

# ***Want to Teach Oral Health Topics – Here's How!***

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# Disclosure

- All project team members, have no relationships to disclose.
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# Objectives

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

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



# CIPCOH

Center for Integration of  
Primary Care and Oral Health



Christine Riedy, PhD, MPH (Lead PI); Russ Phillips, MD; Hugh Silk, MD, MPH (Co-PIs)

# Year 1 of 5 – National Surveys - Methodology

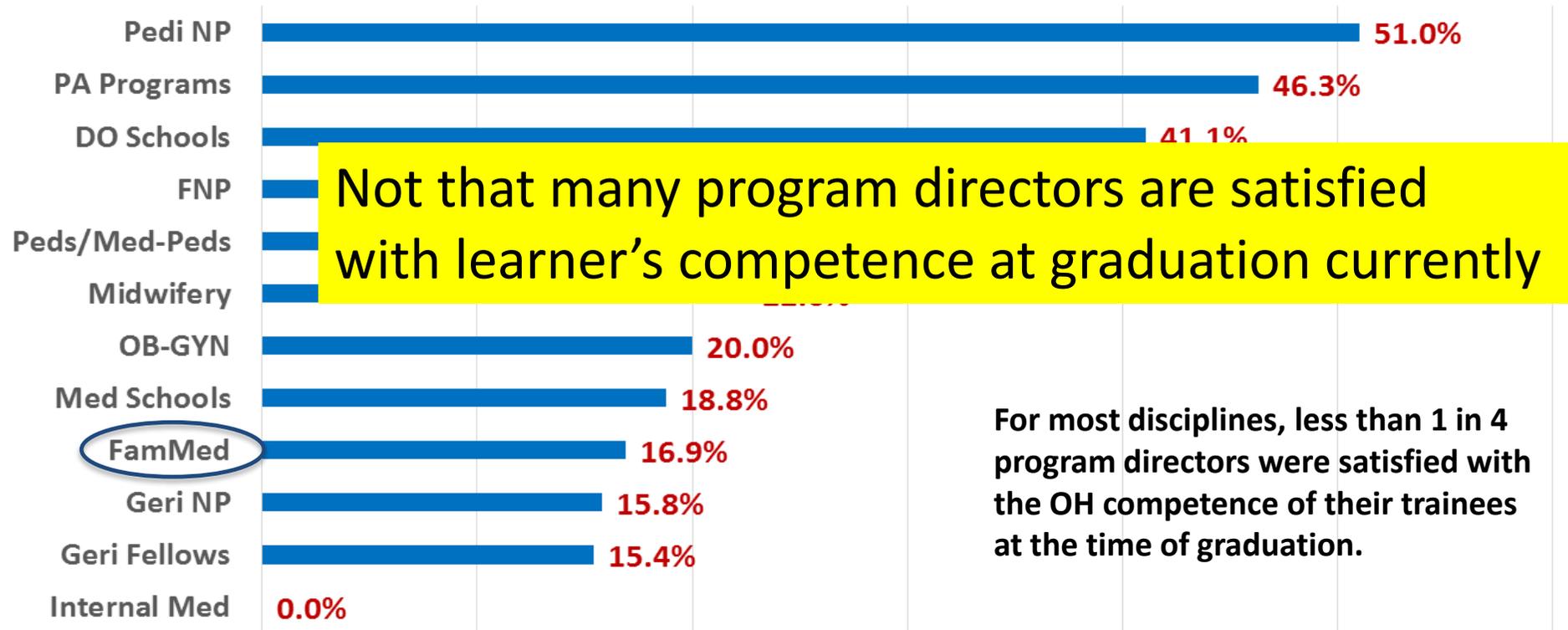
- Electronic surveys were distributed nationwide to 13 primary care disciplines
- Analyses were conducted with programs that had at least a 40% response rate (10 of 13 disciplines)

# 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
- 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.” – Fam Med Res Dir

# 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!

# Years 3 and 4 (of 5) Project – Delphi Group

- Developed an evaluation tool for programs to assess their oral health curriculum within a primary care training program
- Delphi group – structured communication technique; relying on an expert panel to come to a consensus
- Identified champions of integrating oral health in primary care training (some previous Year 1 survey participants and/or Year 2 interview participants)
- Multidisciplinary group from across the country; served as an advisory group for creating and refining the evaluation tool
- Met virtually three times between November 2018 and March 2019, providing materials to review before each meeting
- Piloted Internet-based tool with scoring algorithm; revised as needed
- Currently validating tool with 24 programs (2 from each of 12 disciplines; 1-hour interview) to verify teaching and evaluation OH curriculum materials to tool responses; will refine as needed

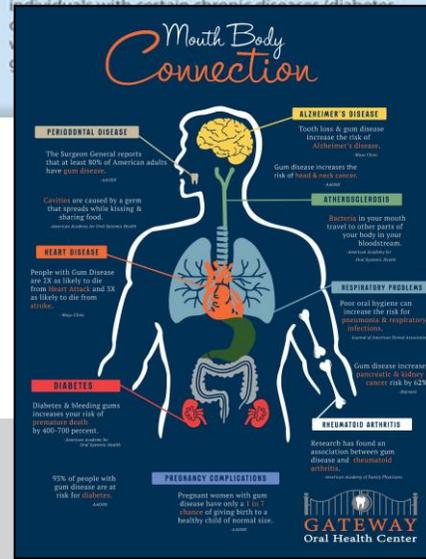
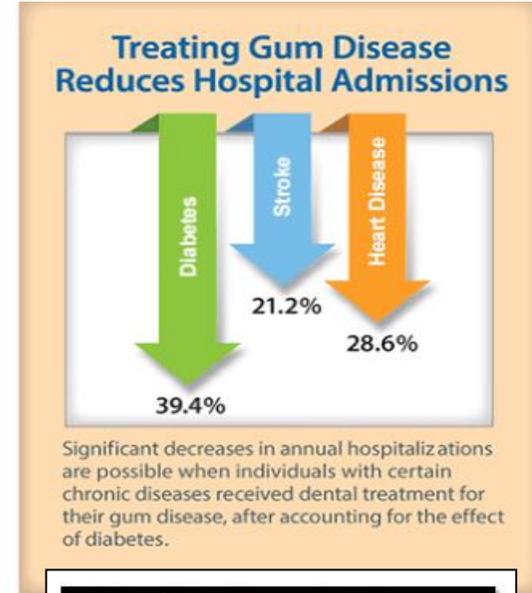
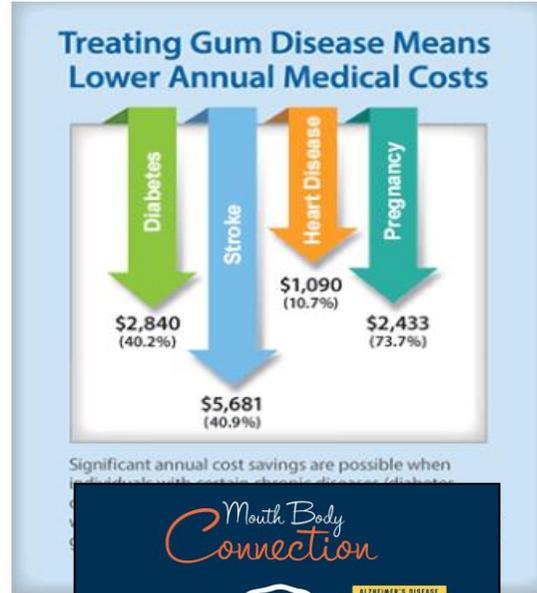
# Champion Grooming

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



# Leadership Influencing

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



# Finding Local Resources



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

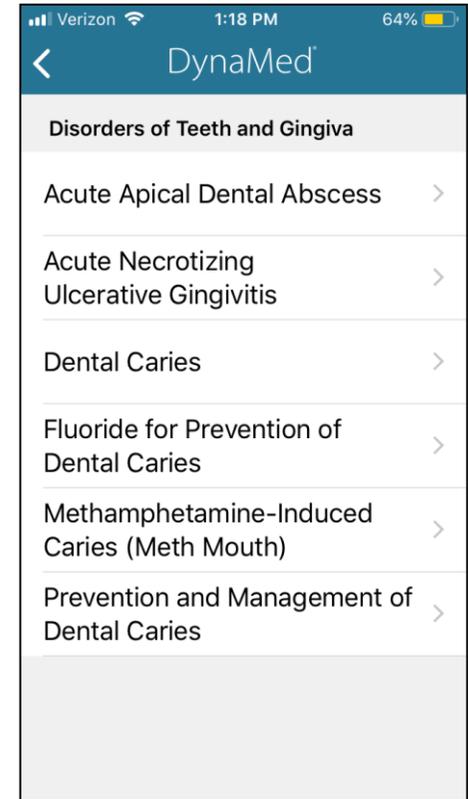
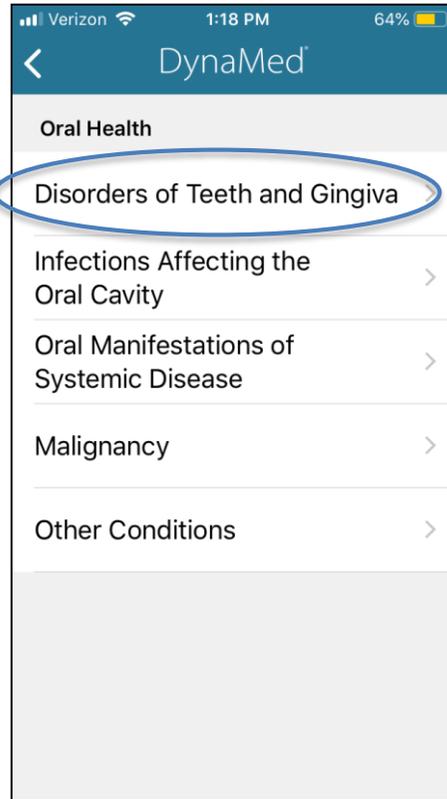


# Promoting National Resources

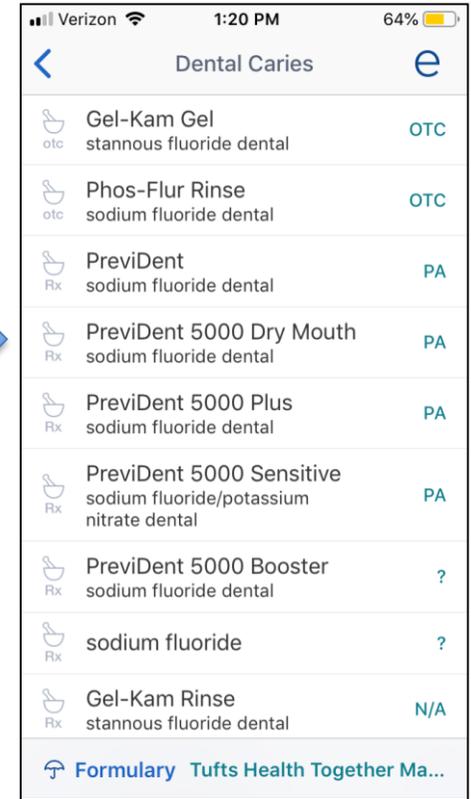
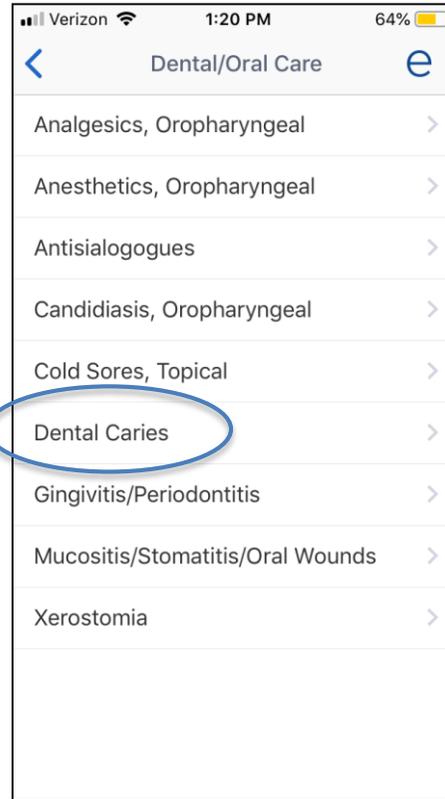
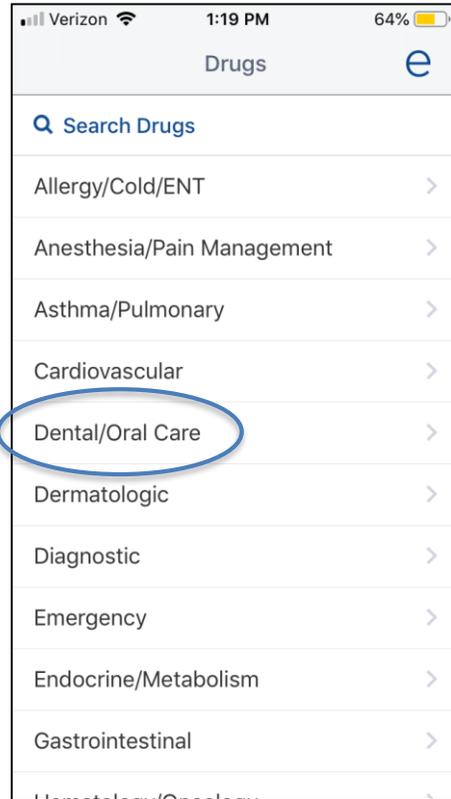
- Smiles For Life
  - Examples on site
- AAP – PACT
- MedEdPortal
- prenatal Oral Health Program (pOHP)
- Tiny Teeth - AAP

The image displays the Smiles for Life website and a mobile app interface. The website header includes the title "Smiles for Life: A national oral health curriculum" and a navigation menu with links for Home, Continuing Education, State Prevention Programs, Resources, About Us, and Contact Us. Below the header, there is a "Welcome" message and a section titled "Smiles for Life: A National Oral Health Curriculum 3rd edition". The main content area features two large images: one showing healthcare professionals in a clinical setting and another showing a speaker addressing an audience. Below these images are buttons for "LEARN ONLINE" and "CURRICULUM". A video player is visible with the title "Answering the Call: Joinin...". At the bottom of the website, there are logos for "STFM SOCIETY OF TEACHERS OF FAMILY MEDICINE" and "GAPN Gerontological Practitioner Nurses". The mobile app interface, shown in the foreground, displays the same "Smiles for Life" title and a list of menu items: "Diagnostic Modules", "Risk Assessment Tool", "Photo Gallery", and "About This App".

# Other Resources - DynaMed



# Other Resources - Epocrates



# USMLE Step 1 Review – Oral Health

The screenshot shows a YouTube video player interface. The main video area displays a title card with the text "Oral Health for USMLE Step One Part 2: Oral Lesions" and a photograph of a female doctor examining a patient's mouth. Below the photo, text identifies the presenter as Olivia Nuelle, a medical school class of 2022 at the University of Massachusetts Medical School, with a faculty adviser, Hugh Silk, MD. The video player includes a progress bar at 0:01 / 10:07 and various control icons. To the right, a playlist titled "12DaysinMarch, Oral Health" by Howard Sachs is visible, listing six parts of the series with their respective durations.

**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](mailto:Howard@12DaysinMarch)  
[www.12DaysinMarch.com](http://www.12DaysinMarch.com)*

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

12DaysinMarch, Oral Health Series, Part 1: Oral Anatomy for Step One  
12DaysinMarch, Oral Health Series, Part 2a: Oral Lesions (Viral, Bacterial) for Step One  
12DaysinMarch, Oral Health Series, Part 2b: Oral Lesions (Fungal, ...)  
12DaysinMarch, Oral Health Series, Part 2c: Oral Lesions (Autoimmune, ...)  
12DaysinMarch, Oral Health Series, Part 2d: Oral Lesions (Neoplasia, ...)  
12DaysinMarch, Oral Health Series, Part 3a: Oral Pathology (Congenital, ...)  
12DaysinMarch, Oral Health Series, Part 2b: Oral Lesions (Dental)

# Funding – Local and National

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



# Evaluation

- Smiles for Life examples
  - OSCEs
- CIPCOH tool

Course 3: **Adult Oral Health and Disease**  A national oral health curriculum

Image: Blend Images/Punchstock

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**What Would You Do?**

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

	<input type="checkbox"/> What is the diagnosis? <input type="checkbox"/> What would you do?		<input type="checkbox"/> What is the diagnosis? <input type="checkbox"/> What would you do?
Brad Neville DDS		Brad Neville DDS	
	<input type="checkbox"/> What is the diagnosis? <input type="checkbox"/> What would you do?		<input type="checkbox"/> What is the diagnosis? <input type="checkbox"/> What would you do?
Joanna Douglass BDS DDS		Joanna Douglass BDS DDS	

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 **CIPCOH**  
Center for Integration of Primary Care and Oral Health

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

	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"/>

**Smiles for Life**  
A national oral health curriculum

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Smiles for Life Curriculum Integration Tool-Kit **Oral Health Curriculum Integration Examples** Interprofessional Education (IPE) and Practice Resources

**Oral Health Curriculum Integration Models**

Following are examples of organizations who have integrated oral health topics into their professional student curriculum in innovative ways. These models provide educators examples of strategic oral health integration in a spiral fashion across the learning trajectory.

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

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PHYSICIAN ASSISTANT EDUCATION ASSOCIATION

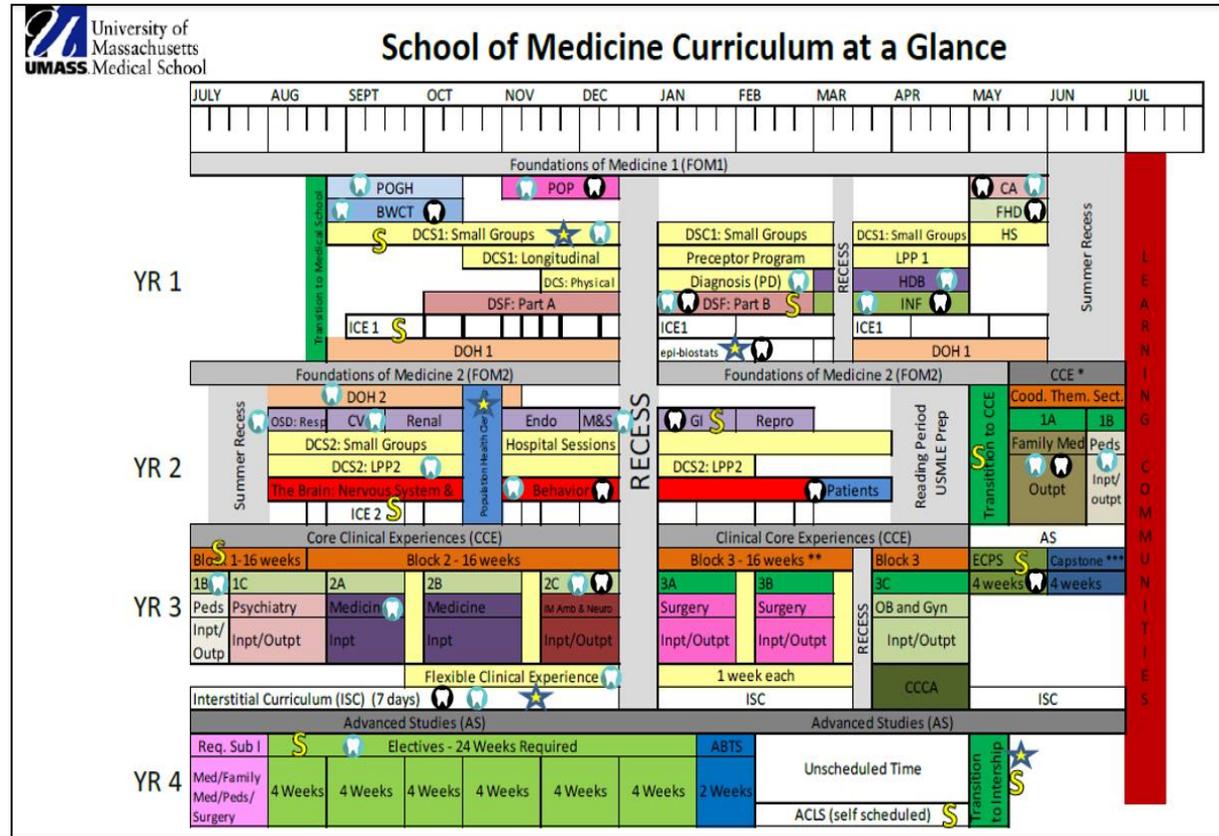
 **AAPA**

 **adha** American Dental Hygienists' Association

COURSES COMPLETED FOR CE CREDIT: 361020

# 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)

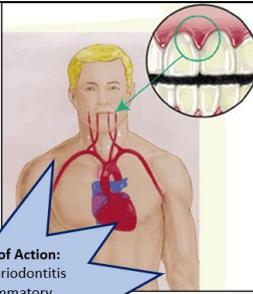


## Another risk factor? Periodontitis and CVD

- 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 Ind 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



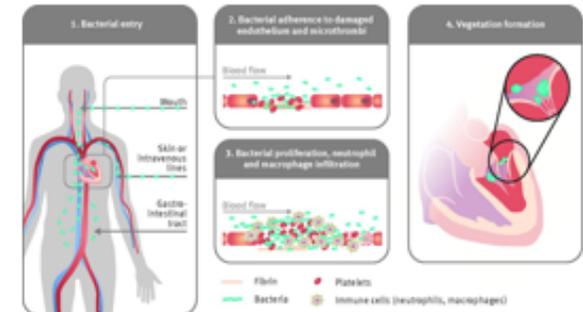
Sinusitis-persistence of pain and associated nasal symptoms

## 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



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# Thank You!

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