

Expanded Scopes of Practice for Dental Hygienists Associated With Improved Oral Health Outcomes for Adults

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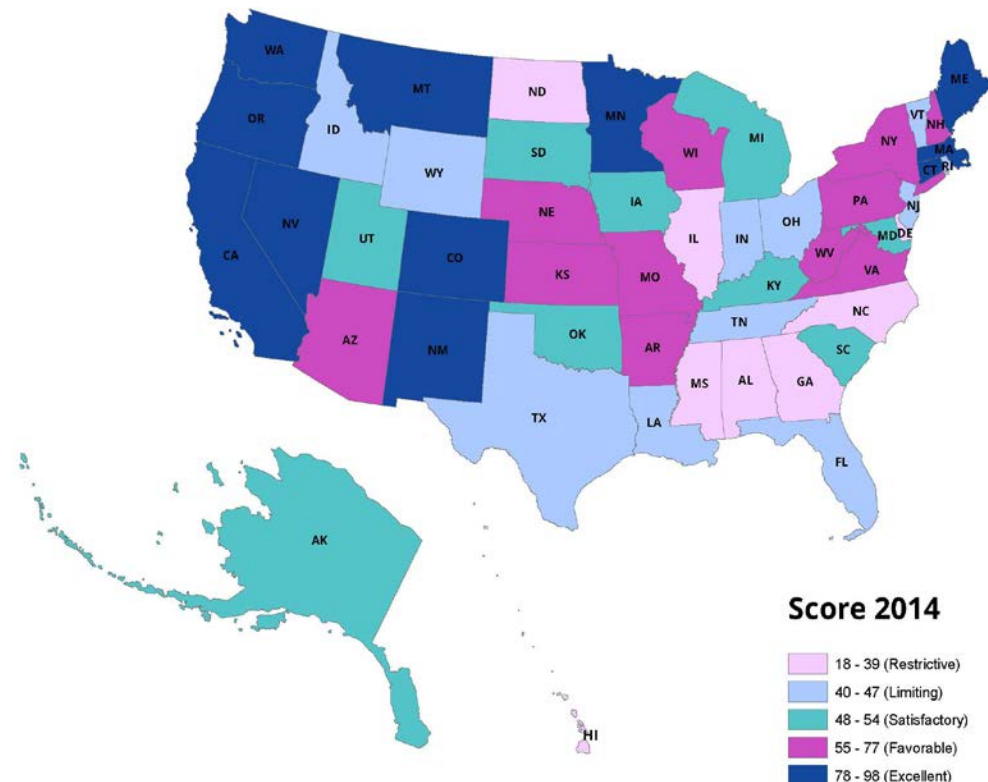
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Dental Hygiene Scope of Practice

- Reducing oral disease burden requires engagement of a comprehensive oral health care team
- Dental hygienists are preventive oral health specialists
- Scope of practice (SOP) varies considerably by state
- Permitted tasks and required supervision impact service delivery
- No numerical measure to compare SOP by state or to determine impact on outcome
- *Research question:* Do more expansive SOPs, which allow more autonomy in preventive services delivery in public health settings, impact oral health outcomes in the population?

The Dental Hygiene Professional Practice Index (DHPPI)

- The DHPPI - a numerical index
- Individual variables carrying weighted scores
- Four categories of variables:
Regulation, Supervision, Tasks, Reimbursement
- Scoring based on state law and regulation
- Possible composite score from 0-100
- Scores for 2001 were updated in 2014
- 2014 scores ranged from 18 in Alabama and Mississippi to 98 in Maine.
- Mean score on the DHPPI progressed from 43.5 in 2001 to 57.6 in 2014.



Analysis Using Multilevel Modeling

- Individual level data describing the oral health status and service utilization of individuals in states from the CDC's Behavioral Risk Factor Surveillance System (BRFSS)
- Multilevel logistic modeling using the DHPPI and BRFSS data and controlling for state and individual level factors including community water fluoridation, demographic and socioeconomic factors
- *Finding:* 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

Conclusions:

- SOP is an important consideration when designing workforce strategies to improve access to services and oral health outcomes
- Placing DHs in community settings and enabling service delivery within professional competencies may improve outcomes