# Take 20 Webinar Dental Hygiene (DH) Scope of Practice Infographic

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#### The OHWRC at CHWS

- The Center for Health Workforce Studies (CHWS) has more than 20 years' experience studying all aspects of the health workforce:
  - Established in 1996
  - A research center of the University at Albany School of Public Health
  - Committed to collecting and analyzing data to understand workforce dynamics and trends
  - Goal to inform public policies, the health and education sectors, and the public
- CHWS has a Cooperative Agreement with the federal Health Resources and Services Administration (HRSA) for an Oral Health Workforce Research Center (OHWRC)



### Acknowledgements

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- Researchers who contributed to this work include Margaret Langelier, M.S.; Tracey Continelli, PhD; Simona Surdu, MD, PhD; Bridget Baker, MA; and Rachel Carter
- The American Dental Hygiene Association who helped with outreach to dental hygienists to inform this work
- The information, conclusions and opinions expressed in this presentation are those of the authors and do not necessarily represent positions of HRSA



# The Changing Oral Health Landscape: Growing Attention to Value-Based Care

- Focusing on prevention and early intervention in disease process
- Increasing emphasis on improving oral health literacy
- Growing importance of risk assessment to triage patients to most appropriate level of care
- Using technology such as teledentistry to improve access and navigate patients to appropriate providers
- Increasing integration of oral health services with primary care and behavioral health care



# **Workforce Impacts**

- Use of team-based models of care
- Expansion of roles for existing workforce
  - Expanded function dental assistants
  - Public health DHs, independent practice DHs, collaborative practice
     DHs, RDHs in Alternative Practice
- Engagement of medical professionals
  - Teaching primary care clinicians to conduct oral health assessments, using training curriculum such as 'Smiles for Life'
- Emerging workforce
  - o Community dental health coordinators
  - Dental therapists and dental hygiene therapists



# What is Scope of Practice?

- Professional scope of practice (SOP), i.e. professional competence, describes the services that a health professional is trained and competent to perform
- Legal SOP, based on state-specific practice acts, defines what services a health professional is allowed to provide under what conditions in a given state
- Legal SOP and professional competence overlap, but amount of overlap varies by state and by profession
- Dental hygiene is a profession with considerable variation in SOP across the nation



# Dental Hygiene Professional Practice Index

- CHWS developed the Dental Hygiene Professional Practice Index (DHPPI) in 2001 to compare DH practice across states
- Numerical scoring based on each state's law and regulation
  - Variables grouped into 1 of 4 categories: regulation, supervision, tasks, and reimbursement
  - Composite scores range from 0-100
- DHPPI in 2001
  - Used to score state DH SOP in 2001 and again in 2014
- DHPPI updated in 2016
  - Used to score state DH SOP in 2016



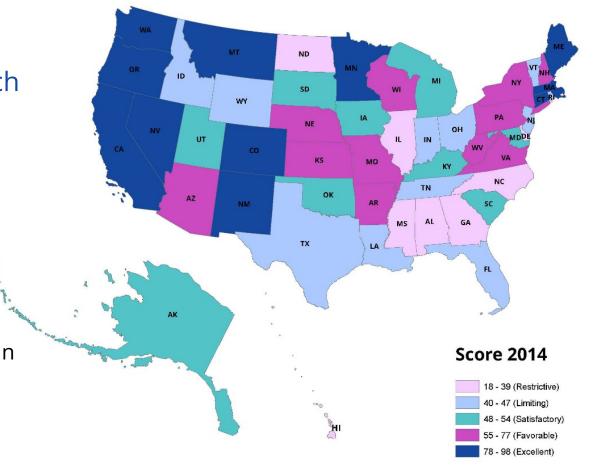
#### State - Level DHPPI Score in 2014

 Scoring based on a review of state law and regulation in each state in 2014

#### Descriptive analysis

 2014 scores ranged from 18 in Mississippi and Alabama to 98 in Maine

Mean score on the DHPPI progressed from 43.5 in 2001 to 57.6 in 2014





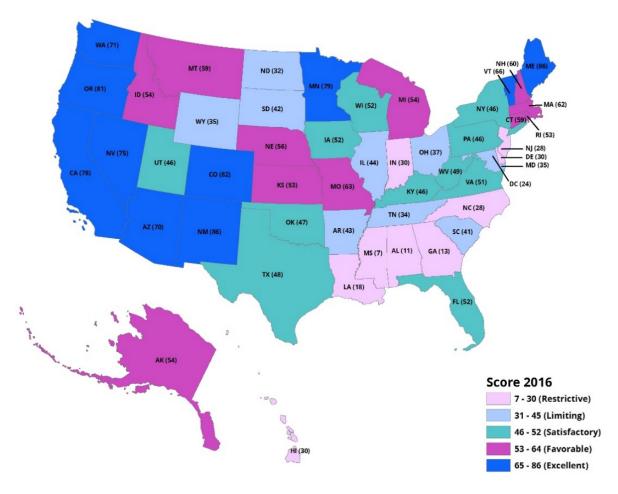
# 2001 DHPPI May Not Accurately Reflect Current Ideal Practice for DHs

- Some states achieved near perfect scores in 2014 using the 2001 index
- Recognized need to update and account for expanded tasks and allowable restorative services
- Critical elements to consider in a revised scale:
  - The ability to supervise dental assistants (some services require two-handed dentistry)
  - Provision of basic restorative services that benefit from dental oversight, supervision, and consultation
  - The ability to provide local anesthesia without direct supervision for certain periodontal procedures



#### State-Level DHPPI Score in 2016

- Scoring based on a review of state law and regulation in each state in 2016
- Descriptive Analysis
  - 2016 scores ranged from 7 in Mississippi to 86 in Maine
  - The mean score in 2016 was 48.9, a decrease from the mean score in 2014 (57.6)





#### **Does Variation in DH SOP Matter?**

- Research question: Do more expansive SOPs, which allow more autonomy in providing preventive services, especially in public health settings, impact oral health outcomes?
- In 2001, 2014 and 2016, we used multilevel logistic modeling with the DHPPI, federal data sources for state-level information and Behavioral Risk Factor Surveillance System data for individual-level information, controlling for state and individual level factors



# Results of 2014 Analysis

- Scope of Practice Index score (DHPPI) exerted a positive and significant impact on adult oral health
- A more expansive SOP for DHs in states was positively and significantly associated (p<0.05) with having no teeth removed due to decay or disease among individuals in those states
- A 10 point increase in the Scope of Practice Index (DHPPI) score results in a 3.5% relative increase in the percentage of adults with no teeth removed due to decay or disease

Langelier M, Continelli T, Moore J, Baker B, Surdu S. Expanded scopes of practice for dental hygienists associated with improved oral health outcomes for adults. *Health Affairs*. 2016; 35(12); doi: 10.1377/hlthaff.2016.0807.



# Dental Hygienists Are Recognized as Experts in Preventive Services

- Dental hygienists with broad SOPs are able to increase access to care and provide needed services, particularly in community settings
  - Autonomous roles
  - Team-based care
  - New technologies
  - New settings for care delivery
  - Point of entry-case findings
  - Roles as case managers/patient navigators





# Developing a Dental Hygiene SOP Infographic: Why and How

#### Translating SOP Research for Policy Makers

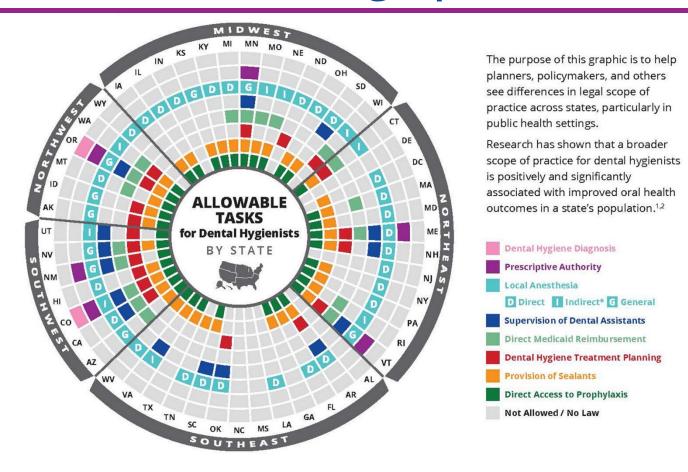
- Research finds that broader SOPs for DHs are associated with better oral health outcomes in a state
- Researchers developed a visualization tool to help policy makers, advocates and other stakeholders understand variations in SOP across the nation

#### Development Process

- In collaboration with American Dental Hygiene Association, researchers convened focus groups with DH leaders from across the country
- Leaders helped to identify key DH functions and tasks to include in the infographic



# Dental Hygiene Scope of Practice by State Infographic



<sup>\*</sup> In Colorado, indirect supervision requires only preapproval, not the presence of a dentist.

Sources: 1. Langelier M. Baker B. Continelli T. Development of a New Dental Hygiene Professional Practice Index by State, 2016. Rensselaer, NY: Oral Health Workforce Research Center, Center for Health Workforce Studies, School of Public Health, SUNY Albany, November 2016. 2. Langelier M. Continelli T. Moore J. Baker B, Surdu S. Expanded Scopes of Practice for Dental Hygienists Associated With Improved Oral Health Outcomes for Adults. Health Affairs, 2016;35(12):2207-2215.



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# **Conclusions and Next Steps**

- SOP is an important consideration when designing workforce strategies to increase access to and utilization of preventive oral health services
- DHs with broader SOPs can effectively serve high need populations in community-based settings and achieve positive outcomes
- Infographic is a work in progress, i.e., requires routine updating as states modify DH practice requirements



### **Thank You**

### **Questions?**

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