day 0.50 mg/day</td>
</tr>
</tbody>
</table>

1. 0.1 part per million (ppm) = 1 milligram/liter
2. 2.2 milligrams sodium fluoride contains 1 milligram fluoride ion

### Inflammation

<table>
<thead>
<tr>
<th>Signs &amp; Symptoms</th>
<th>Treat Inflammation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painful mouth or jaw</td>
<td>Vigorous rinses 3 - 4 times / day with a small cup (approx. 6 ozs.) of warm water containing approximately:</td>
</tr>
<tr>
<td>Tender gums</td>
<td>1/2 tsp. table salt</td>
</tr>
<tr>
<td>Red tender gums</td>
<td>1/2 tsp. baking soda</td>
</tr>
<tr>
<td>Red tender facial swelling</td>
<td>1 oz. hydrogen peroxide</td>
</tr>
<tr>
<td>Low grade fever</td>
<td></td>
</tr>
</tbody>
</table>

### Pain and Infection

<table>
<thead>
<tr>
<th>Treat Pain</th>
<th>Non-steroidal anti-inflammatory drug (NSAID) Nutritional supplement combination analgesic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat Infection</td>
<td>Adult (15 yrs. old +)</td>
</tr>
<tr>
<td>Penicillin VK</td>
<td>500 mg, 1 QID</td>
</tr>
<tr>
<td>Penicillin Allergy/</td>
<td>250 mg QID</td>
</tr>
<tr>
<td>Erythromycin</td>
<td>Second line: Cephalexin</td>
</tr>
</tbody>
</table>

### Caries Risk Analysis

- There is visible plaque on the teeth.
- There are cavities, white spots or enamel hypoplastic areas on the teeth.
- There is a history of decay in the family.
- The child has a history of low birthweight or pre-maturity.
- Impaired salivary flow.

### Fluoride Varnish

- Safe
- Effective
- Quickly completed
**Characteristics**
- Dry tooth facilitates fluoride uptake
- Sets on contact with moisture
- Not rendered inactive by plaque
- Taste is tolerable
- Can reverse early decay and can arrest active lesions

**Fluoride Varnish Products**
- Cavity Shield (Omnii)
- Duraflor (Pharmascience)
- Duraphat (Colgate)

**Fluoride Varnish**
- More than 25 years of use and research in Europe
- Available in Canada for many years
- Currently, more than 90% of all professionally applied topical fluorides in Scandinavia are varnishes

**Efficacy**
- Meta-analysis of Duraphat trials reveals 38% caries reduction*
- Fluoride varnish and APF have comparable efficacy
  
  *Helfenstein and Steiner, Community Dentistry and Oral Epidemiology, 1994

**Safety**
- Fluoride varnish as safe as other topical fluoride applications*
- APF cannot be used safely and effectively on infants and toddlers
  
  *Vaikuntam, Pediatric Dentistry, 2000

**Fluoride Varnish Facts**

*Two types of fluoride:*
- Dietary or ingested fluoride which is swallowed and laid down within developing tooth enamel before tooth erupts
- Topical fluoride which is applied to the actual tooth after it has erupted
  
  *Fluoride varnish has been widely used in Canada and Europe since the 1970s to prevent dental caries*