

# ***A Path Forward – Recommendations for Future Oral Health Education***



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**Closing the Divide: Integrating Medical and Dental Health Care**

Des Moines, Iowa ~ Nov 2019

# Disclosure

- I have no relationships to disclose.
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ILLUSTRATION / DAVE CUTLER

# Objectives

Upon completion of this session, participants should be able to:

- 1) Understand what model programs do to effectively develop and teach oral health
- 2) Utilize national resources for teaching oral health
- 3) Implement a full spectrum oral health curriculum complete with a new tool for evaluating





# CIPCOH

Center for Integration of  
Primary Care and Oral Health



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School of Dental Medicine



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University of  
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**Stony Brook University**

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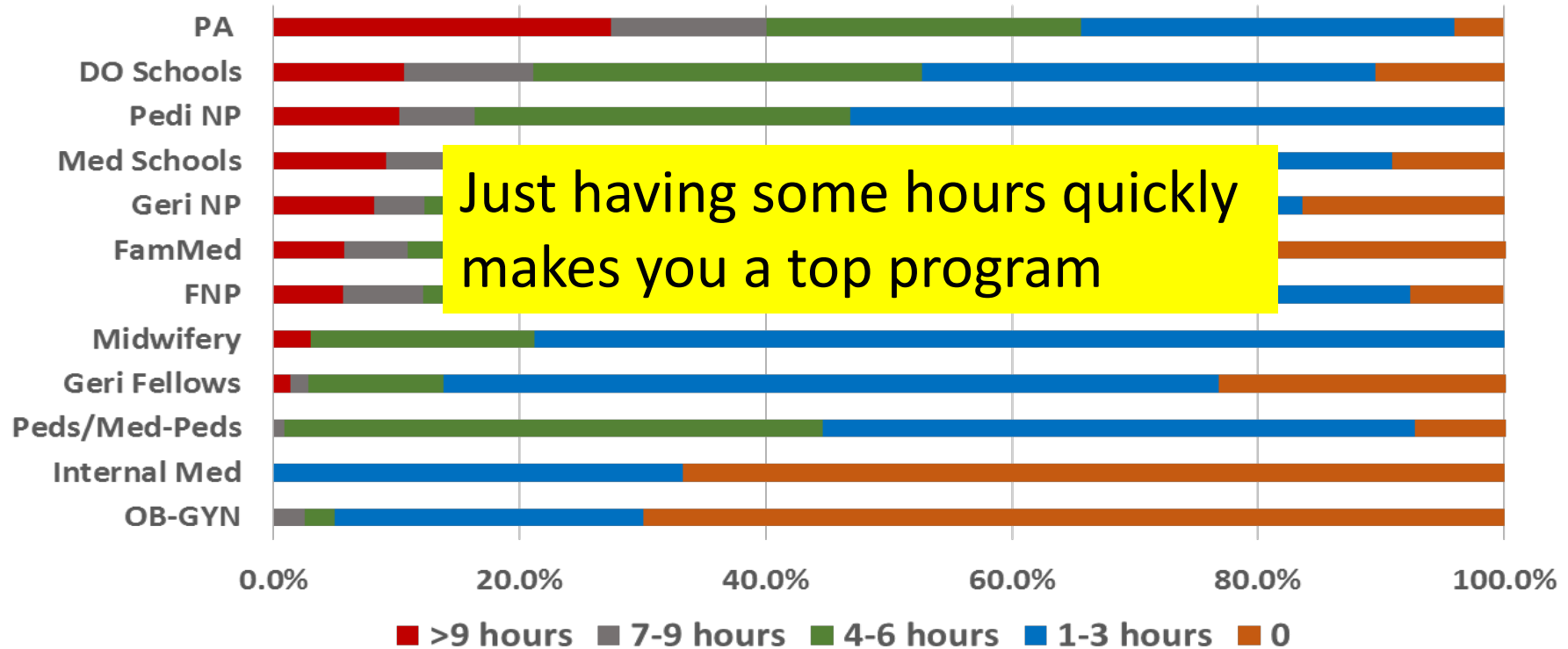
HRSA Cooperative Agreement: UH1HP29962

# Year 1 of 5 – National Surveys - Methodology

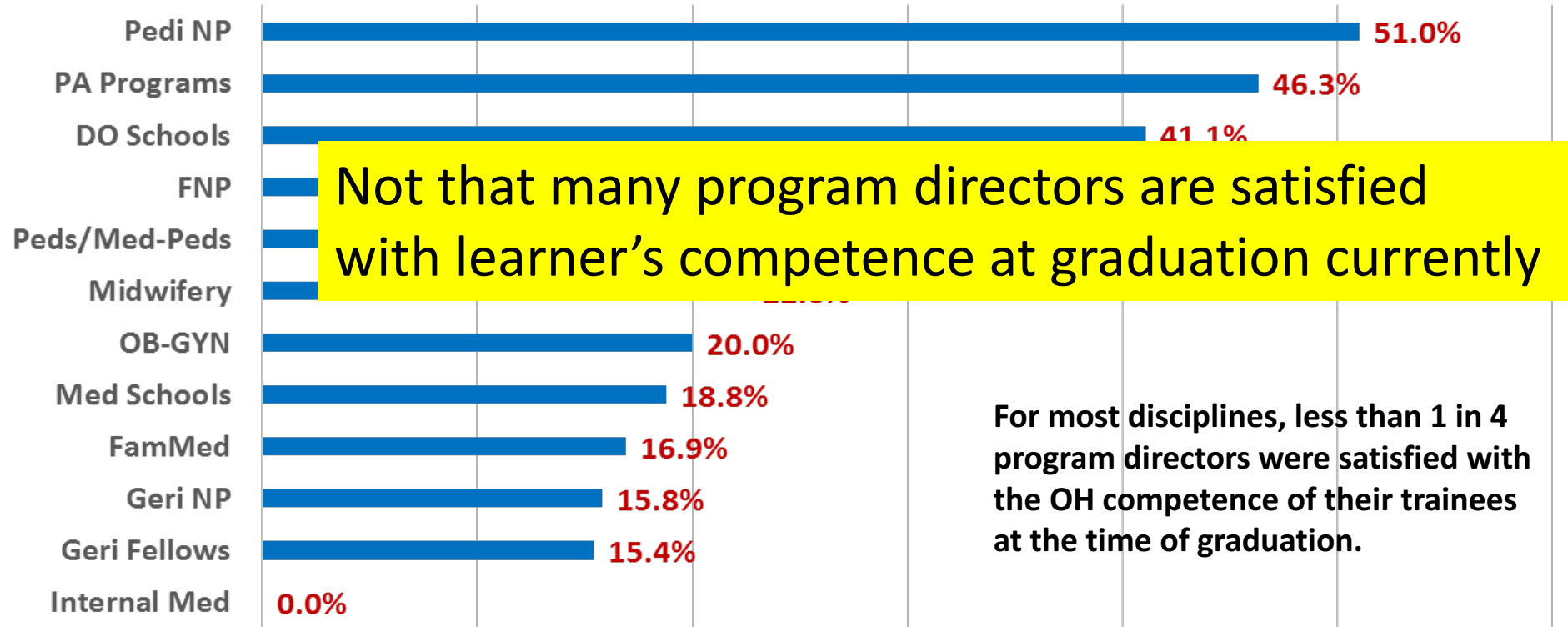
- Electronic surveys were distributed nationwide to 13 primary care disciplines
- Analyses were conducted with programs that had at least a 40% response rate (10 of 13 disciplines)

# Hours of Oral Health Education

Most disciplines have 1-3 hours of OH; OB and IM more frequently report 0 hours while almost one-third of PA programs include > 9 hours.



# Program Director's Satisfaction with Graduate Competence in OH



\*Percent of combined responses to "agree and strongly agree" in one question

# OH Analysis of Relationships within Programs of Having an OH Champion and: Satisfaction with OH Competence of Graduates, # of Hours of OH in Curriculum, and Existence of Relationship between Program and Dental School, Residency or Hygiene Program

	Fam Medicine	Peds/Med- Peds	Geriatric Fellowships	Midwifery	PNP	AGPCNP	FNP	PA Schools	DO Schools
OH Champion x Satisfaction w/ OH Competence of Graduates	√	√	√				√		
OH Champion x # Hours of OH in Curriculum	√	√	√	Borderline	√	√	√	√	
OH Champion x Existence of Relationship between Program and Dental School, Residency or Hygiene Program		√	√		√	√	√		

Oral Health Champions matter!

\* √ indicates a p value significance of <.05

- 4 of the 9 disciplines that had an OH champion also had significantly more satisfaction w/ OH competence of graduates
- 7 of the 9 disciplines that had an OH champion also had significantly more hours of OH in their curriculum
- 5 of the 9 disciplines that had an OH champion also had a formal relationship between the program and a dental school, residency or hygiene program

# Year 2 of 5 – Qualitative Interviews of Programs/School with Robust Curricula

- 31 primary care training programs that had self-identified as “best practice” oral health programs participated in a 1-hour interview (inclusive of all 13 primary care disciplines)
- Qualitative analysis of the 31 interview transcripts

# Year 2 – Quotes

- On borrowing material for others: “There is no sense in reinventing the wheel when the wheel is like a Cadillac.” (referring to the SFL curriculum) – PA Assistant Program Director
- On Barriers: “The biggest barrier is always competing priorities. To get to a point where our faculty felt oral health had the same parity as many other things we teach . . . , it definitely took some influence-building and knowledge-building on everybody’s part.” - Fam Med Res Dir (FMDR)
- Lessons Learned: “It ought to be right in the mix with everything else and be treated as business as usual rather than a special thing. If we get to that place, we’ve succeeded.” - FMDR

# Lessons learned – Year 2:

- Need a **champion** – passion; some funding; energy > expertise
- Need some **leadership buy-in**; the higher up, the better
- **Maximize local resources** by working with academic or community-based local dental professionals; e.g., dentist, dental hygienist
- **Maximize regional resources**; e.g., oral health coalitions, AHEC
- **Maximize national resources**; e.g., Smiles for Life
- Does not take long to achieve success; oral health curricula can be **accomplished with limited or no funding**
- **Missing components** in many programs – **OH objectives** tied into broader learning objectives; **evaluation** – again, borrow these!



# Champion Grooming

- AAP state champions
- PA model – micro grants
- School/Professional organization leader development
- HRSA faculty grants



## Iowa Chapter Activities

The Iowa Chapter continues to promote provider training in pediatric oral health while strengthening delivery of care through policy and legislative efforts. A resolution to incorporate oral health screening into Women, Infants, and Children (WIC) services was passed in 2009. For more information about the Chapter and other oral health resources in the state, please see below.

- [Iowa Chapter Website](#)
- [Iowa Chapter Contact Information](#)

University of Iowa Pediatric Dentistry Department Resources/Educational Materials for Health Professionals

- [Oral Health Training](#)
- [Educational Videos](#)
- [Fact Sheets](#)
- [Patient Referral Forms](#)
- [Water Testing](#)
- [Community Water Fluoridation Status](#)
- [Dental Outreach Program Resources](#)

### Payers and Oral Health in Primary Care

Private payers are now paying pediatricians and other primary care providers for some oral health



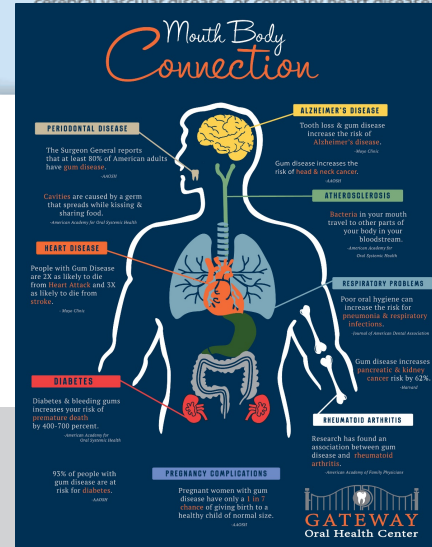
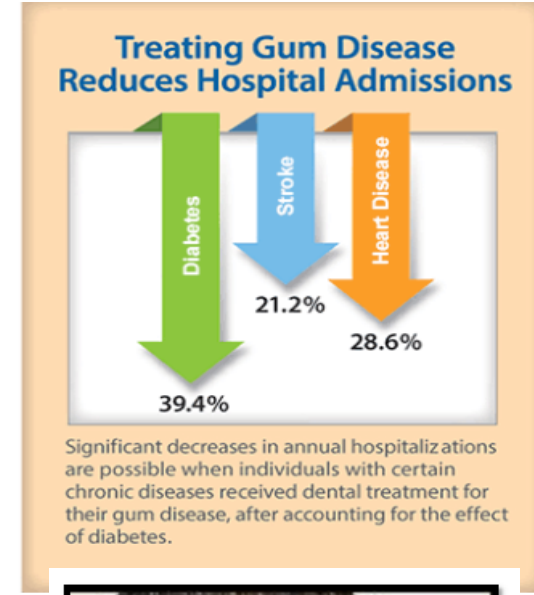
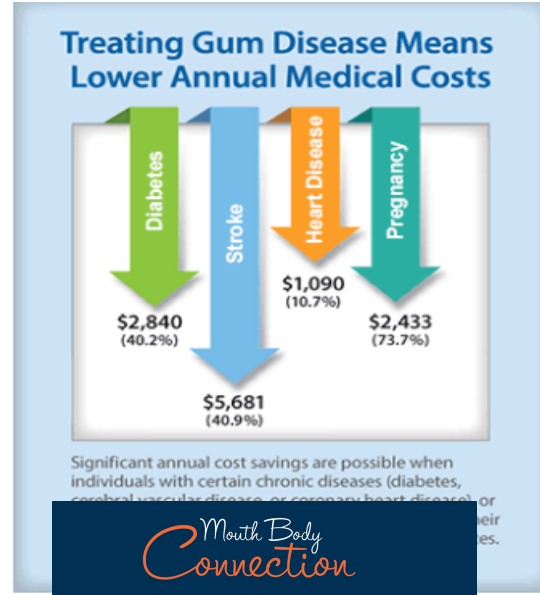
### Chapter Oral Health Advocate



Karin Weber-Gasparoni DDS, PhD  
[karin-weber@uiowa.edu](mailto:karin-weber@uiowa.edu)

# Leadership Influencing

- Show the numbers
  - Nationally
  - locally
- Tell the stories
- Link to medical issues
- Chance for IPE

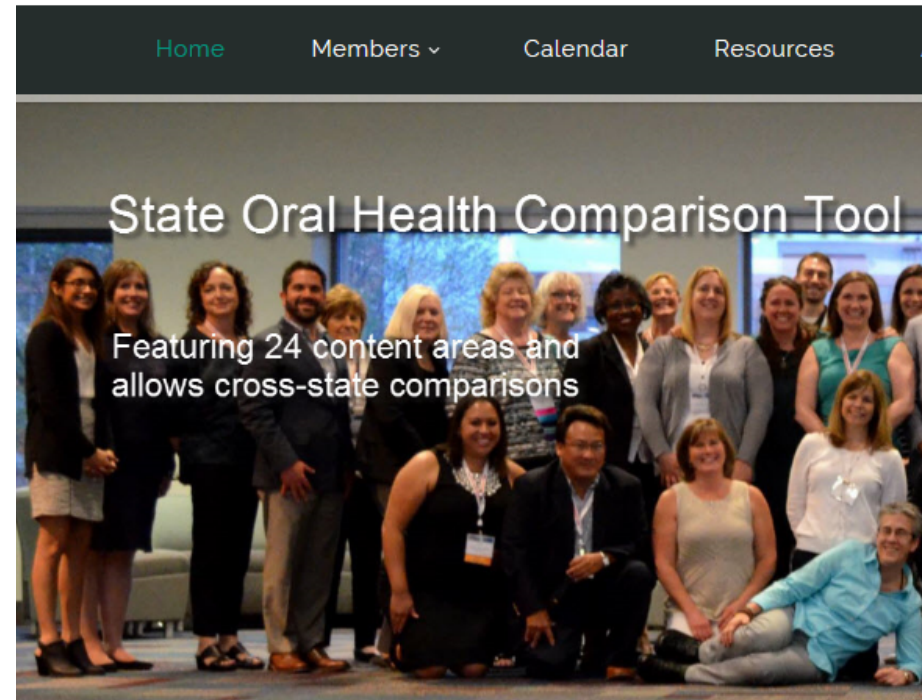


on JB, Blum JJ. Impa  
systemic Conditions, I



# Finding Local Resources

- Oral Health Coalition
- District Dental & Dental Hygiene Societies
- Dental schools/programs
- Community dental providers
- AHEC, DPH, ...

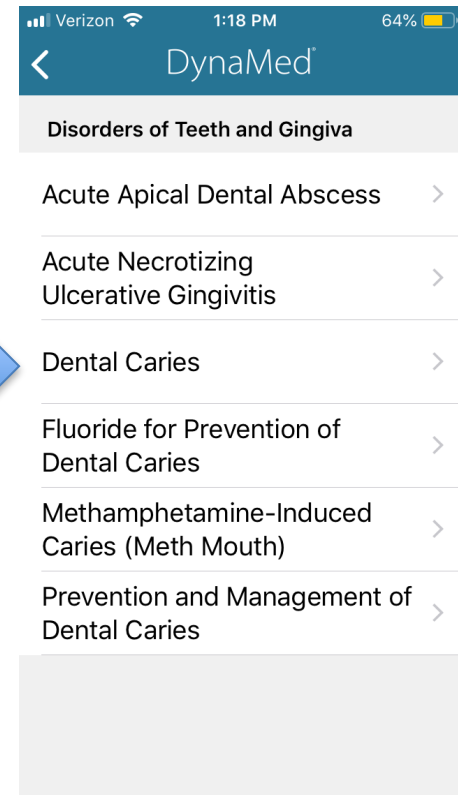
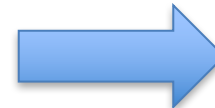
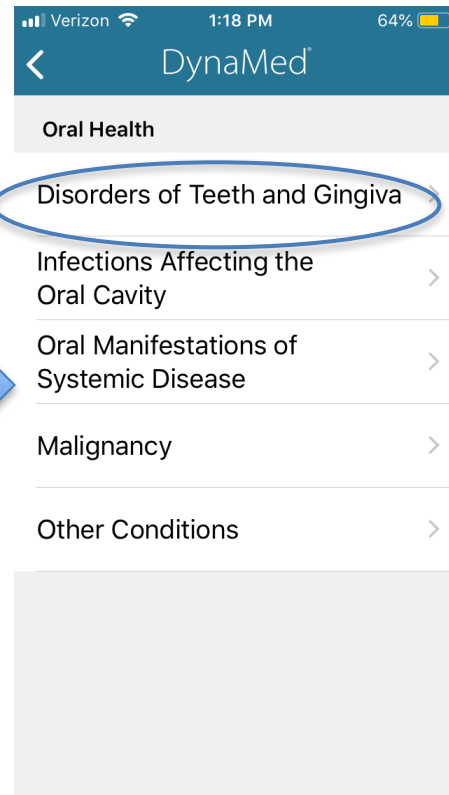
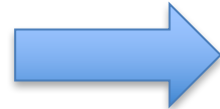
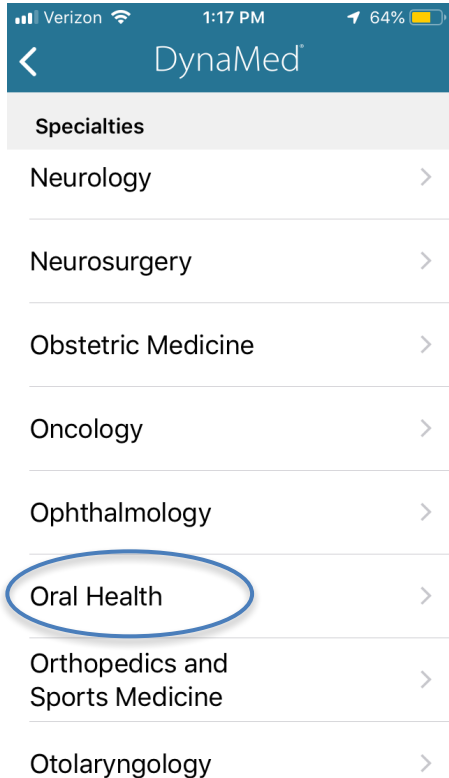


# Promoting National Resources

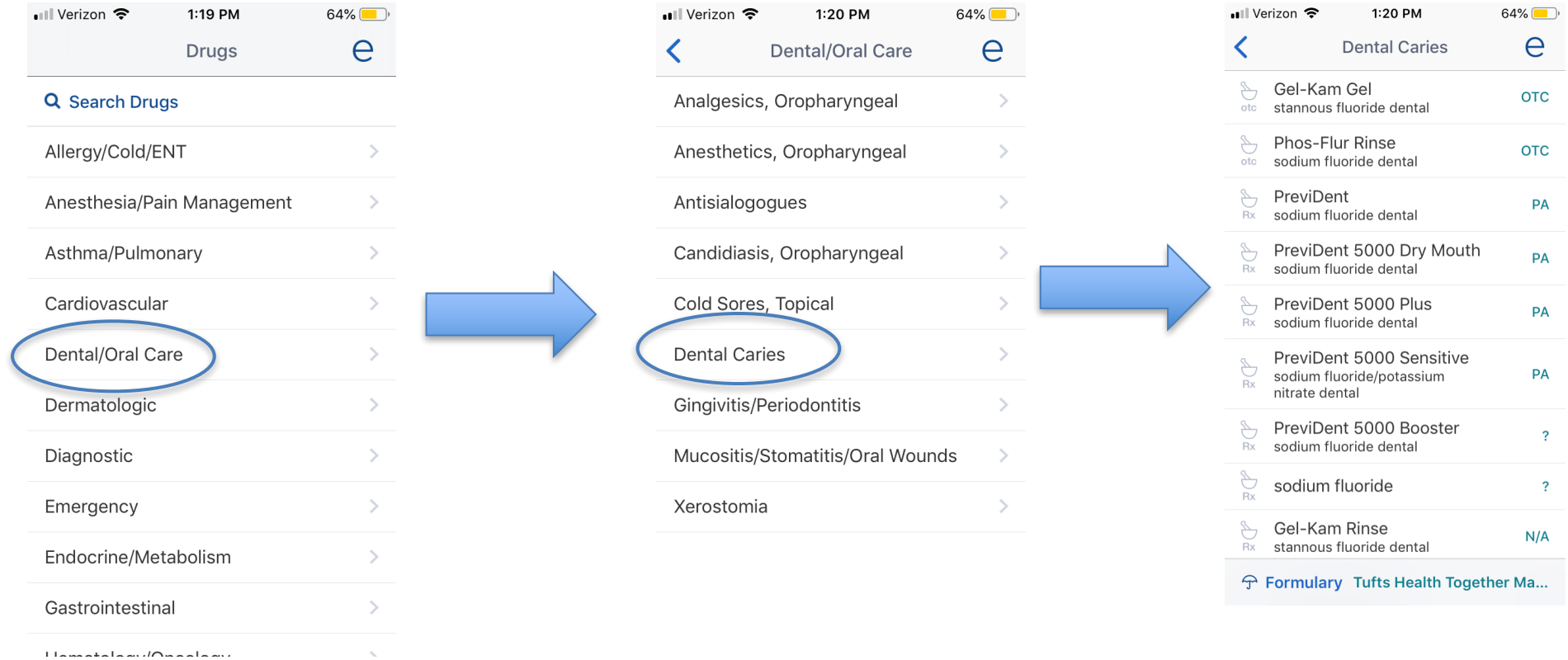
- Smiles For Life
  - Examples on site
- AAP – PACT
- MedEdPortal
- prenatal Oral Health Program (pOHP)
- Tiny Teeth - AAP



# Other resources - DynaMed



# Other resources - Epocrates





# USMLE Step 1 Review – Oral Health

YouTube

Search

Oral Health  
for USMLE Step One

Part 2: Oral Lesions

Olivia Nuelle, Medical School Class of 2022  
University of Massachusetts Medical School  
Faculty Adviser: Hugh Silk, MD  
E-mail: Howard@12DaysinMarch  
[www.12DaysinMarch.com](http://www.12DaysinMarch.com)

0:01 / 10:07

12DaysinMarch, Oral Health Series, Part 2a: Oral Lesions (Viral, Bacterial) for Step One

12DaysinMarch, Oral Health Series, Part 1: Oral Anatomy for Step One  
Howard Sachs 6:00

12DaysinMarch, Oral Health Series, Part 2a: Oral Lesions (Viral, Bacterial) for Step One  
Howard Sachs 10:08

12DaysinMarch, Oral Health Series, Part 2b: Oral Lesions (Fungal, ...)  
Howard Sachs 5:24

12DaysinMarch, Oral Health Series, Part 2c: Oral Lesions (Autoimmune, ...)  
Howard Sachs 5:19

12DaysinMarch, Oral Health Series, Part 2d: Oral Lesions (Neoplasia, ...)  
Howard Sachs 4:59

12DaysinMarch, Oral Health Series, Part 3a: Oral Pathology (Congenital, ...)  
Howard Sachs 6:36

12DaysinMarch, Oral Health Series, Part 2b: Oral Lesions (Fungal, ...)  
Howard Sachs

12DaysinMarch, Oral Health Series, Part 2a: Oral Lesions (Viral, Bacterial) for Step One

12DaysinMarch, Oral Health Series, Part 2b: Oral Lesions...

# Funding – local and national

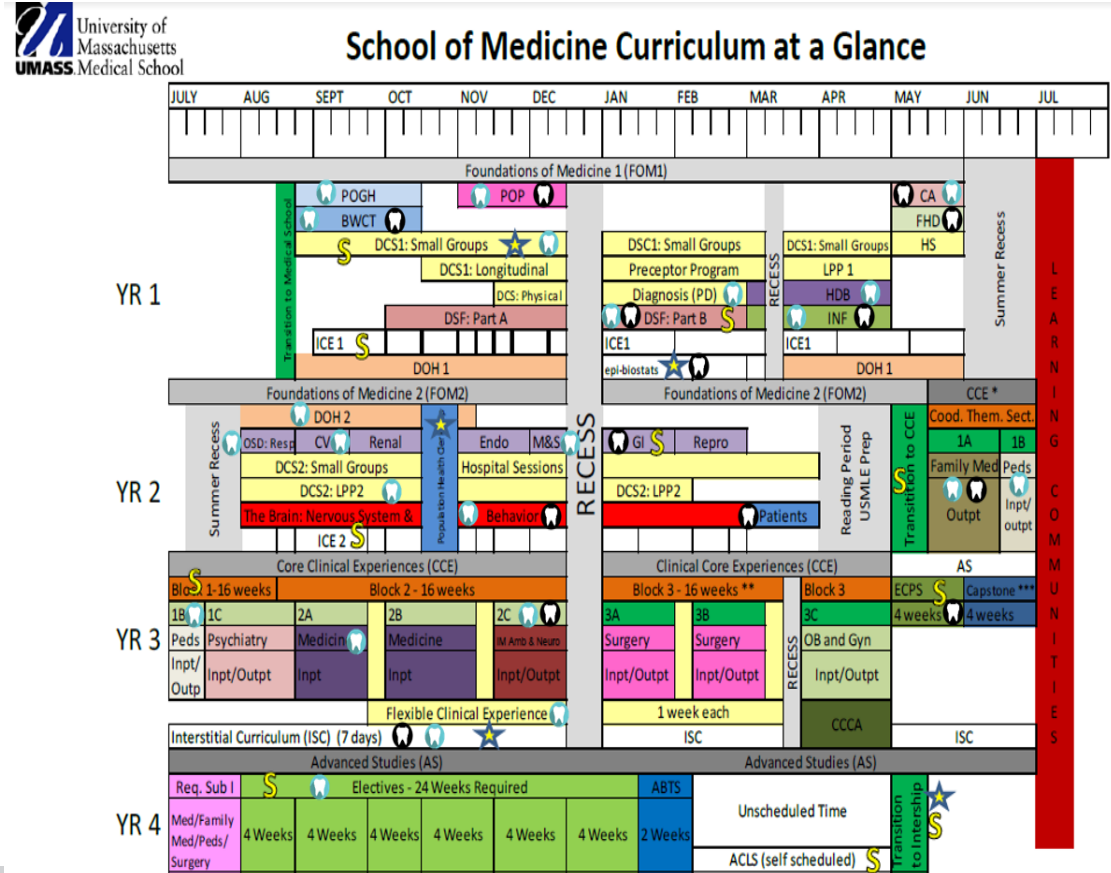
- Dentaquest
- HRSA
- Delta Dental
- Arcora
- Internal grants
- Smiles for Life





# Approach to Ideal OH Curriculum

- Spiral Curriculum
- Oral Health Day
- Oral Health Week
- Electives –
  - 1 day, 1 week, 1 month
- IPE/IPP
- Student project(s)

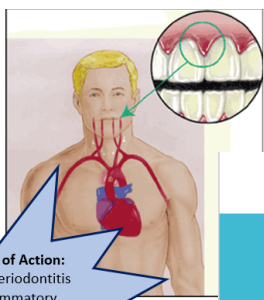


## Another risk factor? Periodontitis and CVD

- Meta-analysis of longitudinal studies show that periodontitis independently confers excess risk for increased morbidity and mortality due to CVD
- The increase risk ranges from 20% (OR 1.2) to 180% (OR 2.8)
- More intervention studies needed
- Treatment – flossing, dental care including deep root planing and scaling

• J Int Soc Periodontol. 2010;14(3):148-154

**Mechanism of Action:**  
bacteria of periodontitis cause inflammatory cytokines to increase systemically -> injuring the vascular endothelium



## Bulimia

- Findings:
  - salivary gland swelling
  - chronic sore throat
  - gingivitis and palate inflammation
  - tooth enamel erosion and decay
  - teeth sensitivity to temperature
  - molars can reduce in size/tooth loss
  - Russell's sign on back of hands
- Pathophysiology:
  - Gastric acid irritating and eroding enamel and tissue
- Management:
  - Behavioral
  - Post vomit neutralize acid rinses (baking soda and water)
  - Fluoride rinse and varnish; dental care



## Facial Pain-Differential Diagnosis



Trigeminal Neuralgia-pain does not last for longer than 2 minutes and is often unilateral



Temporomandibular Pain-presents with clicking of TMJ and limited range of motion of the jaw



Dental Pain (examples: caries, cracked tooth, dental trauma, abscess): This pain is more localized; pain with hot and cold foods, eating, check for visible pathology on oral exam



Myofascial Pain (focal regional muscle pain), trigger points

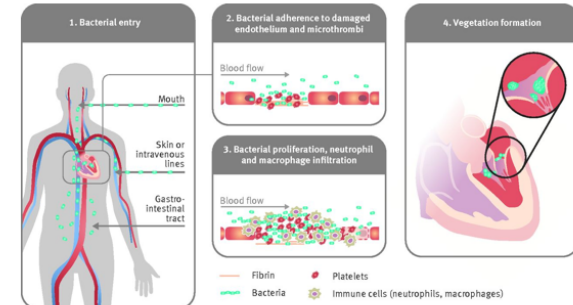


Sinusitis-persistence of pain and associated nasal symptoms

## S. Viridans and Subacute Bacterial Endocarditis

Number one pathogenic cause of infective endocarditis of dental origin

- Two common strains found in oral flora:
  - S. Sanguis and S. Mutans



Reproduced with permission from: BMJ Publishing Group Ltd. BMJ 2017;358:j3942 Figure 1

# Evaluation



Q11. Please indicate the key OH topics that are covered for all learners in your curriculum (**CHECK YES FOR ALL THAT APPLY**):

- Smiles for Life examples
  - OSCEs
- CIPCOH tool

	Yes	No
<b>OH Epidemiology</b> (e.g., rate of caries for children or % of seniors with urgent oral needs) (?)	<input type="radio"/>	<input type="radio"/>
<b>Social Determinants as they relate to OH</b> (e.g., transportation issues affecting access to dental care) (?)	<input type="radio"/>	<input type="radio"/>
<b>Oral Anatomy</b> (e.g., covering teeth, gingiva, tongue and other oral structures) (?)	<input type="radio"/>	<input type="radio"/>
<b>Oral Pathology</b> (e.g., oral lesions such as caries, thrush and oral ulcers) (?)	<input type="radio"/>	<input type="radio"/>
<b>Oral-Systemic Relationships</b> (e.g., effect of periodontitis on diabetes or how inhaled steroids can cause oral thrush) (?)	<input type="radio"/>	<input type="radio"/>
<b>Initial OH Management</b> (e.g., appropriate antibiotic and pain management for a dental abscess) (?)	<input type="radio"/>	<input type="radio"/>
<b>Documentation of OH encounters</b> (e.g., documenting the OH exam in a chart) (?)	<input type="radio"/>	<input type="radio"/>
<b>Referrals</b> (e.g., knowing which dental provider to refer to and initiating the referral) (?)	<input type="radio"/>	<input type="radio"/>

Course 3:

## Adult Oral Health and Disease

Smiles for Life  
A national oral health curriculum

Image: Blend Images/Punchstock

◀ BACK NEXT ▶

### What Would You Do?

**Instructions:** For each image click the button to reveal both the diagnosis and the proper treatment.

Brad Neville DDS

What is the diagnosis?

What would you do?

Brad Neville DDS

What is the diagnosis?

What would you do?

Joanna Douglass BDS DDS

What is the diagnosis?

What would you do?

Joanna Douglass BDS DDS

What is the diagnosis?

What would you do?

SAVE & CLOSE

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## Smiles for Life

A national oral health curriculum

Home Continuing Ed

Practice Tools Patient Education Publications

Smiles for Life Curriculum Integration Tool-Kit Oral Health Curriculum Integration M

Following are examples of organizations who provide educators examples of strategic oral health education:

- University of Massachusetts
- Metropolitan State University
- Northeast Ohio Medical University
- Oregon Health and Science University
- Texas A&M University
- Tufts University
- Wichita State University

# Thank You!

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