### Healthy Mouths, Healthy People

Risk Assessment & Prevention A Systematic Approach

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### Disclosures

Employee Advantage Dental

Minority Owner Advantage Dental



### Healthy Mouths, Healthy People Learning Objectives

Describe:

- Relationship between oral health and overall health
- 2. Dental caries as a chronic infectious disease
- 3. Evidence-based strategies to assess and prevent dental disease



### **Primary References**

- American Academy of Pediatric Dentistry <u>http://www.aapd.org</u>
- American Dental Association Center for Evidence-Based Dentistry <u>https://ebd.ada.org</u>
- Cochrane Oral Health Group <a href="https://oralhealth.cochrane.org/">https://oralhealth.cochrane.org/</a>
- CDC Division for Oral Health <u>https://www.cdc.gov/oralhealth</u>
- Oral Health in America: A Report of the Surgeon General, U.S. Department of Health and Human Services, 2000 <u>https://profiles.nlm.nih.gov/ps/access/NNBBJT.pdf</u>



### **Oral Health: The Silent Epidemic**

Regina M. Benjamin, MD, MBA, Public Health Rep. 2010 Mar-Apr

- Dental caries and periodontal disease are among the most common chronic diseases in the United States.
- Dental caries is the most common chronic disease in children: it is about five times as common as asthma.
- Fifty-three million people live with untreated tooth decay in their permanent teeth.
- One-quarter of adults aged 65 years and older have lost all of their teeth due to untreated oral disease.





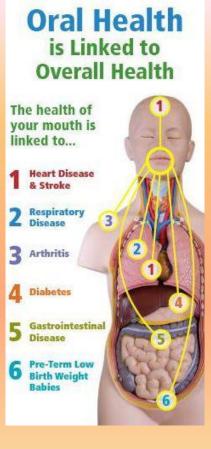


### **Oral Health: The Silent Epidemic**

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Recent research has indicated possible associations between chronic oral infections and diabetes, heart and lung disease, stroke, and low birthweight or premature births.

In other words, oral health refers to the health of our mouth and, ultimately, supports and reflects the health of the entire body.



Periodontal care reduces overall medical costs in the first year

Study Summary All results reflect enrollment of individuals in both CIGNA's Medical and Dental plans.

Diabetes Cardiovascular Disease Stroke



Average Reduction in First Year Medical Costs for Individuals Receiving Periodontal Treatment

"Periodontal Treatment and Medical Costs in Diabetes and Cerebrovascular Accident" Presented at the International Association for Dental Research Meeting 2009, Miami



## Dental Caries: Chronic Infectious Disease

#### Abstract

Dental caries is an infectious and transmissible disease. The mutans streptococci (MS) are infectious agents most strongly associated with dental caries. Earlier studies demonstrated that infants acquire MS from their mothers and only after the eruption of primary teeth. More recent studies indicate that MS can colonize the mouths of predentate infants and that horizontal as well as vertical transmission does occur. The purpose of this paper was to demonstrate that these findings will likely facilitate the development of strategies to prevent or delay infant infection by these microbes, thereby reducing the prevalence of dental caries. (Pediatr Dent 2006;28:106-109)

Keywords: MUTANS STREPTOCOCCI, ACQUISITION, TRANSMISSION

Adult





**Older Adult** 

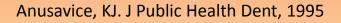
Child

# Does drilling & filling work to treat an infection?

 40-70% recurrent decay within 1 year after treatment under GA

Amin 2004, Zhan 2006, Berkowitz 2011

 70% of fillings done by dentists are replacements, and 70% of replaced posterior restorations increase the number of surfaces



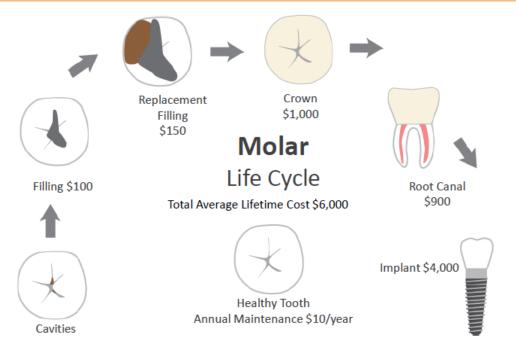




Tooth Decay The World's Oldest & Most Widespread Disease









## Evidence-Based Strategies to Reduce the Burden of Oral Disease

Early access & prevention

• Fluoride

• Sealants

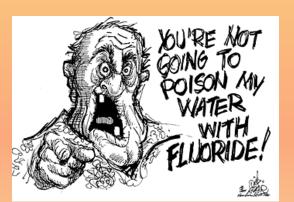


Table 7. Odds Ratio of "High" Caries RiskAssignment at First Dental Visit

Year(s) of Increased Age	Odds Ratio of Caries at First Dental Visit
1 year	2.11
2 years	4.45
3 years	9.39
4 years	19.82

Pediatric Oral Health Research and Policy Center, Aug 2018

• Early referral to treatment for advanced disease



"Children who had their first preventive dental visit by age 1 were more likely to have subsequent preventive visits but were not more likely to have subsequent restorative or emergency visits. Those who had their first preventive visit at age 2 or 3 were more likely to have subsequent preventive, restorative, and emergency visits. The age at the first preventive dental visit had a significant positive effect on dentally related expenditures, with the average dentally-related costs being less for children who received earlier preventive care."

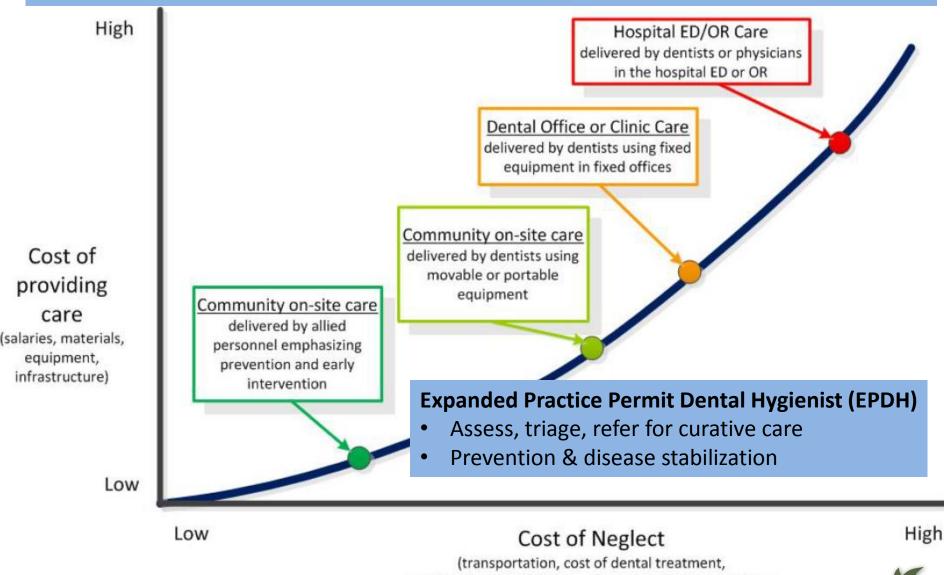
~ Paul S. Casamissimo, DDS, MS, Chief Policy Officer, AAPD

Predictive Model for Caries Risk Based on Determinants of Health Available to Primary Care Providers

Pediatric Oral Health Research and Policy Center, Aug 2018



### Taking the Knowledge & Science to the People



(transportation, cost of dental treatment, costly hospital ED/OR visits, associated medical problems, lost days of school and work)



## Advantage Dental Community Care Investment in EOCCO Counties

- Integration Coordinator & Director of Community Dental Programs
- Nine EPDHs & two community care dental assistants
- 57 school districts & 108 schools in 11 counties
- WIC, Head Start, Preschools, Teen Parent Program, Lifeways Day Treatment Program, Assisted Living Facilities
- Centralized Case Management
- 10 Advantage Dental Offices & 16 Contracted Provider Offices



### **Community Care Team in Action**



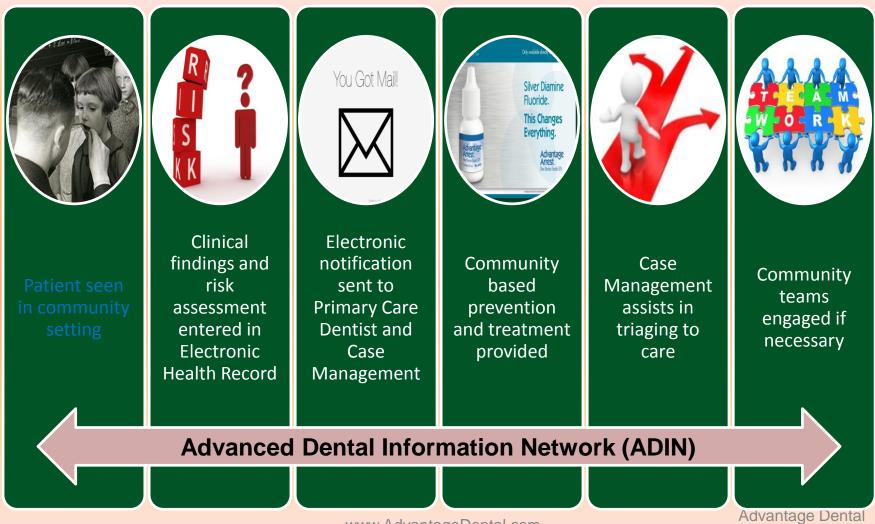






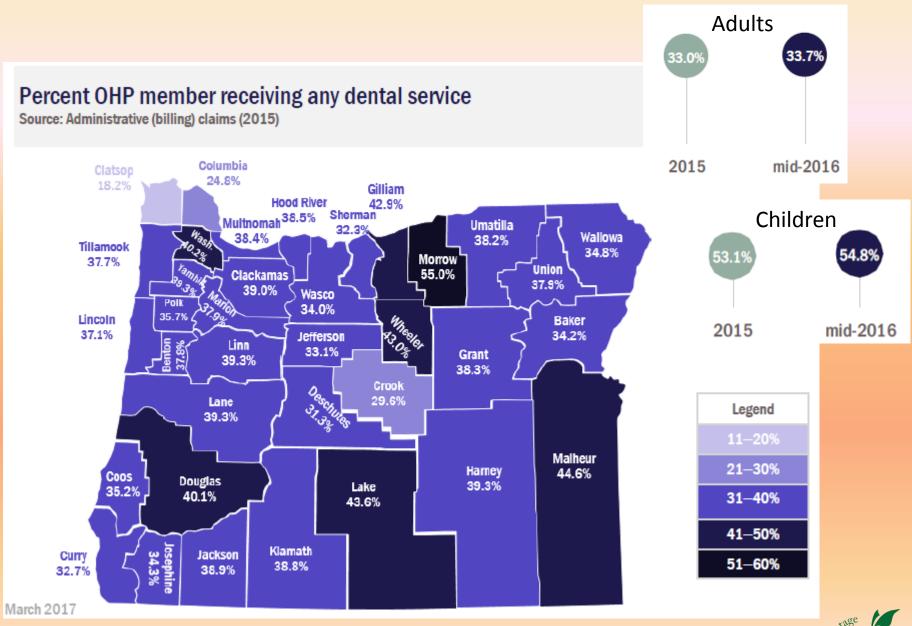


### **Connecting the Community**



www.AdvantageDental.com

proprietary information



Oral Health in Oregon's CCOs – A Metrics Report, March 2017





### Which is better?







# Advantage Dental



MISSION To Improve the Oral Health of All

### **Thanks for You Time!**



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