

Current Issues in Oral Health

Nevada Advisory Committee for Oral Health (AC4OH)



Disclosure(s)

I have no disclosures regarding financial relationships, commercial interests, or funding from commercial support or external sources.

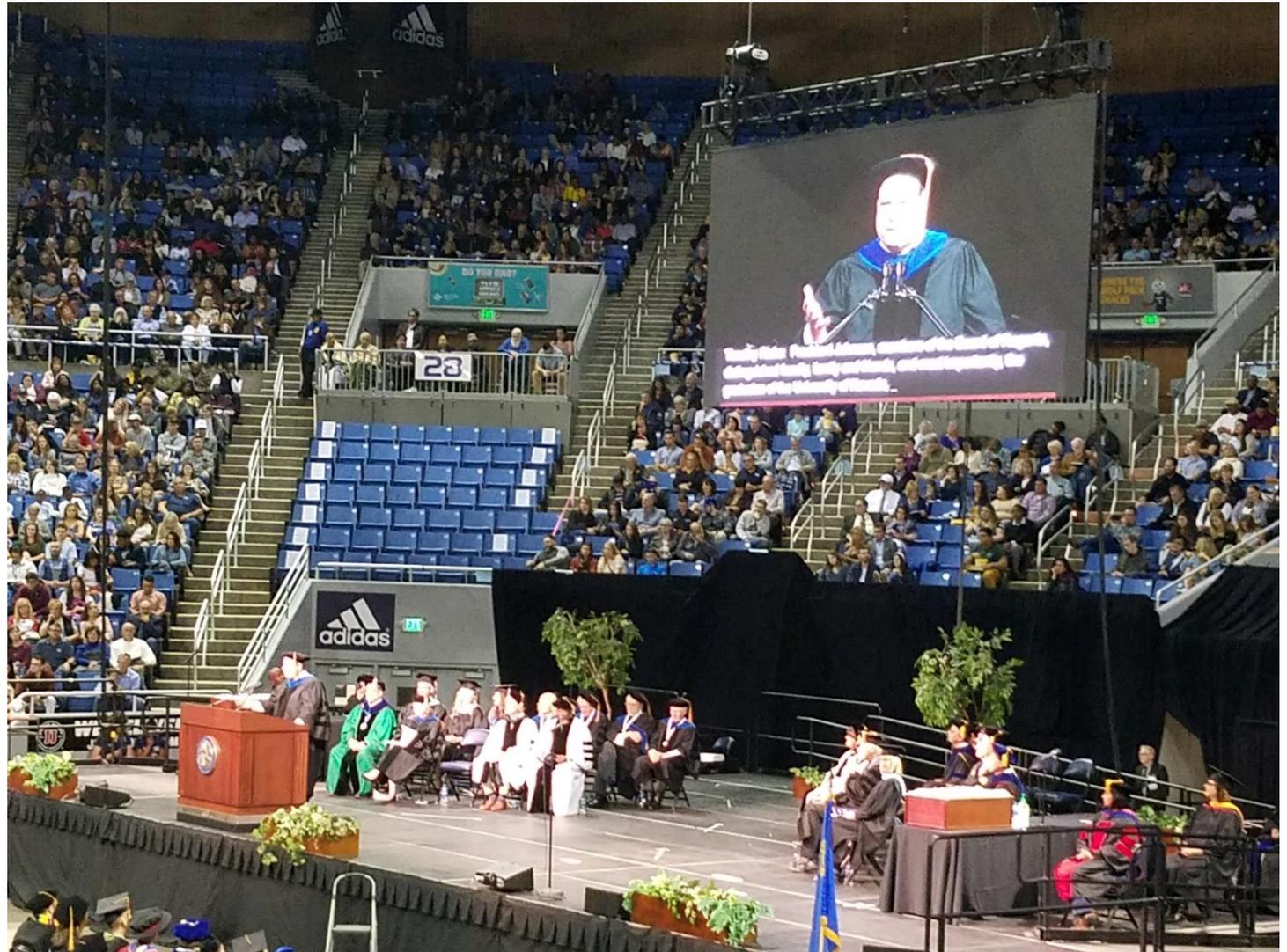
Where appropriate, I have referenced sources for the information provided.

Overview

- Oral Health Coalitions
- Overview of the U.S. Public Health Service
- Summary of COVID-19 and oral health
- Description of oral health inequities in the U.S.(access, disease)
- Overview of workforce models
- Description of medical-dental integration opportunities

1st trip back to NV

May 2019



2nd trip back to NV

September 2019



2nd trip back to NV

September 2019



**But this is what
I remember**



**But this is what
I remember**



A Quick Overview of the USPHS



Photo by Kun Shen



In the Service of Health

“In Officio Salutis”



Who We Are

- **Our origins trace back more than 200** years to when the U.S. Marine Service acted to contain the spread of disease from sailors returning from foreign ports and provide care to new immigrants
- **One of eight uniformed services**, and the only one dedicated solely to protecting America's public health
- **Specialties include** physicians, dentists, nurses, pharmacists, clinical and rehabilitation therapists, dietitians, engineers, environmental health and health services officers, scientists, and veterinarians
- **Led by the Assistant Secretary for Health**, with operations and activities overseen by the U.S. Surgeon General
- **Inspired by the call to serve vulnerable and underserved communities** through addressing public health issues



What We Do

Protect, promote and advance the health and safety of our nation.

- **Provide essential health services** to vulnerable and underserved populations.
- **Serve on the frontline of public health emergencies**
- **Lead public health programs and policy development** throughout the federal government.
- **Advance innovation and science**



USPHS Dentist Locations



National Institutes of Health

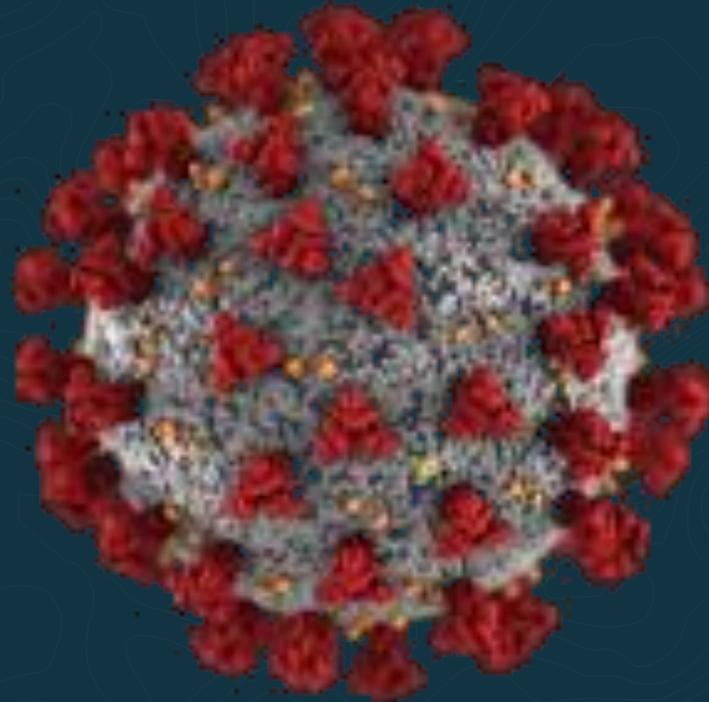


COMMISSIONED CORPS
OF THE U.S. PUBLIC HEALTH SERVICE

What a USPHS dentist does

- **Delivers critical dental services** to vulnerable and underserved populations including American Indians and Alaska Natives (Indian Health Service), inmates (Federal Bureau of Prisons), immigrants and detainees (Immigration and Customs Enforcement Health Service Corps), service members (U.S. Coast Guard), and to poor and underserved across the country through community health centers (Health Resources and Services Administration)
- **Manages population-based oral health programs** such as Medicaid (Centers for Medicare and Medicaid Services), national surveillance, infection control guidance, and community water fluoridation (Centers for Disease Control and Prevention), oral health-related grants (HRSA), etc.
- **Conducts Research** including basic laboratory, translational, and clinical research (National Institute of Dental and Craniofacial Research)
- **Regulates Dental Products** such as dentrifices (Food and Drug Administration)

COVID-19 & Oral Health



Dental Scopes of Practice Expansion – COVID-19

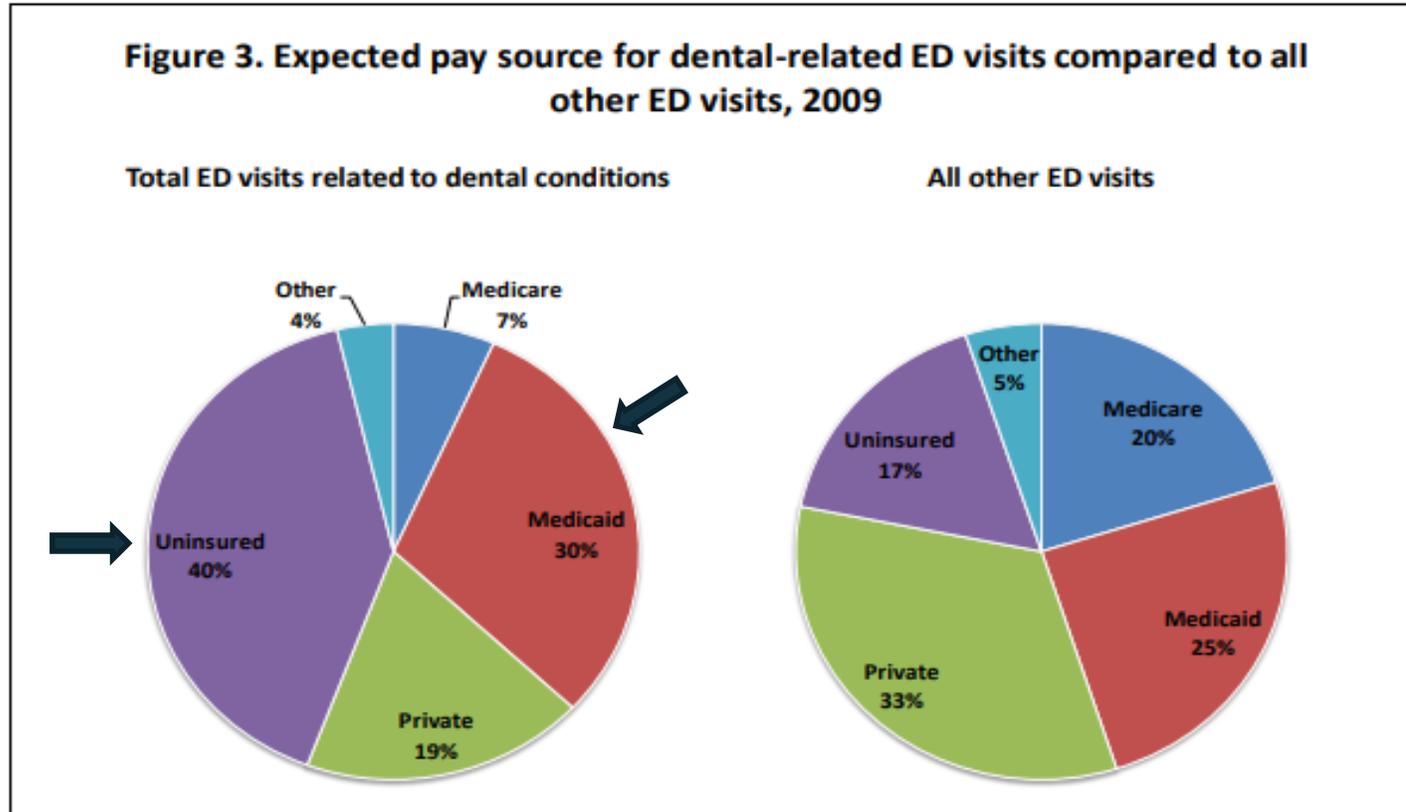
7th PREP Act amendment, effective 3/11/2021, supersedes state authorization.

	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>

Impact on Dental Care for the Underinsured



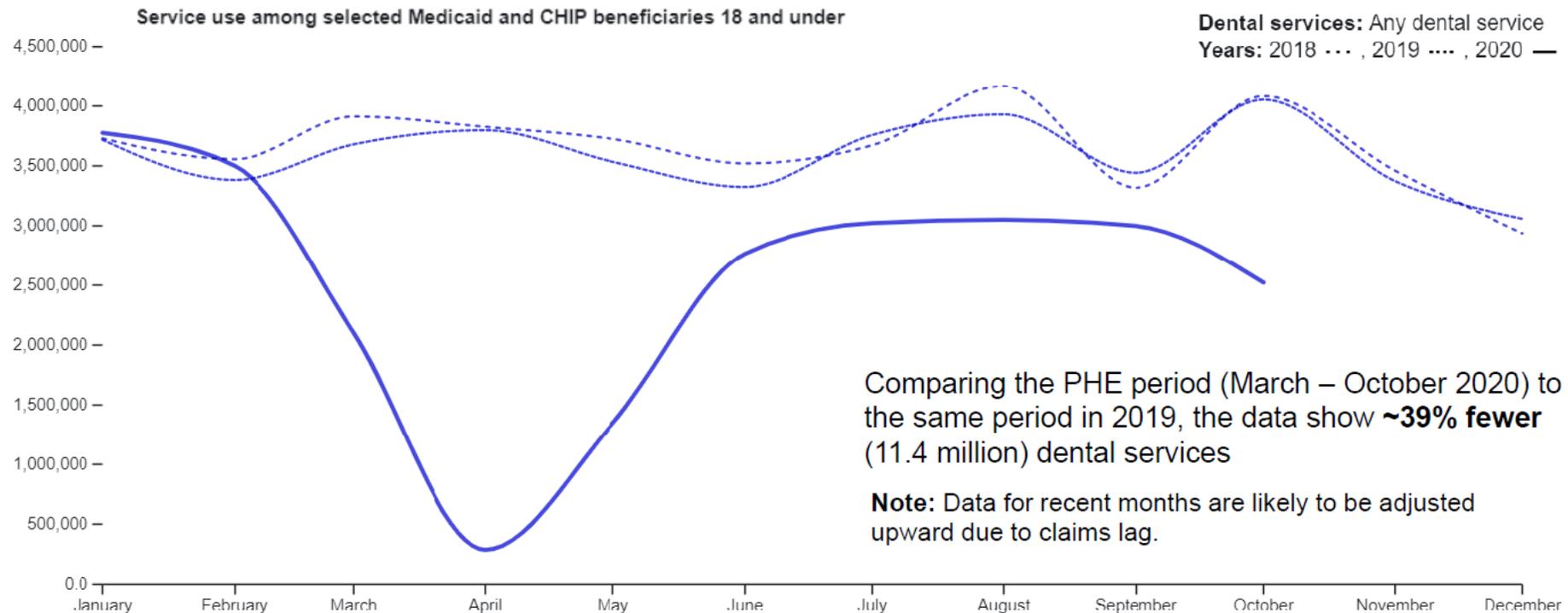
Source: AHRQ, Center for Delivery, Organization and Markets, Healthcare Cost and Utilization Project, Nationwide Emergency Department Sample, 2009



Impact on Medicaid

Preliminary 2020 data show the number of dental services for children declined substantially in April, increased through July, but were still well below prior years' rates

Dental service rates among children under 19 dropped from 95 per 1,000 in February 2020 to a low of 8 per 1,000 beneficiaries in April 2020, and increased to a high of about 80 per 1,000 beneficiaries in August 2020



Opportunities Ahead

- **Tele-dentistry**

- Screening
- Specialty Care

- **Integration of Oral Health and Overall Health**

- Education: HPV, Influenza, etc.
- Referral
- Point of Care Testing

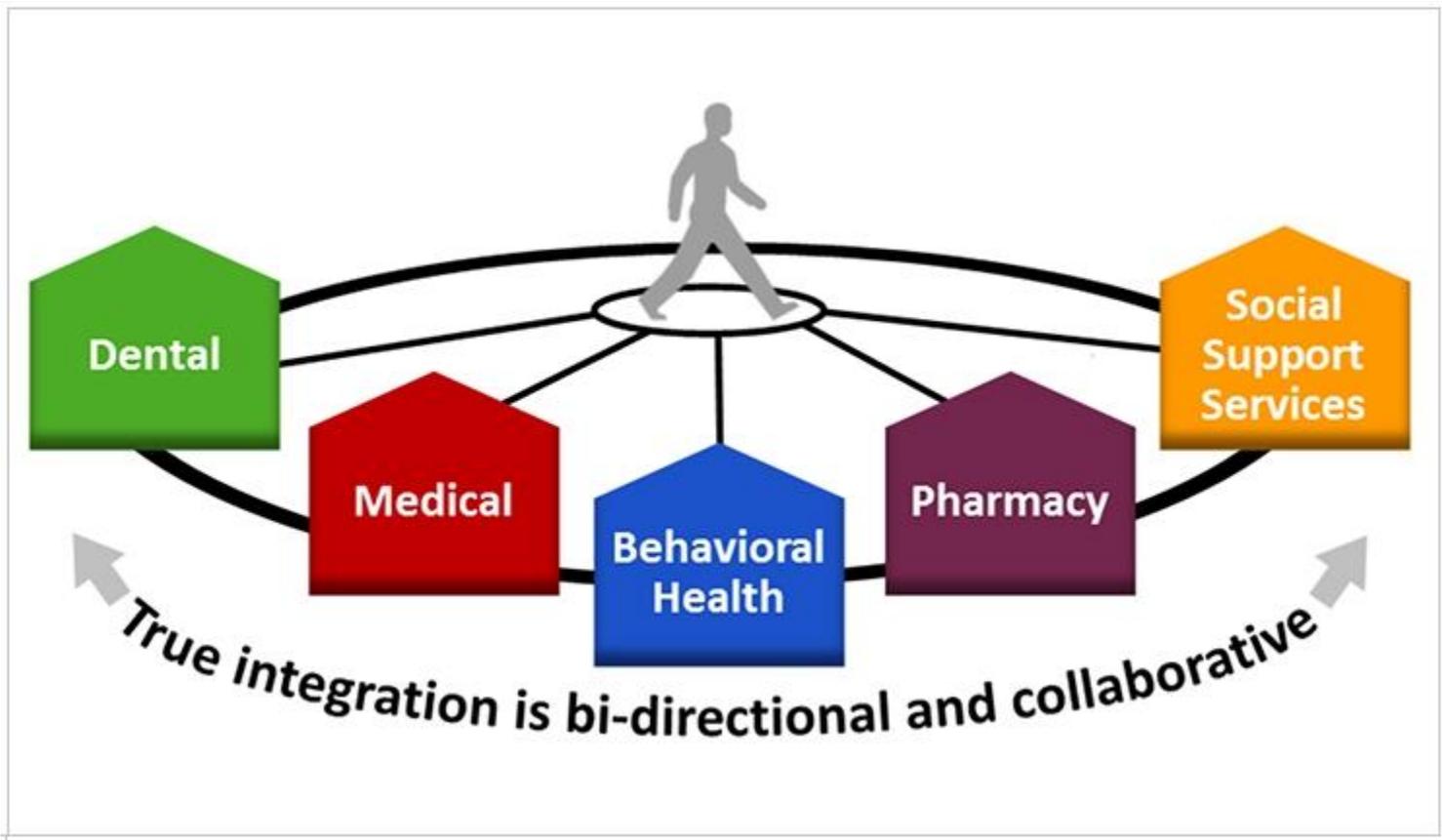
- **Expansion of Alternative Dental Workforce Models**

- **Minimally Invasive Dentistry**

- Silver Diamine Fluoride
- Interim Therapeutic Restorations



Medical-Dental Integration



Opportunities Ahead: Medical-Dental Integration

- **Oral Health into Primary Care**

1. Medical providers applying fluoride varnish
2. Medical providers doing oral health assessments
3. Dental staff working in medical clinics to provide preventive services
4. Collaboration with non-medical providers on oral health
5. Warm referrals from medical to dental

- **Primary Care into Oral Health**

1. Diabetes Screenings (HbA1c)
2. Blood Pressure Screenings
3. Vaccinations – COVID, Influenza, HPV, other childhood vaccines
4. Depression Screenings
5. Other point-of-care tests



MDI Examples



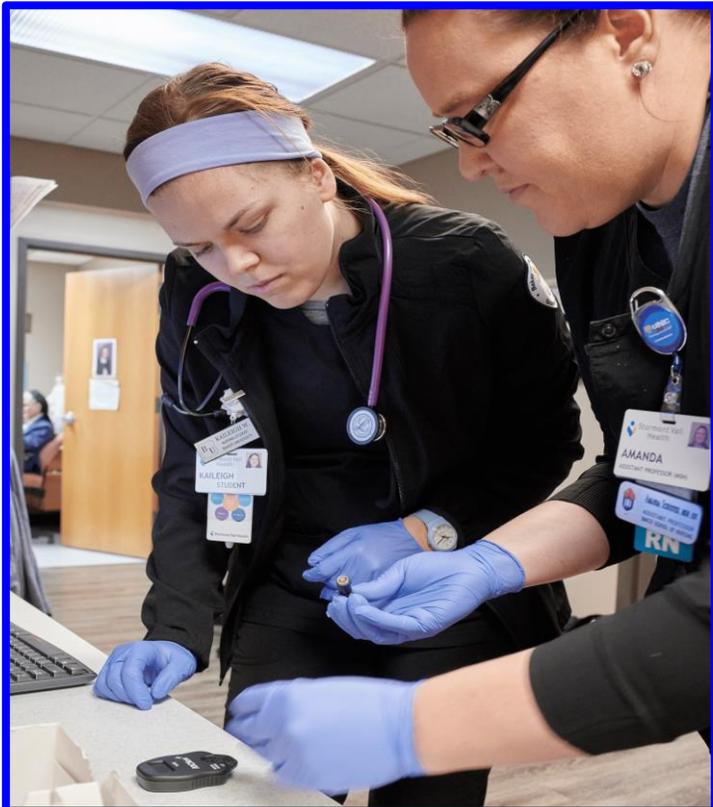
A dental assistant performing a blood pressure screening at HealthWorks for Northern Virginia (courtesy of Dr. Renner)



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



MDI Examples



Point of care diabetic screening at Marian Dental Clinic, Topeka, Kansas



A dental staff member discusses medication interactions with a patient as part of a comprehensive screening protocol at the Agape Clinic in Dallas, Texas.



Opportunities Ahead – HPV Vaccinations

Number of HPV-Associated and HPV-Attributable Cancer Cases per Year			
Cancer site	Average number of cancers per year in sites where HPV is often found (HPV-associated cancers)	Percentage probably caused by any HPV type ^a	Number probably caused by any HPV type ^a
Cervix	12,143	91%	11,000
Vagina	867	75%	700
Vulva	4,114	69%	2,800
Penis	1,348	63%	900
Anus ^b	7,083	91%	6,500
Female	4,751	93%	4,400
Male	2,332	89%	2,100
Oropharynx	19,775	70%	14,000
Female	3,530	63%	2,200
Male	16,245	72%	11,800
TOTAL	45,330	79%	35,900

<https://www.cdc.gov/cancer/hpv/statistics/cases.htm>



Oral Health Inequities





EQUALITY

EQUITY

What is “health *inequity*?”

Concept	Research question	Application to policy or program planning
Disparity	Is there a difference in health status rates between population groups?	Is the difference too large?
Inequity	Is the disparity in rates due to differences in social, economic, environmental or healthcare resources?	Is the distribution of resources <i>fair</i> ?
Inequality*	How do rates vary with the amount of the resource, and how is the population distributed among resource groups?	Can the distribution of the population among resource groups and/or the rates within resource groups be influenced?
Burden	How many people are affected in specific groups and in the total population?	How many people would benefit from interventions?

https://www.cdc.gov/nchs/ppt/nchs2010/41_klein.pdf



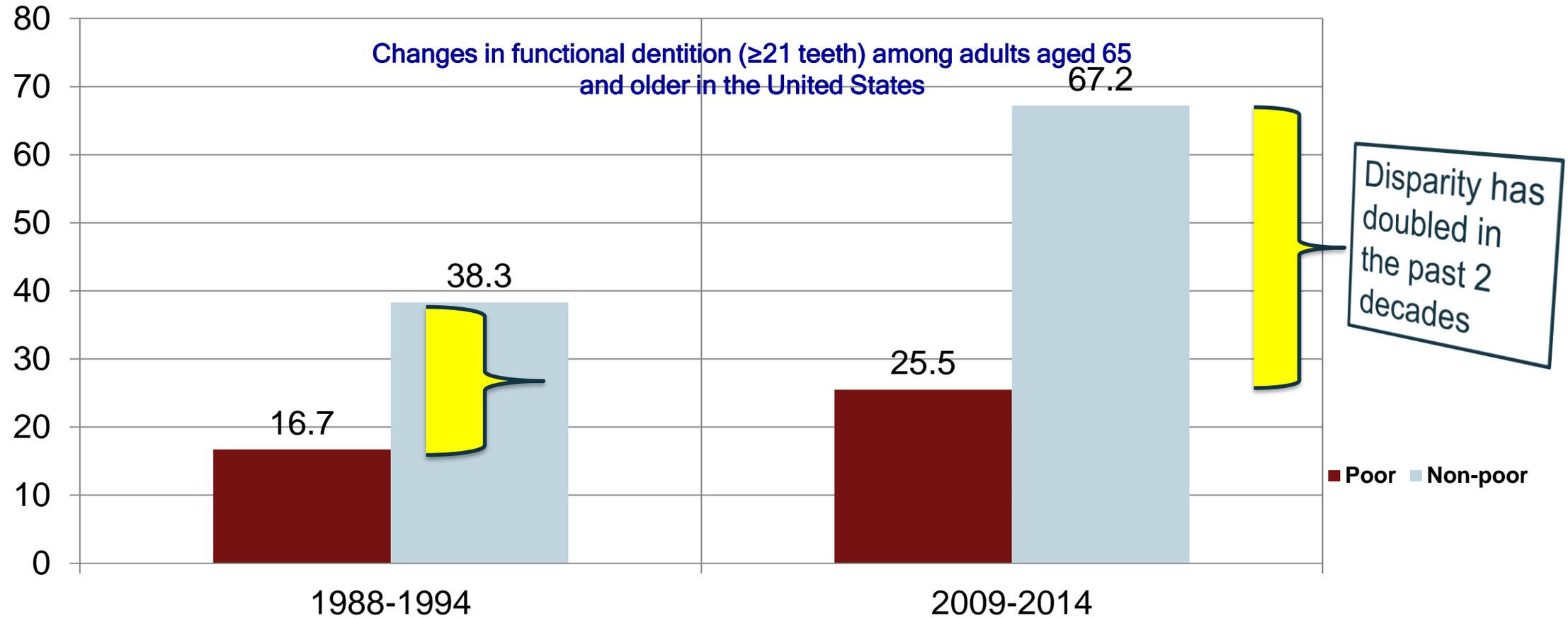
Oral Health Disparities Across the Lifespan

	Caries Prevalence, 2-5 years	Untreated Decay, 2-5 years	Caries Prevalence, 6-11 years	Untreated Decay, 6-11 years	Caries Prevalence, 12-19 years	Untreated Decay, 12-19 years	Untreated Decay, 65+ years	Total tooth loss 65+ years
<i>Race/Ethnicity</i>								
White, non-Hispanic	17.9%	6.7%	13.4%	4.3%	54.3%	15.6%	13.4%	15.2%
Black, non-Hispanic	28.0%	14.8%	21.6%	7.1%	57.1%	20.4%	29.1%	30.7%
Mexican American	32.9%	15.1%	24.5%	7.5%	68.9%	20.8%	35.9%	16.7%
<i>Income</i>								
≤200% FPL	29.6%	13.9%	22.0%	6.9%	65.0%	21.6%	28.6%	28.6%
≥200% FPL	15.7%	6.0%	12.0%	3.5%	48.7%	11.1%	9.9%	10.7%

<https://www.cdc.gov/oralhealth/publications/OHSR-2019-index.html>



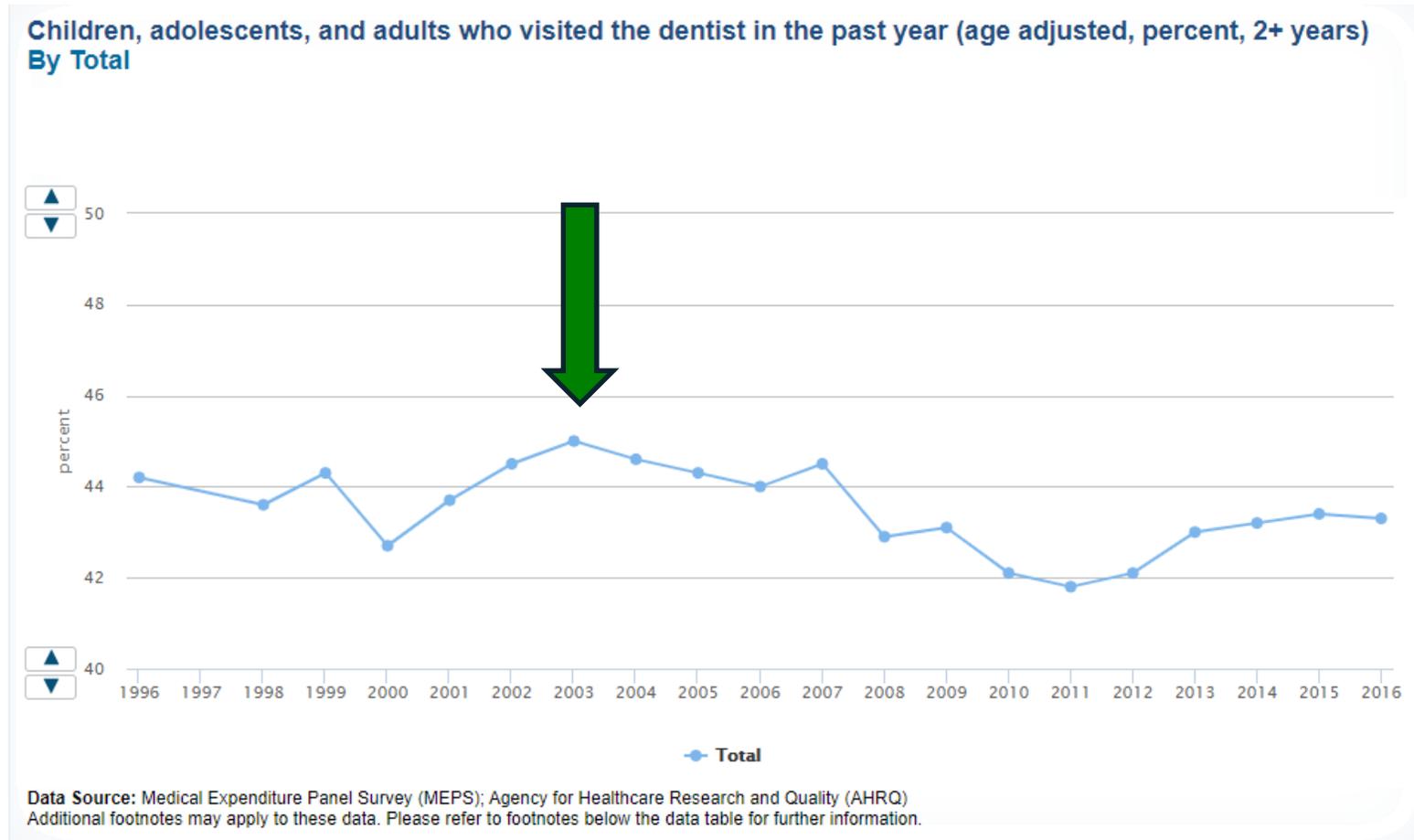
Older Adult Disparities



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

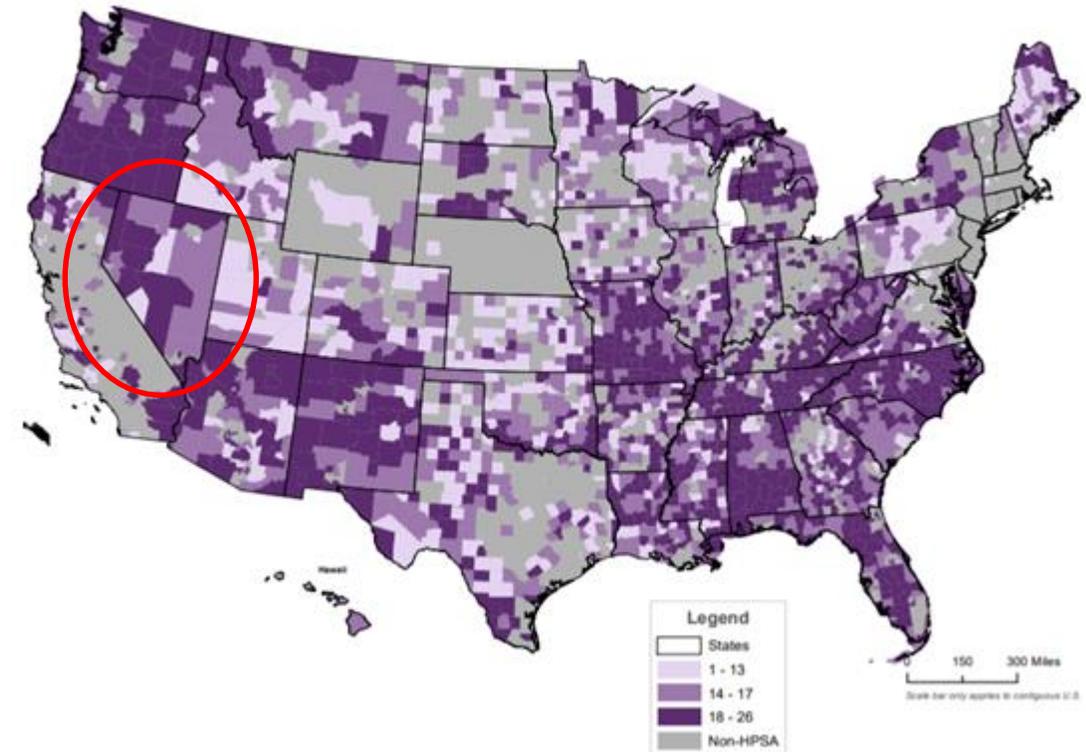


Access to Care in the U.S.



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

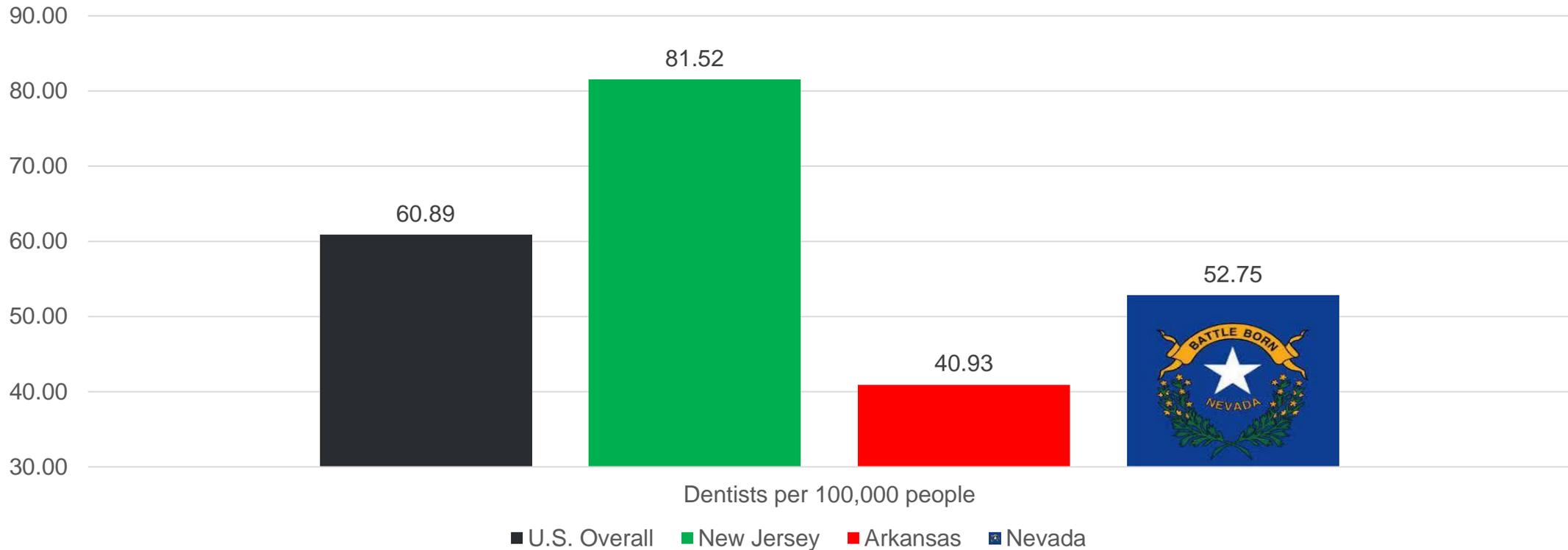


<https://data.hrsa.gov/topics/health-workforce/shortage-areas>



Number of Dentists Per Capita

Dentists Per Capita, 2015

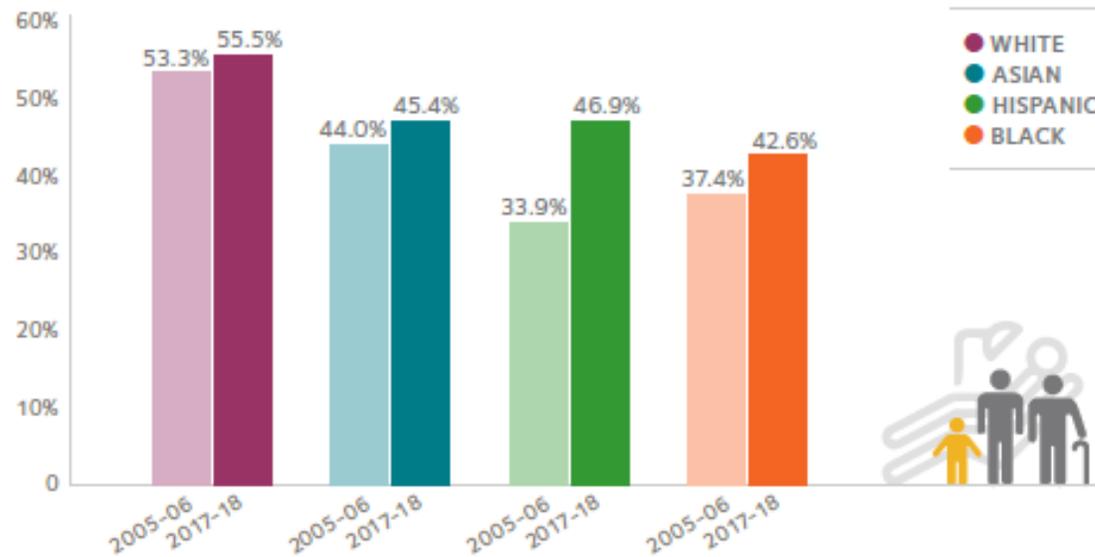


<https://www.cdc.gov/nchs/data/hus/2016/086.pdf>

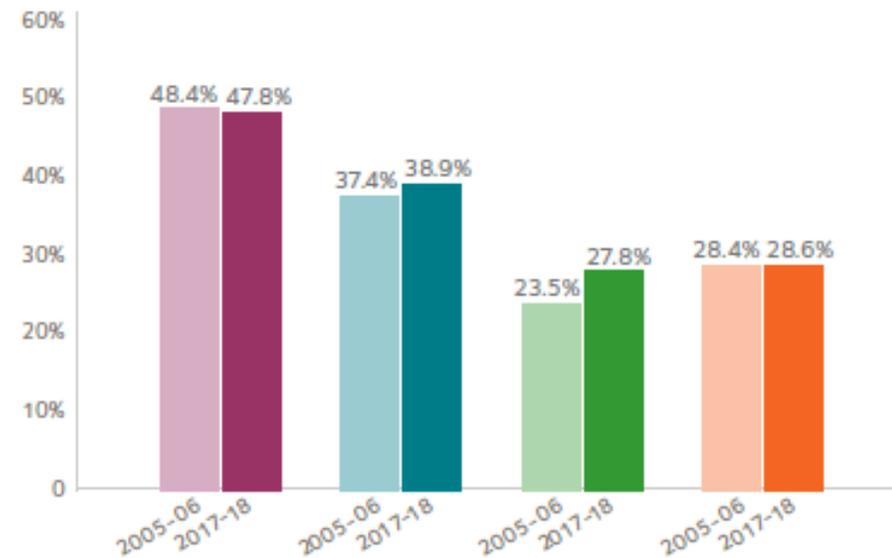


Access by Race/Ethnicity

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



Factors Affecting Access to Dental Care



Healthy People Social Determinants of Health

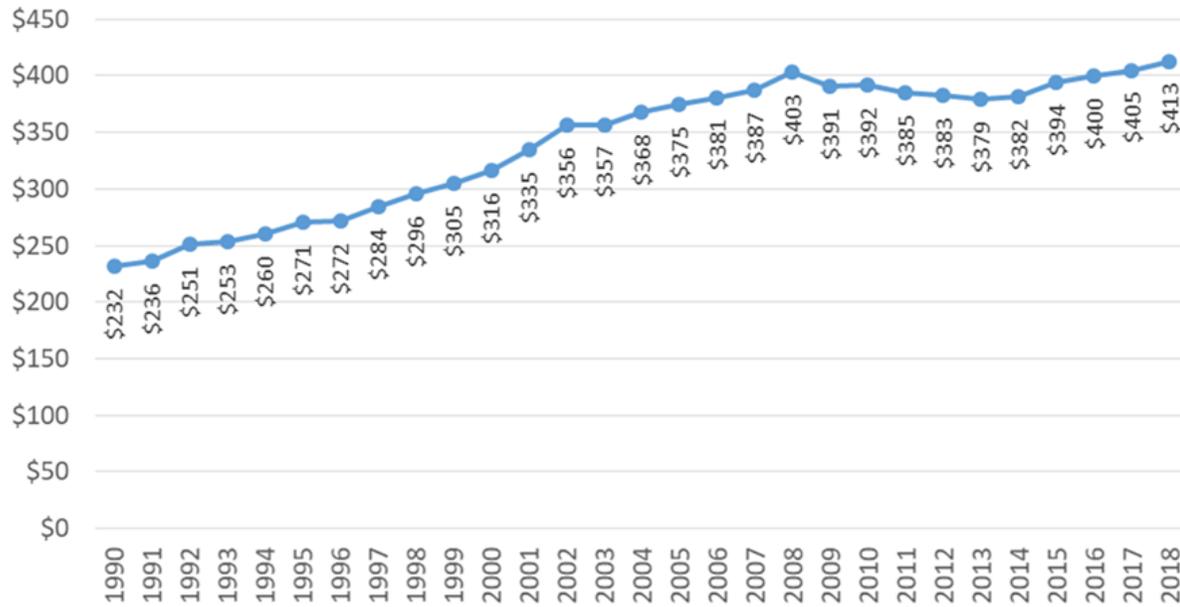
- **Economic Stability**
 - Poverty
 - Employment
 - Food Security
 - Housing Stability
- **Education**
 - High School Graduation
 - Enrollment in Higher Education
 - Language and Literacy
 - Early Childhood Education & Development
- **Social and Community Context**
 - Social Cohesion
 - Civic Participation
 - Discrimination
 - Incarceration
- **Health and Health Care**
 - Access to Health Care
 - Access to Primary Care
 - Health Literacy
- **Neighborhood and Built Environment**
 - Access to Healthy Foods
 - Quality of Housing
 - Crime and Violence
 - Environmental Conditions

SOURCE: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health#two>



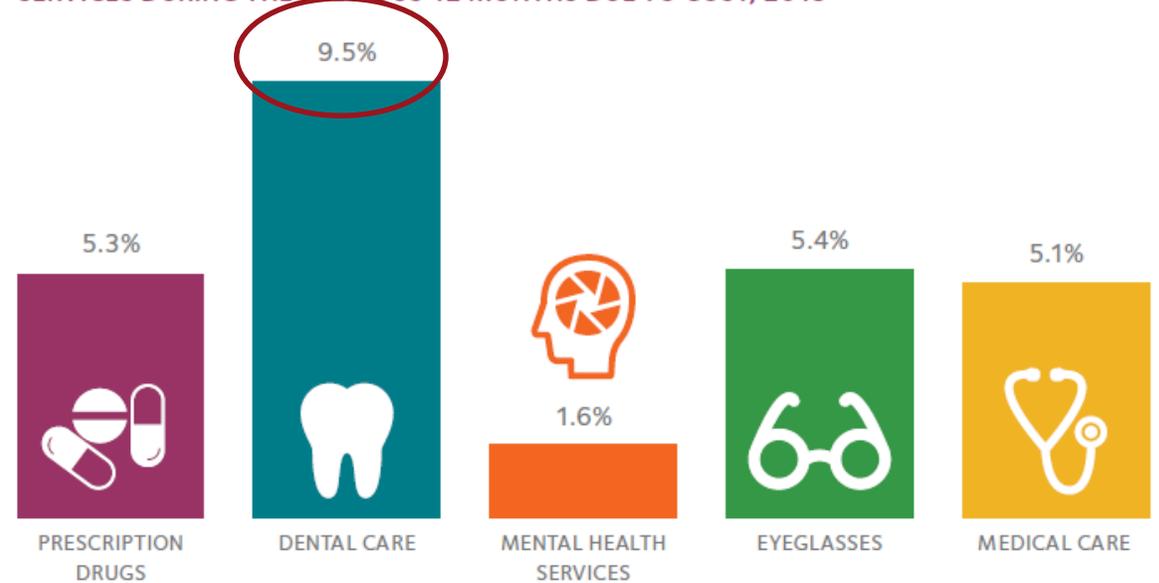
Oral Health Expenditures

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

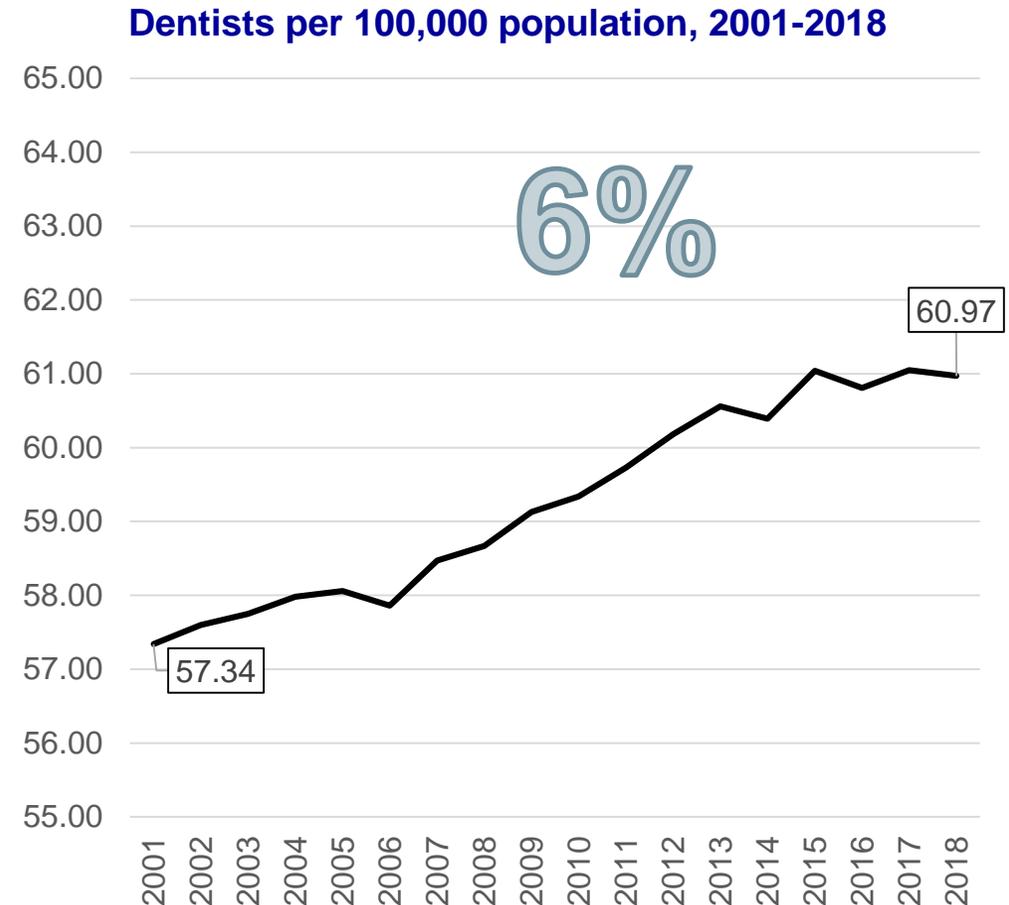
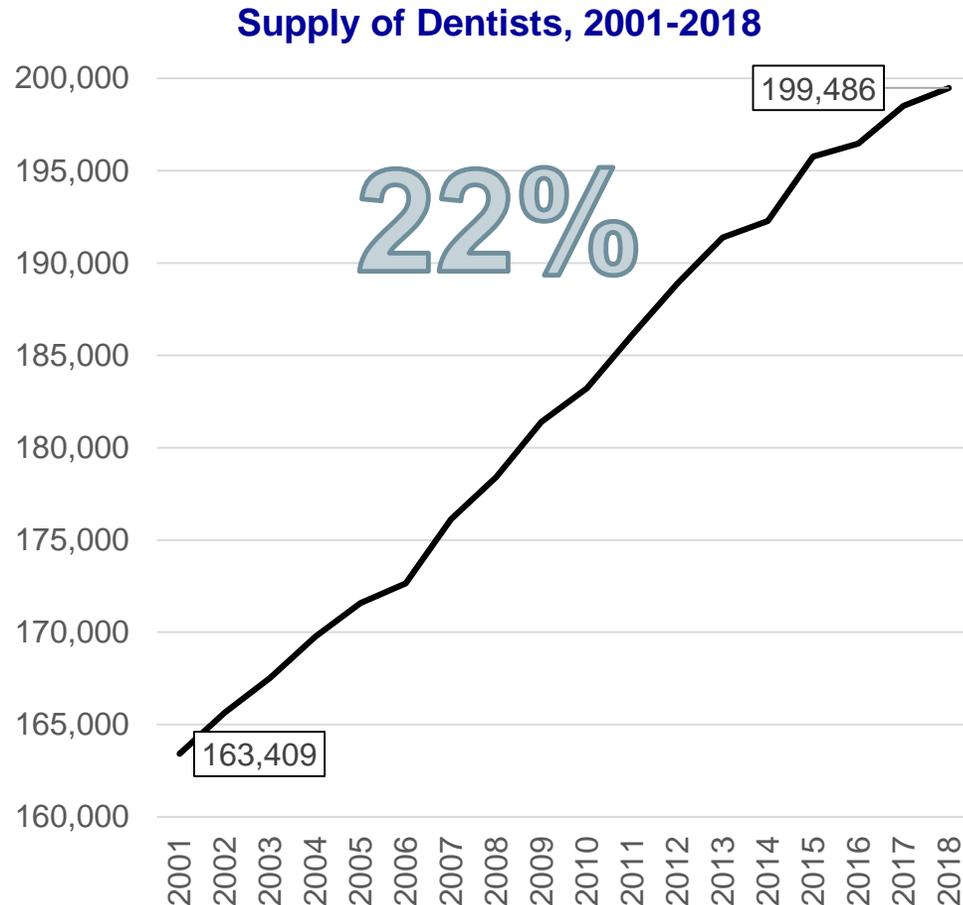


https://www.ada.org/en/science-research/health-policy-institute/publications/infographics?utm_source=adaorg&utm_medium=hpifeaturedbox&utm_content=infographics

Workforce Issues



Workforce Issues – where are dentists going?



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

Cost of Dental Education



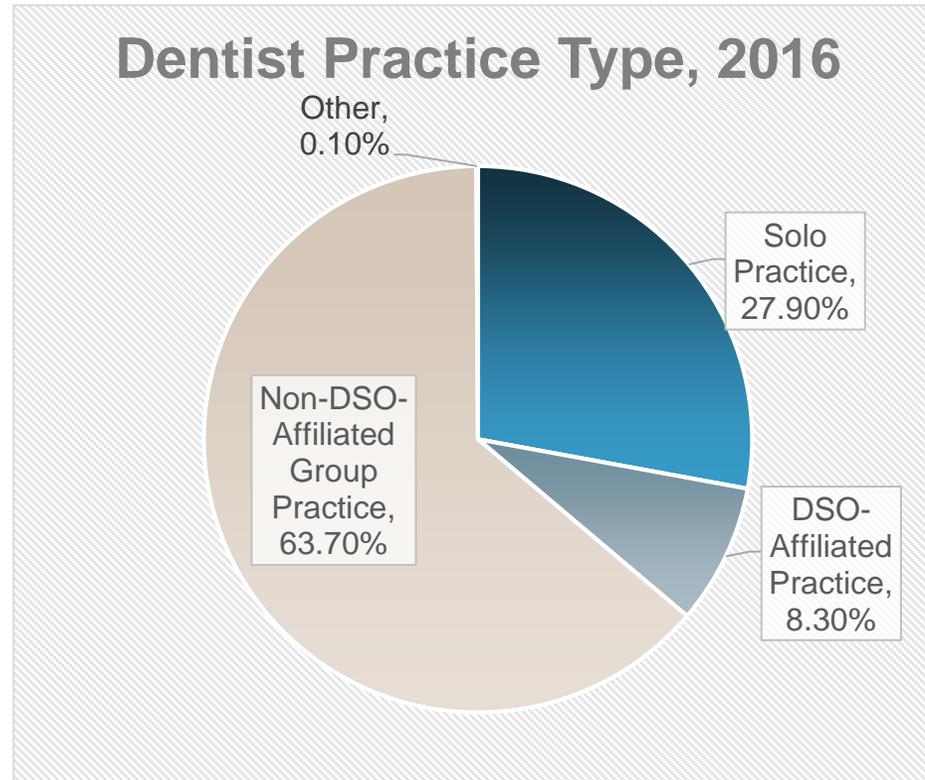
- **\$292,169** - Average educational debt for the Class of 2019
- **39%** - Percentage of 2019 dental school graduates owing >\$300,000
- Assuming \$300,000 debt paid over 25 years:
 - **\$2,314** per month for 25 years
 - **\$694,239** total repayment
 - **\$394,239** total interest cost

https://www.adea.org/GoDental/Money_Matters/Educational_Debt.aspx

https://www.adea.org/GoDental/Money_Matters/Sample_repayment_amounts.aspx



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

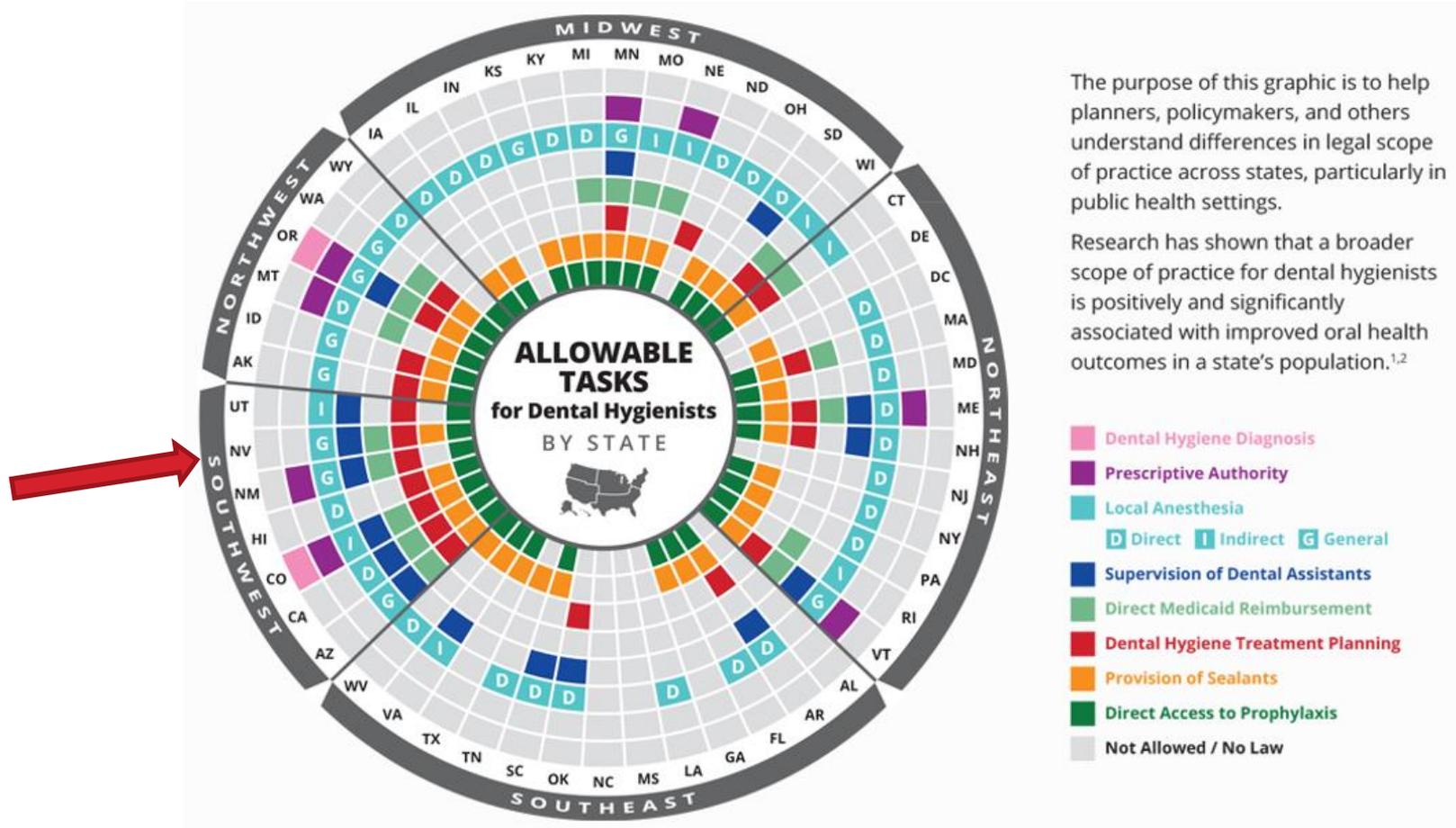


- Begun in 2000
- No universal model
- 12 states have authorized therapy
 - 2004 – Alaska
 - 2009 – Minnesota
 - 2019 – Nevada (dental hygienist therapist)
- 9 states “actively exploring authorizing dental therapy”

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



Changing Workforce Models – Dental Hygienists



The purpose of this graphic is to help planners, policymakers, and others understand differences in legal scope of practice across states, particularly in public health settings.

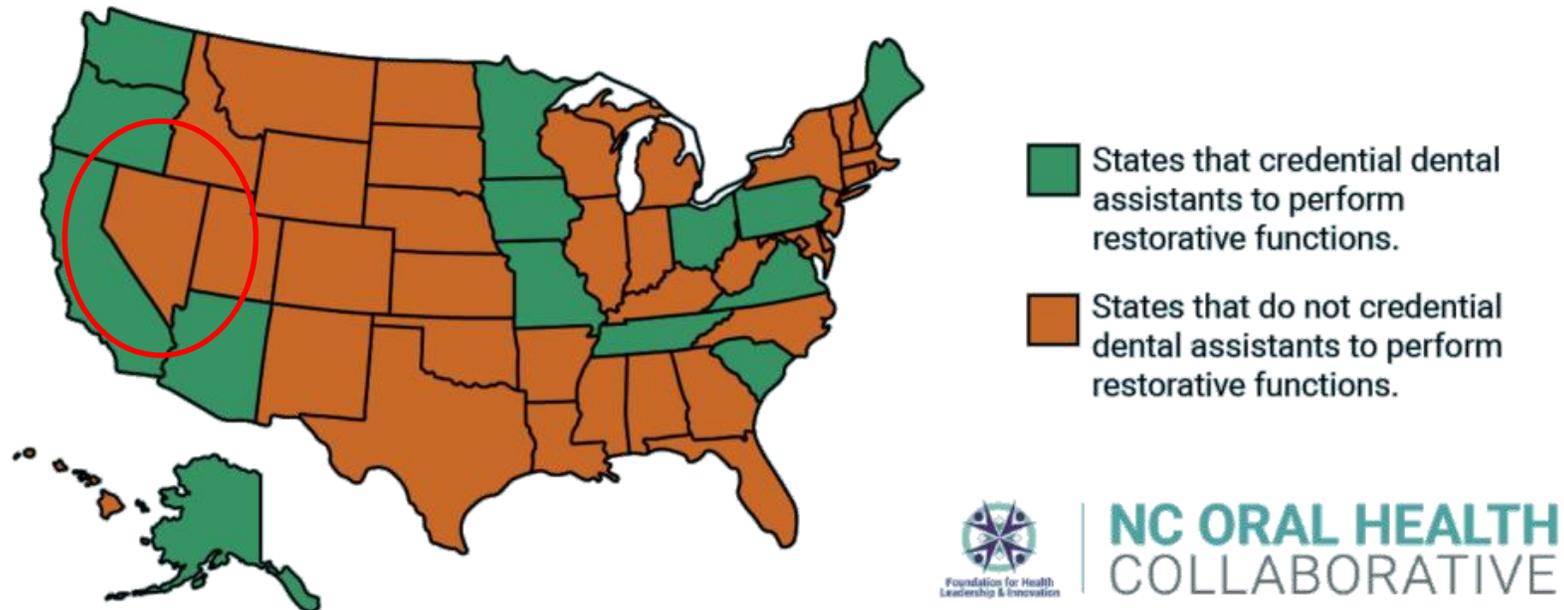
Research has shown that a broader scope of practice for dental hygienists is positively and significantly associated with improved oral health outcomes in a state's population.^{1,2}

<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?



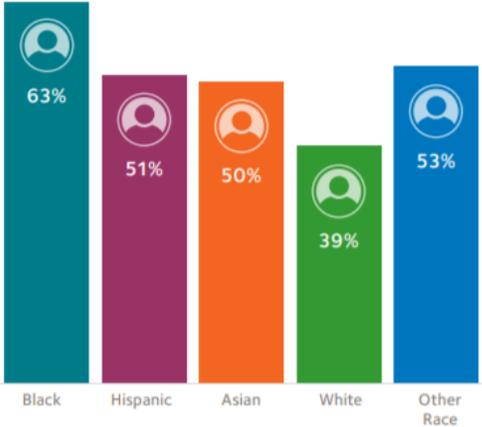
<https://oralhealthnc.org/ncohcs-policy-brief-workforce-utilization/>

17% of Nevadans have Medicaid

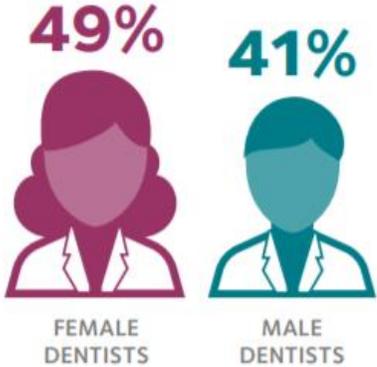
Medicaid Participation Rates

Dentist Participation in Medicaid

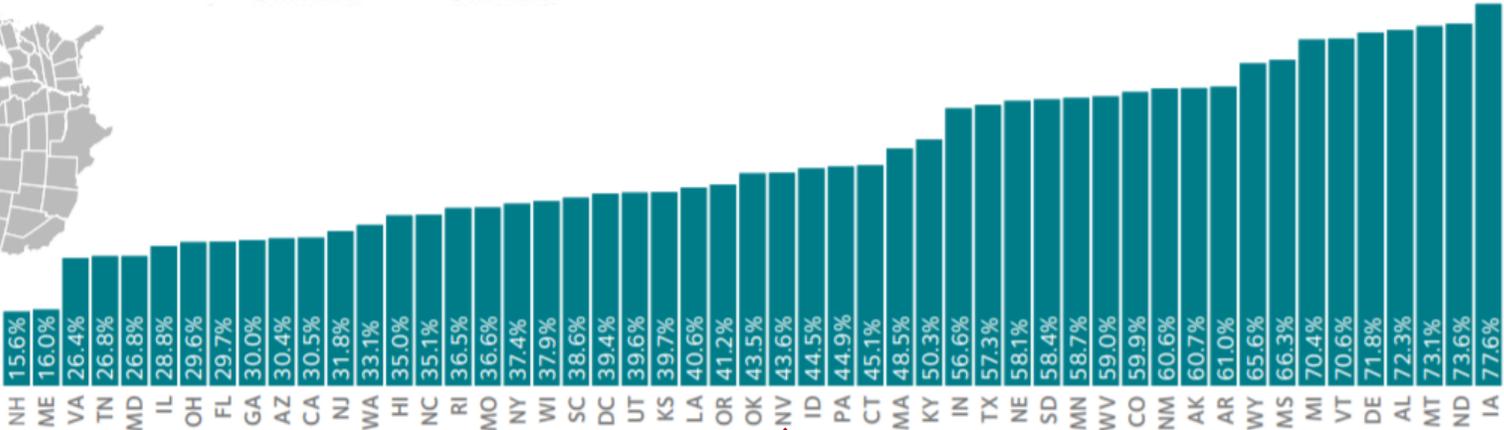
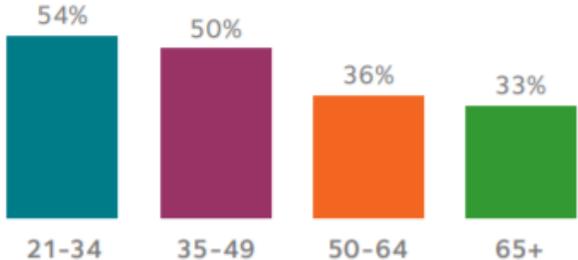
BY RACE/ETHNICITY



BY GENDER



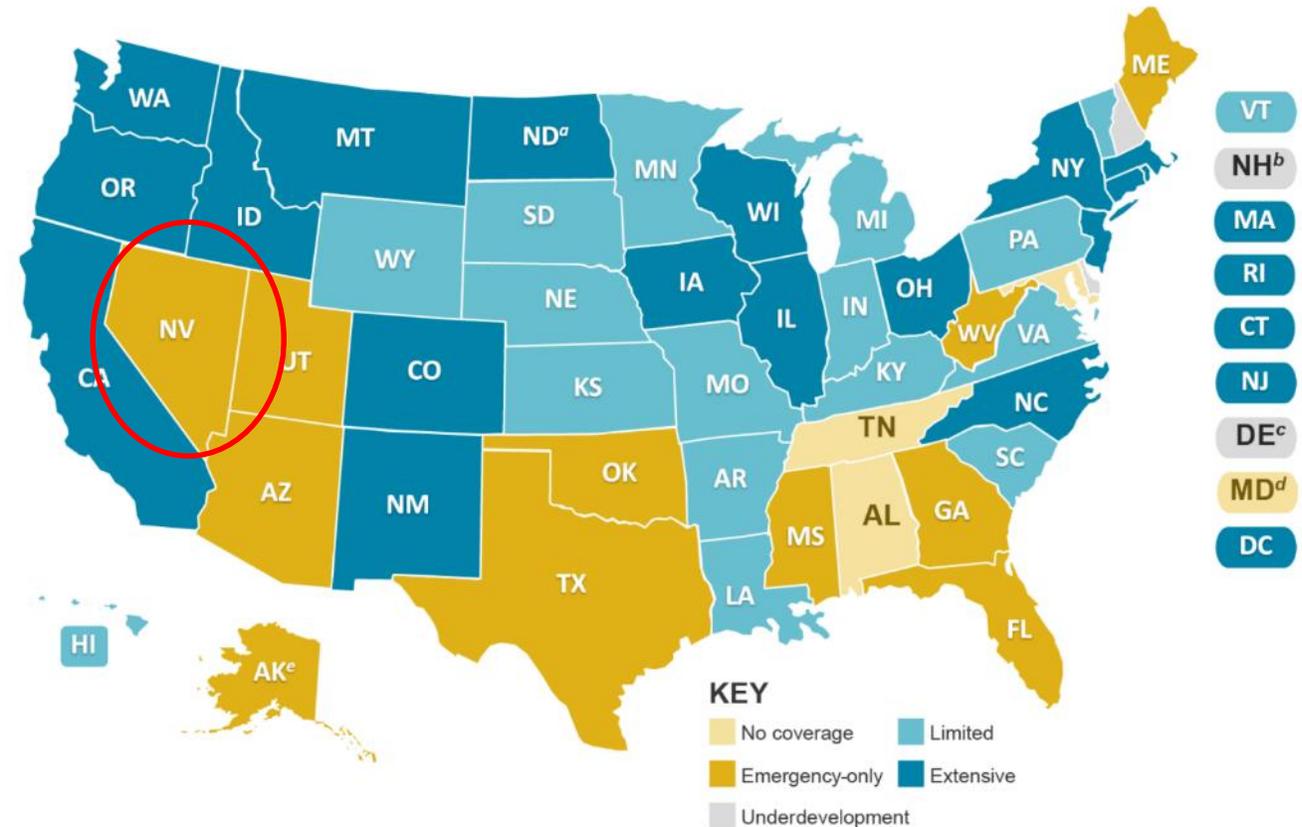
BY AGE



ADA Health Policy Institute, 2021:
https://www.ada.org/en/science-research/health-policy-institute/publications/infographics?utm_source=adaorg&utm_medium=hpifeaturedbox&utm_content=infographics

Adult Medicaid Benefits

- 74 million Americans lack dental coverage.
- As of 2021, only 19 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/>

Thank You!

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