Public Health Dental Hygienist (PHDH) Toolkit

PHDHs’ Role in the Pediatric Medical Setting

Legislature/Requirements
Evidenced-based Prevention Strategies
Safety and Infection Control
Procedures, Equipment, Supplies, and Reporting

Office of Oral Health
Massachusetts Department of Public Health
Dental Caries In Childhood

- Dental caries (tooth decay) is completely preventable, yet it is the most common chronic disease in children. (CDC, 2005)

- Dental caries is transmissible from caregiver to child.

- Parents and caregivers don’t often receive information on how to prevent tooth decay and other oral diseases.

- Many children lack access to preventive dental care.
Dental Caries in Massachusetts’ Children in 2008

- 25% of kindergarten children and 40% of third graders had caries experience (history of tooth decay)
- 52% of kindergarten children and 42% of third graders had untreated caries

Overall, lower income and minority children experienced a 1.7 times greater prevalence of dental caries than non-Hispanic White children

Note. These data are from the Catalyst Institute’s report: The Oral Health of Massachusetts’ Children, January 2008. Many children who experience dental caries at the highest rates are children who receive their medical care at community health centers. This high risk population of minority and low income children is a population you see every day at your medical facility. You might be the only source of preventive oral health education and service these high risk children receive.
High-Risk Populations

Moderate to high-risk children can include:
- Children living in nonfluoridated communities
- Minority children
- Children from families of low socioeconomic status
- Children with special health care needs

More children in moderate to high-risk groups for dental caries are accessing medical care but not dental care.

These children, as MassHealth members, receive medical care, at community health centers, as well as private family and pediatric medical practices.
The Relationship Between Oral Health and General Health

- Bodies have one immune system and one circulatory system

- Chronic health conditions/diseases that increase oral disease risk include:
  - Diabetes
  - Physical challenge or disability
  - Immunosuppression
  - Defect in enamel development
  - Xerostomia, either condition or medication induced
  - Gastrointestinal disorders or GERD
Oral Health in the Pediatric Medical Home

The American Academy of Pediatrics recommends:

1. Every child should begin to receive oral health risk assessments by 6 months of age from a pediatrician or qualified pediatric health care professional.

2. Infants identified as having significant risk of caries should be entered into an aggressive anticipatory guidance and intervention program provided by a dental professional between 6 and 12 months of age.

3. Pediatricians should support the establishment of a dental home for all children between 6 and 12 months of age.

4. Medical practitioners should support the application of fluoride varnish in the medical setting.
Barriers to Oral Disease Prevention in the Medical Home

- Lack of knowledge about oral disease, etiology, and prevention strategies by parents, caregivers and some medical providers
- Lack of access to oral health education/awareness
- Dental professional shortage areas/lack of dental referral resources
- Lack of sufficient time during well child/routine pediatric medical appointments
- Billing complications
How can the PHDH help?

- The legislation supported by the Board of Registration in Dentistry under 234 CMR 2.00 et seq., states that PHDH’s can work in medical practices and other approved public health settings.

- The PDHD could be a valuable resource to child health providers by reducing barriers to implementing the AAP recommendations and enforcing fluoride varnish application.
The PHDH’s Role as part of the Medical Home Team

- The PHDH could independently partner with pediatric medical practitioners to:
  - Provide resources for oral health education to medical professionals, children, and anticipatory guidance to parents/caregivers
  - Deliver oral health screenings to children within the medical home
  - Perform a Caries Risk Assessment
The PHDH’s Role as part of the Medical Home Team (cont’d)

- The PHDH could independently partner with pediatric medical practitioners to:
  
  - Facilitate the establishment of a dental home by age 12 months
  - Apply fluoride varnish to moderate to high-risk children on a routine basis
  - Assist the medical home with the billing for fluoride varnish application
Oral Health Education

The PHDH is qualified to educate parents, children, and even child health providers with oral health education and anticipatory guidance on topics such as:

- Tooth brushing/oral hygiene
- Fluoride/Fluoridation
- Medications/diseases/conditions with potential oral health implications
- Proper nutrition
- Establishing a dental home

The MDPH Office of Oral Health has a wealth of resources, including a training and toolkit for medical providers and fact sheets that can be supportive tools.
What is Anticipatory Guidance?

- Anticipatory Guidance is the information that is provided to a parent, caregiver or family member that helps them to understand what to expect during the child’s current and approaching stage of development.

- Anticipatory Guidance should arm parents and caregivers with knowledge of their child’s growth and development so they know what to expect and they can prepare to decrease disease risk by promoting healthy behaviors that would lead to the prevention of tooth decay.

- For parents of infants and children, anticipatory guidance topics include oral development, tooth eruption, gum/tooth cleaning, appropriate use of fluoride, bottle use, and feeding and eating practices and the transmission of the bacteria that causes tooth decay.
What is a Caries Risk Assessment?

- The Caries Risk Assessment is used to assess the level of risk for caries (tooth decay) development in infants, children and adolescents based on a set of clinical, environmental and general health factors.

- The CRA is comprised of:
  1. Oral health screening/assessment to determine the present oral health status and the history of dental disease
  2. Standard questions that include frequency and consumption of sugar/carbohydrate foods and drinks, access to water fluoridation and fluorides, access to regular dental care, and socioeconomic status

- A child may be categorized as low, moderate or high risk for tooth decay
Assessing Caries Risk

**Low Risk**
- No History of Oral Disease
- No Special Health Care Needs
- Access to Preventive Dental Care
- Infrequent Snacking
- Live in Fluoridated Community AND drinking the water
- Good Oral Hygiene

**Moderate Risk**
- History of Oral Disease
- Special Health Care Needs
- Irregular Access of Dental Care
- Consuming High Frequency of simple sugars/carbohydrates/Juices and Soda
- Not Drinking fluoridated Water
- Evidence of Poor Oral Hygiene

**High Risk**
- Consistent History of Oral Disease
- Special Health Care Needs
- No Access to Dental Care
- Consuming High Frequency of simple sugars/carbohydrates/Juices and Soda
- Not Drinking fluoridated Water
- Demineralized Enamel and Evidence of Poor Oral Hygiene
Oral Health Screening/Assessment

- The PHDH could assist child health providers in identifying children with oral disease and children at-risk for oral disease by screening for:

  - Evidence of poor oral hygiene (plaque, gingivitis, staining, demineralization, etc.)
  - History of dental disease (fillings, extract sites)
  - White spot lesions
  - Presence of dental sealants
  - Presence of potential dental caries
  - Signs of periodontal/soft tissue disease
  - Signs of oral trauma, physical or sexual abuse
Establishing a Dental Home

- The PHDH could provide assistance in facilitating the establishment of a dental home by age one, the AAP recommendation.

- Through the collaborative agreements with a licensed dentist, a network of referral sources could be developed which would assist in building relationships with dental professionals and dental programs at community health centers.

- The PHDH could facilitate scheduling and follow-up between the child health provider, the child and his or her family, the dental home, and any other network of medical/dental specialists.
Why Enforce Fluoride Varnish in the Medical Setting?

1. **A dental cleaning is not needed prior to application**
2. No special dental equipment is needed
3. It is quick and easy to apply, and dries immediately upon contact with saliva
4. It is safe and well tolerated by infants, children, and children with special health care needs
5. It is a **sustainable service** through MassHealth and some other third-party insurers
Fluoride Varnish in the Medical Setting

- Currently, 44 state Medicaid programs allow medical providers to apply fluoride varnish. (American Academy of Pediatrics) In North Carolina, a leader in the field, these services reached 60,000 children under age 4 in 2007. (PEW Center on the States, Children’s Dental Campaign)

- In October 2008, Massachusetts began reimbursing medical providers for fluoride varnish application.

- Since barriers exist with medical providers applying and billing for fluoride varnish application, the PHDH could assist medical settings in implementing and sustaining a fluoride varnish program.

- With a collaborative agreement between a dentist, the PHDH, and the child health provider/medical facility, a PHDH can bill MassHealth or a third party payer directly for fluoride varnish application. (Chapter 70 of the Acts of 2009)
States With and Without MEDICAID Reimbursement for Primary Care Medical Providers to Perform Caries Prevention Services

** Indicates state grade from *The Cost of Delay: State Dental Policies Fail One in Five Children*, Pew Children’s Dental Campaign
Advantages of Fluoride Varnish Application by PHDH in Medical Settings

- Relieve the burden on medical staff
  - Supply, apply, and bill for fluoride varnish application on medium- to high-risk children.
  - Purchase and store all fluoride varnish supplies to relieve this cost and time burden on the medical facility.
  - Fluoride varnish application is quick, easy, and an effective caries prevention strategy.

- Applying fluoride varnish in the medical setting will not interfere with the application/reimbursement of fluoride varnish in the dental setting.
MassHealth Fluoride Varnish Eligibility

- Limitations and Restrictions
  1. Not recommended to exceed one application every 180 days per provider type from first tooth eruption, usually 6 months, to the third birthday
  2. Recommended during a well-child visit and will be delivered along with oral health anticipatory guidance and a dental referral if necessary

- Intended for children ages 3 and younger, but all MassHealth members will qualify who are:
  1. Under age 21
  2. Eligible for dental services
  3. At moderate to high-risk as determined by a Caries Risk Assessment tool
Fluoride Varnish - Caregiver Education

Instructions to Parents

1. Brush Teeth will look dull, but will be back to normal once the varnish is removed

2. Brush the varnish off the next day

3. Child can eat and drink normally for the rest of the day

4. Varnish is applied every 3 to 6 months depending on moderate to high-risk status

5. Reinforce the importance of a dental home
Fluoride Varnish Tips

1. Perform an Oral Health Screening/Assessment, and a Caries-Risk Assessment

2. Assess for contraindications such as pine nut and/or colophony allergy

3. Obtain informed consent and educate caregiver

4. Have caregiver assist with managing a young child during application
For children in moderate or immediate need of treatment for dental caries or other possible dental/oral problems, the PHDH could be an influential bridge between getting the child to a dentist for proper evaluation and care, and communicating back to the child’s health care provider(s).
for Moving Forward…

- Contact local AAP chapters for information on local AAP oral health initiatives.

- Network with child health providers to build awareness on the oral health needs of children and the PHDH’s potential role in improving children’s oral and overall health.

- Build relationships with local dentists and community health center dental programs who have the willingness, knowledge and capabilities to treat young children.

- Contact the MPDH Office of Oral Health for assistance in developing a PHDH oral health program in medical settings at oral.health@state.ma.us
More Resources on Children’s Oral Health in the Medical Home

- MDPH Office of Oral Health BLOCK Oral Disease Program: www.mass.gov/dph/oralhealth

- ASTDD Best Practices: www.astdd.org/best-practices


- American Academy of Pediatrics Fluoride Varnish Application in the Medical Setting Video: www.aap.org/oralhealth/links-training-oralexamvideo.cfm

- First Smiles Initiative and Resources: www.first5oralhealth.org