

Current Issues in Oral Health



Overview

1. About the U.S. Public Health Service
2. The Pandemic & Oral Health
3. *Oral Health in America, Advances and Challenges*
 - Oral Health, the Community, and the Economy
 - Children & Adolescents
 - Working-Age Adults and Older Adults
 - Workforce, Education, and Integration
 - Mental Illness and Substance Use
 - Emerging Science & Technology
4. Healthy People 2030



Overview of the USPHS



Photo by Kun Shen



In the Service of Health

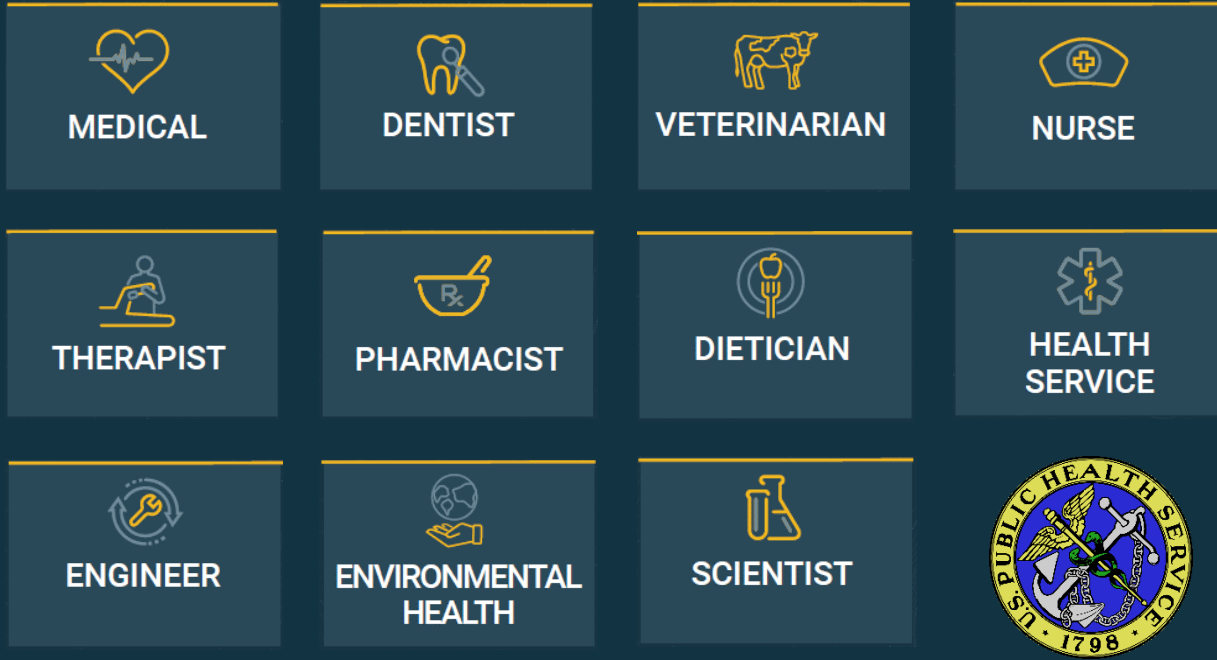
"In Officio Salutis"



COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE

About the USPHS

“Protect, Promote, and Advance the Health & Safety of the Nation”



USPHS Dentist Locations



National Institutes of Health



COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE

About the USPHS

COVID-19 Public-Private Partner Dental Coordination Group

Federal Entities:

BOP
CDC
CMS
DoD (A, AF, N)
FDA
HRSA
ICE HSC
IHS
NIDCR
OSHA
USPHS
VHA

14

Major Dental Organizations:

AADA
ADA
ADHA
AGD
DDS
HDA
NDA
NDHA
SAID

9

Specialty Organizations:

AAE
AAO
AAOMP
AAOMR
AAOMS
AAP
AAPHD
ACP
ASDA

9

Other National Dental & Public Health Organizations:

AACDP	AIDPH	NADP
AADB	→ ANOHC	NMCHOH
AADC	AOS	RC
AADOOCR	→ ASTDD	NNOHA
AAWD	CareQuest	OPEN
ACD	Comm. Catalyst	OSAP
ACFF	DTA	Proj. AOH
ADEA	Forsyth Inst.	Santa Fe
ADSO	MSDA	
AFS	NADL	

28

Medical Organizations:

AAP
APHA
NIIOH
NRHA

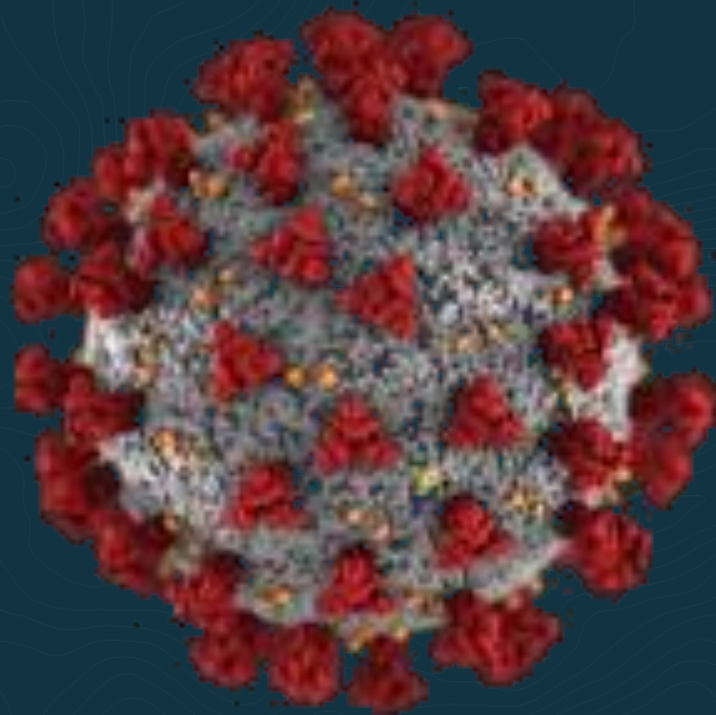
4



Oral Health Interconnectivity

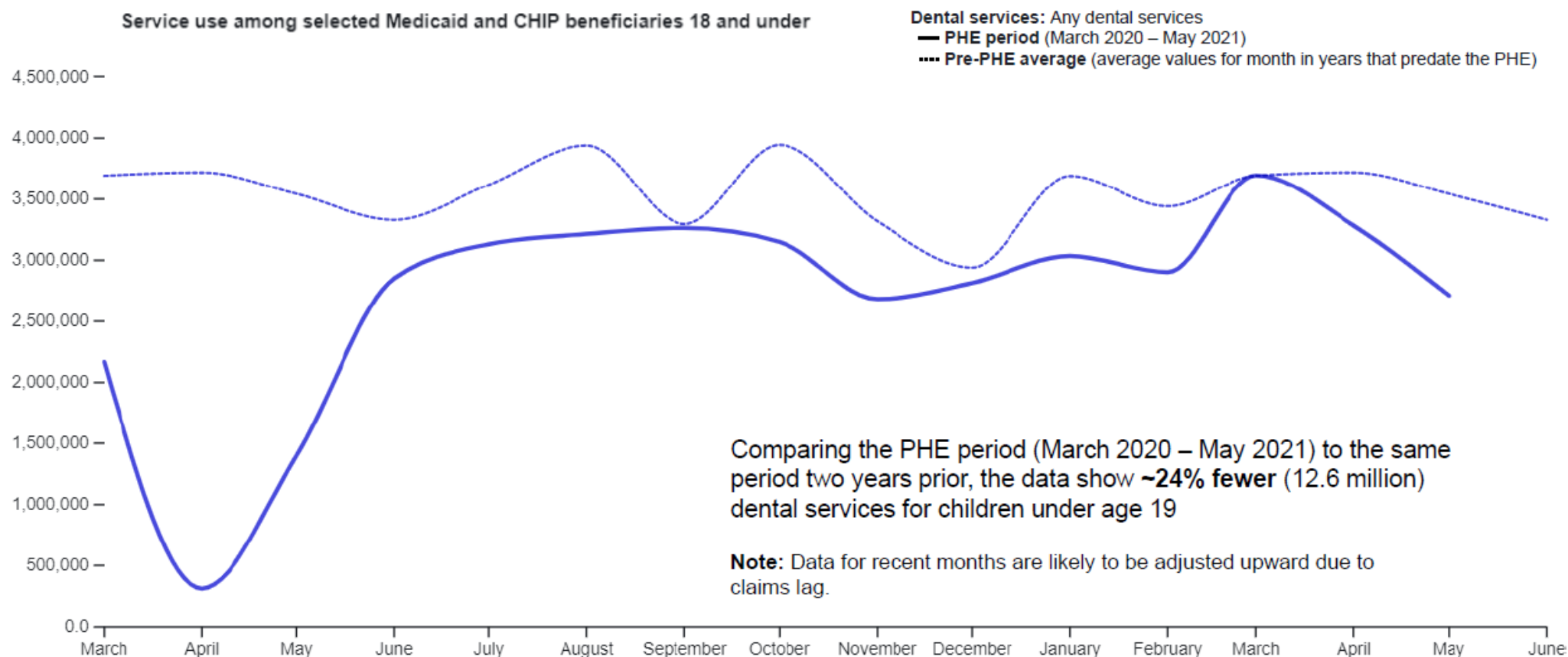


The Pandemic



Pandemic Update: Children's Medicaid Dental Services

Medicaid children's dental services are still below pre-PHE levels. <https://www.medicaid.gov/state-resource-center/downloads/covid19-data-snapshot-11122021.pdf>



Impact on Medicaid

Has your practice disenrolled from Medicaid since the onset of the COVID-19 pandemic?

All Respondents



Prior to the beginning of the COVID-19 pandemic, was your dental practice an enrolled Medicaid provider?

All Respondents



<https://surveys.ada.org/reports/RC/public/YWRhc3VydmV5cy02MTNiOWM4MDAxYmQ1MDAwMTBiNmVhMzAtVVJfM3BaeGhzWm12TnNMdjB4>

Dental Scopes of Practice Expansion – COVID-19

7th PREP Act amendment, effective 3/11/2021, supersedes state authorization.

	Dentists	Hygienists
# of states allowing dental staff to administer COVID-19 vaccine	24	18
# of states allowing dental staff to administer influenza vaccine	8	1
# of states allowing dental staff to administer COVID-19 tests	25	Unknown



<https://www.dentalboards.org/covid-19-resources>



COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE

GEORGIA: 1/15/21 – Gov. Kemp gave temporary authorization to dentists.

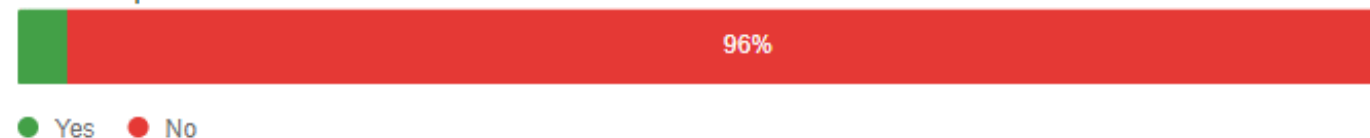
Pandemic

Vaccinator Dentists

Are YOU currently administering COVID-19 vaccines anywhere?

All Respondents

1712 Responses



BY DSO AFFILIATION



BY PRACTICE SIZE



<https://surveys.ada.org/reports/RC/public/YWRhc3VydmV5cy02MGE0MTRIZTU3ZTM1YzAwMGZiMmQ5YWUtVVJfM3BaeGhzWm12TnNMdjB4>

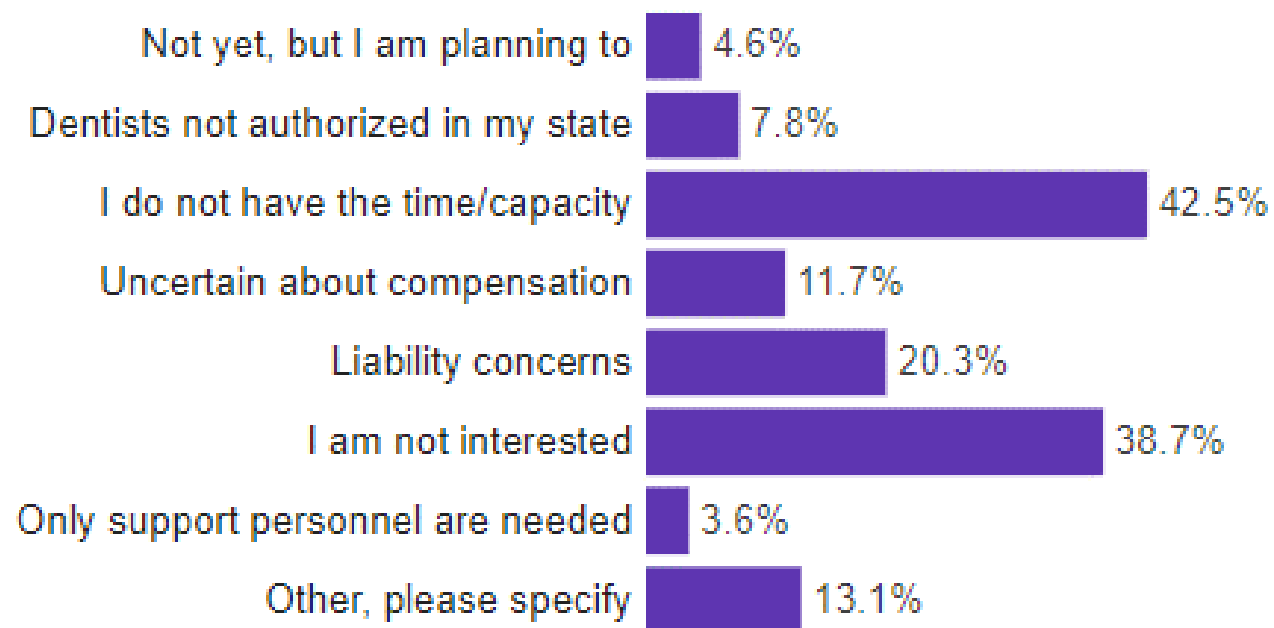


Reasons for Not Vaccinating

If no, why not? (Select all that apply.)

All Respondents

1652 Responses



<https://surveys.ada.org/reports/RC/public/YWRhc3VydmV5cy02MGE0MTRIZTU3ZTM1YzAwMGZiMmQ5YWUtVVJfM3BaeGhzWm12TnNMdjB4>



Staffing Shortages

35.8% of dentists recruiting dental assistants

28.8% seeking dental hygienists

26.5% seeking administrative staff

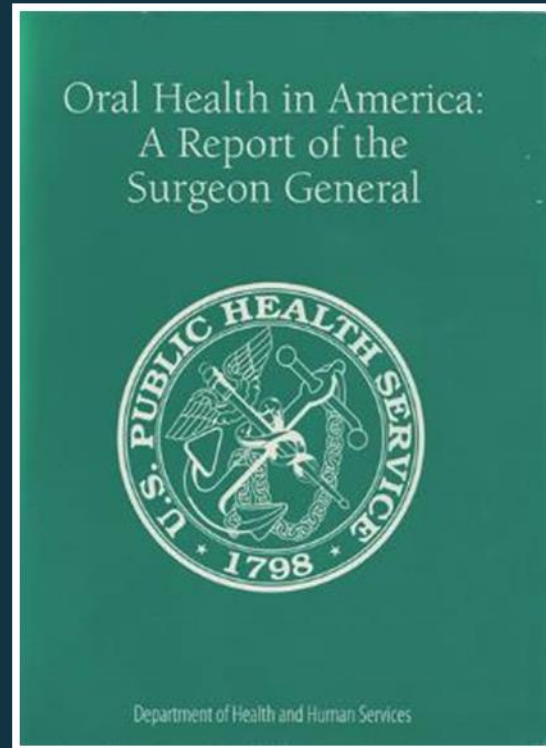
13.1% seeking dentists



<https://www.ada.org/publications/ada-news/2021/june/dentists-face-applicant-shortages-as-they-emerge-from-covid-19-pandemic>



Oral Health in America: Advances & Challenges



To Access the Report:

<https://www.nidcr.nih.gov/oralhealthinamerica>



Foundation: 2018 Listening Session



Left: Steering Committee for the Report, December 2018, with former SG Jerome Adams
Right: With the NIDCR editorial team for Oral Health in America: Advances & Challenges



Report Sections

- Section 1: Effect of Oral Health on the Community, Overall Well-Being, and the Economy
- Section 2A: Oral Health Across the Lifespan: Children
- Section 2B: Oral Health Across the Lifespan: Adolescents
- Section 3A: Oral Health Across the Lifespan: Working-Age Adults



Report Sections

- Section 3B: Oral Health Across the Lifespan: Older Adults
- Section 4: Oral Health Workforce, Education, Practice and Integration
- Section 5: Pain, Mental Illness, Substance Use, and Oral Health
- Section 6: Emerging Science and Promising Technologies to Transform Oral Health



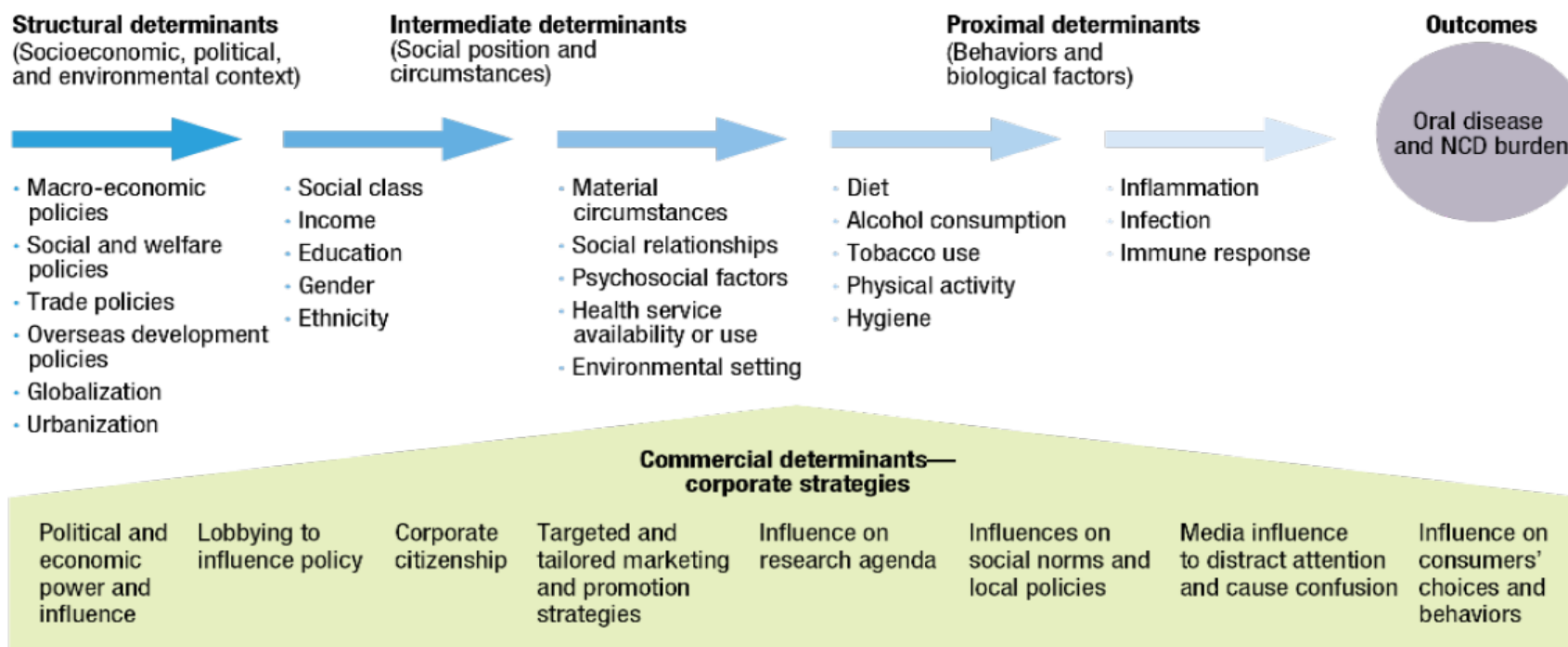
Section 1 **Overview:** Effect of Oral Health on the Community, Overall Well-Being, and the Economy

- Good oral health supports overall health and well-being of individuals, families, communities, and the nation.
- Poor oral health reduces the economic productivity of society by limiting participation in the workforce, as well as by increasing health care costs.
- Natural disasters, the emergence of novel pathogens, such as COVID-19, and other large-scale emergencies underscore the need for public-private partnerships that plan and ensure the continued delivery of essential oral health care in times of crisis.



Section 1 **Key Graph:** Effect of Oral Health on the Community, Overall Well-Being, and the Economy

Figure 2. Social and commercial determinants of oral health (Peres model)



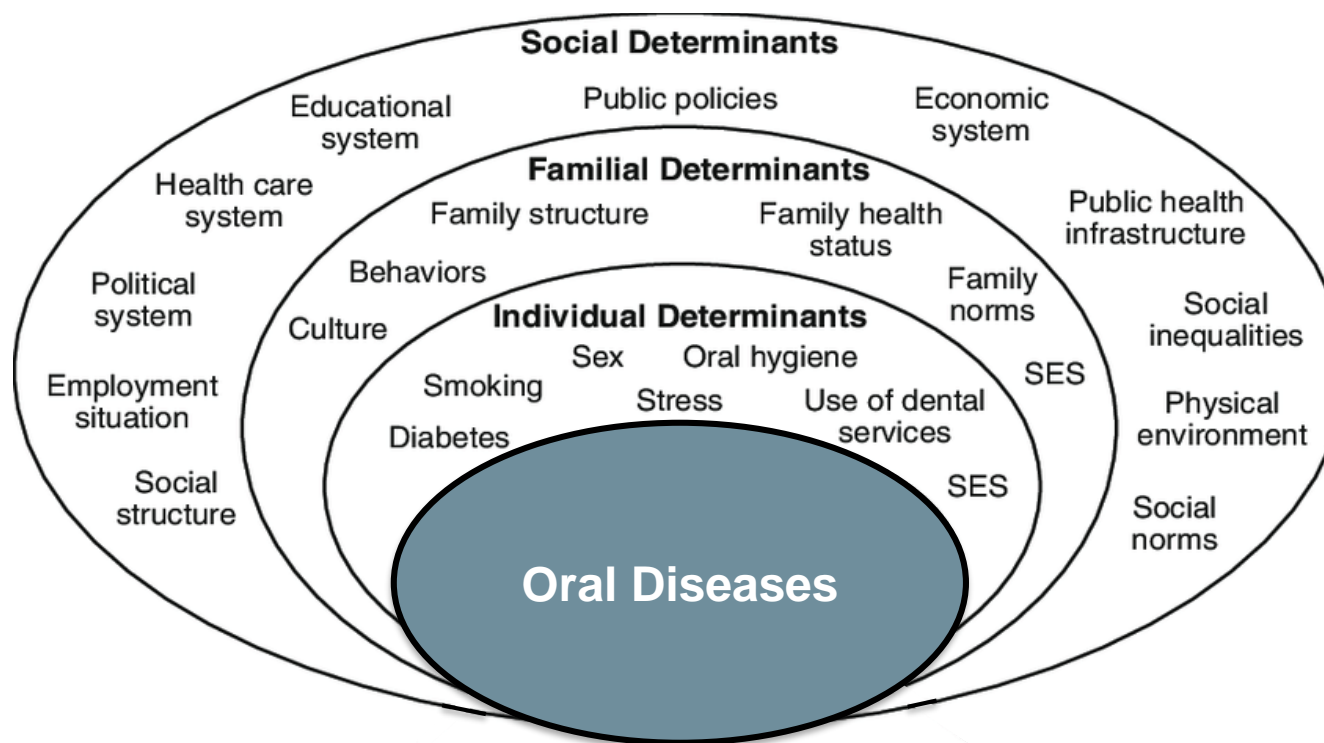
Note: **NCD** = noncommunicable diseases.

Source: Peres et al. (2019). With permission from Elsevier.

- Page 1-3 (61)



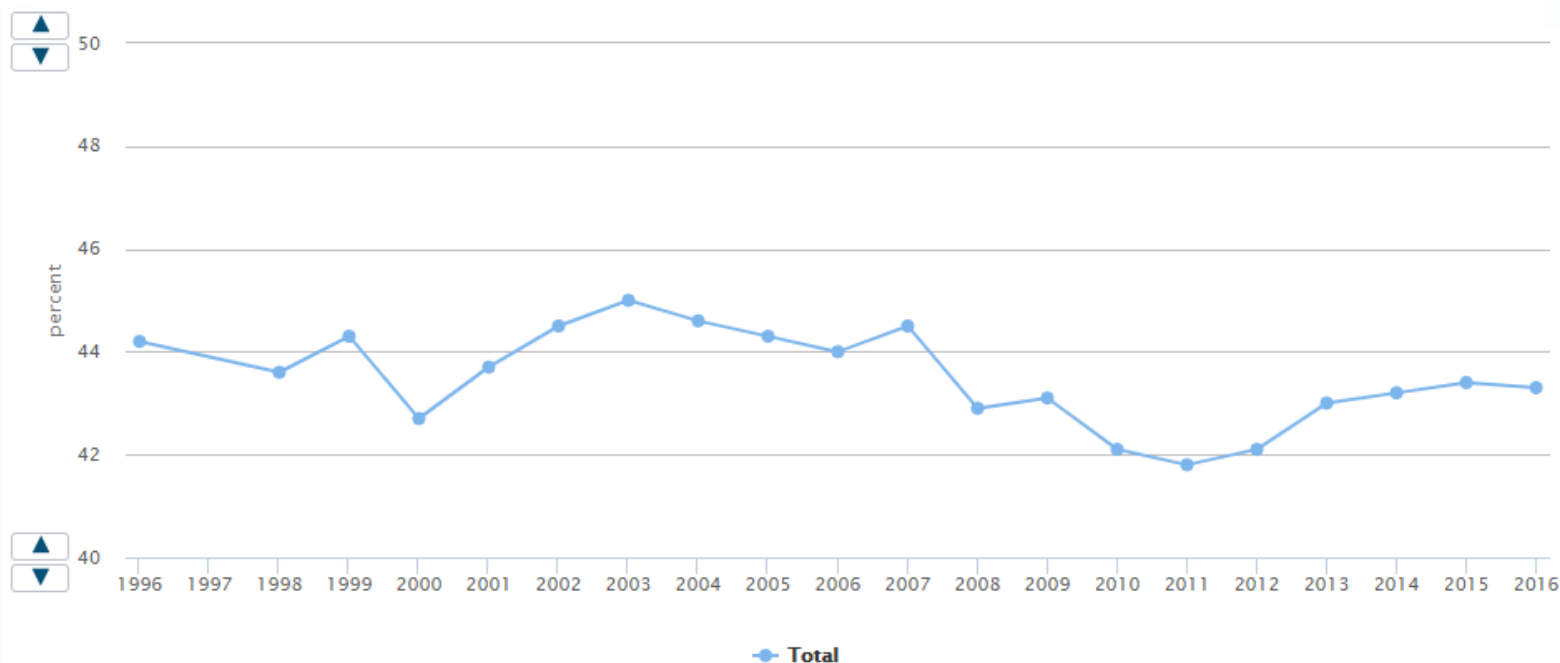
Factors Affecting Access to Dental Care – Another Model



Access to Dental Care, last 20 years

Year	Access %
1996	44.2%
2000	42.7%
2003	45.0%
2005	44.3%
2010	42.1%
2016	43.3%
HP2020 Goal	49.0%
HP2030 Goal	45.0%

Children, adolescents, and adults who visited the dentist in the past year (age adjusted, percent, 2+ years)
By Total

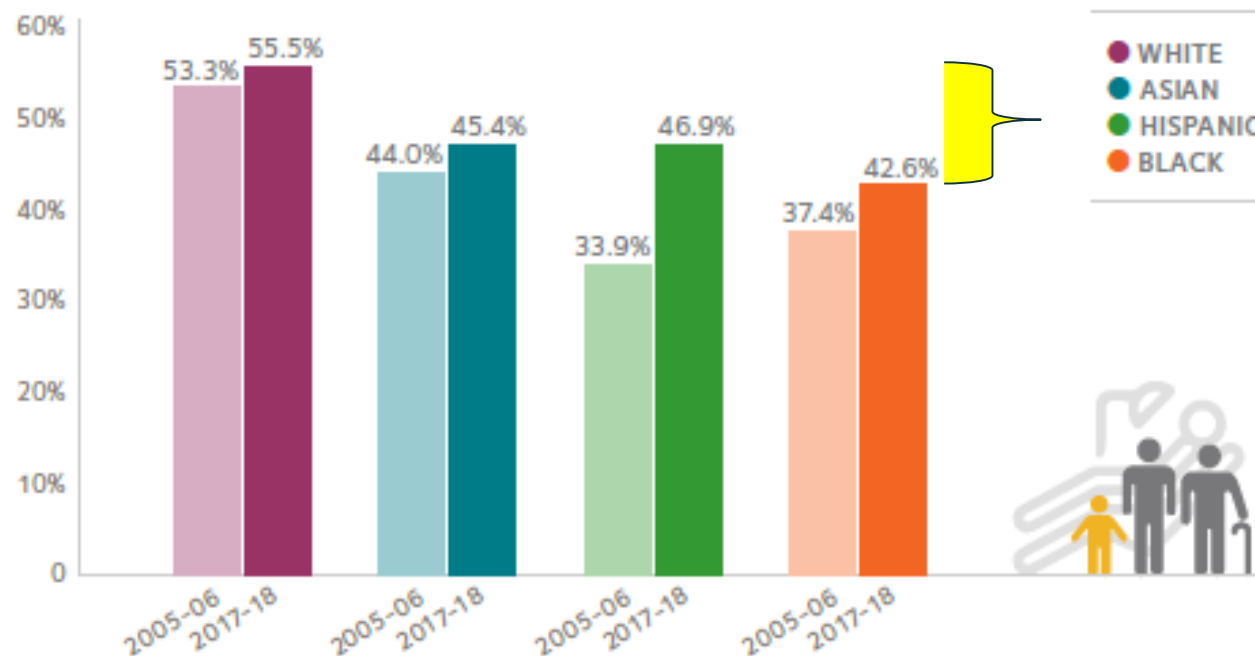


Data Source: Medical Expenditure Panel Survey (MEPS); Agency for Healthcare Research and Quality (AHRQ)
Additional footnotes may apply to these data. Please refer to footnotes below the data table for further information.

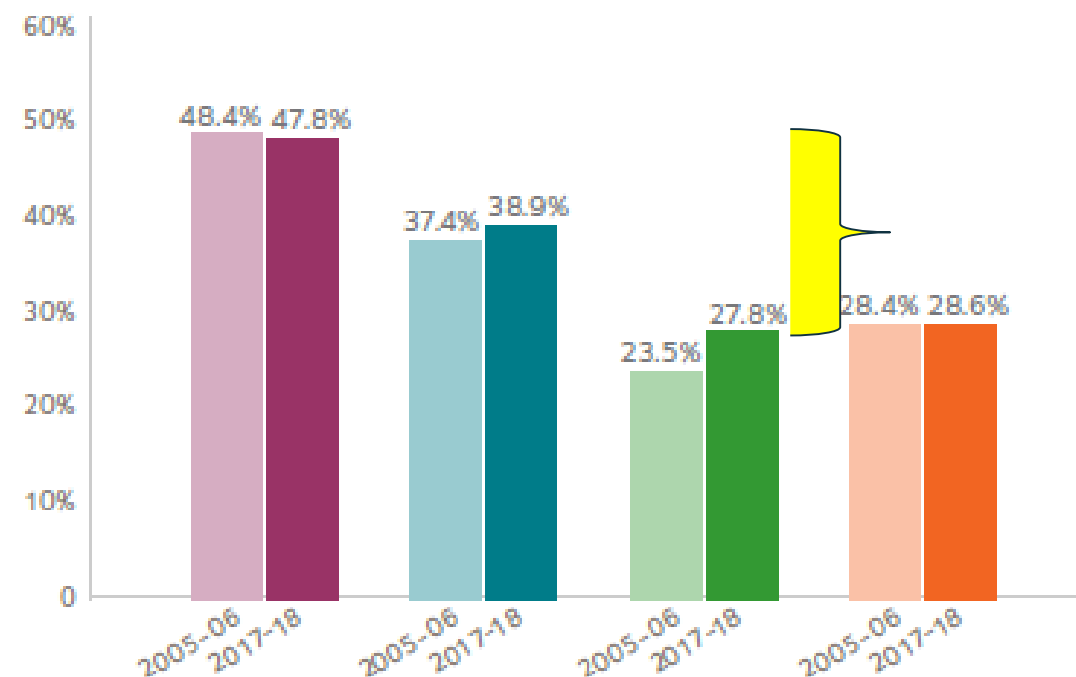


Access by Race/Ethnicity

PERCENTAGE WITH A DENTAL VISIT IN THE PAST YEAR – CHILDREN



PERCENTAGE WITH A DENTAL VISIT IN THE PAST YEAR – ADULTS

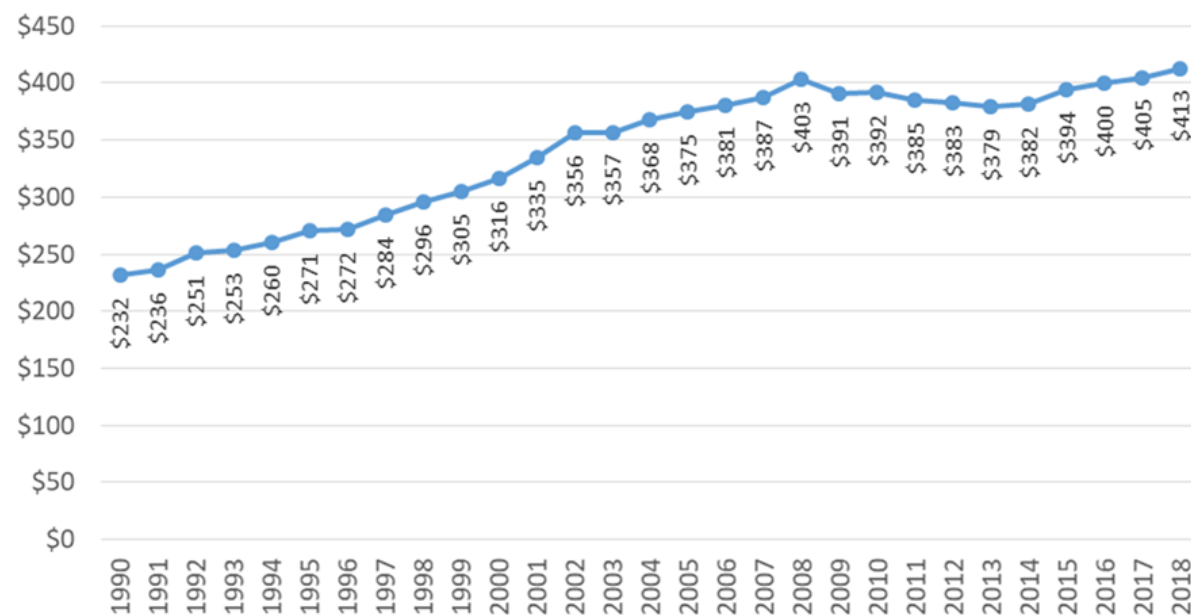


https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic_0421_4.pdf?la=en



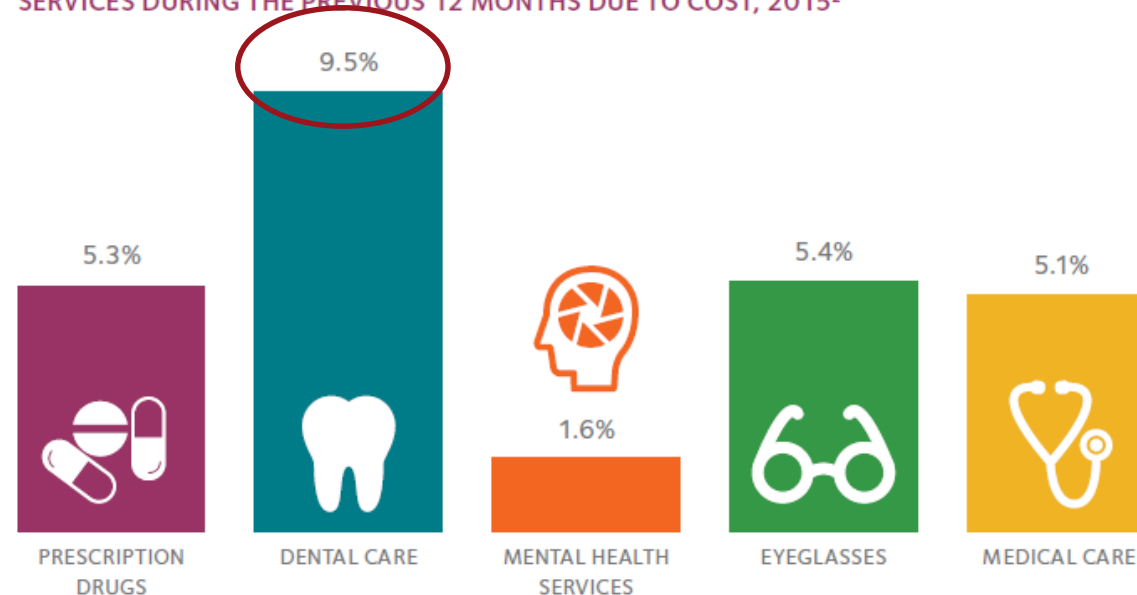
Oral Health Expenditures

Total Per-Capita Dental Spending in the U.S. (Inflation Adjusted)



DENTAL CARE consistently ranks at the top in terms of health care services with affordability challenges.

PERCENTAGE OF THE POPULATION WHO NEEDED BUT DID NOT OBTAIN SELECT HEALTH CARE SERVICES DURING THE PREVIOUS 12 MONTHS DUE TO COST, 2015²



https://www.ada.org/en/science-research/health-policy-institute/publications/infographics?utm_source=adaorg&utm_medium=hpifeaturedbox&utm_content=infographics



COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE

Section 1 **Call to Action:** Effect of Oral Health on the Community, Overall Well-Being, and the Economy

- Policy changes are needed to reduce inequities in oral health status and care, ensuring that all Americans can enjoy the benefits of good oral health.



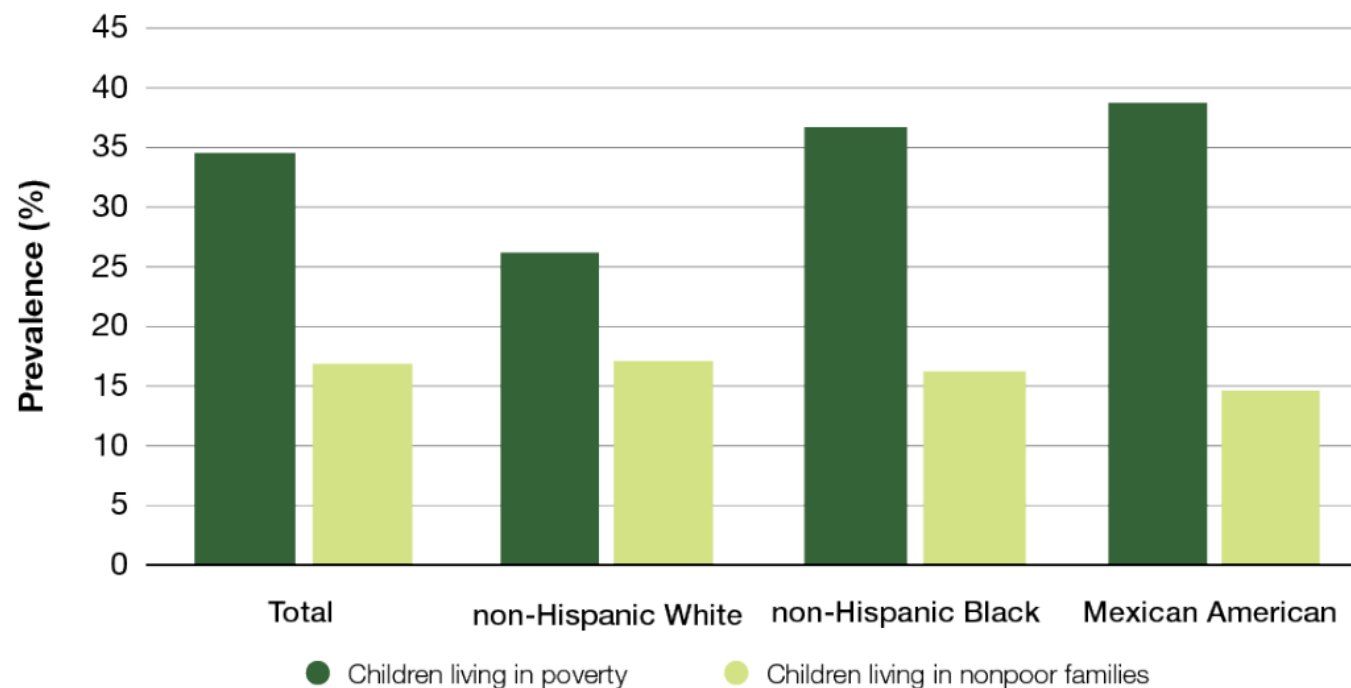
Section 2 **Overview:** Oral Health Across the Lifespan – Children & Adolescents

- About half of all American children do not receive regular dental care because of social, economic, and geographic obstacles.
- Nearly 1 in 5 children have special physical or health care needs; providers trained in active prevention and management of these children's oral health problems help to support their overall health and quality of life.
- About half of all adolescents will experience dental caries; there has been little improvement in the past 20 years.
- Risk-taking behaviors that commonly occur in adolescence, such as tobacco and substance use, as well as the first occurrence of some mental health problems, can affect adolescents' long-term oral health.



Section 2 **Key Graph:** Oral Health Across the Lifespan – Children & Adolescents

Figure 9. Percentage of children ages 2–5 with dental caries in primary teeth by race/ethnicity and poverty status: United States, 2011–2014



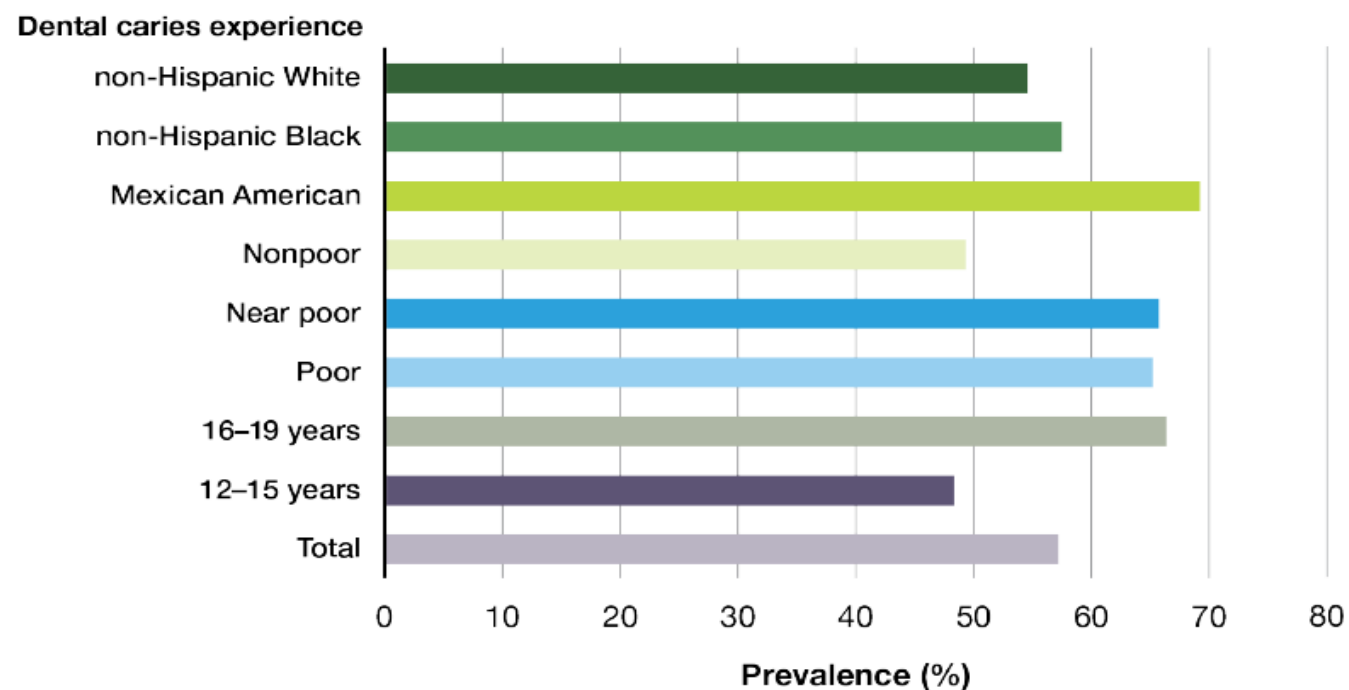
Notes: Dental caries experience (dft > 0). **FPG** = Federal Poverty Guideline: < 100% FPG = poor and ≥ 200% FPG = nonpoor.
Source: Dye et al. (2017).

- Page 2A-7 (165)



Section 2 **Key Graph:** Oral Health Across the Lifespan – Children & Adolescents

Figure 2. Percentage of adolescents ages 12–19 with dental caries in permanent teeth by age group, poverty status, and race/ethnicity: United States, 2011–2016



Notes: Dental caries experience (DMFT > 0). **FPG** = Federal Poverty Guideline: < 100% FPG = poor; 100–199% FPG = near poor; and ≥ 200% FPG = nonpoor.

Source: Centers for Disease Control and Prevention (2019a).

- Page 2B-3 (261)



Section 2 **Call to Action:** Oral Health Across the Lifespan – Children & Adolescents

- Public policies and improved training are needed to reduce oral health inequities by encouraging health providers to focus more on individual and public health approaches to preventing the occurrence of new disease and managing disease earlier.
- Adolescence is a life stage that has been largely neglected by researchers and practitioners in oral health. Policy, education, and research opportunities should be developed to address the unique oral health challenges of this group.



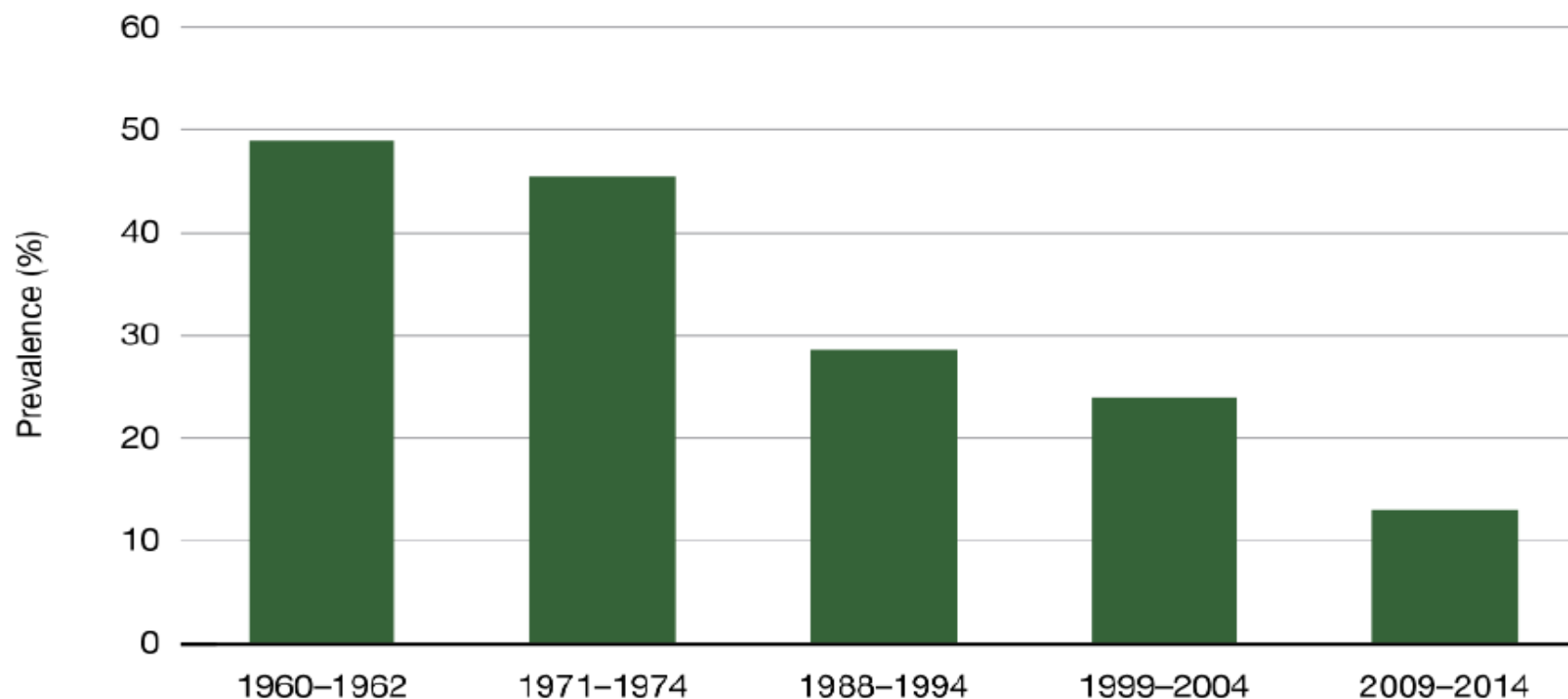
Section 3 **Overview:** Oral Health Across the Lifespan – Working-Age Adults and Older Adults

- Although adults now retain most of their natural teeth, many working-age adults continue to experience the same levels of tooth decay, gum disease, and oral cancers that were observed 20 years ago.
- Many working-age adults—especially low income and minority adults—don't have dental insurance.
- Older adults are living longer than ever before, many with chronic diseases and complex health conditions that would be best managed by medical and oral health professionals working together.
- As working-age adults transition into retirement, most lose their employer-provided dental insurance, and Medicare does not provide an oral health benefit. This puts their oral health at risk.



Section 3 **Key Graph:** Oral Health Across the Lifespan – Working-Age Adults and Older Adults

Figure 5. Trend in edentulism among adults ages 65–74: United States, 1960–1962 to 2009–2014



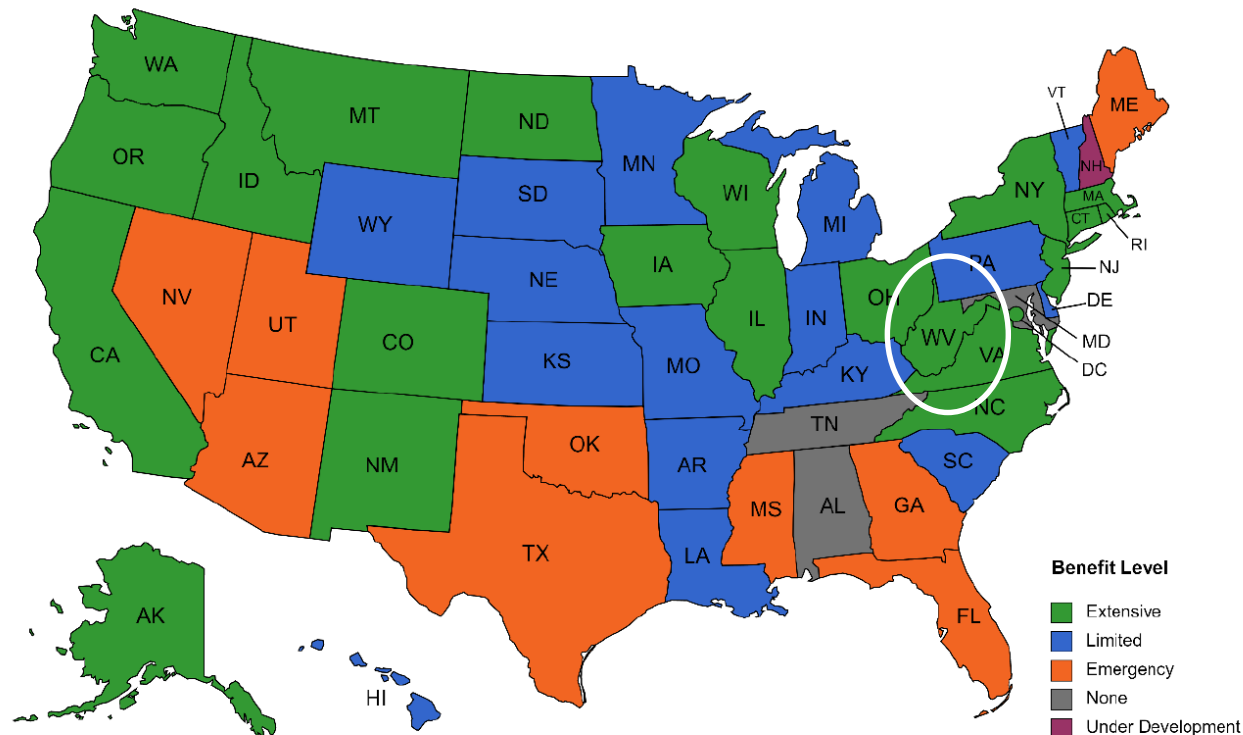
Note: Edentulism is complete loss of all natural permanent teeth.
Source: Adapted from Dye et al. (2019).

• Page 3B-7 (417)



Adult Medicaid Benefits

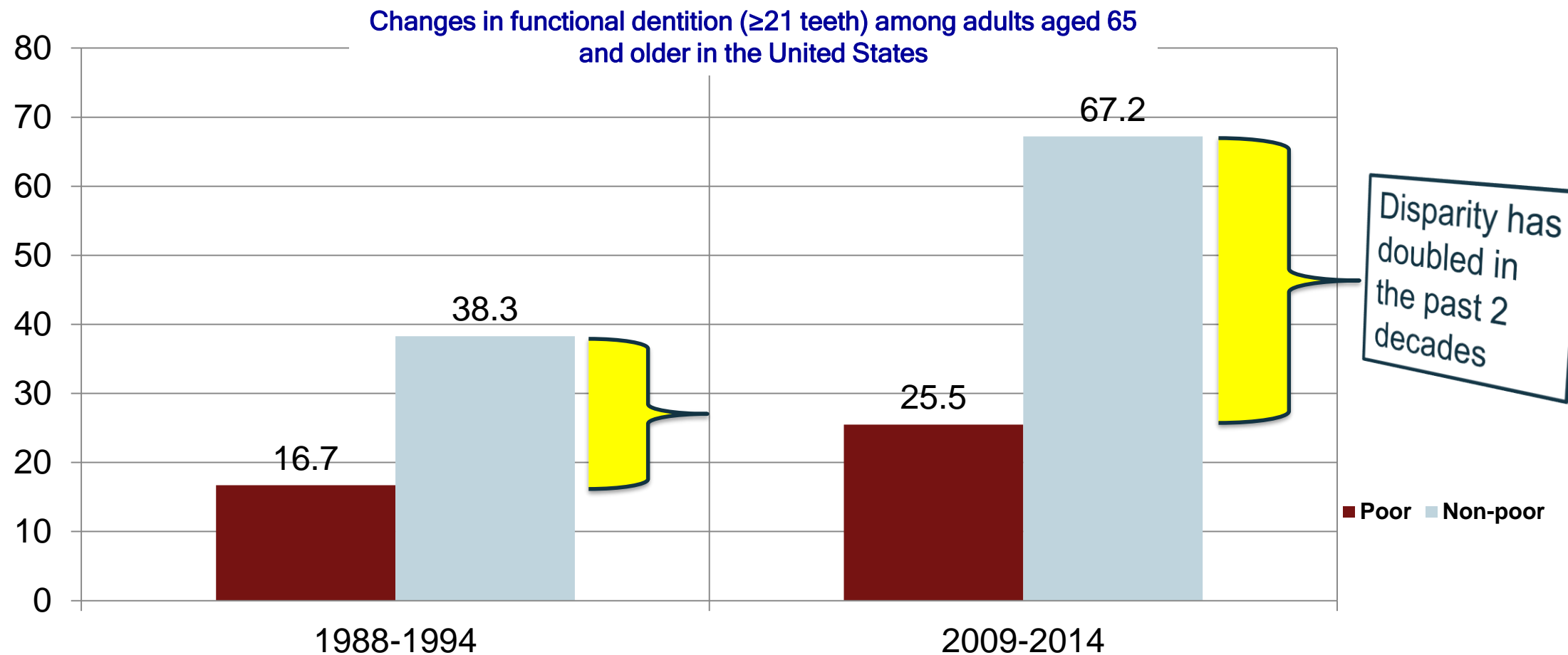
- 74 million Americans lack dental coverage.
- As of 2021, 21 states have extensive dental benefits as part of Medicaid.
- “Extensive” or “Comprehensive” means more than 100 services covered.



<https://dentaquest.com/oral-health-resources/adult-dental-benefit/>



Older Adult Disparities



Dye et al. <https://pubmed.ncbi.nlm.nih.gov/17633507/>



Section 3 **Call to Action:** Oral Health Across the Lifespan – Working-Age Adults and Older Adults

- Policies are needed to improve regular access to professional dental care for working-age adults, assuring access to both preventive and early treatment services, leading to better oral health.
- A policy that mandates dental coverage in Medicare would reduce health inequities for older adults by assuring access to preventive and other oral health services for all, including those who are place-bound or in need of caregiver assistance.

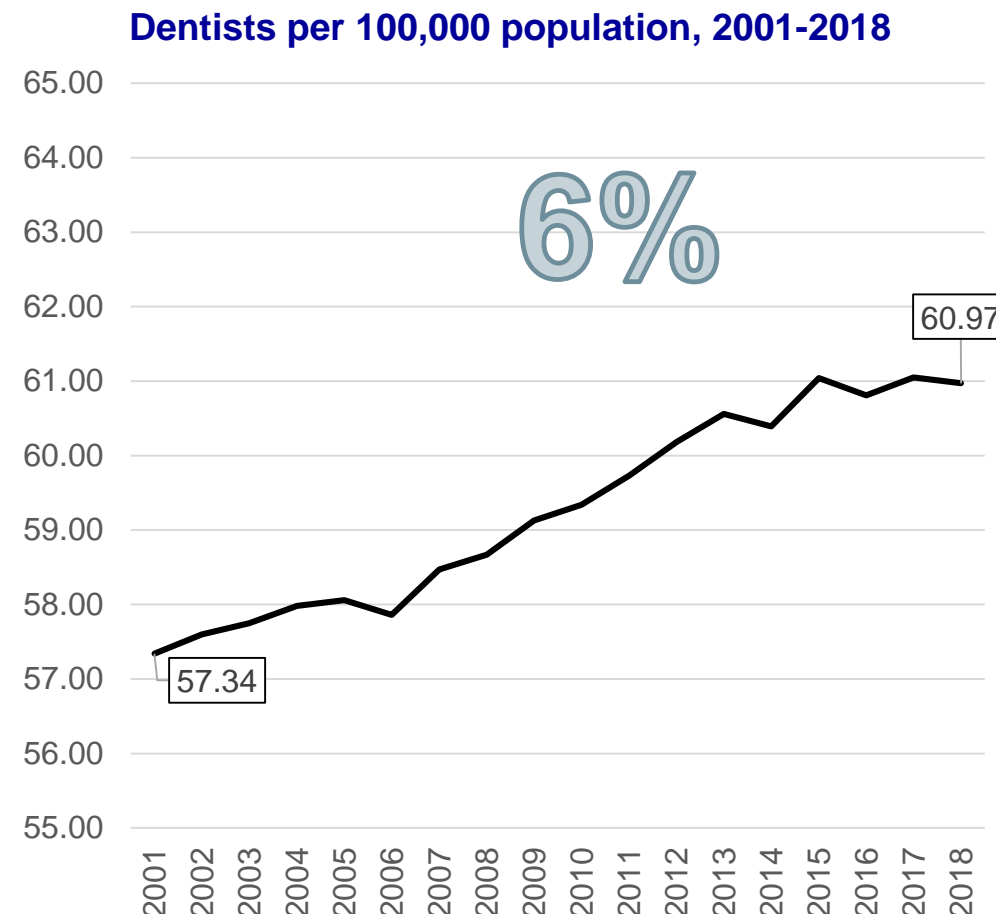
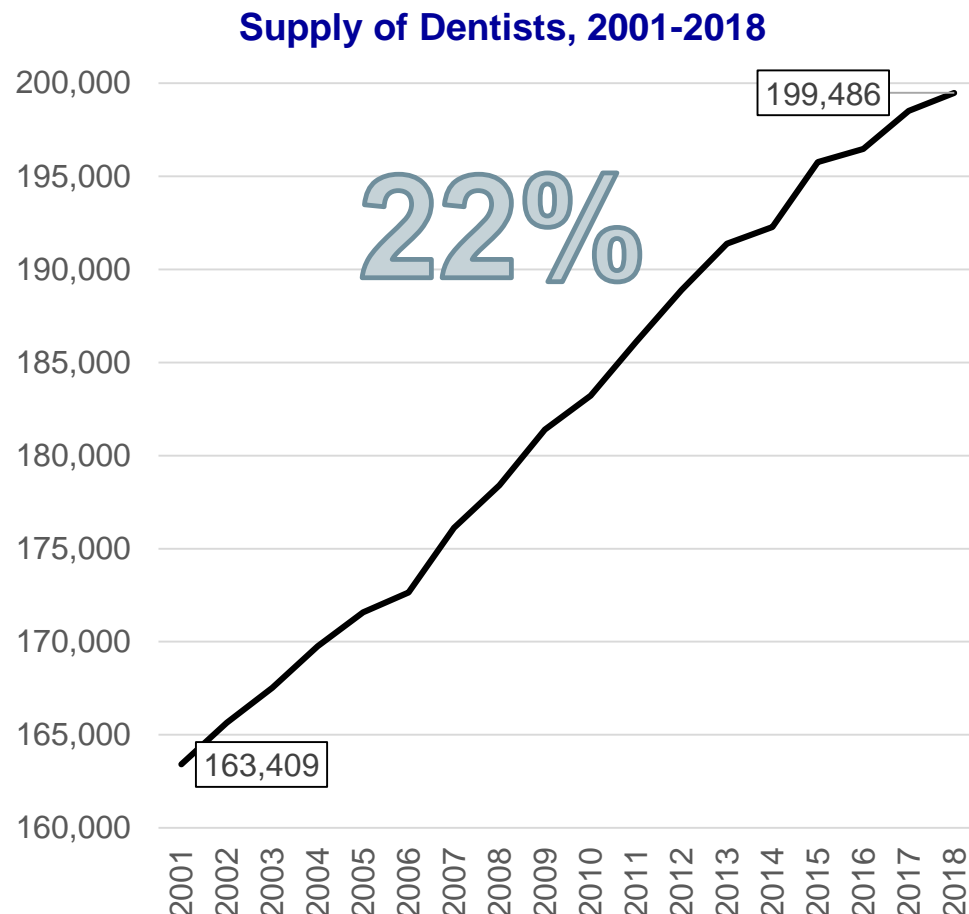


Section 4 **Overview:** Oral Health Workforce, Education, Practice & Integration

- Today's oral health workforce includes not only dentists, but other oral health professionals, such as dental therapists, public health dental hygienists, and community dental health coordinators and medical colleagues who provide oral health assessment and prevention.
- Although there are more oral health providers in the U.S. than in 2000, today about 60 million Americans live in areas (mostly rural) where there are too few oral health professionals to meet local needs.
- Strategies for the integration of oral and general health care delivery are emerging. Improving adults' access to dental care will require a multipronged approach and coordinated efforts among policymakers, insurers, and dental professionals.



Workforce Issues – where are dentists going?

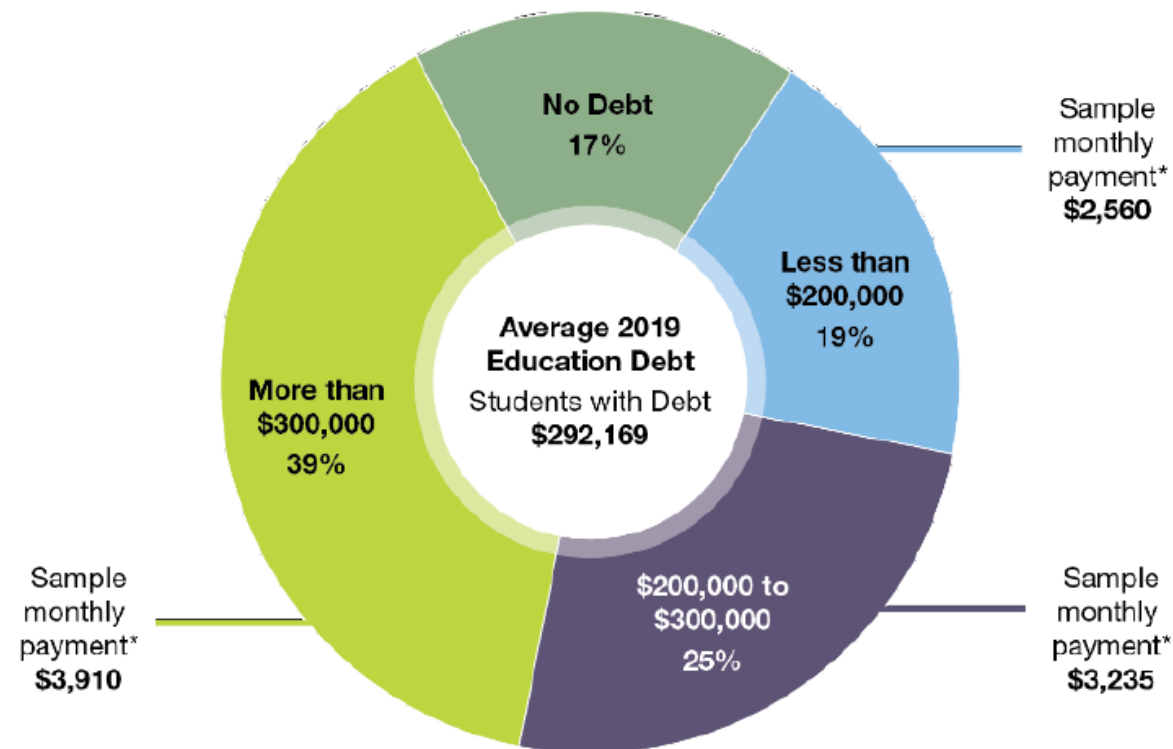


American Dental Association, Health Policy Institute. Supply of Dentists in the U.S.: 2001-2018, February 2019.



Section 4 **Key Graph:** Oral Health Workforce, Education, Practice & Integration

Figure 1. Reported total educational debt of graduating dental school seniors: United States, 2019.



- Page 4-12 (506)

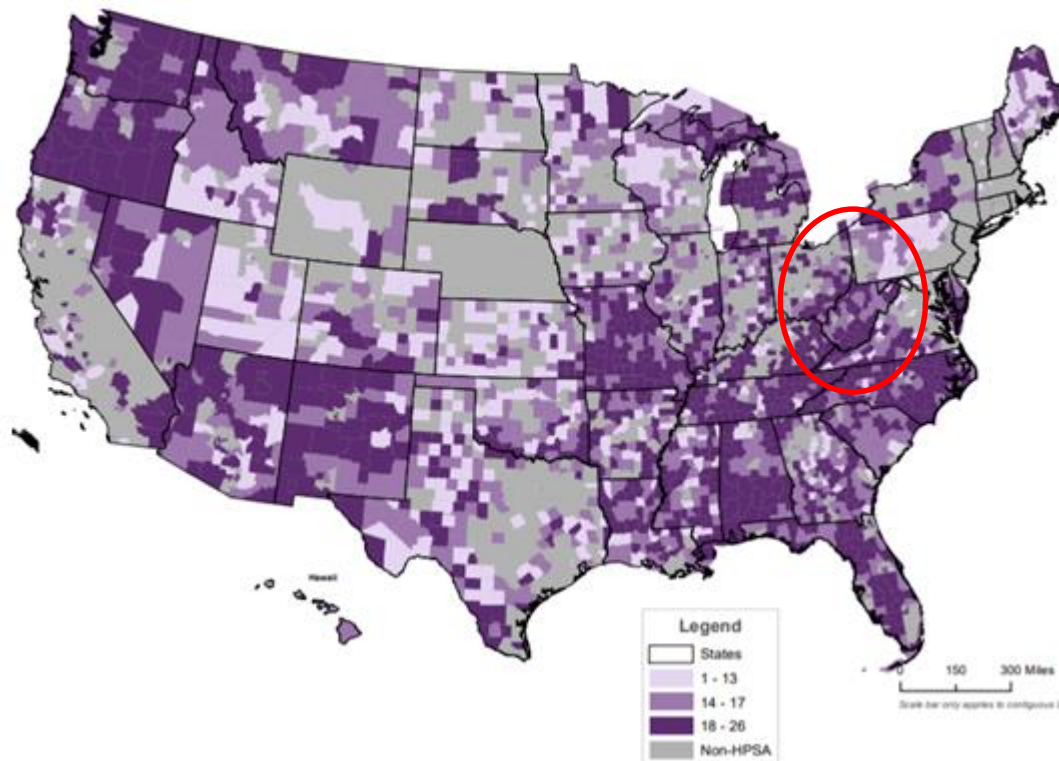
Note: *Standard 10-year term (120 level payments).

Source: American Dental Education Association, Survey of Dental School Seniors, 2019 Graduating Class (2019).



Dental Health Professional Shortage Areas (HPSAs)

- Over 60 million people living in dental HPSAs
- 6,559 dental health professional shortage areas (HPSAs)
- 10,853 practitioners needed to remove HPSA designation

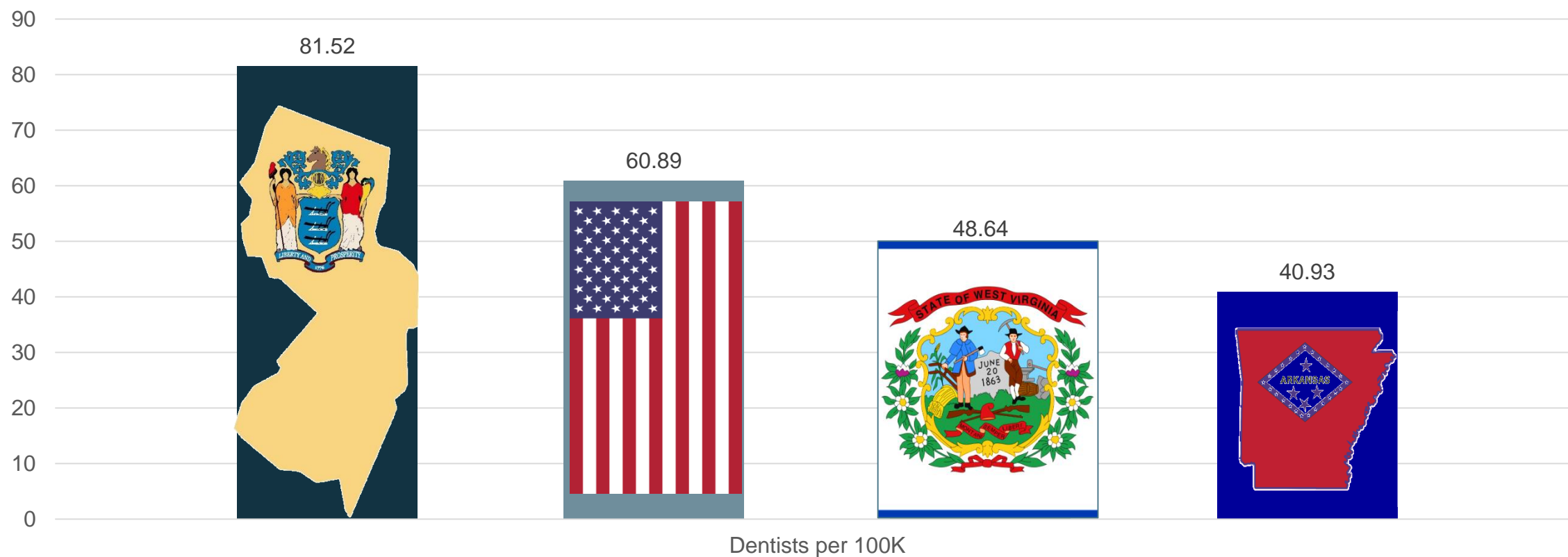


<https://data.hrsa.gov/topics/health-workforce/shortage-areas>



Number of Dentists Per Capita

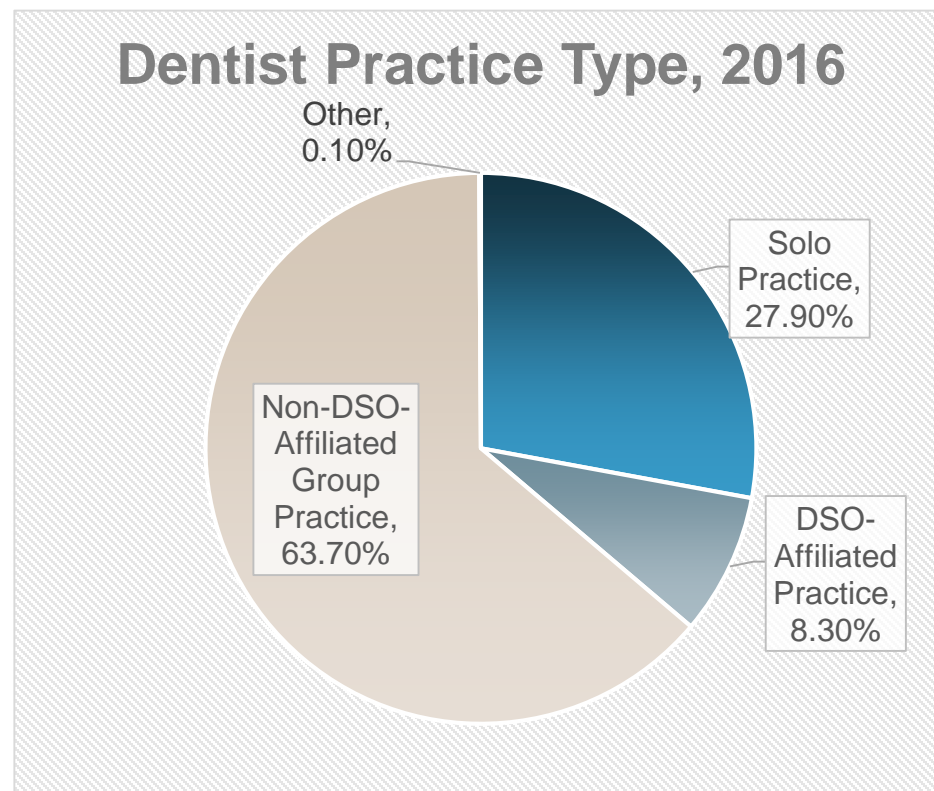
Active Dentists in the U.S., 2015



<https://www.cdc.gov/nchs/data/abus/2016/086.pdf>



Changing Workforce Models – Group Practice

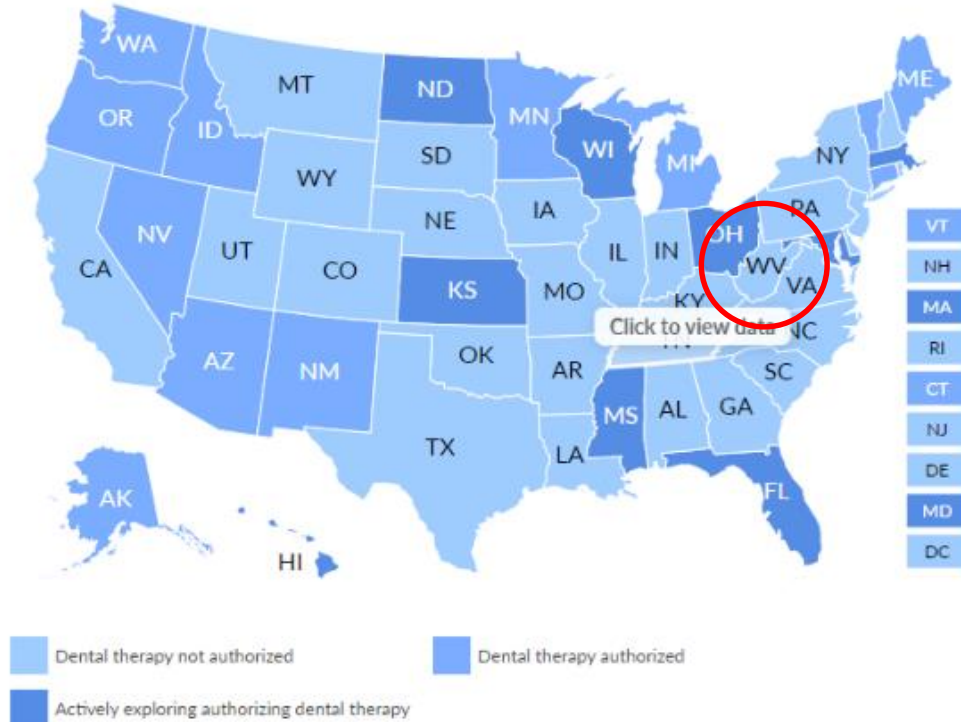


American Dental Association, Health Policy Institute. Supply of Dentists in the U.S.: 2001-2018, February 2019.



Changing Workforce Models - Therapy

Dental therapy policies by state

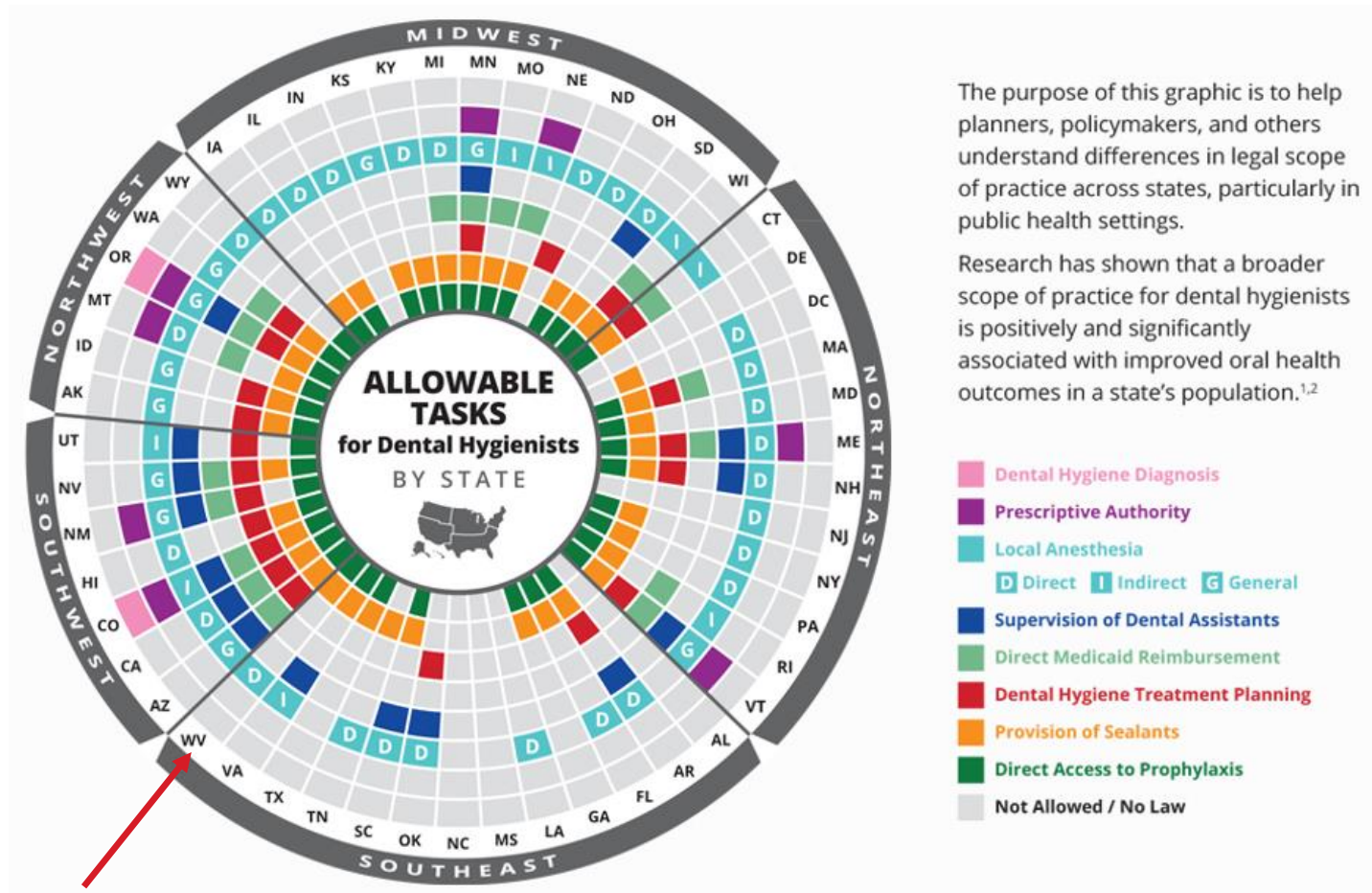


- Begun in 2000
- No universal model
- 13 states have authorized therapy
 - 2004 – Alaska
 - 2009 – Minnesota
 - 2018 – Michigan (8th state)
- 9 states “actively exploring authorizing dental therapy”

<https://www.pewtrusts.org/en/research-and-analysis/articles/2016/09/28/states-expand-the-use-of-dental-therapy>



Changing Workforce Models – Dental Hygienists



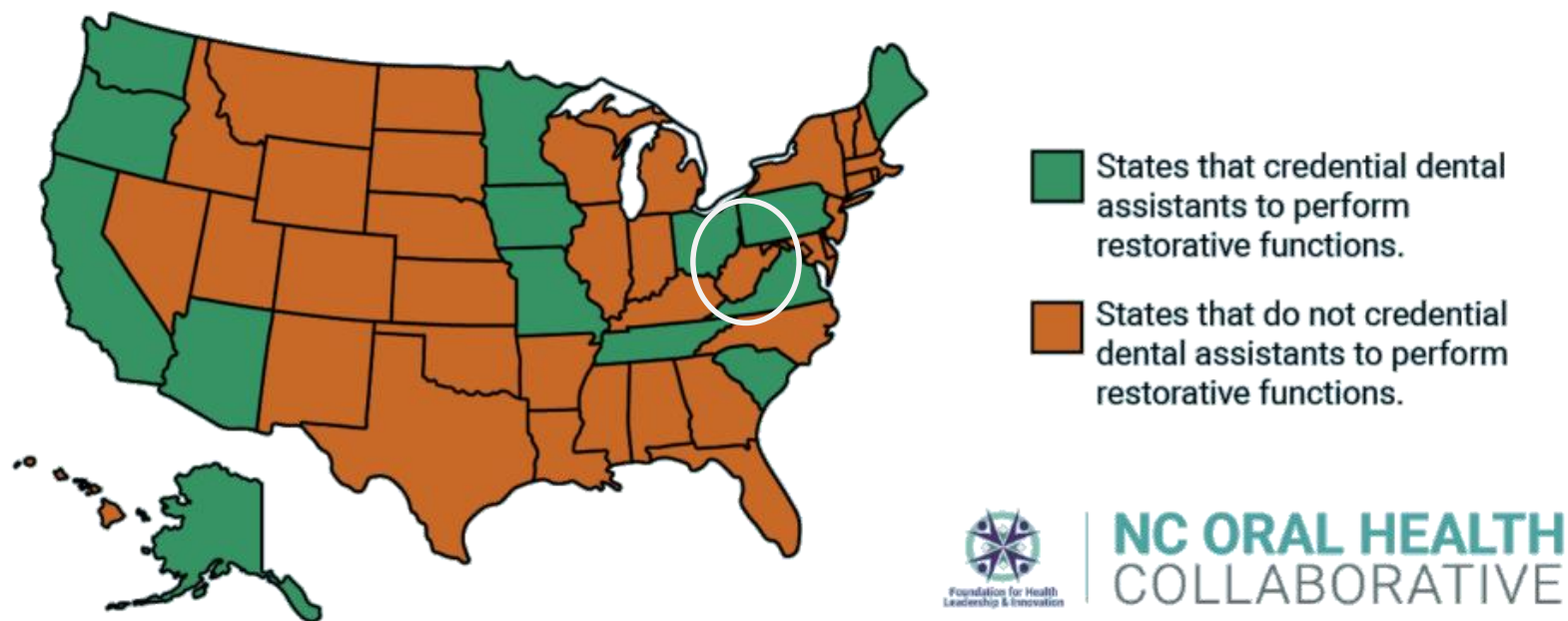
<https://oralhealthnc.org/ncohc-policy-brief-workforce-utilization/>



Changing Workforce Models — Expanded Function Dental Assistants

Dental Assistant Restorative Functions

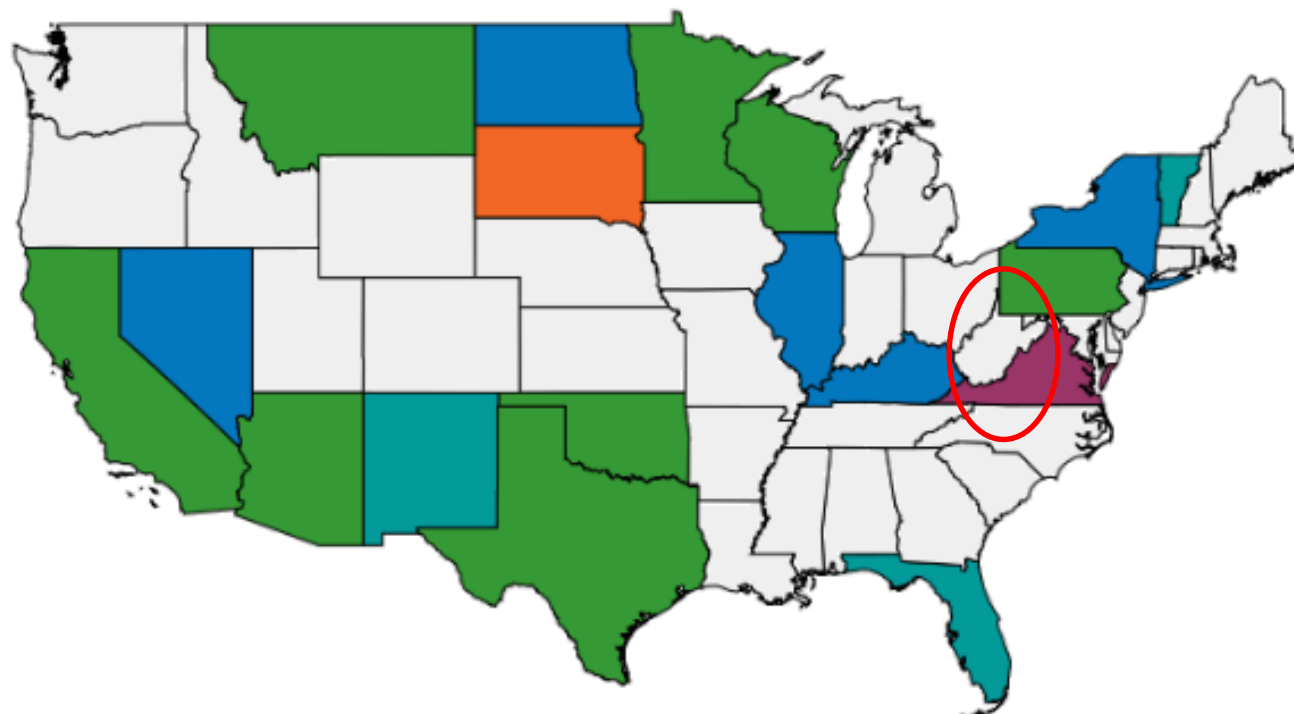
Where can dental assistants be credentialed for expanded functions?



<https://oralhealthnc.org/ncohcs-policy-brief-workforce-utilization/>



Changing Workforce Models — Community Dental Health Coordinators



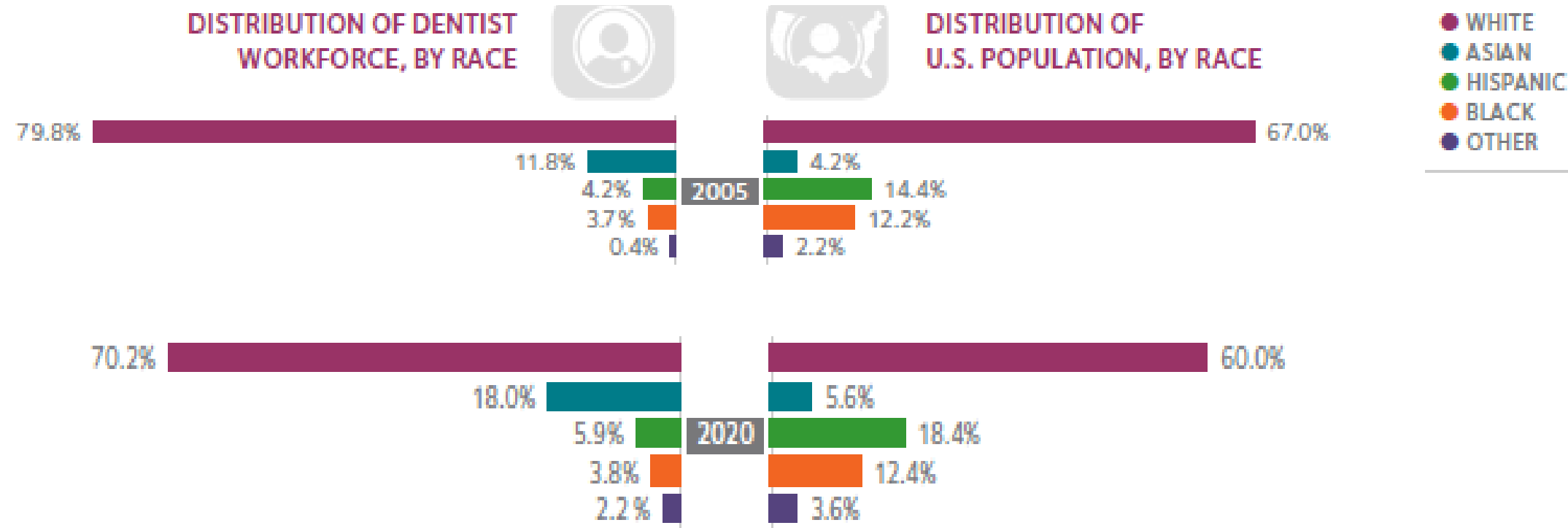
STATUS

- FULL FUNCTION CDHC ON-SITE
- CDHC HELP NAVIGATE TO PROVIDERS
- PILOTING A CDHC PROGRAM
- VISITING CDHC
- CDHC PROGRAMS IN DEVELOPMENT

<https://www.ada.org/en/public-programs/action-for-dental-health/action-for-dental-health-map>



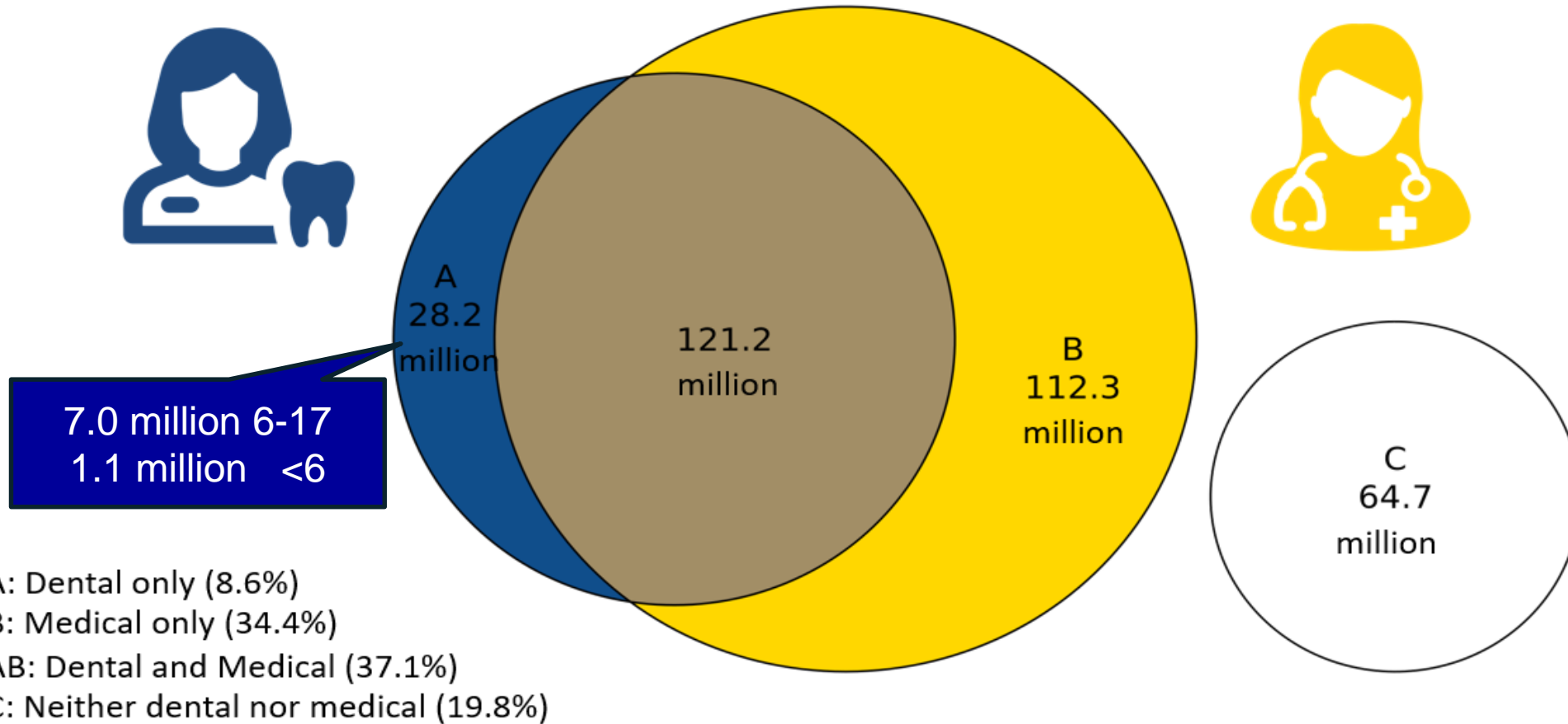
Workforce Diversity



https://www.ada.org/-/media/project/ada-organization/ada/ada-org/files/resources/research/hpi/hpigraphic_0421_1.pdf?rev=aa1f41177af94613a74a307adc11f2f0&hash=8F66BABF02828DB2E9A6D5D53908F2DD



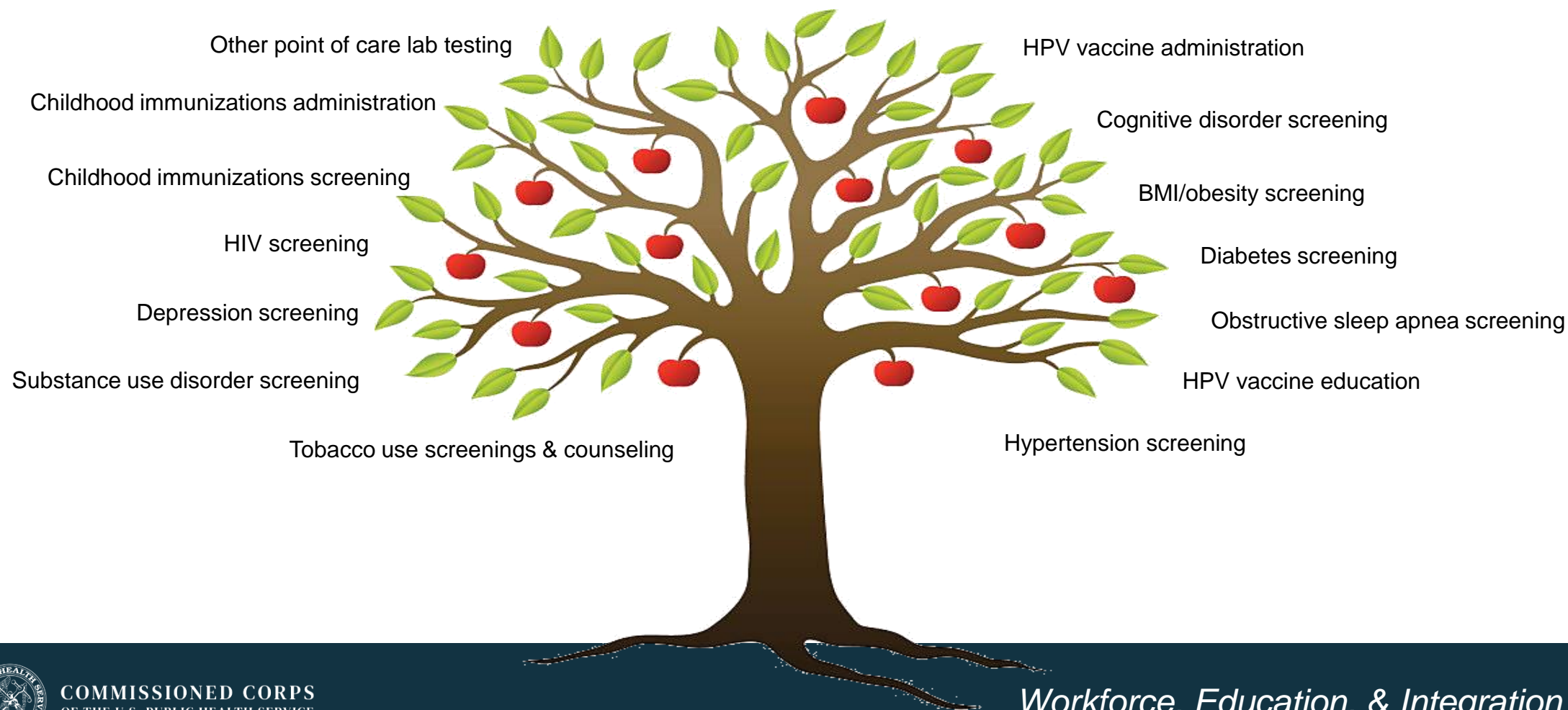
Population with Any Dental and Medical Visits



Source: Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends, Medical Expenditure Panel Survey, Household Component, **2018**.

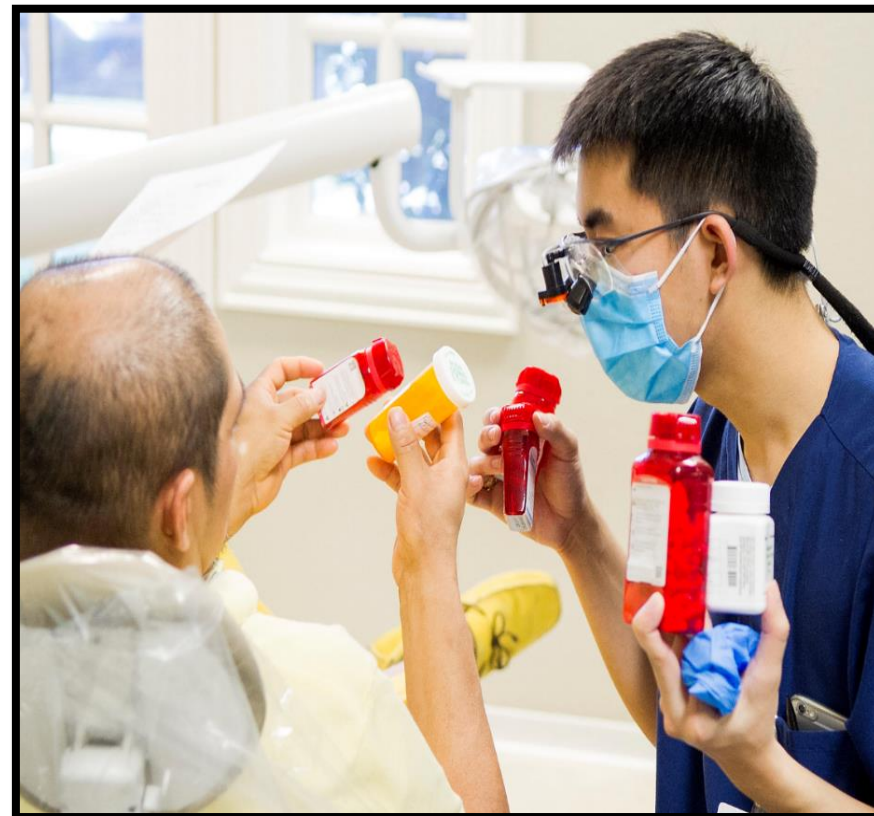


Opportunities for the Present & Future



Section 4 **Call to Action:** Oral Health Workforce, Education, Practice & Integration

- Improving access to oral health care can be achieved by recognizing dental care as an essential health benefit for all Americans, expanding dental coverage for the uninsured, encouraging new professional models, and by providing educational opportunities that encourage interprofessional learning and the delivery of care in new settings.



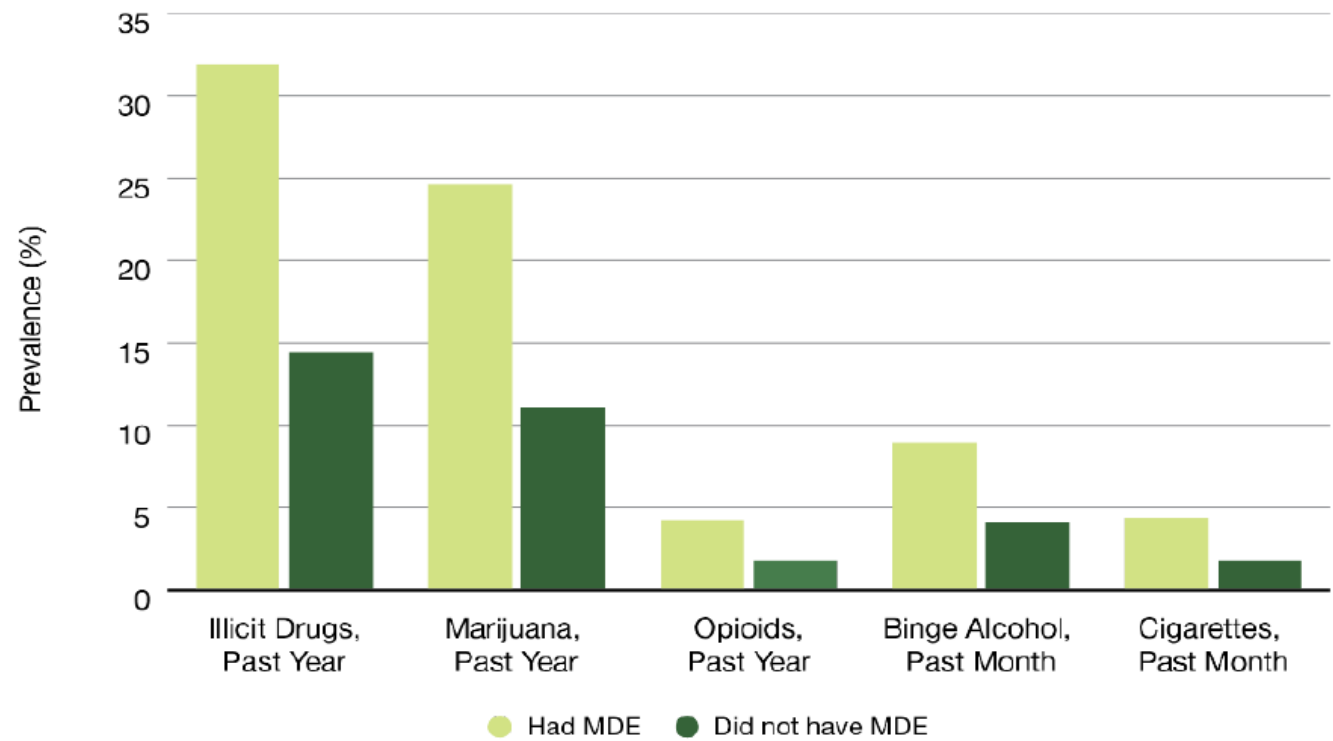
Section 5 **Overview:** Pain, Mental Illness, Substance Use, and Oral Health

- Substance misuse and mental illness can have negative effects on oral health and well-being.
- Most opioid prescriptions for dental conditions are provided in emergency departments—an expensive and often ineffective practice.
- Early research on e-cigarette use shows that it has many of the same negative effects on gums and soft tissue seen with tobacco use, including increased risks for oral malignancies.



Section 5 **Key Graph:** Pain, Mental Illness, Substance Use, and Oral Health

Figure 7. Percentage of substance use among youths ages 12–17 reporting a past year major depressive episode (MDE): United States, 2019



Notes: Major depressive episode (MDE) previously defined. Difference between this estimate and the estimate for youths without MDE is statistically significant at the .05 level. Youth respondents with unknown MDE data were excluded.
Source: Substance Abuse and Mental Health Services Administration (2020a).

Section 5 **Call to Action:** Pain, Mental Illness, Substance Use, and Oral Health

- In order to participate fully in an integrated system of health care, oral health professionals must acquire new competencies related to the behavioral health aspects of substance use and mental illness to provide optimal oral health care for, and appropriately refer, those with substance use disorders and mental health problems.



Dr. Daniel Brody, a dentist at Valley Health CHC in Fort Gay, West Virginia, screens a patient for SUD.



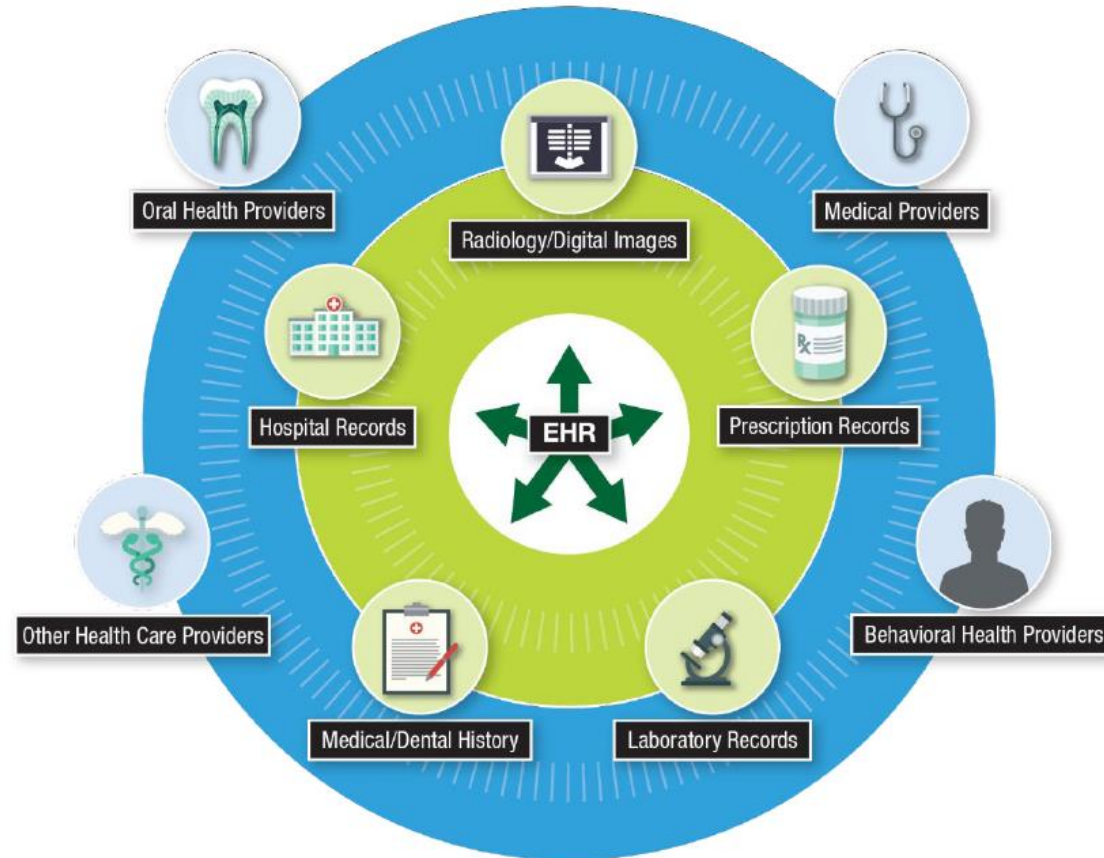
Section 6 **Overview:** Emerging Science and Promising Technologies to Transform Oral Health

- Science and technology provide the essential foundation for preventing and treating oral disease, and research breakthroughs during the past 20 years offer exciting opportunities to improve oral health.
- Discoveries related to the microbiome, genomics, and other omics offer promise for individualizing oral health care and revealing relationships among systemic diseases, suggesting possibilities for new treatments.
- The emergence of novel pathogens, such as COVID-19 and other as yet unknown agents, underscores the need to strengthen the scientific base and ensure the flexibility of the scientific enterprise to swiftly incorporate advances and technology necessary for addressing new health challenges.



Section 6 **Key Graph:** Emerging Science and Promising Technologies to Transform Oral Health

FIGURE 5. Integrated electronic health record (EHR)



- Page 6-29 (703)



Section 6 **Call to Action:** Emerging Science and Promising Technologies to Transform Oral Health

- Training, support, and mentorship of more oral health scientists and academics are needed to ensure a robust workforce who can extend and effectively use the advances in science that are so critical for delivering care in the changing landscape of oral health.





Healthy People 2030: Oral Health Objectives



COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE

Healthy People 2030 Oral Health Objectives

Federal Initiatives: Healthy People 2030 (healthypeople.gov)

Webinar Date	Healthy People Oral Health Objective	Alignment with national initiative/observance
May 2022	OH-4: Reduce the proportion of older adults with untreated root surface decay	Older Americans Month
Jul 2022	OH-2: Reduce the proportion of children and adolescents with active and currently untreated tooth decay in their primary or permanent teeth	None, but preceding National Back to School Month
Oct 2022	OH-3: Reduce the proportion of adults with active or currently untreated tooth decay	Healthy Literacy Month
Nov 2022	OH-6: Reduce the proportion of adults aged 45 years and over with moderate and severe periodontitis	American Diabetes Month
Jan 2023	OH-11: Increase the proportion of persons served by community systems with optimally fluoridated water systems	Anniversary of Grand Rapids, MI Fluoridation
Feb 2023	OH-1: Reduce the proportion of children and adolescents with lifetime tooth decay experience in their primary or permanent teeth	National Children's Dental Health Month
Apr 2023	OH-7: Increase the proportion of oral and pharyngeal cancers detected at the earliest stage	Oral, Head & Neck Cancer Awareness Month
Jun 2023	OH-D01: Increase the number of states and the District of Columbia that have an oral and craniofacial health surveillance system	Oral Health Month
Aug 2023	OH-10: Increase the proportion of children and adolescents who have dental sealants on 1 or more molars	National Back to School Month
Oct 2023	OH-9: Increase the proportion of low-income youth who have a preventive dental visit	National Dental Hygiene Month
Mar 2024	OH-8: Increase the proportion of children, adolescents, and adults who use the oral health care system	World Oral Health Day
May 2024	OH-5: Reduce the proportion of adults aged 45 years and over who have lost all of their natural teeth	Older Americans Month



Thank You!

Timothy L. Ricks, DMD, MPH, FICD, FACD
Rear Admiral, U.S. Public Health Service
Assistant Surgeon General/Chief Dental Officer
(301) 549-2629
USPHSCDO@ihhs.gov



COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE