

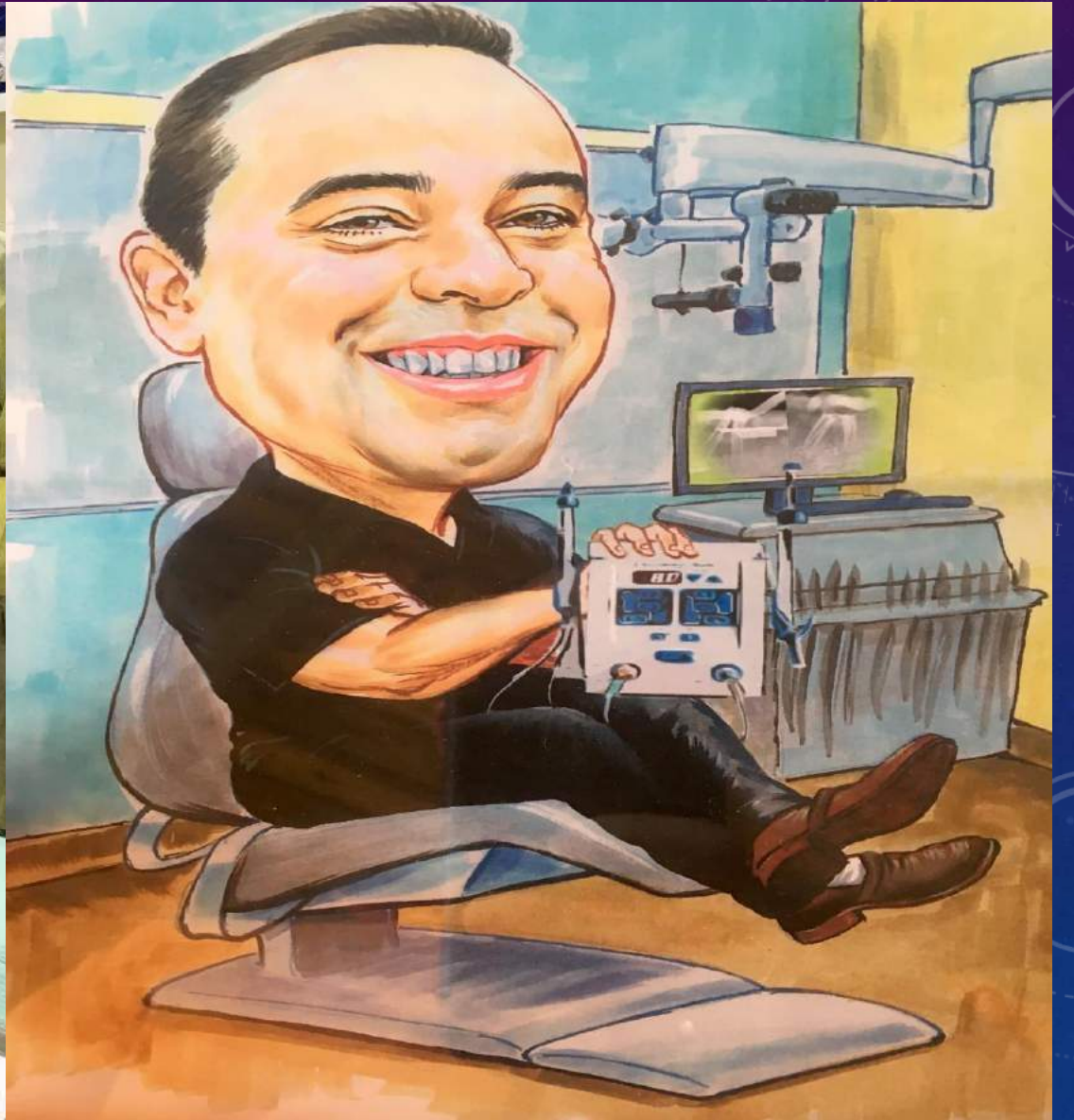
**INTEGRATING DENTISTRY INTO OVERALL
HEALTH CARE:**
YOU ARE NOT HEALTHY WITHOUT GOOD ORAL HEALTH

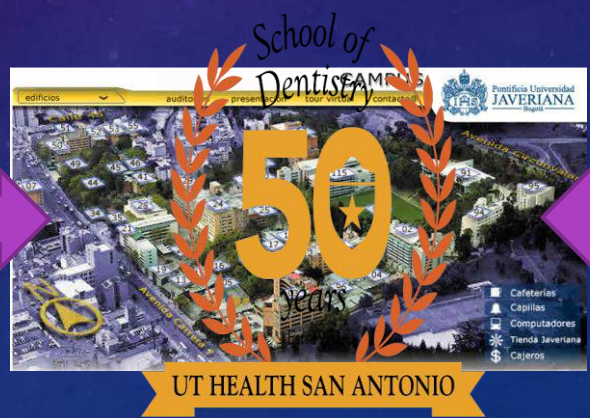
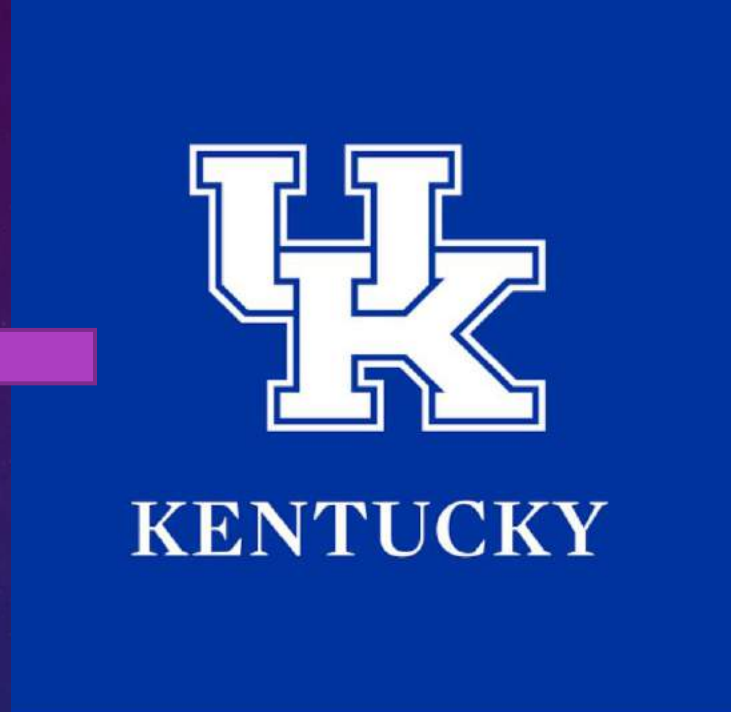
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WHAT IS HEALTH CARE

- Primary **health care** has been defined by the World **Health Organization (WHO)** as essential **health care** based on practical, scientifically sound, and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain.

WHAT IS ORAL HEALTH

- A fundamental component of health, physical and mental well being
- A multi-faceted and include the ability to speak, smile, smell, taste, touch, chew, swallow and convey a range of emotions through facial expressions with confidence and without pain, discomfort and disease of the craniofacial complex.
- Exist along a continuum influenced by the values and attitudes of individuals and communities
- Reflects the physiological, social and psychological attributes that are essential to the quality of life.
- Is influenced by the individual's changing experiences, perceptions, expectations and the ability to adapt to circumstances



Oral Health = Overall Health





TEAMWORK
is what counts!



“...Medical students learning more about the mouth and dental students learning more about general health in school...then learning together in residencies that are designed for integrated care will make an enormous difference”.

Dr. Bruce Donoff

*Crimson Carpet, Achieving Quality and Value in
Healthcare through Integration, HSDM Leadership
Forum 2018*

Standard 2-20:

"Graduates **must** be competent in communicating and collaborating with other members of the health care team to facilitate the provision of health care."

Entrustable Professional Activities in Oral Health for Primary Care Providers Based on a Scoping Review

Kristen H. Goodell, Shenam Ticku, Sara B. Fazio, Christine A. Riedy

Abstract: Despite advances in oral health care, inequalities in oral health outcomes persist due to problems in access. With proper training, primary care providers can mitigate this inequality by providing oral health education, screening, and referral to advanced dental treatment. Diverging sets of oral health competencies and guidelines have been released or endorsed by multiple primary care disciplines. The aim of this study was to transform multiple sets of competencies into Entrustable Professional Activities (EPAs) for oral health integration into primary care training. A scoping review of the literature between January 2000 and December 2016 was conducted according to PRISMA methodology to identify all existing sets of competencies. The following primary care disciplines were included in the search: allopathic/osteopathic medical schools and residency programs in family medicine, internal medicine, and pediatrics; physician assistant programs; and nurse practitioner programs. Competencies were compared using the Health Resources and Services Administration Integration of Oral Health and Primary Care Practice competencies as the foundational set and translated into EPAs. The resulting EPAs were tested with a reactor panel. The scoping review produced 1,466 references, of which 114 were selected for full text review. Fourteen competencies were identified as being central to the integration of oral health into primary care. These were converted to seven EPAs for oral health integration into primary care and were mapped onto Accreditation Council for Graduate Medical Education residency competency domains as well to the Association of American Medical Colleges EPAs for graduating medical students. The resulting EPAs delineate the essential, observable work required of primary care providers to ensure that oral health is treated as a critical determinant of overall health.

**Assessment of the current status of
oral health integration including
core competencies and examination of
best practices and exemplary models
of training**

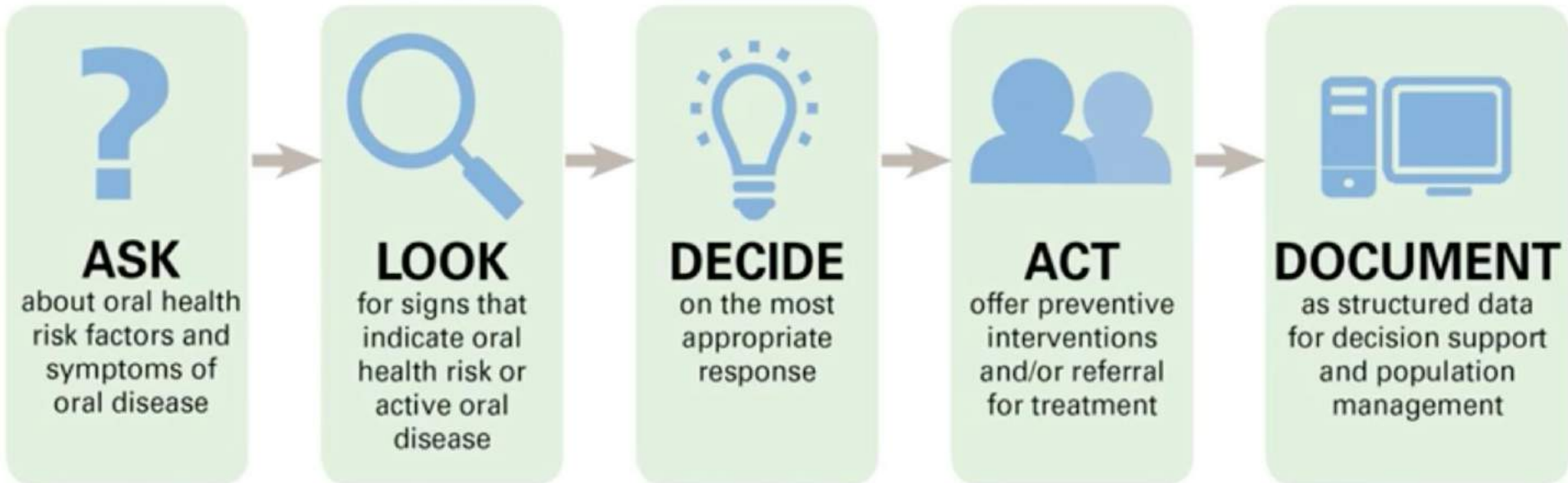
YOUR HEART AND LUNGS LOOK GOOD, TOO.



DENTAL VS. MEDICAL?

ORAL HEALTH DELIVERY FRAMEWORK

- 5 actions primary care teams can take to protect and promote their patient's oral health.
- Within the scope of practice for primary care; possible to implement in diverse practice settings



Doctors

Dentists

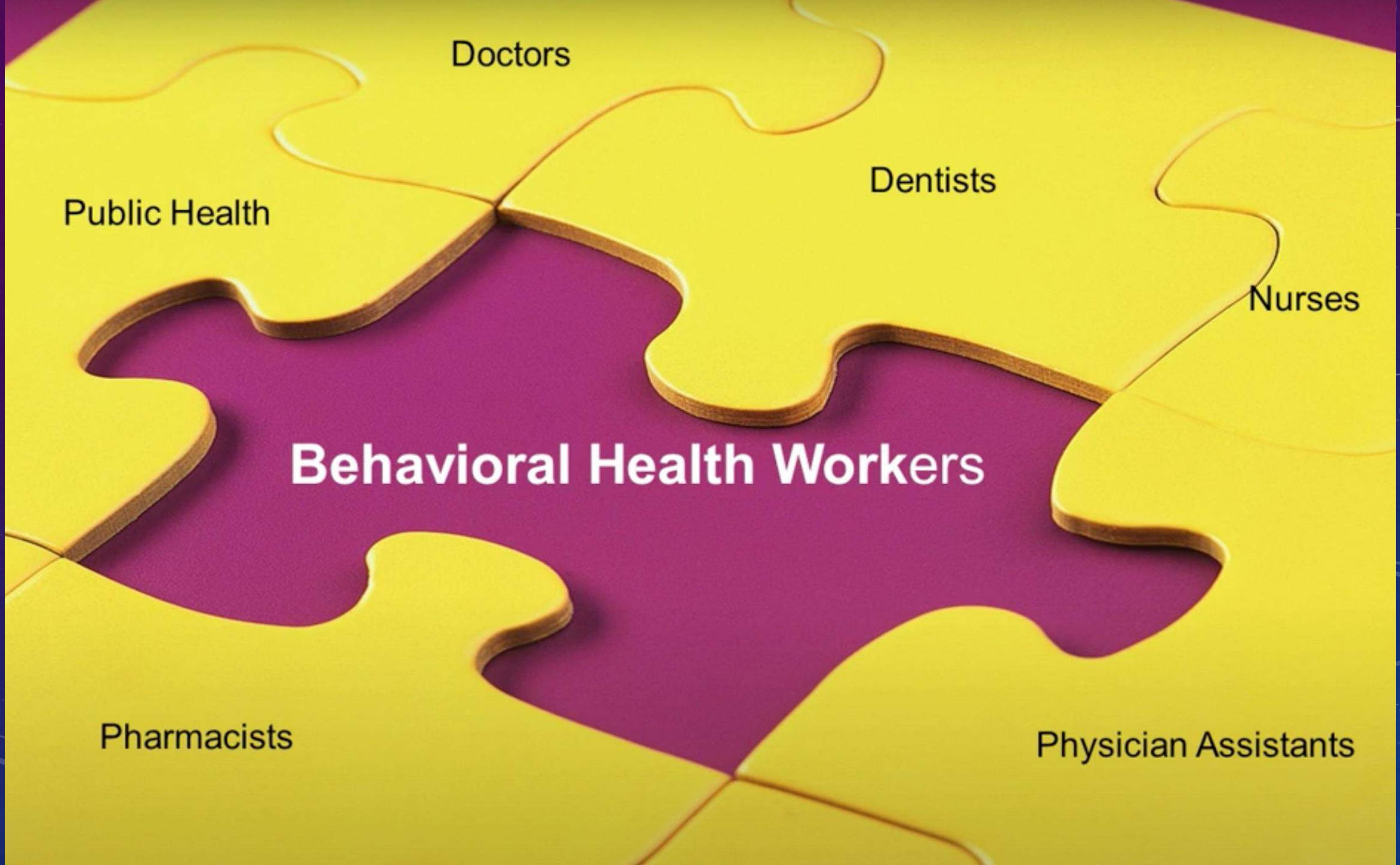
Nurses

Behavioral Health Workers

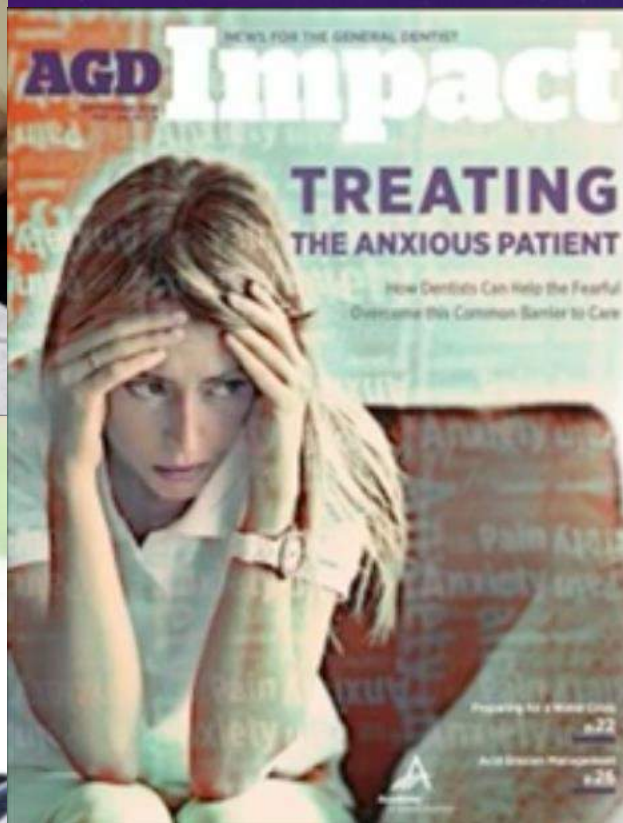
Public Health

Pharmacists

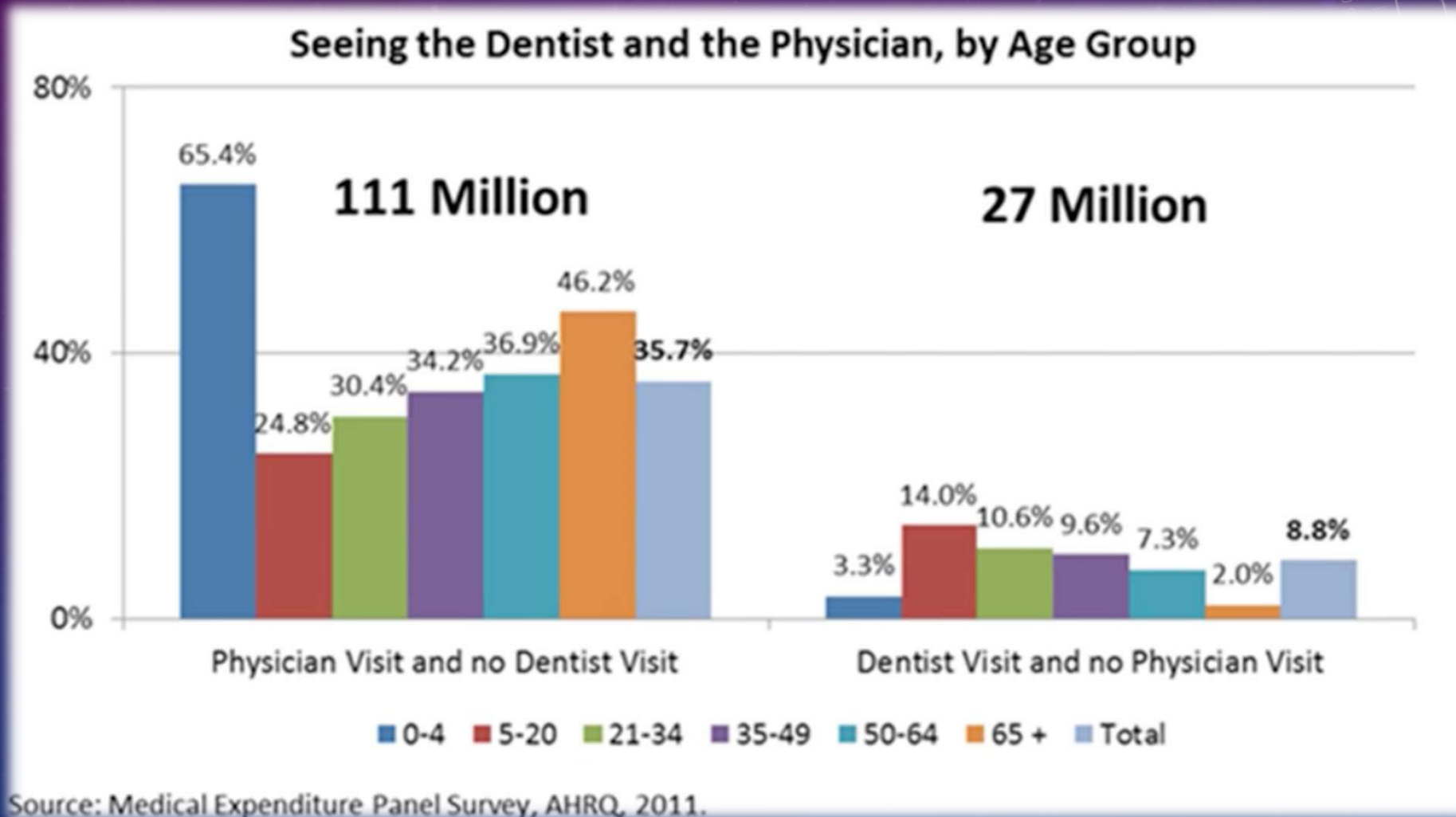
Physician Assistants



CASE EXAMPLES



MEDICINE AND DENTISTRY – SEPARATE SYSTEM

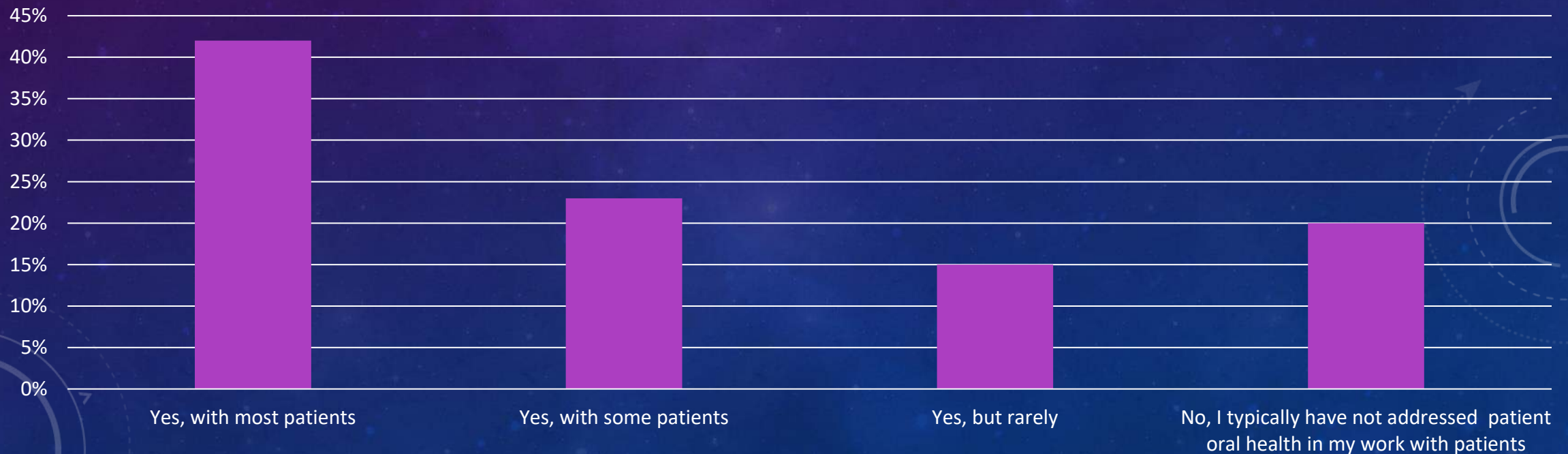


QUESTIONS TO PRIMARY CARE PROVIDERS

Do you consider oral health status when initially evaluating your patient's needs?

1. Yes, with most patients
2. Yes, with some patients
3. Yes, but rarely
4. No, I typically have not addressed patient oral health in my work with patients

Primary care providers



SURGEON GENERAL'S REPORT ON ORAL HEALTH

(2000)

- First ever Surgeon General's Report on Oral Health – Milestone in the history of oral health in America
- The report elaborates on the meaning of oral health and explains why oral health is essential to general health and well-being.



A screenshot of the National Institute of Dental and Craniofacial Research (NIDCR) website. The top navigation bar includes the NIH logo, the text 'National Institute of Dental and Craniofacial Research', a search box, and a language selector for 'Español'. Below the navigation bar are tabs for 'Health Info', 'Research', 'Grants & Funding', 'Careers & Training', 'News & Events', and 'About Us'. The 'Research' tab is selected. On the left side, there is a 'Data & Statistics' section with links for 'Research Conducted at NIDCR (Intramural)' and 'Research Funded by NIDCR (Extramural)'. The main content area shows a breadcrumb trail: 'Home > Research > Data & Statistics'. Below this, a large green link reads '2000 Surgeon General's Report on Oral Health in America'.

SURGEON GENERAL'S REPORT ON ORAL HEALTH

(2000)

- Oral health is essential to the general health and well-being of all Americans and can be achieved by all Americans.
- However, not all Americans are achieving the same degree of oral health. Despite the safe and effective means of maintaining oral health that have benefited most Americans over the past half century, many among us still experience needless pain and suffering, complications that devastate overall health and well-being, and financial and social costs that diminish the quality of life and burden American society.

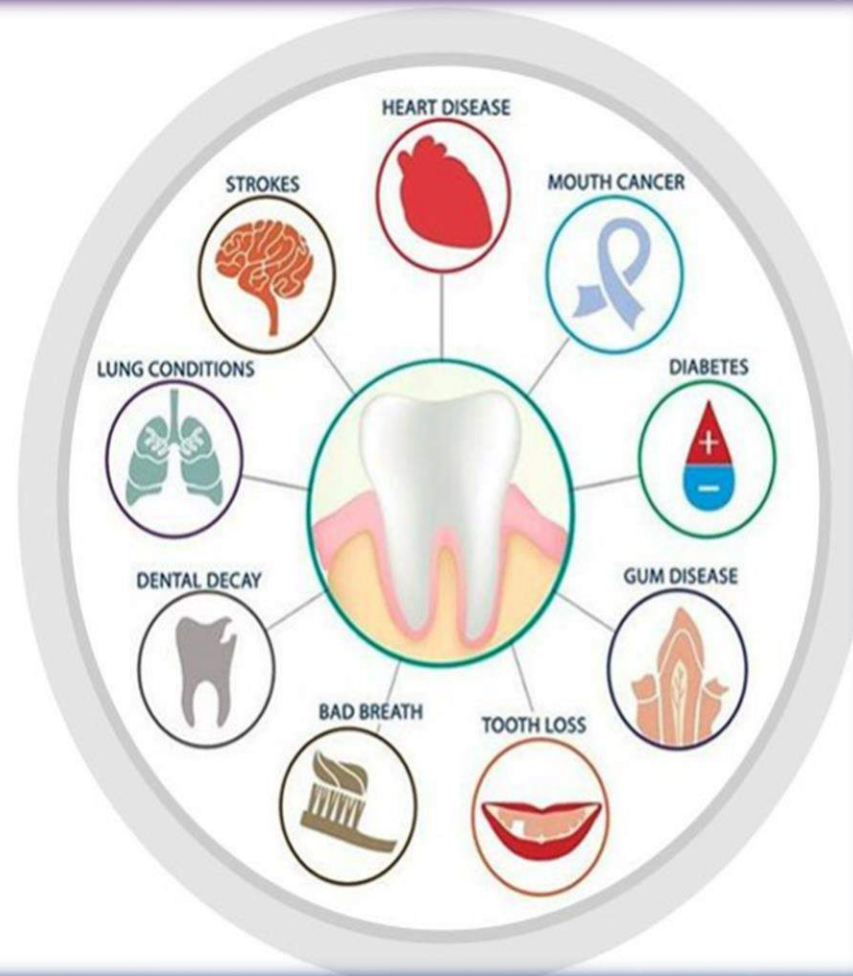
SURGEON GENERAL'S REPORT ON ORAL HEALTH

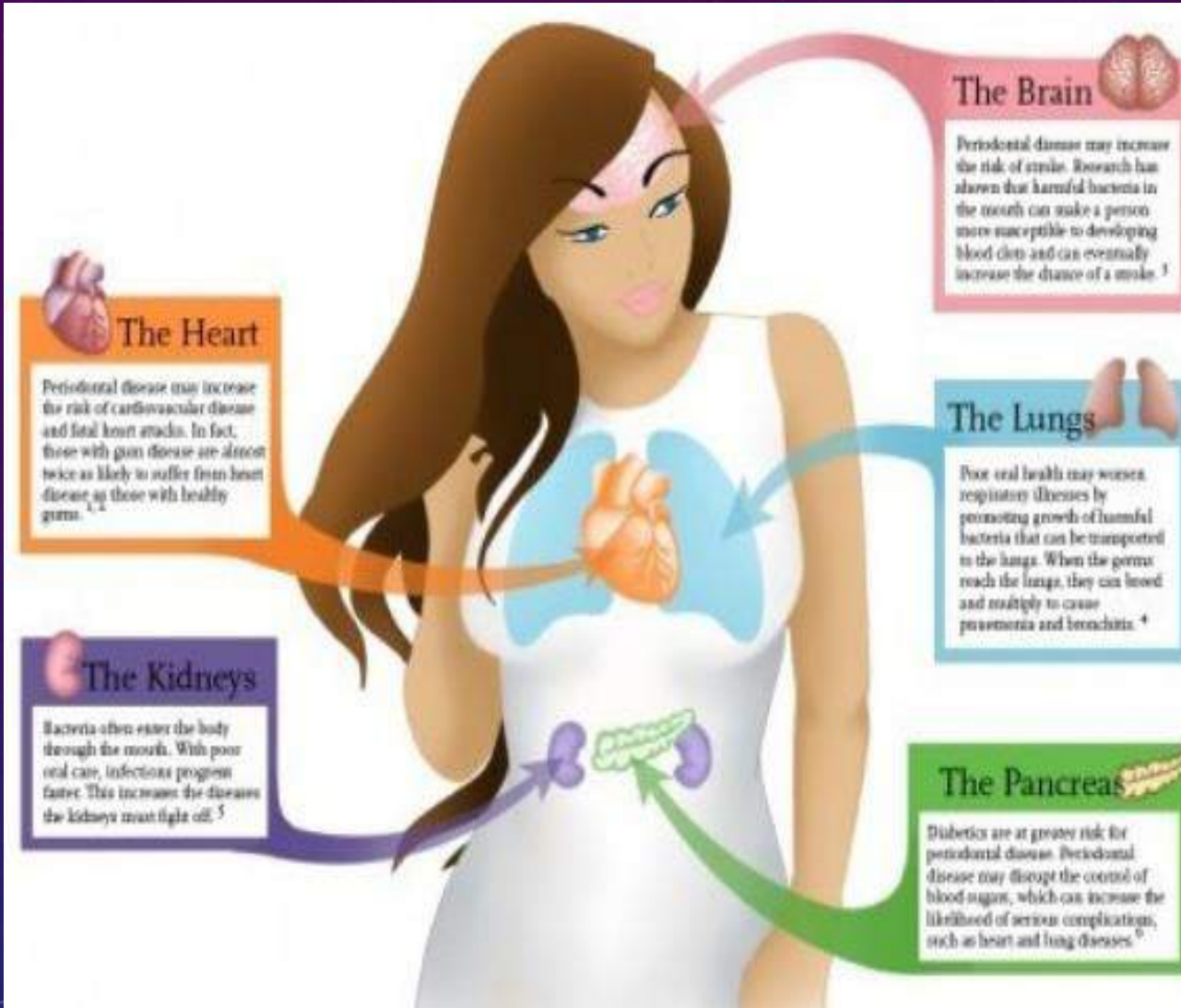
(2000)

- The mouth includes not only the teeth and the gums (gingiva) and their supporting tissues, but also the hard and soft palate, the mucosal lining of the mouth and throat, the tongue, the lips, the salivary glands, the chewing muscles, and the upper and lower jaws.
- Equally important are the branches of the nervous, immune, and vascular systems that animate, protect, and nourish the oral tissues, as well as provide connections to the brain and the rest of the body.

WHAT IS THE CONNECTION?

What is the
Oral Systemic?
Connection!



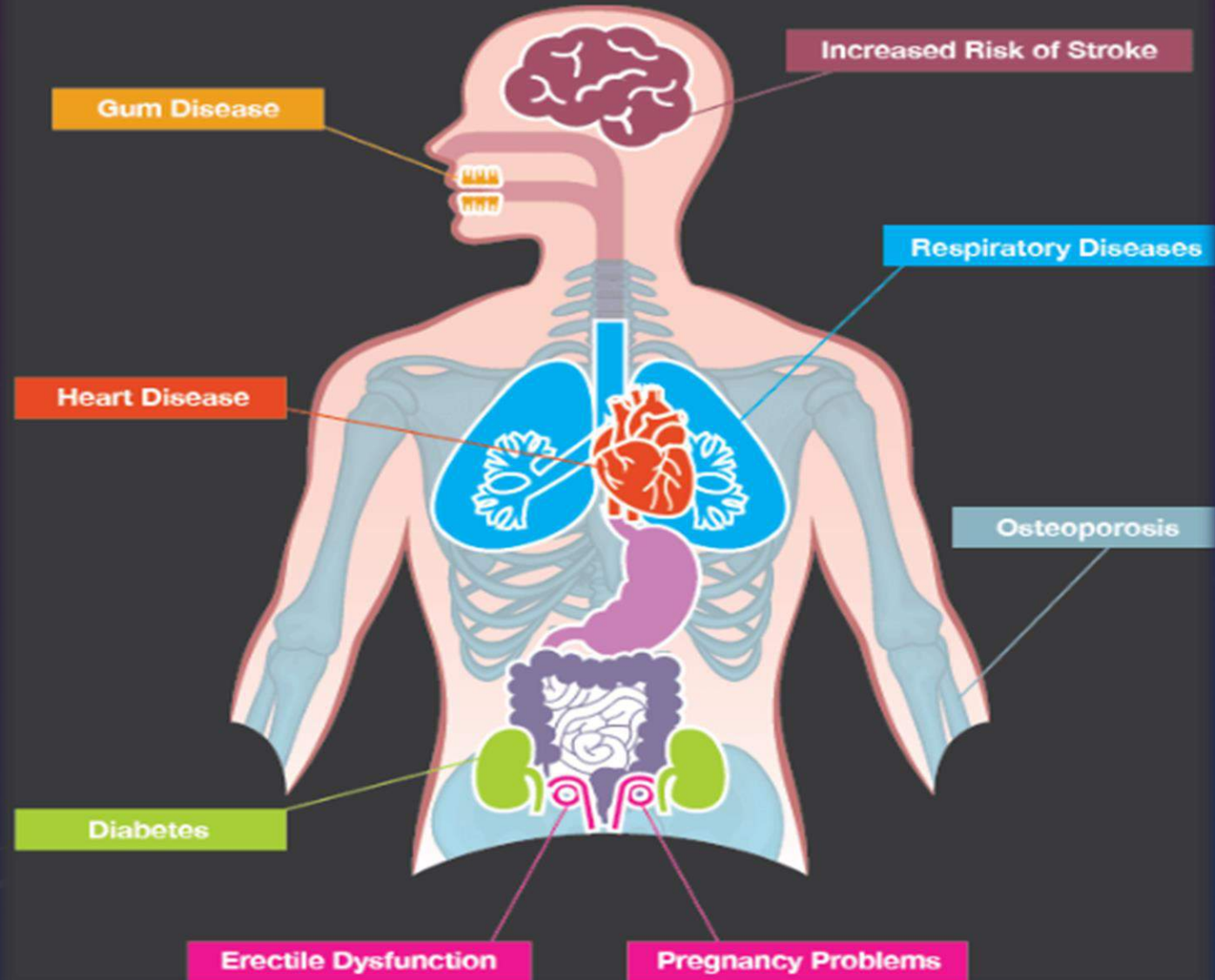


Heart – Periodontal disease may increase the risk of cardiovascular disease and fatal heart attacks. In fact, those with gum disease are almost twice as likely to suffer from heart disease as those with healthy gums

Brain- Periodontal disease may increase the risk of stroke. Research has shown the harmful bacteria in the mouth can make a person more susceptible to developing blood clots and can eventually increase the incidence of a stroke

The Connection Between Your Oral Health and Your Overall Health

Effects of Poor Dental Hygiene



- Pancreas- Diabetics are at a greater risk for periodontal disease. Periodontal disease may disrupt the control of blood sugars, which can increase the likelihood of serious complications, such as heart and lung diseases.
- Kidneys-Bacteria often enter the body through the mouth. With poor oral care, infections progress faster. This increases the disease the kidneys must fight off.
- Lungs – Poor oral health may worsen respiratory diseases by promoting growth of harmful bacteria that can be transported to the lungs. When the germs reach the lungs, they can breed and multiply to cause pneumonia and bronchitis

THE CHALLENGE



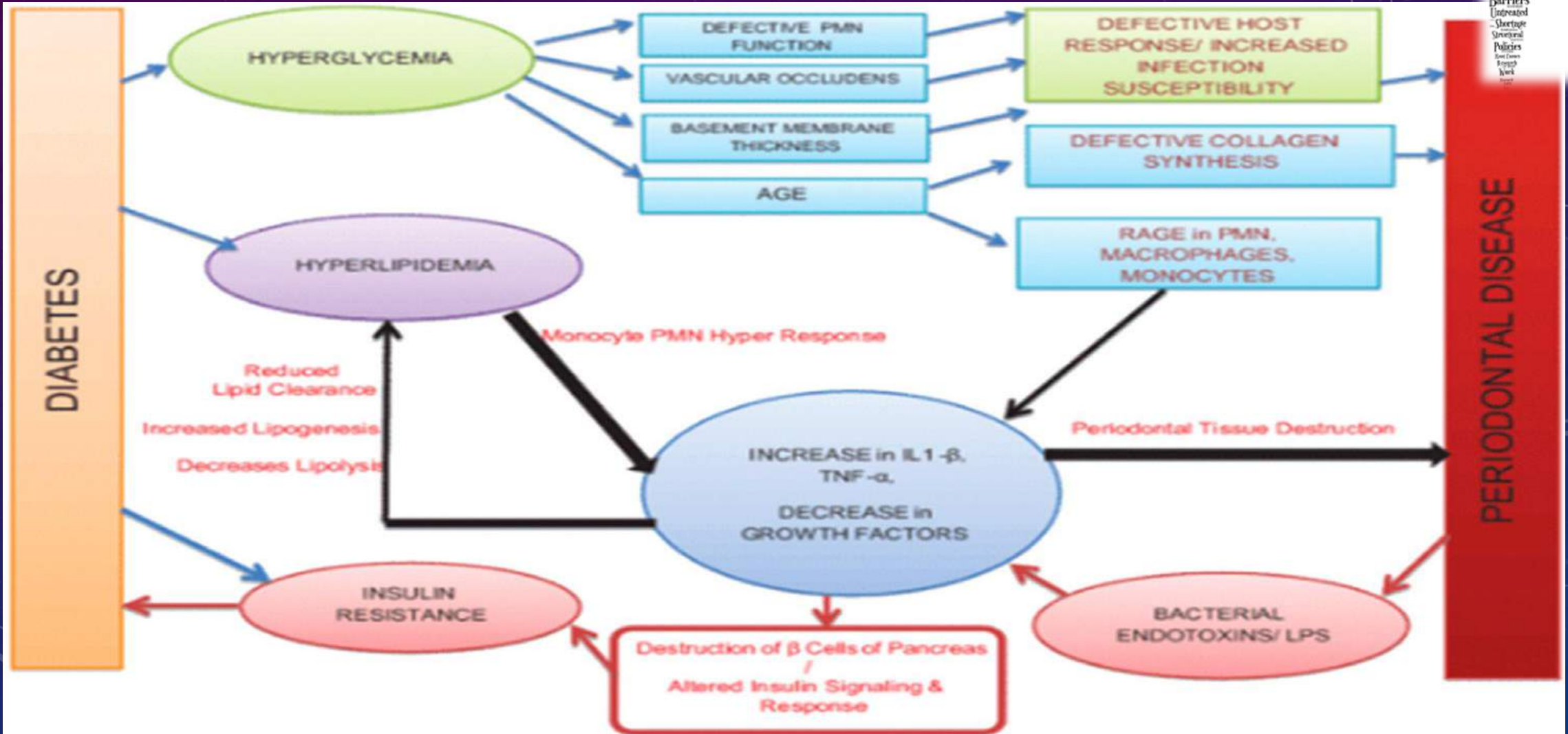
- The people who are at highest risk for dental disease have the greatest difficulty in accessing care (lack of access points, lack of insurance, out-of-pocket costs, etc.)
- The public health infrastructure for oral health is insufficient to address the needs of disadvantaged groups
- Integration of oral health into medical care expands the potential for high-risk individuals to have access to care that halts or even reverses dental disease, avoiding or reducing the need for expensive and complicated treatment

BIDIRECTIONAL RELATIONSHIP



- The bidirectional relationship among oral health and other diseases and conditions provides a strong rationale for a **bidirectional relationship between oral health care and primary care.**
- Example: Diabetes and Periodontitis

BIDIRECTIONAL RELATIONSHIP BETWEEN DIABETES AND PERIODONTITIS



EVIDENCE FOR INTEGRATION ORAL HEALTH INTO PRIMARY HEALTH CARE



Author and year Evidence for integration

- Sheiham and Watt 2005 Common risk factor approach.
- Hajizamani et al. 2012 Treatment of oral diseases takes lots of family time and expenditure.
- ◀ Kathryn et al. 2017 Bidirectional relationship.

BARRIERS IN INTEGRATION OF ORAL HEALTH INTO PRIMARY HEALTH CARE



- **Atchison et al. 2017**
 - Lack of integrated electronic health record prevents all health care providers from seeing a patient's common care plan and treatment status.
 - Multidisciplinary care team
 - Lack of communication, coordination and integration between medical and dental practice.
- **Suresh 2016**
 - Traditionally medical care and dental care have been two separate streams of health care services. Most of the treatment for lower strata in government hospital. No close collaboration among members of various health professionals and community support groups.

INNOVATIVE CARE MODELS



- Coordination where enhanced care by the medical provider includes basic preventive oral health services at the medical visit with a coordinated referral to an outside dentist.
- Dental hygiene services in the medical practice.
- Integration of dental hygienists within the medical care team with case coordination to a dentist for restorative needs
- Telehealth supported dental hygiene services are provided in the community.



BASIC PREVENTIVE ORAL HEALTH CARE IN THE MEDICAL HOME

- Infants, toddlers, and preschoolers at frequent and regular intervals
- The medical home is being leveraged to expand access to preventive oral health services for children. Basic preventive oral care includes the following:
 1. oral health risk assessment
 2. oral health anticipatory guidance
 3. fluoride varnish application
 4. dental referral
 5. prescribing fluoride supplements.

INTERPROFESSIONAL EDUCATION AND INTERPROFESSIONAL COLLABORATIVE PRACTICE



- Interprofessional Education: when 2 or more professions learn with, about and from each other to enable effective collaboration and improve health outcomes
- Interprofessional Collaborative Practice: when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, caregivers, and communities to deliver the highest quality of care across settings.

INTEGRATED CARE



2 Examples of integrated care:

- In dentistry can now test for blood glucose levels as there is a CDT code for that (CDT D0411, D0412).
- How physicians can apply fluoride varnish and do infant exams

“While good oral health is important to the well-being of all population groups, it is especially critical for PLWHA. Inadequate oral health care can undermine HIV treatment and diminish quality of life, yet many individuals living with HIV are not receiving the necessary oral health care that would optimize their treatment.”



Ryan White Part A and Oral Health



- Ryan White grant
- 3,000 per patient
- 150,000 for part B
- 150,000 for part D
- It is difficult to keep or follow patient / recall



What's Next...

- What could increase funding do?
 - Does more \$\$ = better treatment?
- How do we further integrate medical and dental?
- How do we better improve our partnerships?
- How do we better serve our patients?



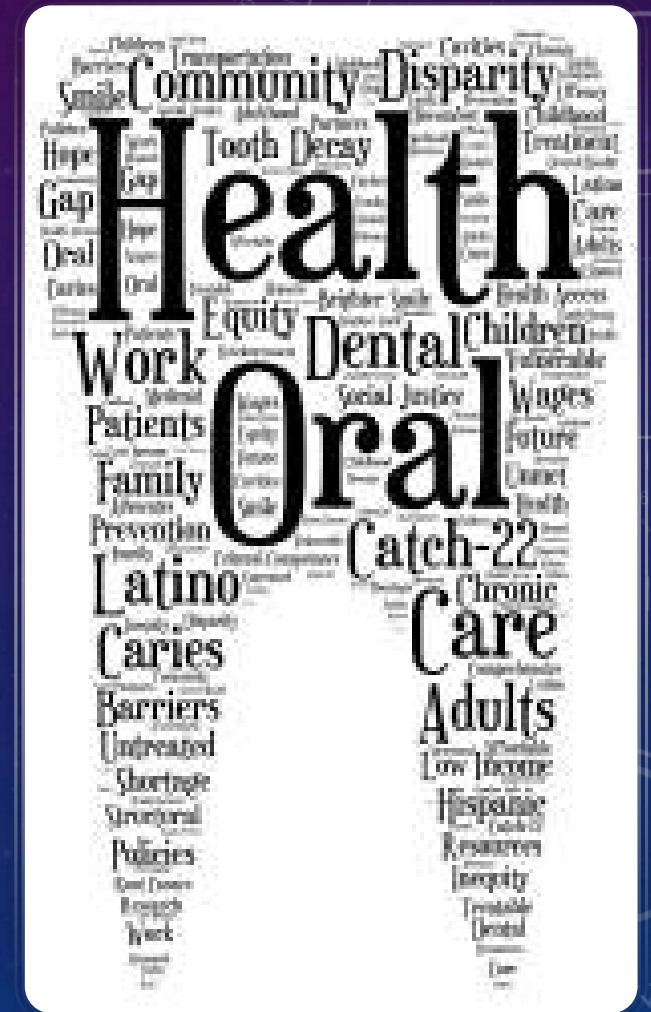
- Also, if we had diagnostic codes for dentistry as there are for medicine (ICD codes also not just CPT codes), perhaps dentists would be paid for more procedures such as diagnostic procedures as opposed to paying for mostly operative and surgical procedures.
- Dental providers should be trained to provide select components of annual wellness exams (e.g., screening and immunizations) and assist in chronic disease management (e.g., medication adherence, blood pressure measurement, INR monitoring).

INTER PROFESSIONAL EDUCATION



- IPE is essential. Once we have better interprofessional education in schools (Medicine and dentistry) we'll be better positioned to be able to speak to and hear from physicians and they will learn better how to refer to and speak with us.
- Perhaps if dental exams and care were incorporated into Diagnosis Related Groups (DRGs) we could be paid for seeing medical patients as a part of their overall inpatient care. Of course, that requires dentists to see inpatients in hospitals.
- Cross training and bidirectional service provision is essential for efficient resource use and to ensure that fewer patients are lost to follow up.

- Even with other barriers removed, lack of supportive information technology can stymie integration efforts.
- In fact, information technology limitations have been a principal reason for the exclusion of dental services from many accountable care organizations.
- Developing a shared health record is challenged by differences in clinical workflow and documentation priorities between dental and medical providers, and by the lack of interoperability between prevailing medical and dental computer systems.



CONCLUSIONS

- The past half century has seen the meaning of oral health evolve from a narrow focus on teeth and gingiva to the recognition that the mouth is the center of vital tissues and functions that are critical to total health and well-being across the life span.
- The mouth as a mirror of health or disease, as a sentinel or early warning system, as an accessible model for the study of other tissues and organs, and as a potential source of pathology affecting other systems and organs has been described in earlier chapters and provides the impetus for extensive future research.
- Past discoveries have enabled Americans today to enjoy far better oral health than their forebears a century ago. But the evidence that not all Americans have achieved the same level of oral health and well-being stands as a major challenge, one that demands the best efforts of public and private agencies and individuals.

QUICK TIPS

- Ask basic care questions during appointments to engage individuals and encourage preventive care. Questions can include if they experience any dental pain, if they have bleeding gums, or when was the last visited a dentist.
- Provide educational materials on the importance of regular oral care in the center's common areas and exam rooms.
- Know about your community's free and no cost clinics so, that you can make referrals, as appropriate, and visit donated dental services to find programs in your state



QUESTIONS

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