

From the Mouth to the Body and Mind: Whole Person Health

**Presented to the
National Dental Practice-Based Research Network (PBRN) National Meeting
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- National Dental – Practice-Based Research Network (D-PBRN)



The National Dental
Practice-Based
Research Network

Mission

"To improve oral health by conducting dental practice-based research and by serving dental professionals and their patients through education and collegiality."

DOOR at UFCD and ECU is 1 OF 10 PRIMED CENTERS ACROSS THE COUNTRY

Practice-Based Research Integrating
Multidisciplinary Experiences in Dental Schools
(PRIMED)

Development of Opportunities for
Research at Dental Schools (DOOR):
Future Academic Interdisciplinary
Workforce and Collaborators for the
National Dental Practice-Based
Research Network (PBRN)

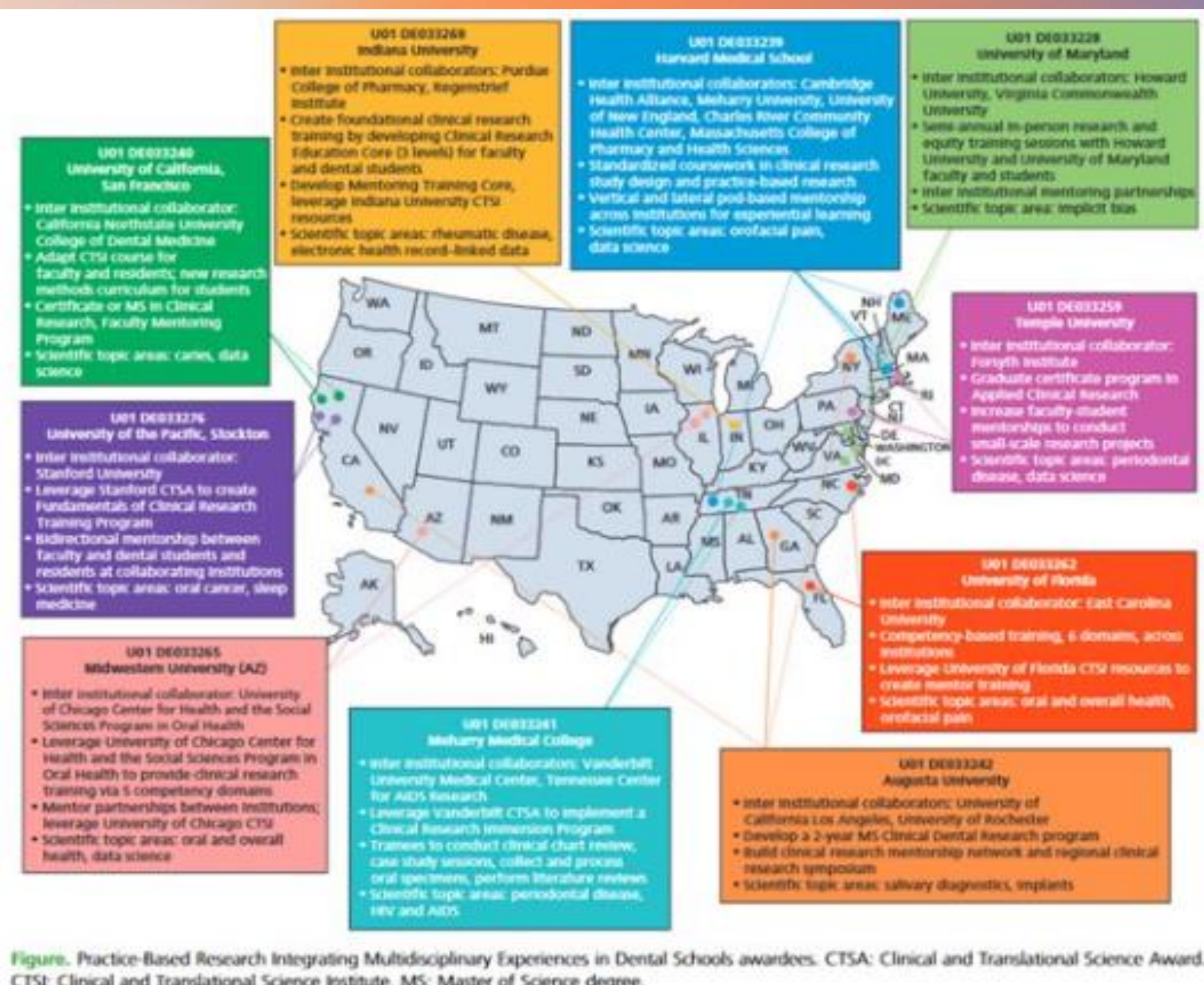


Figure. Practice-Based Research Integrating Multidisciplinary Experiences in Dental Schools awardees. CTSI: Clinical and Translational Science Award. CTSI: Clinical and Translational Science Institute. MS: Master of Science degree.



Case - A Dentist Addressing Whole Person Health

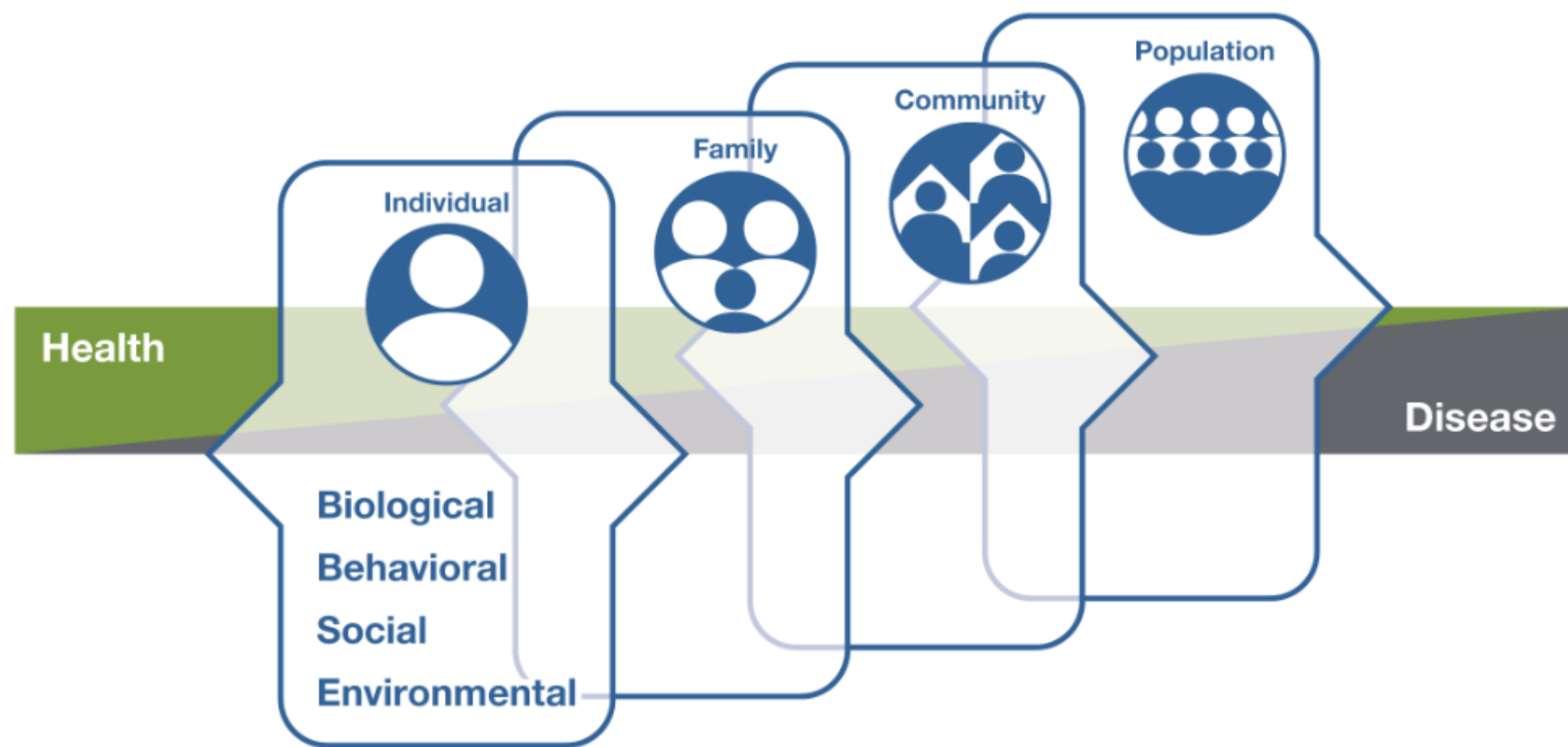
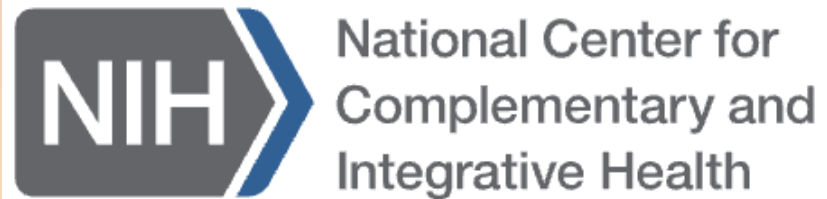


<https://www.facebook.com/groups/30531622410/posts/10160383423302411/>



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What is Whole Person Health?



“Whole person health involves looking at the whole person — not just separate organs or body systems — and considering multiple factors that promote either health or disease.”

Other Views of Whole Health

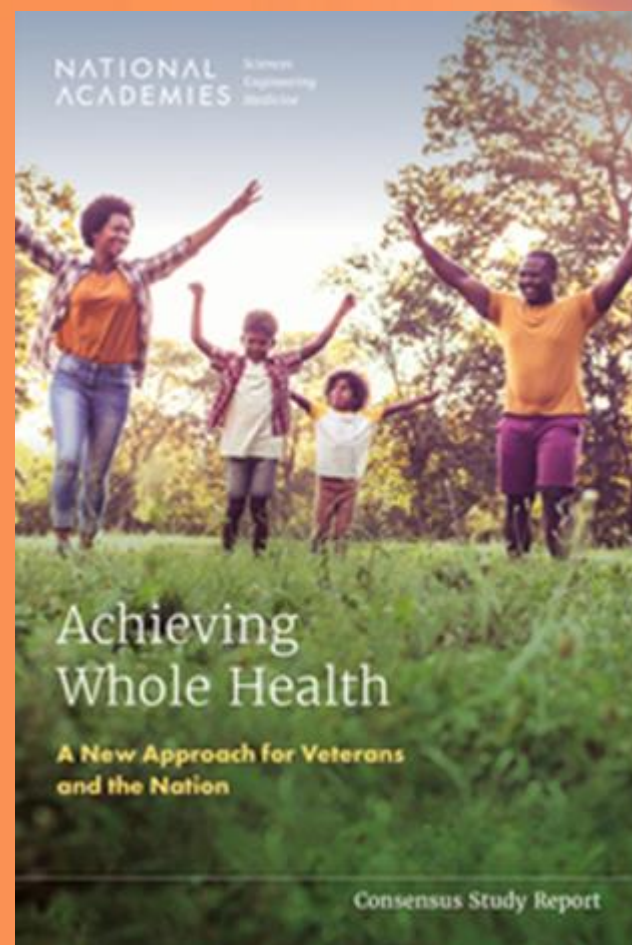
"What is Whole Health?"

Whole Health supports your health and well-being.

Whole Health centers around **what matters to you**, not what is the matter with you." (VA, 2026)



<https://www.va.gov/wholehealth/>



<https://www.nationalacademies.org/projects/HMD-HCS-21-03/publication/26854>

"Whole health is physical, spiritual, and socioeconomic well-being ..."
(National Academies, 2023)

MEDICAL CARE
Official Journal of the Medical Care Section, American Public Health Association

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MEASURING WHAT MATTERS SUPPLEMENT

Measuring What Matters Most

Considering the Well-Being of the Whole Person in Health Care

Bokhour, Barbara G. PhD^{*,†}; Vogt, Dawne PhD^{‡,§}; Kligler, Benjamin MD, MPH^{||,¶}

Author Information ⓘ

Medical Care 62(12):p S1-S3, December 2024. | DOI: 10.1097/MLR.0000000000002088 ©

OPEN

Traditionally, the US health care system has focused on improving disease outcomes for individuals and populations. Yet more recently, we have become aware that the absence of disease or disease-state symptoms does not always translate into benefits for individuals' broader lives. Thus, a shift is occurring where the relevant outcome is the extent to which the health care system improves individuals' Whole Health, well-being, and functioning in their daily lives. The National Academy of Sciences, Engineering, and Medicine defines Whole Health as "physical, behavioral, spiritual, and socioeconomic well-being as defined by individuals, families, and communities... [which] aligns with a person's life mission, aspiration, and purpose."¹

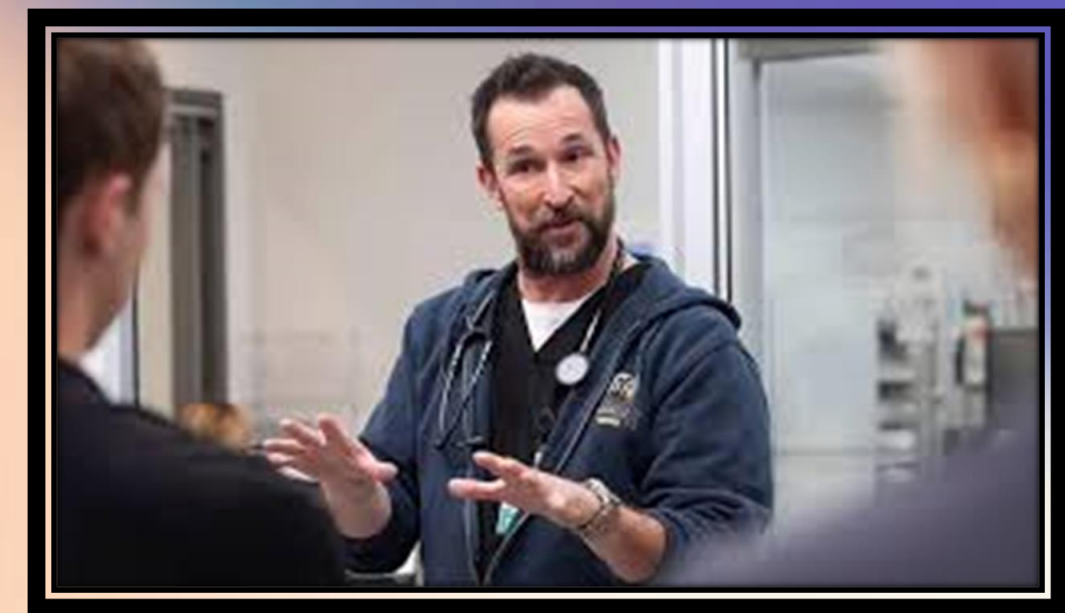
Outline
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Objectives

- **Describe models that integrate oral, systemic, and behavioral Health and how they promote conceptualizing whole person health in dental practice.**
- **Identify psychological and behavioral factors that influence oral health outcomes, such as stress, anxiety, depression, and health behaviors, and discuss strategies for integrating mental health–aware approaches into dental practice.**
- **Apply whole–person health principles in potential applications to clinical decision making by incorporating health history, psychosocial context, lifestyle factors, psychological characteristics (including strengths), and patient reported outcomes into individualized treatment planning.**

Outline

1. **Current Status of Healthcare Approaches to Whole Person Health**
2. **Whole Person Health and Dental-Medical-Behavioral Integration**
3. **Definitions and Models of Dental, Medical, and Behavioral Integration**
4. **Selected Examples of Dentists' Expansion to General Healthcare Roles**
5. **Levels and Types of Identification, Intervention, and Referral**
6. **Application Models in Dentistry – What is Feasible?**
7. **Challenges in Implementation – Where do you put your focus and time?**
8. **Imagining the future**
9. **Summary, Comments, Questions**



Page, Warrick. Noah Wyle. *The Hollywood Reporter*, 10 Apr. 2025

**“The Pitt”
(2025-Current)**

My Journey and Interdisciplinary Role in Dentistry

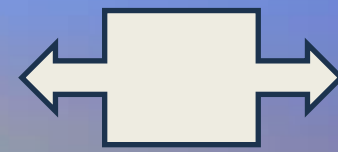


<https://www.12up.com/posts/video-white-sox-pregame-dugout-ritual-is-awesome-01dc5nrd7zhf>

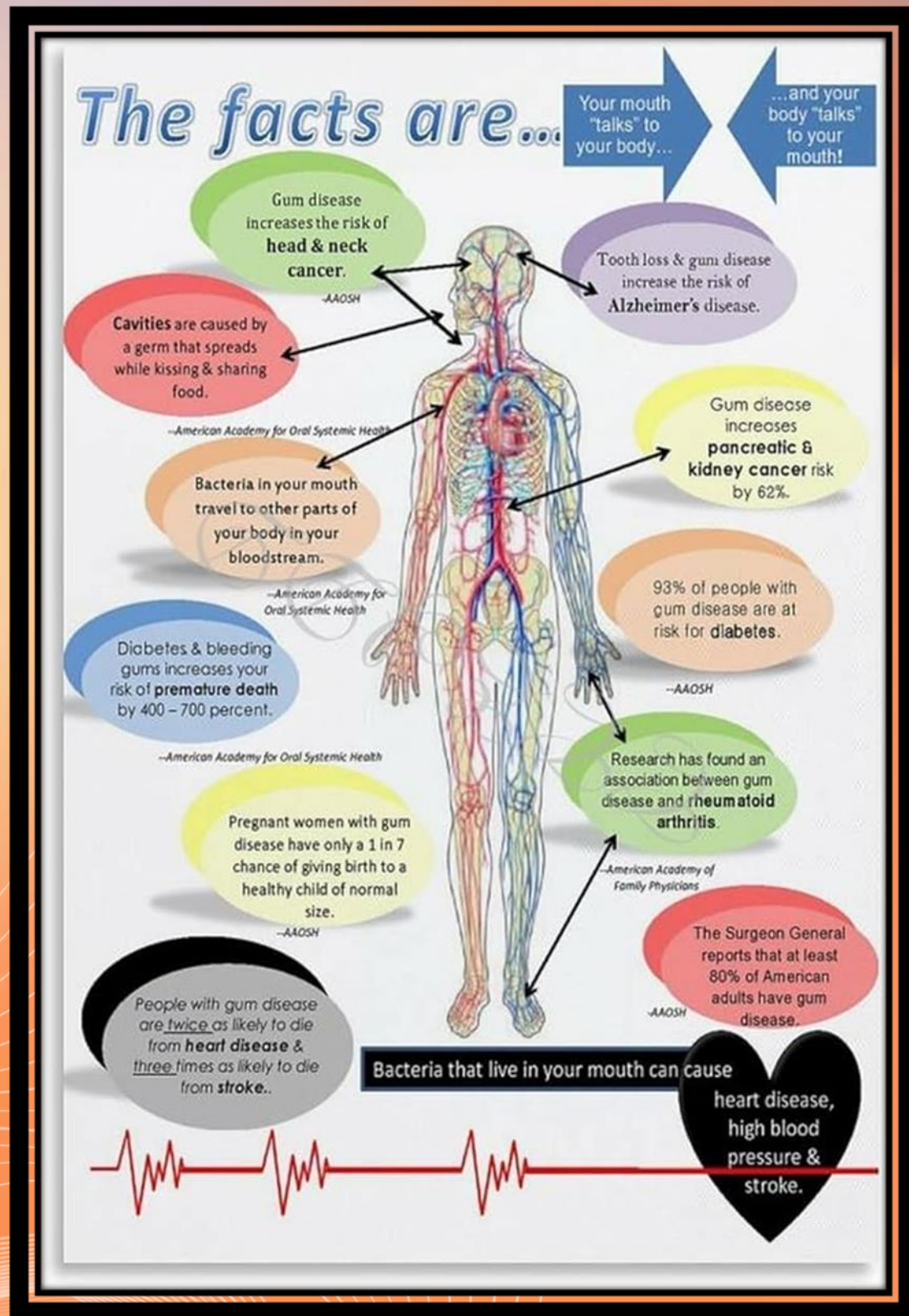


<https://www.mlb.com/whitesox/ballpark/information>

Oral Health



Systemic Health



Oral Health and Whole Body Health Image, Instagram

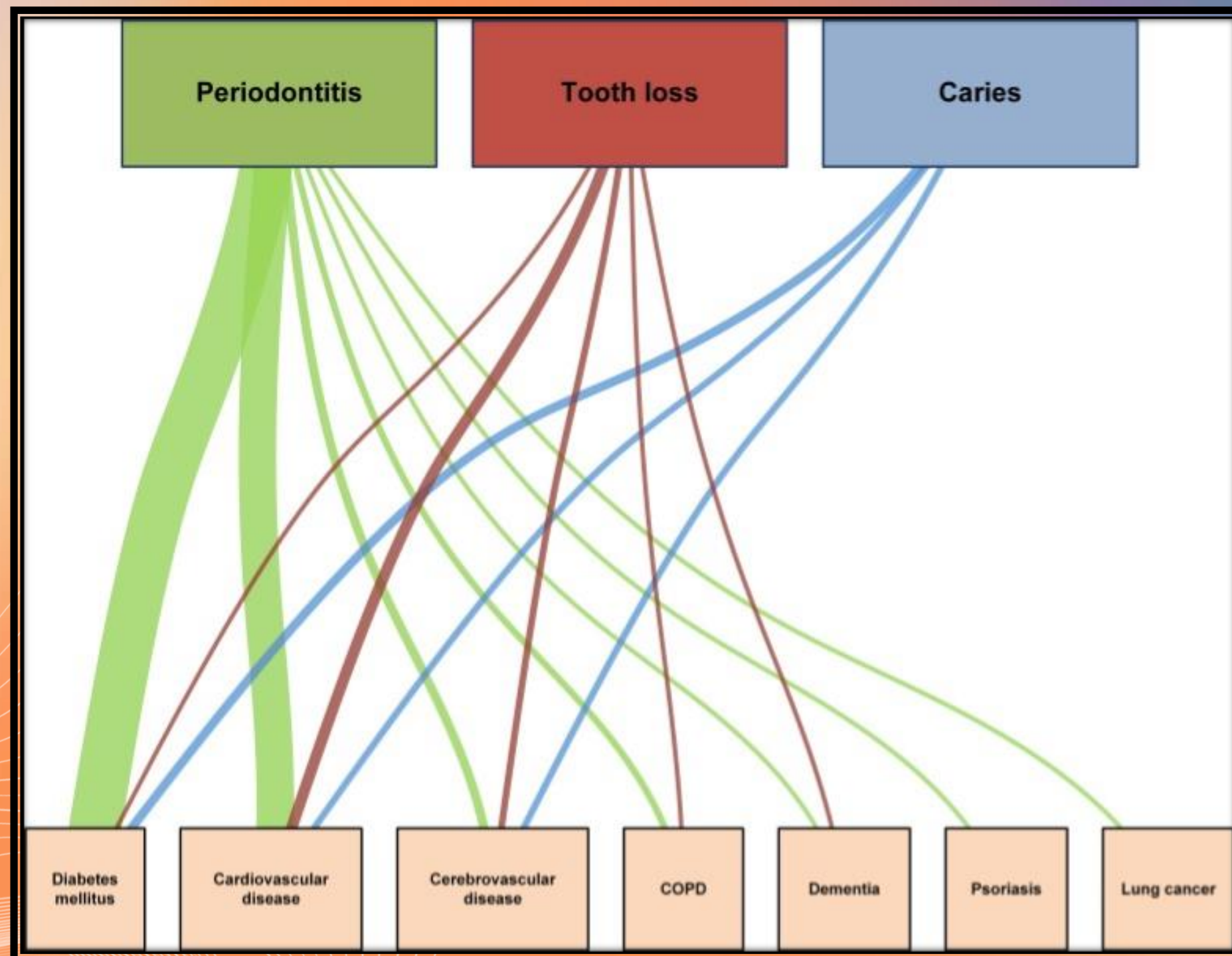
“Oral health is a sentinel marker of overall health status . . . it serves as a mirror reflecting health and well-being . . . ” (McNeil, Crout, & Marazita, 2012)

NIDCR (2021) - "Expand and implement the view that oral health is an essential part of overall health and health care"



“Resolved, that the ADA supports and encourages research, collaboration and appropriate treatment discussions between dentists and other health care providers to help identify systemic diseases which are suspected to have a relationship to a patient’s oral health.” (ADA, <https://www.ada.org/resources/ada-library/oral-health-topics/oral-systemic-health>)

Examples of the Interplay Between Oral Diseases and Other Chronic Diseases

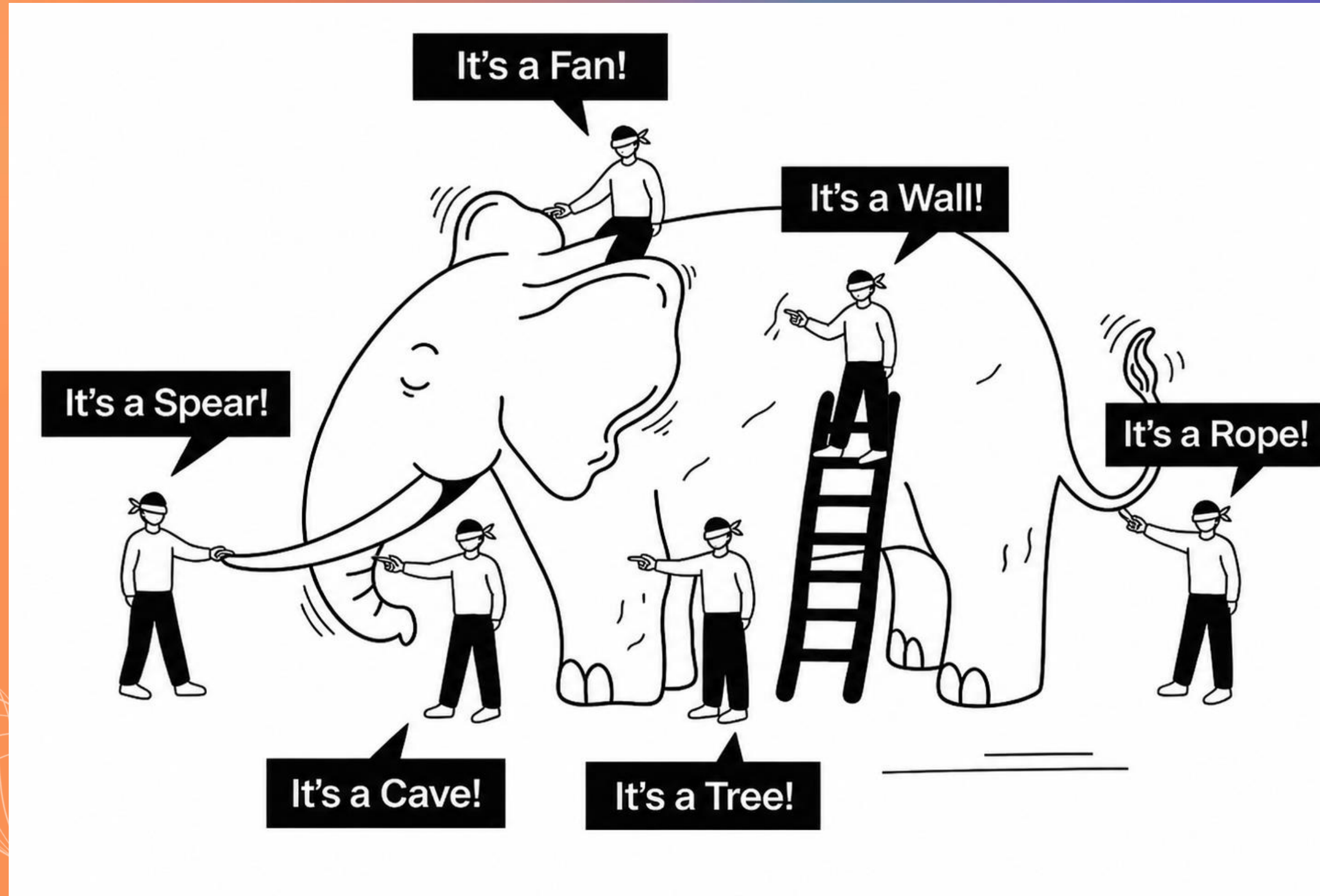


Seitz et al. Prev Chronic Dis. 2019 Sep 26;16:E132

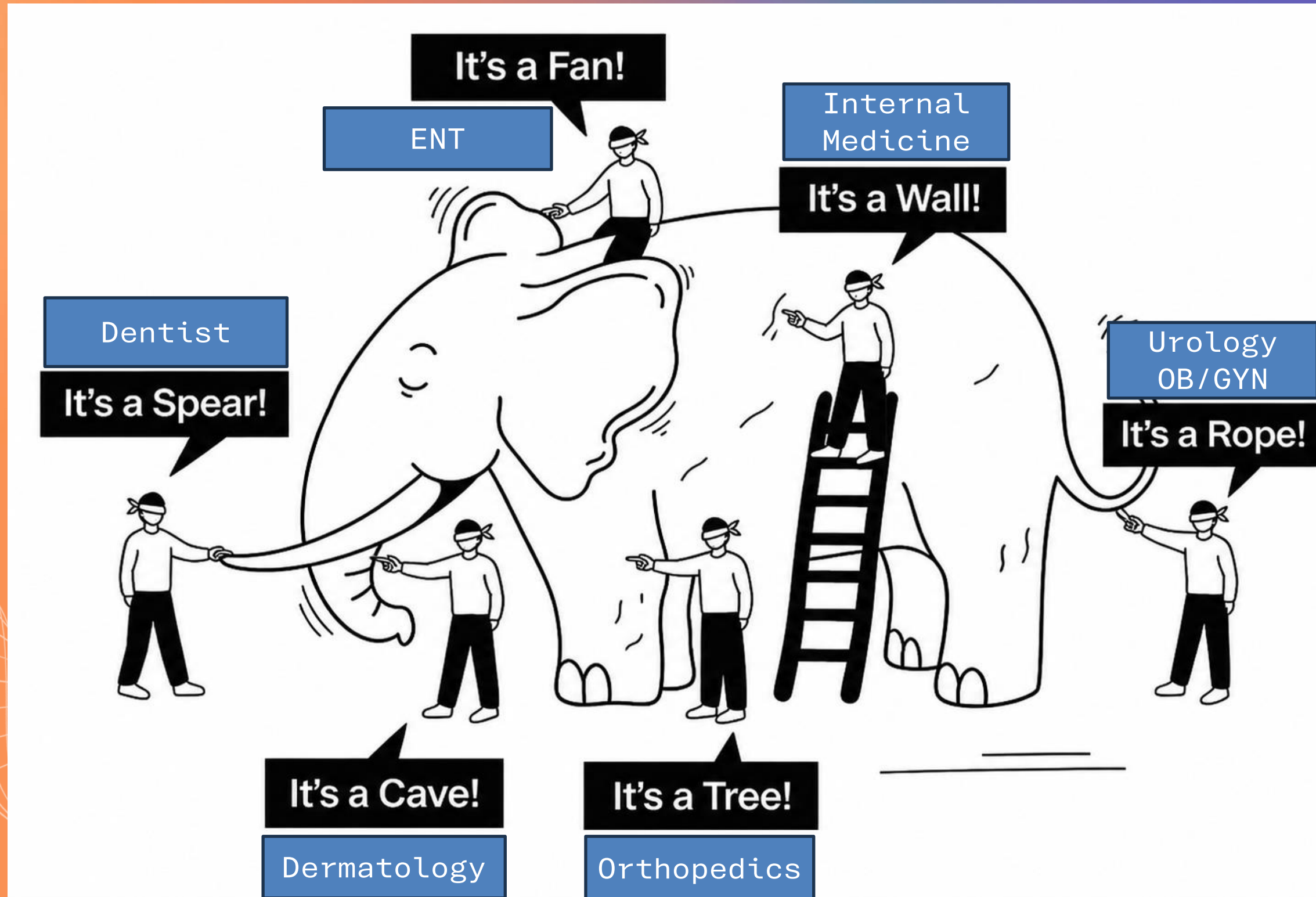


**“The Whole Nine Yards”
(2000)**

Why “Whole Person Health?”



Why “Whole Person Health?”





World Health Organization

WHO definition of Health

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946, chaired by Thomas Parran.



The New York Times. (2020, April 13). *As doctors fight coronavirus, "Grey's Anatomy"*

"Grey's Anatomy"
(2005- Current)



**World Health
Organization**

Oral Health - Defined

“Oral health is the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions such as eating, breathing and speaking, and encompasses psychosocial dimensions such as **self-confidence, well-being and the ability to socialize and work** without pain, discomfort and embarrassment.

Oral health varies over the life course from early life to old age, is **integral to general health** and supports individuals in **participating in society and achieving their potential.**”

Silos!?

“Oral health is siloed from broader healthcare systems, contributing to disparities in care.”

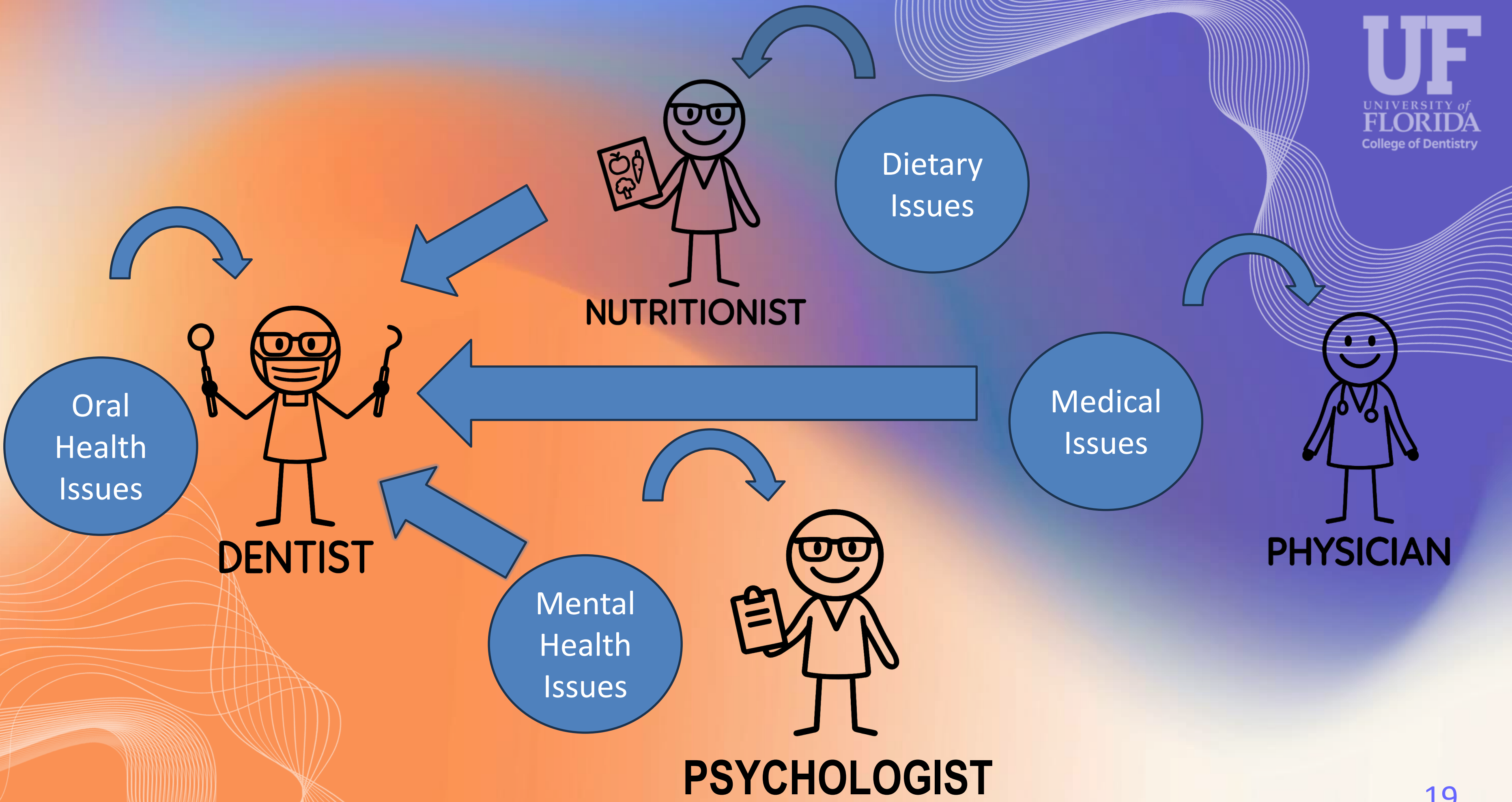
(Vermillion et al., 2026)



A field of yellow flowers is next to a row of silos By [Scott Prokop](#)
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“Nurse Jackie”
(2009 – 2015)



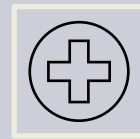
Whole-Person Impact



Encourages dentists to consider the patient's overall well-being, not just episodic dental treatments



Acknowledges that mental health, behavior, and lifestyle strongly influence oral health outcomes and treatment adherence

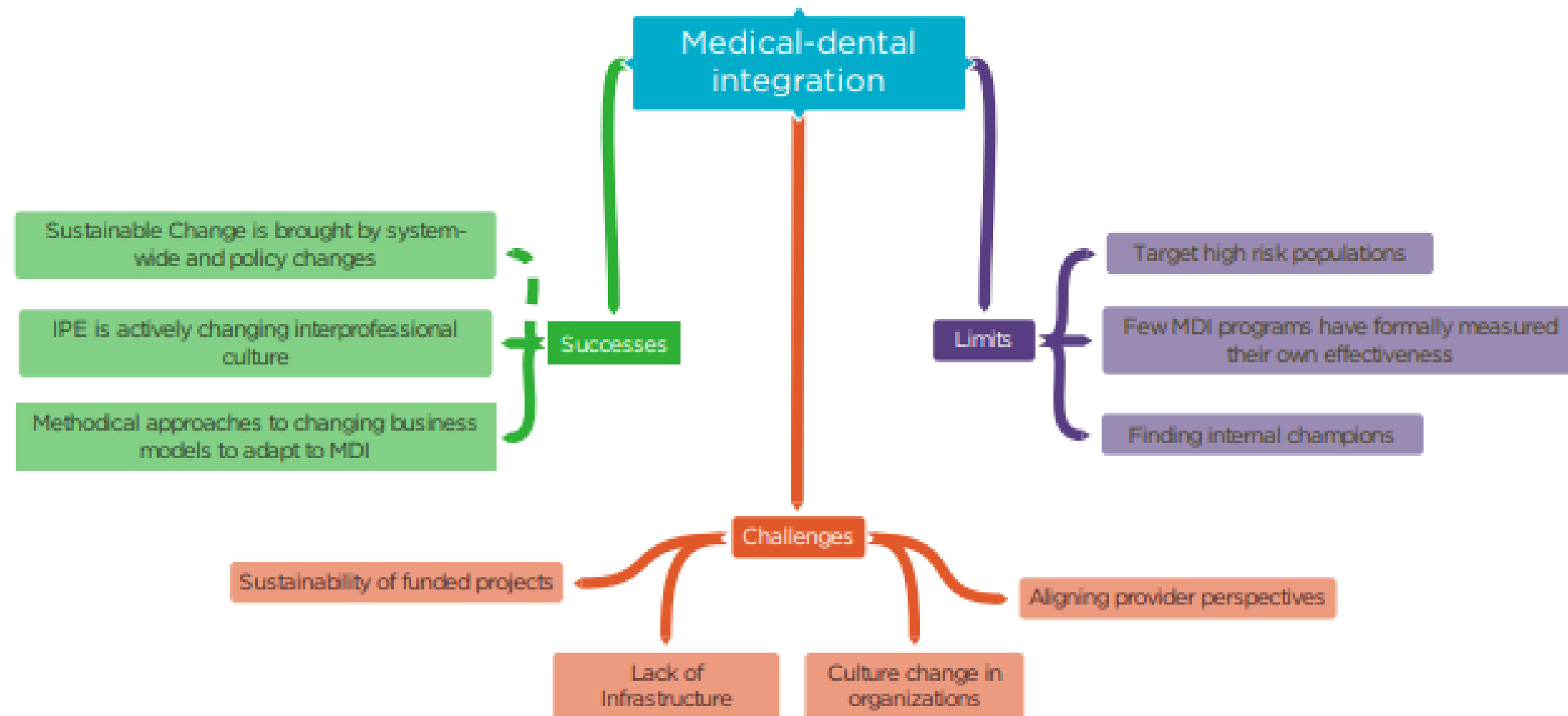


Recognizes that patients' medical conditions, medications, and overall health status affect dental treatment planning, outcomes, and safety



ABPosters (2026)

System-Level Medical-Dental Integration



"The Dentist"
(1996)

https://www.deltadentalinstitute.com/content/dam/delta-dental-policy/pdf/UCO_MDI_White_Paper.pdf

WHOLE-PERSON HEALTH AND MEDICAL DENTAL INTEGRATION

Toward a Comprehensive Model of Medical-Dental-Behavioral Integration

D.W. McNeil¹, D.B. Pereira¹, O.S. Ensz¹, K. Lukose¹, G. Harrell¹, and D.B. Feller¹

Abstract: Introduction: Existing models of medical-dental integration, as well as those from behavioral health care integrated with primary medical treatment, provide a basis for a truly synthesized and expanded model incorporating medical, dental, and behavioral components. Such a comprehensive model allows for collaborative health care serving patients seamlessly without disciplinary silos, promoting optimal whole-person health. This innovative approach is consistent with recent developments in the behavioral and social oral health sciences that include an imperative for their full inclusion in dental health care, research, and education.

Methods: Existing models of medical-dental integration are described, along with current models from integrated primary medical and behavioral health care. Using these existing approaches as a basis, a new multilevel model is proposed to include social and cultural determinants of health.

Results: Contemporary approaches to providing health care across disciplines include referral to a geographically separate entity, co-location of

services, and integrated, side-by-side care. Integration of electronic health records and interoperability are necessary (but not sufficient) factors that affect transdisciplinary health care. Effective communication among health care providers and the need for interprofessional education, comprehensive training, and ongoing cross-disciplinary consultation also are noted as crucial factors in truly collaborative care. Evidence for existing models varies greatly depending on the target population and type of services provided.

Conclusions: A fully integrated, transdisciplinary model of health care is possible, theoretically and practically. Combining aspects of extant integrated models and extending them provides opportunity for a greater focus on systemic factors and more emphasis on prevention. Consistent with this new model, medical and dental home concepts can be expanded to that of a person-centered health care home that includes interprofessional practice. This transdisciplinary approach contributes to greater health equity given the multilevel approach. Multidirectional integration of diverse

disciplines representing the various realms of medicine, dentistry, and behavioral health care is essential for optimal health of all.

Knowledge Transfer Statement: This article can be used by clinicians, scientists, administrators, and policy makers in developing and implementing integrated systems of care that provide for patients' medical, dental, and behavioral health needs.

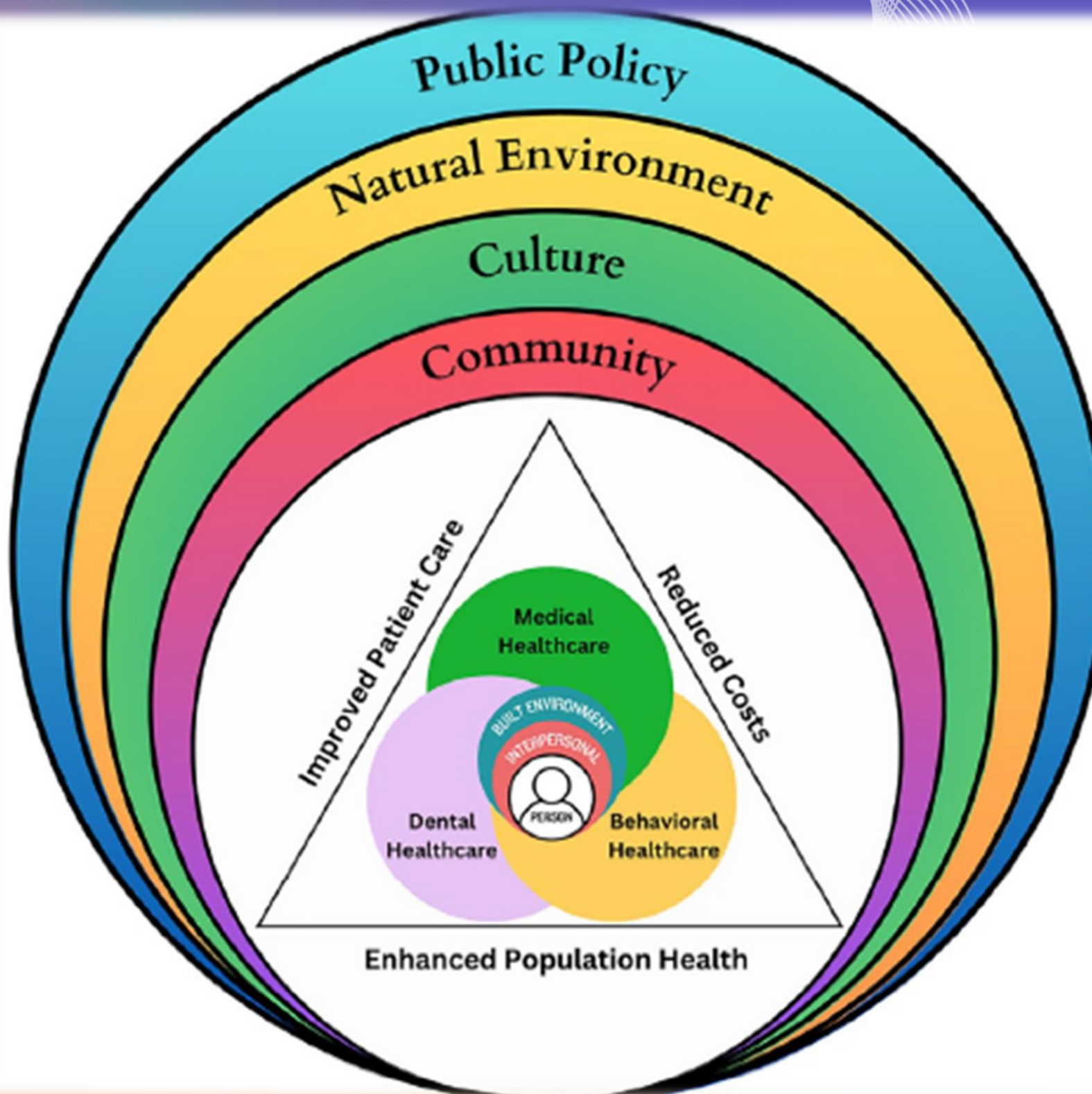
Keywords: interprofessional relationships, interprofessional communication, interdisciplinary communication, multidisciplinary communication, cross-disciplinary communication, patient care team

Introduction

At its best, health care approaches the individual patient as a total person, understanding each one and how their various bodily systems, psychological processes, and social (including cultural) environments function as an interacting whole. With the availability of highly specialized medicine and various forms of health care, there certainly are inherent forces that promote just

DOI: 10.1177/23800844241273836. ¹University of Florida, FL, USA. Corresponding author: D.W. McNeil, Chair & Parker E. Maiken Endowed Professor, Department of Community Dentistry and Behavioral Science, University of Florida College of Dentistry, PO Box 103626, 1329 SW 16th Street, Suite 5180, Gainesville, FL 32610, USA. Email: dmcneil@dentals.ufl.edu

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“The Hangover”
(2009)

Importance of Behavioral and Social Determinants to Whole Person Health

Consensus Statement on Future Directions for the Behavioral and Social Sciences in Oral Health

Journal of Dental Research
1-4
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DOI: 10.1111/cdoe.12833

EDITORIAL

COMMUNITY DENTISTRY AND ORAL EPIDEMIOLOGY WILEY

Introduction to the special issue: Advancing the behavioural and social sciences to promote oral health

This special issue of *Community Dentistry and Oral Epidemiology* constitutes a published proceedings and extension of the 2020 Behavioural and Social Oral Health Sciences Summit. Introducing this special issue, we offer a brief historical perspective, a description of the process of events that influenced our work and culminated in the Summit and these published proceedings, and an overview of the articles included. It has been with great enthusiasm and considerable humility that we have championed this special issue and the activities and processes that preceded it, hopefully allowing this initiative to blossom. Truly, we are "standing on the shoulders of giants",¹ some of whom came well before us in this field and others to whom we are grateful for contributing articles to this special issue. From the very beginnings of the Summit planning, our efforts, and those of our colleagues, were designed to look to the future. Rather than being only an accounting of what is happening at present, we envisioned that the Summit, the *Consensus Statement on Future Directions for the Behavioural and Social Sciences in Oral Health*² that emanated from it, and this special issue would provide a roadmap of possible and important future directions for the field.

Journal of Dental Research,³ *International Dental Journal*¹⁰) were published, special journal issues were organized (e.g. *Journal of Public Health Dentistry*¹¹), and books were released (e.g. *Social Science and Dentistry*,¹² *The Psychology of Dental Care*,¹³ *Behavioural Sciences for Dentistry*,¹⁴ *Behavioural Dentistry*,¹⁵ *Sociology and Psychology for the Dental Team*¹⁶).

As evidenced by this brief historical account, the behavioural and social sciences in oral health have been evolving and growing in impact and recognized importance. Still, there were two issues that we believed impeded the field. First, as noted above, it had been quite a long time since there was a large-scale conference organized specifically for behavioural and social scientists working in the oral health arena. Annual meetings of the International Association for Dental Research (IADR) provided regular opportunities for the IADR Behavioural, Epidemiologic and Health Services Research (BEHSR) scientific group to gather, but those meetings typically involved shorter sessions and interdisciplinary interaction with those in various other specialty fields of dentistry. There was a need for another longer-form and focused conference designed specifically for the in-

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EDITORIAL

COMMUNITY DENTISTRY AND ORAL EPIDEMIOLOGY WILEY

Harnessing the behavioral and social sciences to promote oral health: Where do we go from here?

The 2020 Behavioral and Social Oral Health Sciences Summit was the first large-scale, comprehensive conference in more than a quarter-century organized specifically for those applying behavioral and social science to research in dentistry and oral health. Moreover, it was the first international meeting of its kind. The intent of this special issue of *Community Dentistry and Oral Epidemiology* was twofold: to serve as the published proceedings of the Summit and to extend the leading-edge presentations and engaging reactor panel discussions that took place at the historic event. The articles included in the special issue provide historical perspectives and essential background on key topics; review contemporary thinking and recent advances in the field; highlight the debates and gaps that remain; and suggest future directions and priority areas that should be the foci of research over the next several years or decades. This collection of articles joins a body of literature that emerged in the 1960s and since grew considerably in global representation, size and impact (for accounts of early work, see¹⁻⁴).

As mentioned in the introduction to the special issue, this collection is one of two major formal products of the Summit; the other was the *Consensus Statement on Future Directions for the*

In short, the *Consensus Statement*: (a) affirms the significant influence of behavioral and social factors on dental, oral and craniofacial health; and (b) outlines the essential research focus areas and critical next steps that experts agree are most likely to maximize the impact of behavioral and social science for the promotion of oral health. It is future oriented and intended to stimulate further discussion, scholarly pursuits, improved practice and advocacy. Thus, we are pleased that the *Consensus Statement* quickly evoked two commentaries and already sparked debate in the field. We appreciate the view of the Summit as "transformational" by Raskin and Fleming,⁷ and their acknowledging its call for global oral health equity through application of behavioral and social science. We also appreciate that Raskin and Fleming have challenged us and the entire field to specifically consider the oppression of marginalized groups as a key focus in this work (for more, see a timely, must-read special issue of the *Journal of Public Health Dentistry*⁸). The concepts explicated in their commentary, as well as their important calls to action, are reflected in some of the articles included in this special issue. We also appreciate Reynolds⁹ reaction to the *Consensus Statement* and his analysis

Improving Oral Health Through Dental-Medical-Behavioral Integration



But, HOW do we make it happen?



AndyC37 Posted in [Captain Bernie Futterstockman](#)

“MASH”
(1974)

Contemporary Thrusts in Dental-Medical-Behavioral Integration

- Expanding Scope of Historically Medically-Focused Procedures to Dentists
 - Screening/Assessment
 - Direct (in-office) Intervention
 - Referrals
- Integrated Medical-Dental Teams and Organized Healthcare Systems
- Embedding Dental Hygienists into Medical Teams

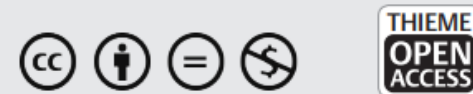
Selected Potential Areas of Overall Health Focus for Dentists

1. **Systemic Medical Conditions**
 - A. Cardiac and Cardiometabolic Diseases
 - B. Infectious, Autoimmune, and Hematologic Disorders
 - C. Head and Neck Cancer
 - D. Chronic Pain (including TMD)
2. **Behavioral and Mental Health Issues**
 - A. Mental Health Issues (e.g., Anxiety/Fear, Depression, Stress, Trauma)
 - B. Substance Abuse and Addiction, Tobacco and ENDS Cessation
3. **Prevention and Public Health and Other Healthcare**
 - A. Vulnerable Populations: Children - abuse, neglect, behavior problems; Intimate Partner Violence; Older Adults - abuse, neglect, cognitive/neuromuscular decline
 - B. Sleep Disorders
 - C. HPV and Other Vaccinations
 - D. Dietary/Nutrition
 - E. Tobacco and ENDS Prevention
 - F. Botox: TMD, Bruxism, Jaw Function, Esthetics

Systemic Medical Conditions: Selected Potential Areas of Focus

Published online: 2020-12-07

216 Original Article



Periodontal Disease as a Predictor of Undiagnosed Diabetes or Prediabetes in Dental Patients

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Eur J Dent 2021;15:216–221

Abstract

Objectives The study investigates whether periodontal parameters can identify subjects with undiagnosed diabetes mellitus (DM) or pre-DM in patients seeking dental treatment at a university dental hospital.

Systematic Review

Oral Findings Linked to Chronic Kidney Disease: A Comprehensive Systematic Review

Paula García-Rios, Francisco Javier Rodríguez-Lozano * and Nuria Pérez-Guzmán

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Abstract: Background\ Objectives: Chronic kidney disease (CKD) is defined as a clinical syndrome secondary to a permanent change in kidney function or structure, making it irreversible. Most patients at the onset of the disease are asymptomatic or present nonspecific symptoms, including signs and symptoms at the oral level. These manifestations, such as hyposalivation, increased calculus index, enamel defects, or changes in saliva composition, contribute to the diagnosis of this pathology and can also significantly affect the patient's quality of life. The aim is to systematically assess the presence and relevance of oral manifestations in patients with CKD, and to identify correlations between these symptoms and clinical parameters such as glomerular filtration rate or concomitant conditions of the patient. **Materials and Methods:** A systematic review was conducted following the Pre-

Behavioral Health Conditions: SBIRT and Potential Foci

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ORIGINAL ARTICLE

COMMUNITY
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Screening, brief intervention, and referral to treatment in oral health settings: A scoping review

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Correspondence

Lisa D.S. Zerden, The University of North

Abstract

Objectives: Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an effective evidence-based model to provide early intervention and treatment to people with substance use disorders across diverse health settings. Yet, how SBIRT has been implemented within oral health settings and its associated outcomes has not been explored. This scoping review assessed how SBIRT has been implemented in oral health settings in the U.S. and discusses the implications for SBIRT integration in dentistry and oral health research, education and practice.

Published in final edited form as:

J Stud Alcohol Drugs. 2026 January ; 87(1): 54–63. doi:10.15288/jsad.24-00383.

Dental Screening, Counseling, and Referral to Treatment for Substance Use Disorder: Survey of the National Dental Practice-Based Research Network

Jenna L. McCauley, PhD¹, Phillip Crawford², Michael C. Leo, PhD², Mary Ann McBurnie, PhD², Danyelle Barton², Heather A. Weidner³, D. Brad Rindal, DDS³, the National Dental PBRN Collaborative Group

¹Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston, SC

²Kaiser Permanente Center for Health Research, Portland, OR

³HealthPartners Institute, Bloomington, MN

Abstract

Objective: The objective of this study was to conduct a national survey of practicing dentists assessing their current knowledge, attitudes, and practice behaviors related to substance use screening among their adult patients. The secondary objective was to identify practitioner- and practice-level facilitators and barriers of substance use screening.

Mental Health Issues and Dentistry – A PBRN Study




 ORIGINAL ARTICLE | [Full Access](#)

Perceptions of mental health screening and referral to treatment in National Dental-Practice Based Research Network practices: A qualitative study

[M. Blake Berryhill PhD](#) ✉, [Nathan Culmer PhD](#), [Todd Smith PhD](#), [Dorota Kopycka-Kedzierawski DDS](#), [Ria Gurganus MA, MS](#), [Gabrielle Curry BS](#)

First published: 01 April 2024 | <https://doi.org/10.1111/jphd.12607> | [VIEW METRICS](#)

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Abstract

Objectives

Dental practices can have additional positive impacts on public health by implementing mental health screening and referral to treatment in dental care workflows. In this study, we examined how dental practices identify and address adult patient mental health concerns, attitudes about implementing mental health screening and referral, and potential barriers and facilitators to treatment.



"Good Will Hunting"
(1997)

Other Health Conditions: Selected Potential Areas of Focus

Oral Science Trends

Cover Story

The enigma of sleep

Advancing dentistry with evidence-based knowledge

Implications of sleep neuroscience for the dental clinician and patient

Davis C. Thomas, BDS, DDS, MSD, MSc Med, MSc; Tanvee Somaiya, BDS; Miguel Meira E. Cruz, DDS, MSc; Priyanka Kodaganallur Pitchumani, BDS; Anil Ardeshta, DMD, MDS; Anjali Ravi, BDS; Shranya Prabhakar, BDS

ABSTRACT

Background. Sleep disturbances have been shown to result in considerable morbidity and mortality. It is important for dental clinicians to understand the neuroscience behind sleep disorders.



The Emerging Role of Dentists in Managing Sleep Disorders

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on July 8, 2025

Sleep is a fundamental biological necessity, essential for physical restoration, cognitive function and overall health and well-being. Despite its importance, a significant portion of the population experiences chronic difficulties in obtaining adequate rest. The American Academy of Dental Sleep Medicine reports approximately 70 million Americans suffer from sleep-related disorders. Sleep deprivation has far-reaching consequences, negatively impacting cardiovascular, metabolic, cognitive and immune functions.

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The Journal of the American Dental Association

Volume 141, Issue 6, June 2010, Pages 675-678



Nutrition

Eating Disorders: Screening in the Dental Office

Anne L. Hague RDH, RD, MS, PhD ¹

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<https://doi.org/10.14219/jada.archive.2010.0257>

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ABSTRACT

Background

Eating disorders are serious illnesses that often are not detected by health care professionals. The author presents techniques that the oral health care professional (OHCP) can use to screen at-risk patients for eating disorders during routine preventive care appointments.

Other Healthcare: Additional Potential Areas of Focus



Advancing dentistry with evidence-based knowledge

Investigation

The role of dentists in promoting human papillomavirus vaccination for oropharyngeal cancer prevention

A cross-sectional survey of dentists in North Carolina

Jesse Woon, DMD, MS; Marcella H. Boynton, PhD; Ujunwa F. Onyema, MPH; Nadja A. Vielot, PhD; Adam D. Lietzan, PhD, DMD, MS

ABSTRACT

Background. Human papillomavirus (HPV) causes cancers of the oropharynx, and HPV vaccination prevents these cancers. Given the prominent role of HPV vaccines in promoting oral health, this study aimed to understand the knowledge, perceptions, and perceived barriers associated with HPV and HPV vaccination among dentists in North Carolina, a state that does not currently permit vaccine administration by dentists.

Methods. A cross-sectional study using a questionnaire was electronically distributed to North Carolina dentists. Eligibility criteria included reporting an active dental license and practicing dentistry. Descriptive statistics and linear regression models were used to evaluate associations.



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The need for effective interprofessional collaboration between nutrition and dentistry

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There are bidirectional relationships between diet and nutrition, systemic health and oral health. Diet and nutrition are fundamental to the prevention and management of chronic diseases. Systemic health can impact oral health. And oral health can influence diet and nutrition. The 2020 Surgeon General's Report "Oral Health in America" stated that nutrition is an integral factor in the development of oral disease and health overall. Within the medical model, Registered Dietitians have

Categorization of Types of Potential Whole Person Healthcare by Dentists

- **Screening/Assessment**
- **Direct (in-office) Intervention**
- **Referrals**



**"Marathon Man"
(1976)**

Potential Whole Person Healthcare by Dentists

- **Screening/Assessment**
 - **Patient report - Intake/health history forms**
 - **Intentional questions (typically on a scale, e.g., 0-4)**
 - **Incidental observations of behavior (including what the patient says)**
 - **Formal testing (e.g., HbA1c)**

Selected Potential Whole Person Healthcare Services by Dentists

- **Advising/Very Brief Counseling (in-office)**
 - **Education (e.g., Nutrition)**
 - **Verbal (e.g., Motivational Interviewing)**
 - **Providing printed materials**
 - **Sending (e.g., email, text) information**
 - **Giving access to information (e.g., links)**
 - **Direct Intervention by Dentist and/or staff**
 - **Tobacco cessation counseling and Rx**
 - **Vaccinations**

Potential General Healthcare Services by Dentists

- Referrals
- Passive
- Active



**“Little Shop of Horrors”
(1986)**

Intersecting Domains and Factors Involved in Whole Person Healthcare by Dentists

- **Sources of Clinical Information**
- **Types of Assessment, Consultation, and Intervention**
- **Levels of Referral and Intervention**

Research on Expanding General Healthcare Roles of Dentists

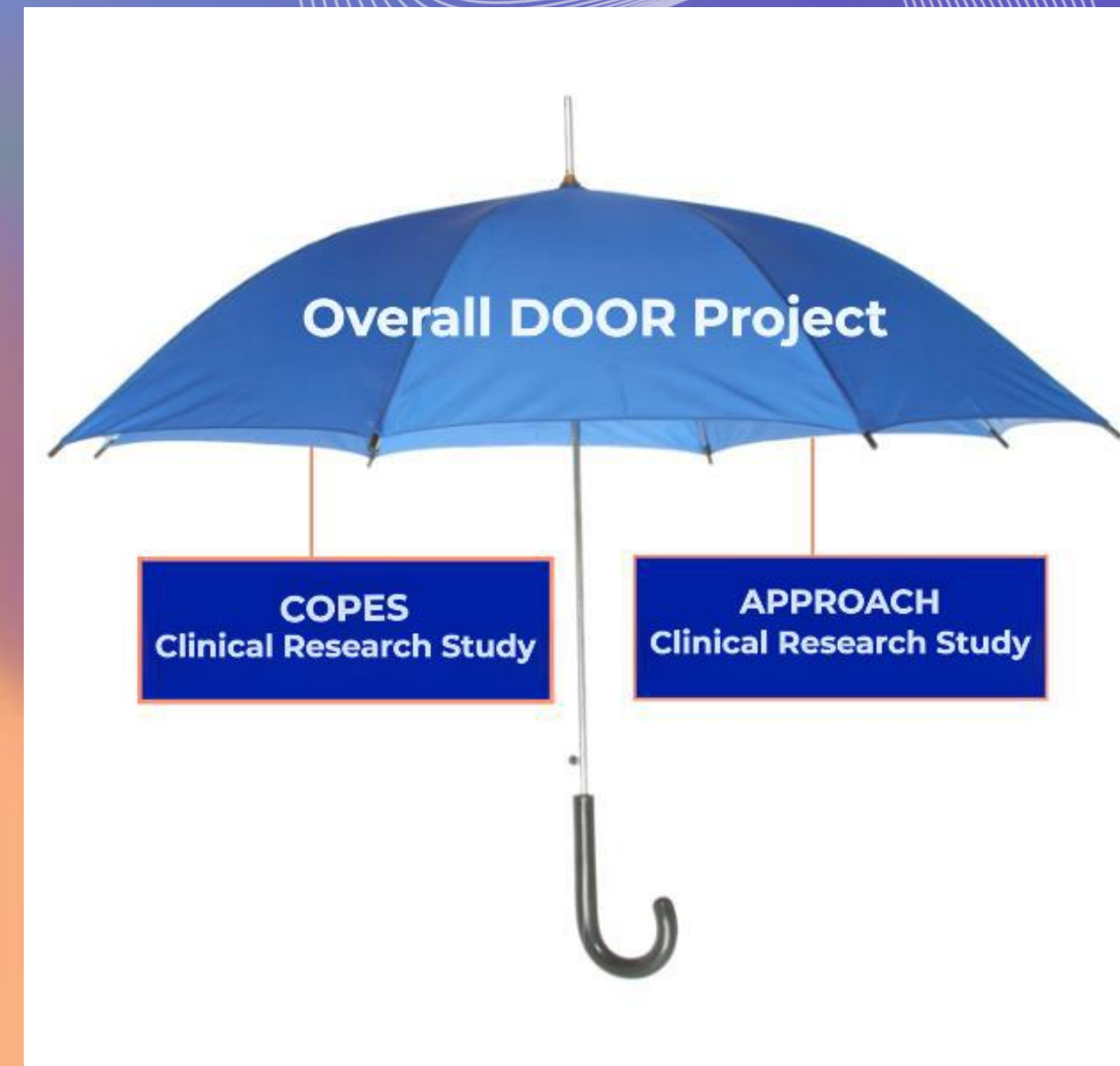
**2 Examples
from UF**



Review of Novocaine. IGN, 16 Nov. 2001, <https://www.ign.com/articles/2001/11/16/review-of-novocaine>.

**"Novocaine"
(2001)**

Development of Opportunities for Research at Dental Schools (DOOR): Clinical Studies



APPROACH: Advancing Prediabetes/Periodontal Research in Oral Academic Clinical Healthcare – Diabetes and pre-diabetes screening chairside

COPES: Chronic Overlapping Pain Experiences Study – Acute and chronic pain effect on pain during and after dental procedures



APPROACH

Advancing Prediabetes/Periodontal Research in Oral Academic Clinical Healthcare – Diabetes and pre-diabetes screening chairside

- Adult patients
- No prior diagnosis of diabetes/prediabetes
- CDC risk score ≥ 5

Prediabetes Risk Test

NATIONAL DIABETES PREVENTION PROGRAM

Write your score in the boxes below

- 1. How old are you?**
 - Younger than 40 years (0 points)
 - 40–49 years (1 point)
 - 50–59 years (2 points)
 - 60 years or older (3 points)
- 2. Are you a man or a woman?**
 - Man (1 point) Woman (0 points)
- 3. If you are a woman, have you ever been diagnosed with gestational diabetes?**
 - Yes (1 point) No (0 points)
- 4. Do you have a mother, father, sister, or brother with diabetes?**
 - Yes (1 point) No (0 points)
- 5. Have you ever been diagnosed with high blood pressure?**
 - Yes (1 point) No (0 points)
- 6. Are you physically active?**
 - Yes (0 points) No (1 point)
- 7. What is your weight category?**
 - (See chart at right)

Total score:

Height	Weight (lbs.)		
4'10"	119-142	143-190	191+
4'11"	124-147	148-197	198+
5'0"	128-152	153-203	204+
5'1"	132-157	158-210	211+
5'2"	136-163	164-217	218+
5'3"	141-168	169-224	225+
5'4"	145-173	174-231	232+
5'5"	150-179	180-239	240+
5'6"	155-185	186-246	247+
5'7"	159-190	191-254	255+
5'8"	164-196	197-261	262+
5'9"	169-202	203-269	270+
5'10"	174-208	209-277	278+
5'11"	179-214	215-285	286+
6'0"	184-220	221-293	294+
6'1"	189-226	227-301	302+
6'2"	194-232	233-310	311+
6'3"	200-239	240-318	319+
6'4"	205-245	246-327	328+
	1 Point	2 Points	3 Points

You weigh less than the 1 Point column (0 points)

Adapted from Bang et al., Ann Intern Med 151:775-783, 2009. Original algorithm was validated without gestational diabetes as part of the model.

If you scored 5 or higher

You are at increased risk for having prediabetes and are at high risk for type 2 diabetes. However, only your doctor can tell for sure if you have type 2 diabetes or prediabetes, a condition in which blood sugar levels are higher than normal but not high enough yet to be diagnosed as type 2 diabetes. **Talk to your doctor to see if additional testing is needed.**

If you are African American, Hispanic/Latino American, American Indian/Alaska Native, Asian American, or Pacific Islander, you are at higher risk for prediabetes and type 2 diabetes. Also, if you are Asian American, you are at increased risk for type 2 diabetes at a lower weight (about 15 pounds lower than weights in the 1 Point column). Talk to your doctor to see if you should have your blood sugar tested.

You can reduce your risk for type 2 diabetes

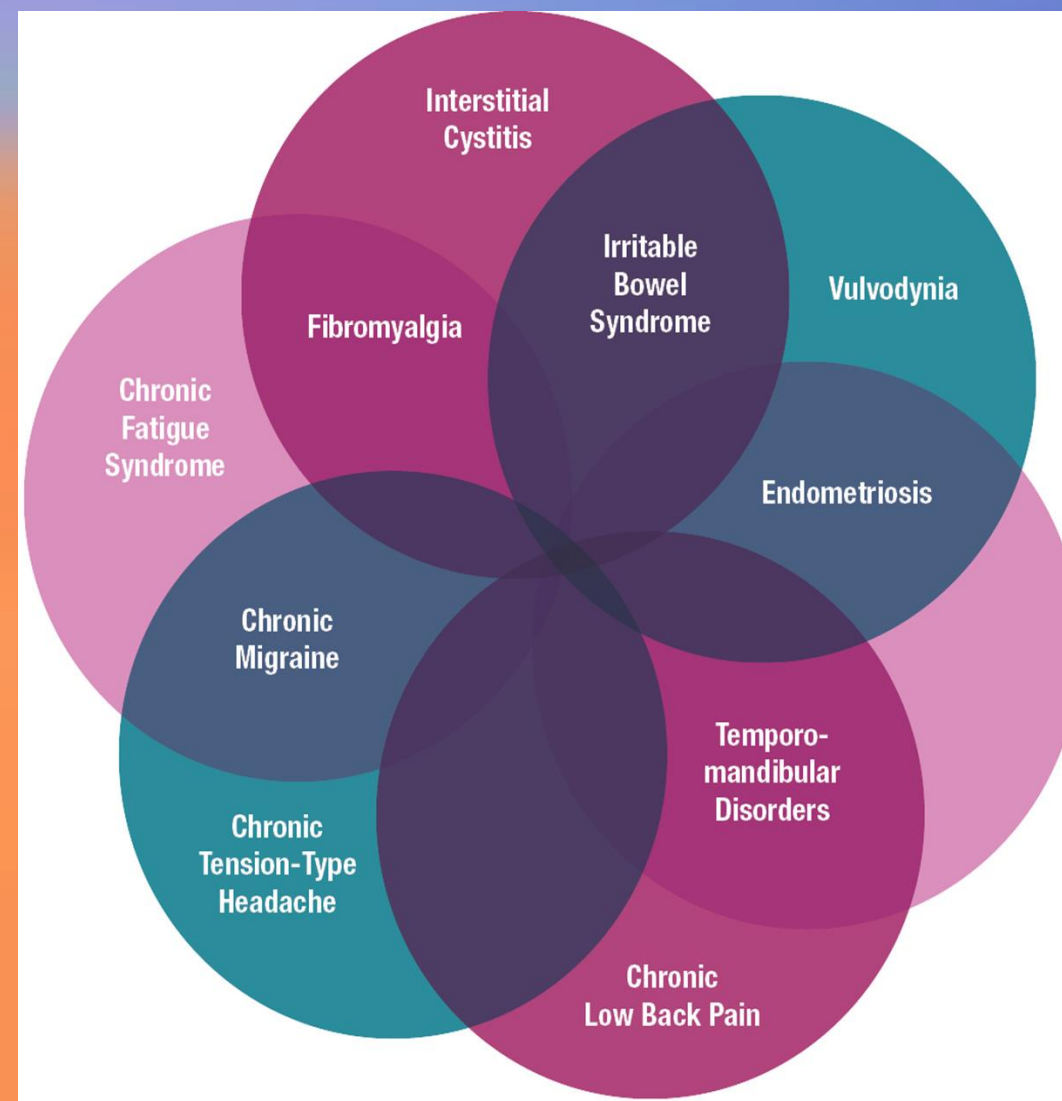
Find out how you can reverse prediabetes and prevent or delay type 2 diabetes through a CDC-recognized lifestyle change program at <https://www.cdc.gov/diabetes/prevention/lifestyle-program>.

Risk Test provided by the American Diabetes Association and the Centers for Disease Control and Prevention.

Characteristic	Category	n	%
Overall	All participants	40	100
Sex	Female	15	37.5
	Male	25	62.5
Race	African American	3	7.5
	White/Caucasian	29	72.5
	Unknown	8	20.0
Age (years)	<35	0	0
	35–65	14	35.0
	>65	26	65.0
Family history of diabetes	Yes	12	30.0
	No	12	30.0
	Unknown	16	40.0
BMI category	Healthy weight (18.5–24.9 kg/m ²)	5	12.5
	Overweight (25.0–29.9 kg/m ²)	17	42.5
	Obese (≥30.0 kg/m ²)	12	30.0
	Unknown	6	15.0

Preliminary data - APPROACH study

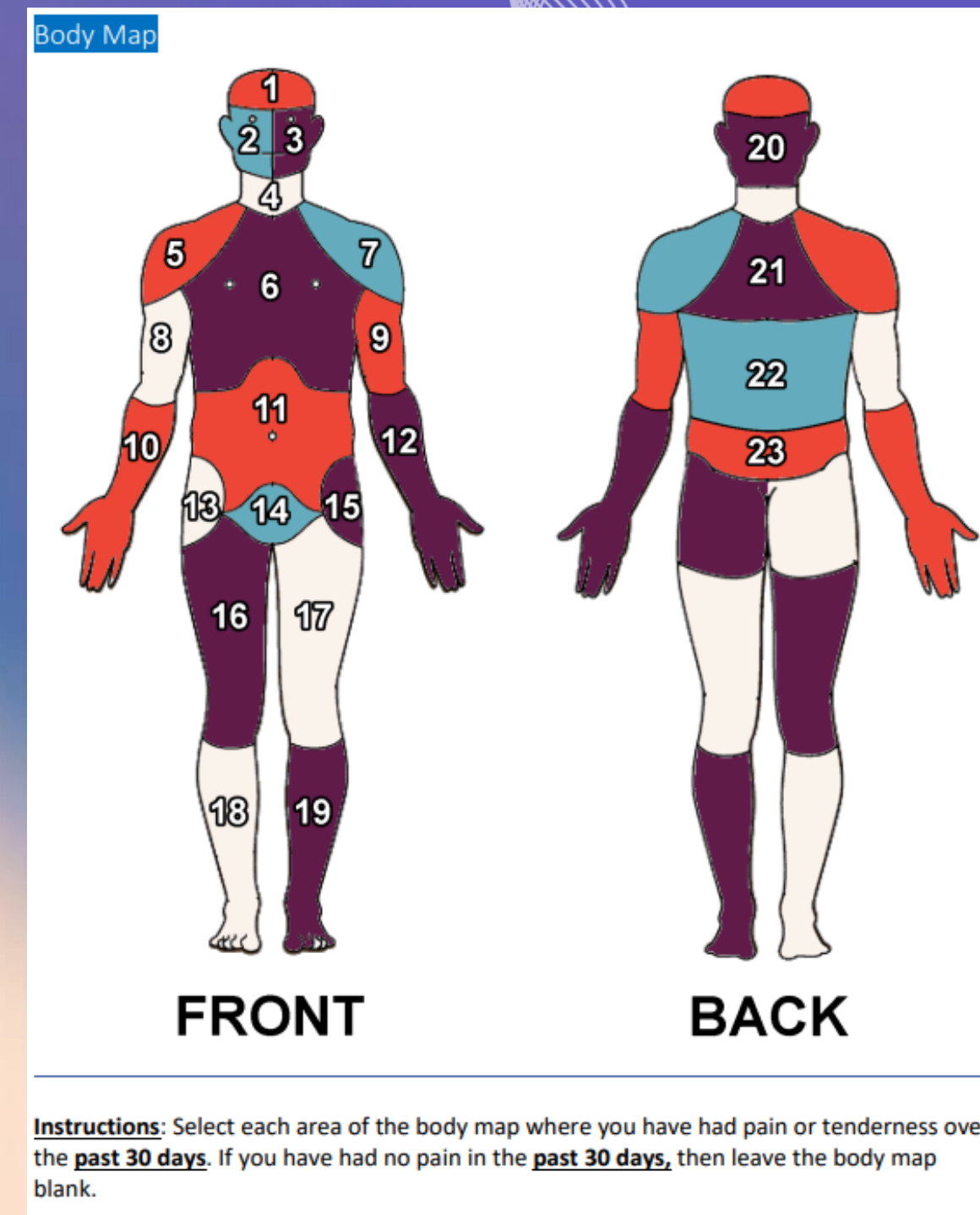
HbA1c Level	Normal (<5.7%)	Prediabetes (5.7%-6.4%)	Diabetes (≥6.5%)
# of patients	14 (35%)	22 (55%)	4 (10%)



COPES

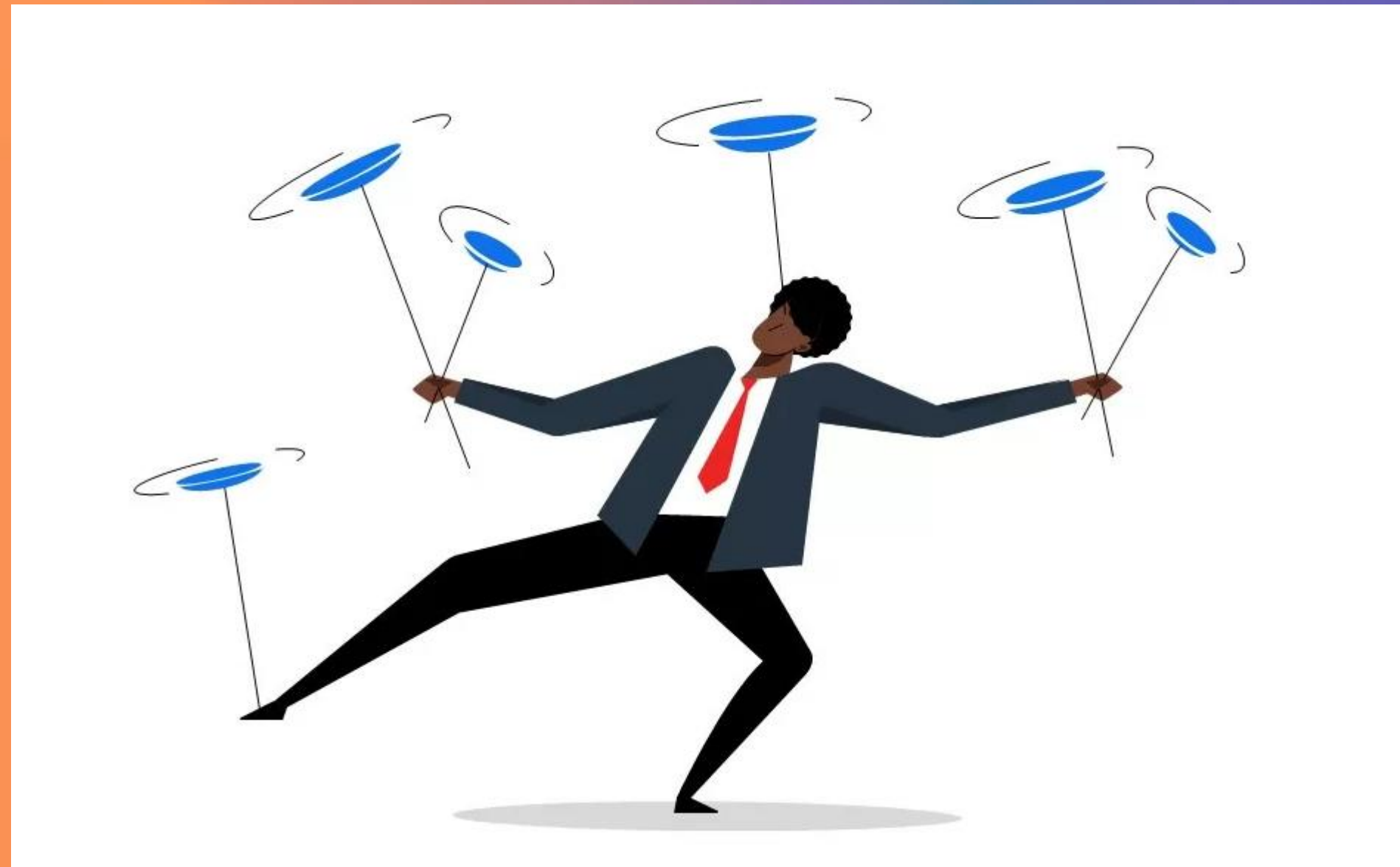
Chronic Overlapping Pain Experiences Study –
Acute and Chronic Pain Effects on Pain During and
After Dental Procedures

- Adult patients
- Anticipating an invasive procedure
- With or without pain or other health conditions



So many potential roles for Dentists

- Like plate spinning!?



"SlifeModel.com



"There's got to be a better way..." Image Source: [Culture Waves](#)

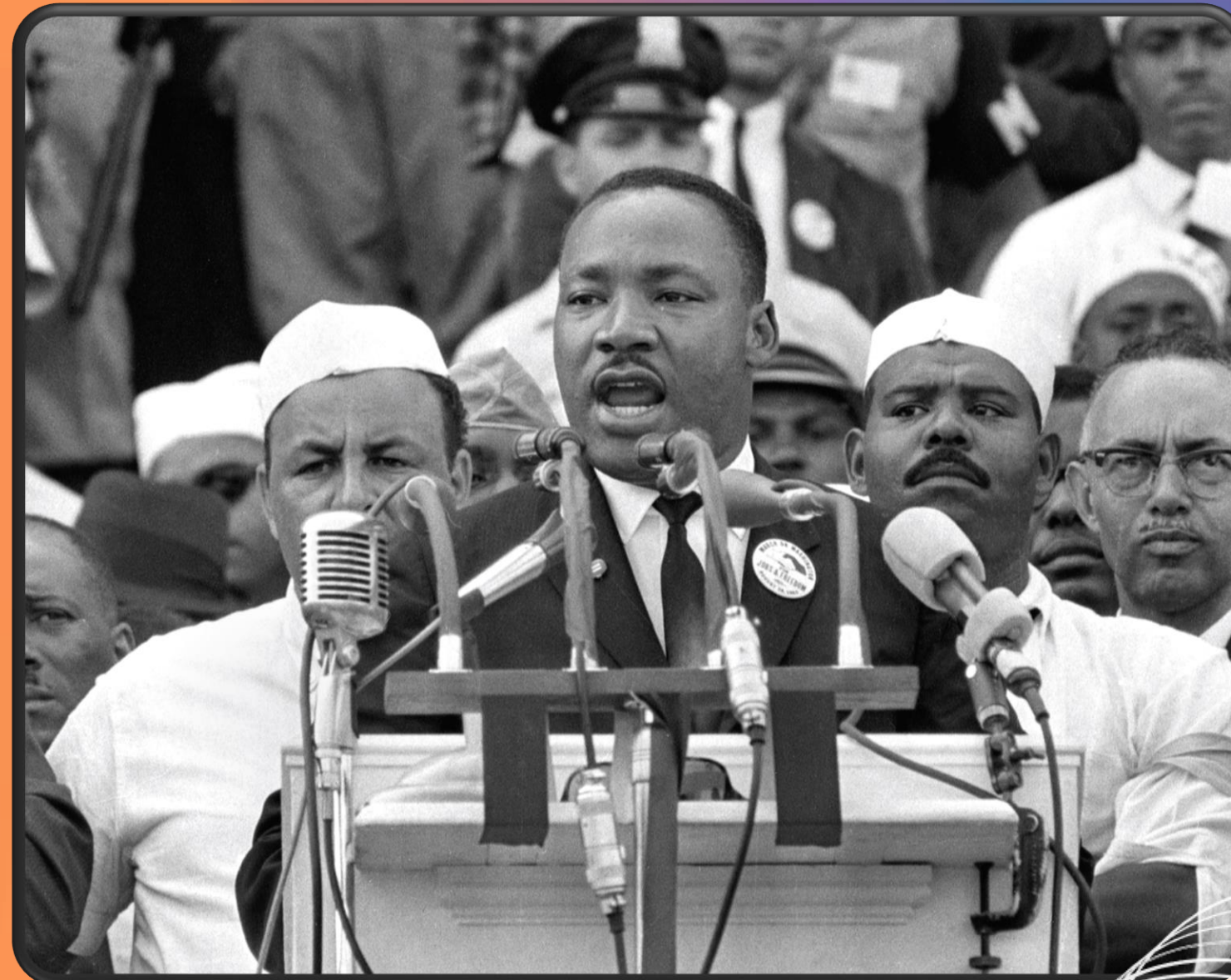
**It may seem like
TOO MANY roles –
How do you choose
and focus your
efforts?**

Facilitators/Barriers to Implementation

1. Dentist and staff view of appropriateness *vis a vis* scope of practice
2. Patient Acceptance
3. Workflow demands
4. Payment models and plans
5. "Safe" topics (less sensitive, non-confrontational)
6. Topics that seem conceptually "closer" to oral health (e.g., nutrition vs. exercise)
7. Ongoing professional relationship with a patient

(Berryhill et al., 2024)

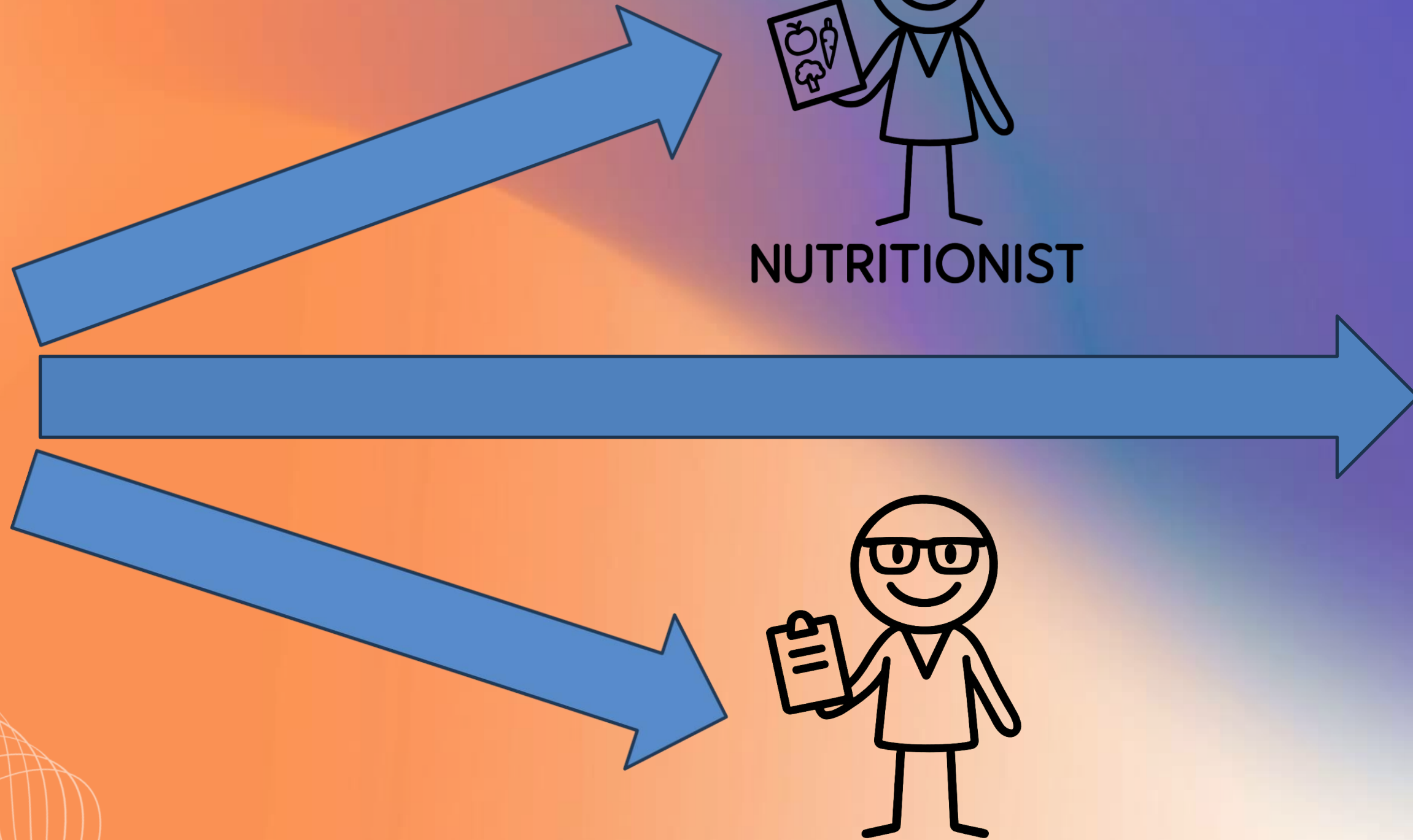
What is Your Vision for the Future of Dentistry in Terms of Whole Person Health?



Beaumont Enterprise. (2013). *Martin Luther King Jr. speaking in Beaumont*

One of my thoughts about what is needed . . .

Oral Health
Awareness
&
Knowledge



PSYCHOLOGIST

PHYSICIAN

NUTRITIONIST

THANK YOU!



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Questions, Thoughts, and Comments



"Finding Nemo"
(2003)

