The Dental Hygiene Professional Practice Index (DHPPI) for each of the Fifty States and the District of Columbia

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What is a Professional Practice Index?

- Scope of Practice (SOP) describes lawful practice for health professionals including the necessary qualifications to provide professional services, requisite levels of supervision, and settings where services can be provided
- The Dental Hygiene Professional Practice Index (DHPPI) is a numerical scale that quantifies the SOP (i.e. the legal practice environment) for dental hygienists (DHs) in each state
- The original DHPPI was developed in 2001
- Higher scores on the DHPPI are generally associated with broader sets of tasks, more autonomy (i.e. less direct oversight) and greater opportunities for direct reimbursement for dental hygienists (DHs)
- This project updated the DHPPI to reflect SOP in 2014

Why Is an Update Needed?

- **Access to oral health services for certain populations remains a significant concern**
- In many states there is an oversupply of DHs with skills that could be used to **improve access to services**
- Many states have supported changes in SOP **enabling workforce innovation** to improve access to oral health services
- SOP for DHs has changed dramatically and the 2001 index is no longer accurate

There are Four Overarching Components in the DHPPI Scale

- Four components with multiple variables in each
- The total possible score in an "ideal" practice environment is 100.
  - *Regulatory Environment* (max. 10 pts. – 4 variables)
  - *Levels of Required Supervision* (max. 47 pts. – 10 variables)
  - *Tasks Permitted* (max. 28 pts. – 13 variables)
  - *Reimbursement* (max. 15 pts. – 2 variables)
- The index measures possible not actual practice
- Scoring achieved through review of current statute and regulation governing oral health professionals in each state and D.C.
- The scale was factor analyzed and determined to be a robust model

The Instrument

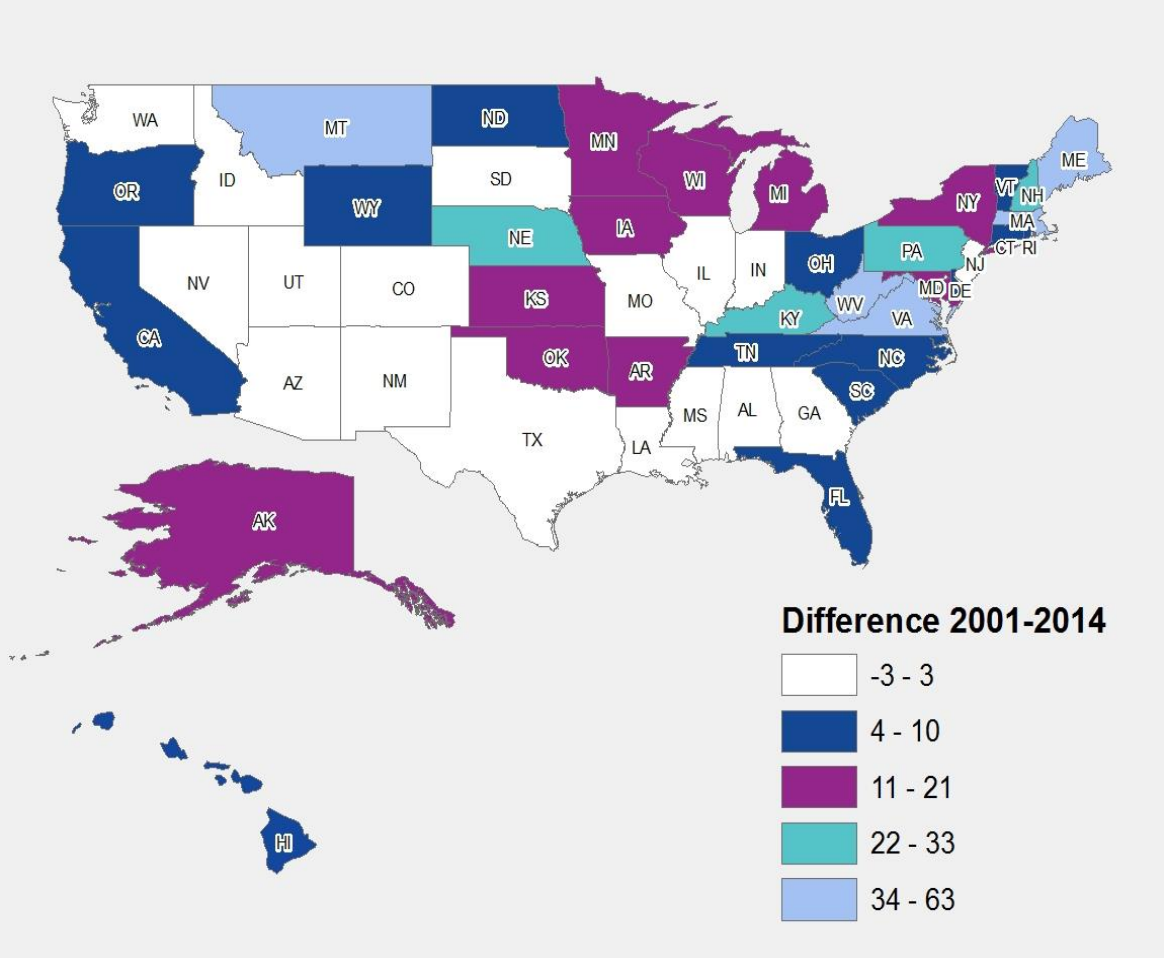
SCORING CATEGORY	Points	Max Score
Regulated by:		
Board of Dental Hygiene/Independent Dental Hygiene Committee	4	4
Board of Dentistry/Dental Examiners with Dental Hygiene Advisory Committee	4	
Board of Dentistry/Dental Examiners with Dental Hygienist as a Voting Member (2+)	3	
Board of Dentistry/Dental Examiners with Dental Hygienist as a Voting Member	2	
Board of Dentistry/Dental Examiners with Dental Hygienist as a Non-Voting Member	1	
Other State Boards or Departments	3	
Other Regulatory:		
Licensure by Credential/Endorsement with no new clinical exam required	2	2
Scope of Practice Defined in Law or Regulations	2	2
Hygienist not restricted to patient of record of primary employing dentist	2	2
Total Regulation Score		10
Supervision:		
Dental Hygiene Practice: Highest level of supervision in state laws and regs:		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
Supervision Requirements In:		
Dentists Office		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
Long Term Care Facilities - Skilled Nursing Facilities		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
Schools-Private or Public		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
Public Health Agencies- Federally Qualified Health Centers		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1

Correctional Facilities		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
Public Institutions- Mental Health Facilities		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
Hospitals/Rehabilitation Hospitals or Convalescent settings		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
Home Settings- Personal Residences		
Unsupervised	4	4
Collaborative Practice Arrangements	3	
General	2	
Direct	1	
No requirement for prior examination by a dentist	1	1
No Limits on Settings Allowed for Practice by Dental Hygienists	3	3
Total Supervision Score		47
Dental Hygienist Tasks Allowed in Legislation:		
Prophylaxis - Physical Presence of Dentist Not Required	2	2
Fluoride Treatment - Physical Presence of Dentist Not Required	2	2
Sealant Application - Physical Presence of Dentist Not Required	2	2
X-Rays - Physical Presence of Dentist Not Required	2	2
Place Amalgam Restorations	2	2
Administer Local Anesthesia	2	2
Administer Nitrous Oxide	2	2
Hygienist allowed to perform initial screening or assessment	2	2
Hygienist allowed to refer patient	2	2
Hygienist may be self employed	2	2
Hygienist may supervise a dental assistant	2	2
Hygienist may be supervised by a medical provider	2	2
Expanded functions available in the state	4	4
Total Tasks Score		28
Reimbursement:		
Medicaid Reimbursement Directly to Hygienists	10	10
Dental Hygienist may be paid directly for services provided	5	5
Total Reimbursement Score		15
TOTAL SCORE		100

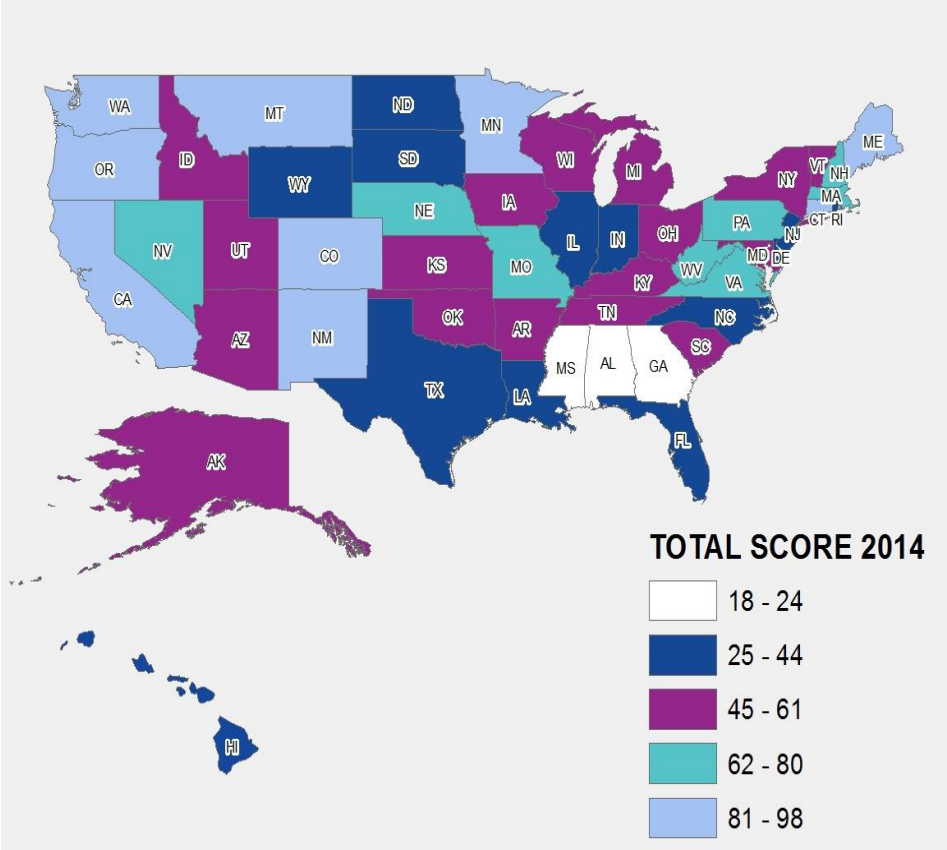
Key Findings in the Updated Scale

- Scope of practice for DHs has broadened in many states but remains relatively unchanged in others
  - High scoring states in 2001 remain high scoring in 2014
  - Some states noticeably advanced DH SOP
    - Montana moved from a satisfactory ranking in 2001 to excellent in 2014 by issuing limited access permits allowing DHs to provide preventative services in public health settings without prior authorization or presence of a dentist and allowing for direct reimbursement
  - Some states lost ground in comparison to their previous rankings
    - New York moved from a favorable ranking in 2001 to satisfactory in 2014 even with a positive change in score due to greater expansion of DH SOP in other states
  - Several lower scoring states in 2001 have shown little change
    - Many states in the south retain restrictive or limiting DH SOP

Where has change occurred?



How Do States Compare with Each Other?



Excellent

Maine	Oregon	New Mexico
Colorado	Washington	Minnesota
California	Montana	Connecticut

Favorable

Massachusetts	Pennsylvania	New Hampshire
Nebraska	West Virginia	Nevada
Missouri	Virginia	

Satisfactory

New York	Kansas	Oklahoma	Arizona
Wisconsin	South Carolina	Alaska	Vermont
Arkansas	Iowa	Michigan	Kentucky
Utah	Maryland	Ohio	Idaho
Tennessee			

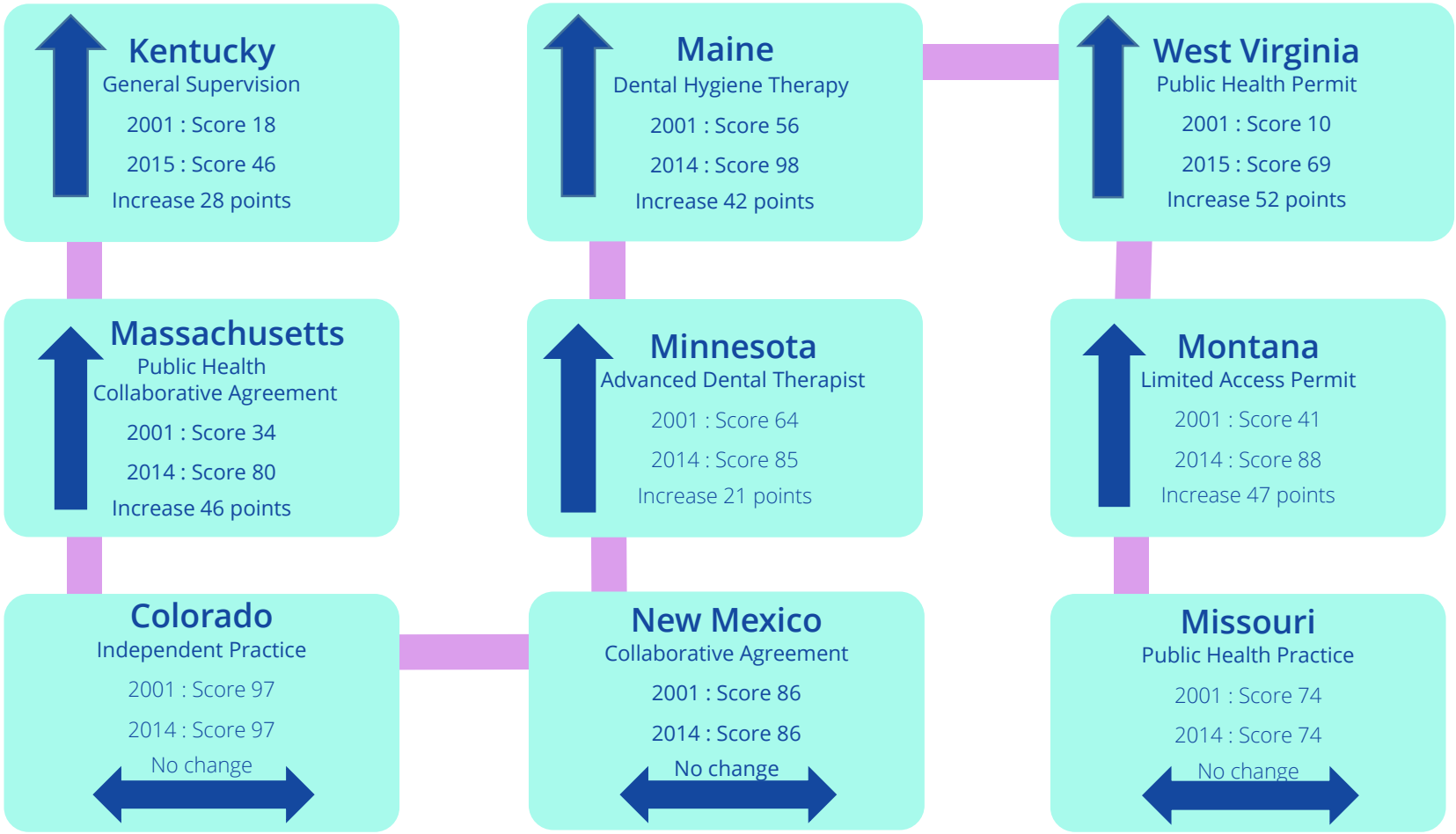
Limiting

South Dakota	Hawaii	Rhode Island	North Dakota
Louisiana	Illinois	Wyoming	North Carolina
Texas	Indiana	Delaware	New Jersey
Florida	District of Columbia		

Restrictive

Georgia	Alabama	Mississippi

State Scores



Some Examples of State to State Variation

- Maine
  - Allows for expanded practice dental assistants and DHs
  - Allows for public health dental hygiene practice under collaborative agreements
  - Allows for independent practice dental hygiene
  - Allows dental hygiene therapy including basic restorative tasks
  - Direct reimbursement is available
- Mississippi
  - Requires dentists to directly supervise DH in office or treatment facility
  - Limited opportunity to work under general supervision in schools but may only screen and educate patients and apply fluoride varnishes in that setting

Why Does SOP matter?

- Conditions for practice affect patients' access to services
- In 2001, the DHPPI was significantly correlated with a number of indicators of utilization of oral health services and oral health outcomes (e.g. states with higher DHPPIs had smaller percentages of their populations not visiting dentists and larger percentages of the population with no teeth removed due to decay or disease).
- In 2014, multi-level modeling found a significant relationship between a broad scope of practice for DHs and positive oral health outcomes in state populations
- Surveillance data is now more limited than in 2004 so it is difficult to compare results from 2001 with results from 2014

How Does SOP Impact Access and Outcomes?

- A DH may be unable to provide any services unless a dentist has first seen a patient (patient of record requirements) which limits service provision when a dentist is unavailable
- Limits on services that can be provided in a public health setting (e.g. may only provide education and screening services in a school) underutilize the competencies of DHs
- DH services are somewhat more portable than dental services and the potential to reach underserved populations in a variety of settings may be minimized in states retaining restrictive practice environments
- Variation in SOP impacts how care is provided (WI and MN)

How is the DHPPI Used?

- **The DHPPI is a tool for researchers** to understand
  - The impact of SOP on access to oral healthcare (Wanchek)
  - The impact of SOP on oral health outcomes (Center for Health Workforce Studies, Albany)
  - The impact of regulation on labor market outcomes (Kleiner and Park)
  - The impact of SOP on services in FQHCs (Maxey)
- **The DHPPI is useful in the policy arena**
  - To benchmark DH practice among states
  - To inform regulatory and statutory change
  - To document change over time in regulatory frameworks

What Are Next Steps in Evaluating DH SOP?

- Existing scale may not accurately assess current ideal practice for DHs
  - Historical scale based on the premise that lower levels of supervision would increase access to preventive oral health services
  - In some states the ideal has been nearly achieved
  - Focus changed to now include expanded tasks and irremediable restorative services that require team based care and dental oversight or supervision
  - Critical elements a new scale might include
    - 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

Summary

- Permitting DHs to work to the full extent of their competencies through a reasonable SOP is desirable
- Rationalizing SOP for DHs across states would allow for patient and professional mobility
- DH practice is evolving in some states to include “mid-level” skills with extra training
- Enhancing career ladders for allied dental professionals is desirable
- Team based care is emerging in dentistry changing the traditional hierarchical model for delivering services
- Regulation can support innovation while still protecting patient safety and ensuring quality of care