

## Preventing Early Childhood Caries through Collaborative Practice in North Carolina

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## Goals of this webinar

- Expand on collaborative practice knowledge.
- Provide details of evidence based programs that prevent/reduce early childhood caries.
- Provide tools and strategies for you to implement in your LDH and community.
- Generate confidence and knowledge towards your important role as leaders in young children's oral and overall health.



## Today's agenda

- The state of early childhood oral health
- NC background
- Into the Mouths of Babes (IMB): what it does and doesn't do
- Carolina Dental Home: an extension of IMB
- UNC's Baby Oral Health Program (bOHP)
- Building a collaborative practice



## AAPD Policy on Early Childhood Caries

- The disease of ECC is the presence of one or more decayed (noncavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces in any primary tooth in a child under the age of six. In children younger than three years of age, any sign of smooth-surface caries is indicative of severe early childhood caries (S-ECC).

The American Academy of Pediatric Dentistry and the American Academy of Pediatrics. (last edited 2014). Policy on Early Childhood Caries (ECC): Classifications, Consequences, and Preventive Strategies, Reference Manual, 36(6). Retrieved from: [http://www.aapd.org/media/Polices\\_Guidelines/P\\_ECCClassifications.pdf](http://www.aapd.org/media/Polices_Guidelines/P_ECCClassifications.pdf)



### Early childhood caries is also...

- A disease process
- Infectious
- Chronic with acute episodes
- Preventable/controllable
- Outcome of ECC...  
cavity, hole, tooth decay



Photo provided by Joanna Douglass BDS DDS

Treating the outcome (cavity) does not eliminate the disease



### Early childhood oral health

- Approximately 37% of children aged 2-8 years have experienced caries in primary teeth (2011-12).
- Twice the amount of untreated caries in Hispanic and non-Hispanic black children.



Dye BA, Thornton-Evans G, Li X, Iafolla TJ. Dental Caries and sealant prevalence in children and adolescents in the US, 2011-2012. NCHS data brief, no 191. Hyattsville, MD: National Center for Health Statistics, 2015.



### Access to dental care in NC



- 47<sup>th</sup> in dentist to population ratio\*
- Maldistribution of dentists\*
- Not all dentists see young children
- Not all dentists accept Medicaid as payment

\*J Spero and J Burgette. Program on Health Workforce Research and Policy, UNC Cecil G Sheps Center on Health Services Research. Presentation to NC Committee for Dental Health on 1/21/16.



### Collaborative practice

- In our last webinar, you heard about forming an inter-professional partnership between dental and perinatal providers.
- Today, we will highlight the partnership between dental and primary care medical providers serving infants and toddlers.
- An existing partnership may be expanded and improved upon by increasing and improving communication, or a new collaborative practice may be created in your county or area!



## Into the Mouths of Babes (IMB)

Trained medical professionals providing oral preventive care to Medicaid-insured infants and toddlers in an effort to prevent and reduce ECC



## IMB: what we've learned:

- High adoption rates among medical providers
- Increased access to preventive services
  - Wide geographic distribution
  - 50% of well-child visits as of 2013
  - Physician visits 4 times greater than dentists
  - Multiple visits 20 times greater in medical offices
- Improved treatment outcomes
  - 49% reduction before 18 months
  - 18% reduction at 6 yrs with  $\geq 4$  visits
  - 21% reduction in hospital episodes

Rozier et al. *J Dent Educ* 2003;67:876-85.  
Stearns et al. *Arch Pediatr Adolesc Med*. 2012;166(10):945-951.  
Rozier et al. *Health Affairs*. 2010;29:2278-85.  
Pahel et al. *Pediatrics*. 2011;e682-9.



## Dental home recommendation

- Dental Home: 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)
- The AAPD, ADA, AAP, and American Association of Public Health Dentistry all recommend establishing a dental home by one year of age.

American Academy of Pediatric Dentistry Policy on the dental home. AAPD Oral Health Policies Reference Manual 2013/2014, 35(6):24-25.



## Early and periodic screening, diagnostic, and treatment benefit (EPSDT)

- NC EPSDT recommends all Medicaid-insured children have a dental visit at one year of age.
- NC EPSDT requires all Medicaid-insured children have a dental visit at three years of age.
- This may be because of NC's dental workforce shortage/maldistribution.



### Dental home reality in NC

- Workforce shortage and maldistribution
- Barriers for parents
  - More than transportation and work schedules
  - Additional research needed
- Oral preventive care more likely in medical home than dental home for young children
- Children receiving IMB services but without a dental home are less likely to get dental treatment when needed

Krantz et al. Effects of physician-based preventive oral health services on dental caries, Pediatrics. 2015, 136(1) 107-114.



### Evidence supports collaborative practice and early dental visits

- Children 2 to 5 years of age receiving a recommendation from their medical provider to visit the dentist were more likely to have a dental visit.
  - Beil HA Rozier RG. Primary health care providers' advice for a dental checkup and dental use in children. Pediatrics 2010. 126 (2)
- Medicaid-insured children having a preventive dental visit by 1 year of age were more likely to have subsequent preventive visits and lower dental expenses.
  - Lee JY et al. Examining the cost-effectiveness of early dental visits. Pediatr Dent. 2006.28(2).102-105.



### Oral health risk assessment

- “Administer an oral health risk assessment periodically to all children.”
  - Maintaining and improving the oral health of young children, (2014) Policy statement from The American Academy of Pediatrics
- “Dental caries risk assessment...should be a routine component of new and periodic examinations by oral health and medical providers.”
  - Guidelines on caries-risk assessment and management for infants, children, and adolescents, (2014) Council on Clinical Affairs, American Academy of Pediatric Dentistry



### Carolina Dental Home (CDH)

- Pilot project in Craven, Pamlico, and Jones Counties
- Partnership
  - 2 large peds practices
  - 7 general dentists
  - 1 pediatric dentist
- PORRT developed to refer youngest high risk children to dental home



## Carolina Dental Home (CDH)

- An extension of the IMB program, with the goal to expand access to a dental home by:
  - Developing a Priority Oral health Risk assessment and Referral Tool (PORRT) with definitive guidelines for IMB medical providers to promote risk-based dental referrals.
  - Providing continuing education for general dentists in infant and toddler oral health care using UNC's Baby Oral Health Program (bOHP).
  - Educating parents about the importance of early dental visits.



## The PORRT is part of the (IMB) oral preventive procedure...

- Oral and written oral health education for the parent or caregiver (PORRT Section A/ Questions for parent)
- Oral evaluation performed by physician or physician extender (PORRT Section B/ clinical assessment)
- Fluoride varnish application
- Dental referral for children at highest risk (PORRT Section C/completed by dental office)
- PORRT is part of Connecting the Docs training!



### Guidelines for Priority Dental Referral of Pediatric Patients 6 to 42 Months of Age

Manage in Medical Office	Refer to Dentist	Refer to Dentist Specializing in Infant and Toddler Oral Care
<ul style="list-style-type: none"> <li>&lt;3 behavioral risk factors<sup>1</sup></li> <li>No decay or other conditions</li> <li>No health concerns</li> </ul>	<ul style="list-style-type: none"> <li>≥3 behavioral risk factors<sup>1</sup>, or</li> <li>White spots (early stage disease), or</li> <li>Enamel defects, or</li> <li>Other dental concerns</li> </ul>	<ul style="list-style-type: none"> <li>Cavitation (advanced disease), or</li> <li>Special health care needs</li> </ul>

#### <sup>1</sup>Behavioral Risk Factors

- Does not brush with fluoridated toothpaste at least once a day
- Does not drink fluoridated water
- Drinks sweetened beverages or eats sugary snacks between meals
- Sleeps with bottle or sippy cup containing something other than water
- Family history of dental disease

#### Notes:

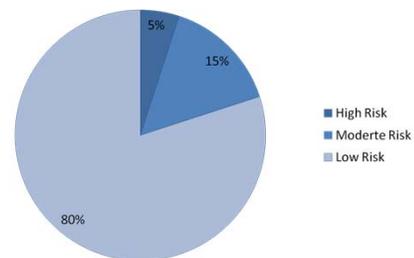
- Management in the medical office includes parent counseling, fluoride varnish application and ongoing screening and risk assessment.
- According to AAP guidelines (2008) all children should have an oral health risk assessment and screening by a dentist starting at 6 months of age. Refer every child to a dentist by 12 months if you know dentists in your community who will see them.
- The risk-based referral guidelines displayed here are to be applied in communities where there are not enough dentists and all children cannot be referred by one year of age. The Priority Oral Health Risk Assessment and Referral Tool (PORRT) can be used to implement these guidelines.
- These risk-based referral guidelines are intended for use with low-income (Medicaid) children <42 months of age; the number of risk factors might need to be adjusted for other populations.
- All children should be referred at 3 years of age if they do not already have a dental home.

Reference:  
American Academy of Pediatrics, Section on Pediatric Dentistry and Oral Health. Preventive oral health intervention for pediatricians. Pediatrics. 2008;122(5):1387-94.



Connecting the Docs  
For Children's Oral Health

## Percent of CDH sample, by risk status



## What we've learned

### Medical Home

- 1) Screening
- 2) Risk assessment
- 3) Guideline-based referral



### Referral System

- 1) Make appointment
- 2) Monitor visits
- 3) Provide support



### Dental Home

Visit

1. Intervention effects
  - a. Use structured checklists
  - b. Reduction in some risk factors
  - c. Increase in referral of early disease, but not advanced
2. Still under-refer patients with elevated risk
  - a. Less likely to refer for behavioral risk factors
  - b. Hesitate to refer if anticipate lack of follow through
3. Some referrals don't get into system
4. Difficult to engage
5. Because number of parents needing or wanting support is unknown, impact difficult to determine
6. Once in system, referral is moderately effective
7. Dentists' willingness to see patients exceeded referral demand



Slide courtesy of Dr. Gary Rozier

## CDH Lessons

- Medical providers under-refer high risk patients and are more likely to refer once they see treatment needs (cavities).
- Dentists prefer to see young children before they have treatment needs (cavities).
- Medical providers more likely to refer early disease (white spot lesions) after training intervention.



## Create a collaborative practice

- Communication is key!
- You will work together to:
  - Identify champions for dental and medical teams
  - Dental team training with bOHP
  - Medical team training with Connecting the Docs
  - Convene for collaboration on parent PORRT guidelines and referral process, closing feedback loop
  - Counsel/educate parents with consistent messaging
    - OHRC has free materials in English/Spanish:
      - <http://mchoralhealth.org/materials/brochures-consumer.php#HHHS>



## Steps using bOHP (dental team)

- <http://www.babyoralhealthprogram.org/index.php>
- Choose a dental champion to lead the process
- Plan a 2-hour 'lunch and learn' for dental team
- View the online bOHP tools:
  - Dental provider and staff videos
  - Parent/caregiver presentation
- Collaborate with medical team on referral guidelines, referral process, and parent messaging.



### Steps using Connecting the Docs (medical team)

- <https://www2.ncdhs.gov/dph/oralhealth/partners/IMB.htm>
- Contact your regional public dental hygienist for Connecting the Docs training.
- Schedule the 1-hour training session for everyone in office.
- Choose a champion to lead the process for your team.
- Collaborate with dental team on PORRT risk referral guidelines, referral process, parent messaging.



### Dental Home Collaborative practice

- Convene medical and dental teams
- View bOHP parent presentation
- View PORRT DVD and discuss referral process and guidelines
- Determine communication strategies



### Dental Home Collaborative Practice

- You may choose to expand your Carolina Dental Home collaboration beyond your Local Health Department into your community.
- Let us know how we can help.



### It's about logistics

- You are the experts on young children and oral health.
- How can you work together?
- How may we help you?
- Communication and flexibility are key.



## QUESTIONS?



## Speaker's Contact Information



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## Thank you!

