Research Protocol for Dental Hygienist Scope of Practice Laws

Prepared by the Policy Surveillance Program Staff

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Dental Hygienist Scope of Practice Laws

I. Dates of Protocol: Regularly edited during the coding process, June 2014 to December 2014

II. Scope: Compile statutes and regulations, effective as of January 1, 2013, which authorize and regulate the scope of practice of dental hygienists (hereinafter, “hygienists”) across all 50 states and the District of Columbia. The goal of the dataset is to provide data to assist in identifying where there is increased public access to dental hygiene services. The dataset includes coding questions about scope of practice topics such as: whether hygienists may perform fundamental oral hygiene services, what level of supervision by dentists is required for hygienists to perform services, and whether hygienists may perform services as volunteers.

III. Primary Data Collection

   a. Project dates: June 2014 – December 2014


   c. Data Collection Methods: The team building this dataset consisted of two legal researchers (“Researcher #1” and “Researcher #2” or “Researchers”) and one supervisor (“Supervisor”). The Researchers initially collected state laws and regulations that regulate the practice of dental hygienists in 10 states: AL, AR, CA, IL, KY, MO, MS, MT, NJ and OH. They compared and confirmed their findings with each other, the Supervisor and with secondary sources.

   d. Databases used: WestlawNext was used to locate statutes and regulations. Relevant statutes and regulations were then collected from state legislature websites and HeinOnline. HeinOnline was also used to confirm the effective dates of legislation.

   e. Search terms: Dental hygienist, dental hygiene

      i. Key word searchers were supplemented by examination of the table of contents of each relevant section of the state law identified. Researchers also collected effective dates for the most recent version of relevant statutes and regulations.

      ii. When the relevant statutes and regulations were identified for a jurisdiction, a master sheet was created that summarized the relevant statute or
regulation, included the most recent statutory history for each statute and regulation, and added the effective date for that version of the law.

iii. The initial 10 states were 100% redundantly researched to confirm that all relevant law was being collected by the Researchers; 20% of the remaining states were redundantly researched.

f. **Information about initial returns and additional inclusion or exclusion criteria:** Some states dedicate specific statutory and regulatory code chapters to the practice of dental hygiene specifically, while other states capture such information in a broader chapter or title related to dentistry. For the scope of this dataset, particular provisions and subject matters were excluded from research collection, including:

i. Administration of anesthesia laws. As the purpose of the dataset is to analyze laws that increase access to dental hygiene, and anesthesia in almost all cases may only be administered by a hygienist under the direct supervision of a dentist, laws pertaining to administration of anesthesia were not included in the scope.

ii. General state licensing and registration laws for hygienists. Laws detailing the information that applicants must provide to the state to be registered as hygienists, examinations required to obtain a license or registration, education levels, or other requirements of hygienists in obtaining a standard, active state-issued license and/or registration (hereinafter referred to as "standard licenses") were not included.

iii. Continuing education laws. Laws about the courses and/or training that must be done by hygienists to maintain an active license and/or registration or to pursue an advanced license were not included in the scope.

iv. Laws about out-of-state hygienists, or hygienists registered in another state or country were only included if they indicated those hygienists could actually practice within the state without acquiring a standard state license. Laws about licensure reciprocity between jurisdictions and/or licensure by credential were not included if they only detailed the procedural requirements for out-of-state hygienists to acquire and in-state standard license, rather than permitting hygienists licensed out-of-state to practice without first acquiring an in-state license.

v. West Virginia regulations regarding mobile dental facilities, W. Va. Code R. §§ 5-14-1 to 5-14-12, were excluded because they do not specify the functions or supervision levels required for the practice of dental hygienists in such facilities. Statutes and regulations in other states that also lacked this information were not included.

**IV. Coding**
a. **Development of Coding Scheme:** In January 2014, the PHLR legal team began redeveloping a previously published dataset, “Dental Hygienist Scope of Practice Laws,” which analyzed the scope of practice of dental hygienists. The coding scheme of that dataset was to identify differing “classifications” of hygienists in each state, then to identify the services performed by each classification of hygienists. Coding by hygienist classification proved to be problematic for various reasons.

i. The coding scheme of this dataset, in order to retain better quality information about the services provided by hygienists, was designed to focus on what oral hygiene services are provided by hygienists, in what particular settings and with what required levels of supervision by dentists. Additionally, the coding questions help to identify which states allow experienced hygienists to provide expanded services or services in different settings by obtaining specials permits and licenses, where hygienists may practice as volunteers, and in which states hygienists without a standard, active in-state license may practice.

ii. A content expert, Lisa Deem, D.M.D., J.D., helped to determine what oral hygiene services are most commonly performed by hygienists and are also most fundamental to providing proper dental hygiene. The content expert confirmed that three services: (i) performing scaling, (ii) applying fluoride and (iii) applying sealants are the fundamental services provided by dental hygienists. Whether hygienists can provide these three services specifically, and under what conditions, are examined in questions 2 to 11. Questions 12 to 21 analyze the scope of practice of hygienists in other aspects, including whether they can volunteer, what advanced permits or licenses they may obtain, and whether hygienists may practice in state without a state-granted license.

b. **Coding methods:** Researcher #1 coded 10 states preliminarily, which were then 100% redundantly coded by Researcher #2. The remaining 40 states and D.C. were divided at random between the Researchers to research and code. Throughout this process, the Supervisor met with the Researchers to discuss coding variations, described further in **Quality Control**, below. Pursuant to coding reviews and discussions, the coding questions were edited to capture the most valuable information within the dataset scope. Various questions were reworded or deleted and answers were added when necessary. Specific methods of coding, by question, are described below.

i. **Question 1P:** Are dental hygienists explicitly prohibited from practicing independently?
   1. Coded “Yes” only if the state law contains an explicit provision prohibiting hygienists from establishing their own practices or offices independent of dentists.

ii. **Question 2P:** Are dental hygienists allowed to perform scaling?
1. Coded “Yes” if the state authorizes hygienists with standard licenses to perform scaling. In other words, if hygienists with an advanced license or permit can perform scaling, but hygienists with a standard license may not, the coded answer is “No.”

2. Coded “Yes” if state law explicitly allows hygienists to perform scaling and if state law uses other terms that are synonymous or functionally equivalent to performing scaling in context, such as “oral prophylaxis,” “root planing,” and the “removal of calcareous deposits, accretions, and stains from the exposed surfaces of the teeth.” The following describes support for coding “Yes” in states where state law does not explicitly use the term “scaling”:
   b. **Delaware**: Del. Code tit. 24 § 1101(11) defines an element of the practice of dental hygiene as “the removal of calculus deposits, plaque and stains from all surfaces of the teeth, and making instrumental examinations of the oral cavity.”
   c. **D.C.**: D.C. Code § 3-1201.02(4)(A)(i) defines the practice of dental hygiene as including “a complete prophylaxis, including the removal of any deposit, accretion, or stain from the surface of a tooth or a restoration; or the polishing of a tooth or a restoration,” and D.C. Mun. Regs. Tit. 17 § 4310(a) authorizes hygienists to do the same “complete prophylaxis.”
   d. **Florida**: Fla. Stat. § 466.023(1) allows dental hygienists to be delegated “the task of removing calculus deposits, accretions, and stains from exposed surfaces of the teeth and from the gingival sulcus and the task of performing root planing and curettage.”
   e. **Georgia**: Ga. Code § 43-11-74 authorizes hygienists to “remove calcareous deposits, secretions, and stains from the surfaces of the teeth,” and Ga. Comp. R. & Regs. 150-5-.03(5)(d) and (f) allow dentists to “[r]emove calcareous deposits, secretions, and stains from the surfaces of teeth”
and “[p]erform root planing and curettage with hand instruments,” respectively.

f. Indiana: Ind. Code § 25-13-1-11(3) describes a hygienist as someone who, among other tasks, “removes calcific deposits or accretions from the surfaces of human teeth or cleans or polishes such teeth.”

g. Maine: 02-313 Me. Code R. Ch. 2, § I(R) indicates hygienists may “[p]erform all procedures necessary for a complete prophylaxis, including root planing.”


i. New Mexico: N.M. Stat. Â§ 61-5A-4 includes “prophylaxis” within the practice of dental hygiene and defines it as “the removal of plaque, calculus and stains from the tooth structures as a means to control local irritational factors.” Under N.M. Code R. Â§ 16.5.17.13, the protocols for a collaborative practice dental hygienist include “prophylaxis/scaling,” but there is no other direct mention of scaling in the law.

j. North Carolina: 21 N.C. Admin. Code 16G.0101 describes functions that dentists may delegate to hygienists, including “Performing periodontal probing” and “Performing subgingival exploration for or removal of hard or soft deposits.”

k. North Dakota: N.D. Admin. Code 20-04-01-01(1) permits hygienists to perform a “[c]omplete prophylaxis to include removal of accumulated matter, deposits, accretions, or stains from the natural and restored surfaces of exposed teeth” and, with a dentist’s direct order, to do “root planing and soft tissue curettage.”

l. South Dakota: S.D. Codified Laws § 36-6A-40 authorizes a dental hygienist to perform educational, diagnostic, therapeutic services and S.D. Admin. R. 20:43:04:04 authorizes dental hygienists to “perform preliminary examination of the oral cavity and surrounding structures, including periodontal screenings; complete prophylaxis; placement of sealants; and polishing of restorations.”
m. **Washington**: Wash. Rev. Code § 18.29.190 allows a dental hygienist with an initial limited license to perform "hygiene procedures" including scaling, and Wash. Rev. Code § 18.29.050 allows a dental hygienist to remove deposits and stains, perform root planing and soft tissue curettage, as well as other dental operations delegated to them by a dentist. The performance of scaling by a dental hygienist is not mentioned directly in the law.

n. **West Virginia**: W. Va. Code § 30–4–17(1) includes "Performing a complete prophylaxis, including the removal of any deposit, accretion or stain from the surface of a tooth or a restoration" in the practice of dental hygiene.

**iii. Question 3C: What type of supervision is required for dental hygienists to perform scaling?**

1. Coded “Pre-treatment examination by dentist” if the dentist must examine a patient prior to a hygienist providing a service.
2. Coded “Post-treatment examination by dentist” if the dentist must examine a patient after a hygienist provides a service.
3. Coded “Direct personal supervision by a dentist” if a dentist must be physically present while a hygienist provides a service.
4. Coded “Remote supervision” if a dentist is required to authorize services before they are provided by a hygienist, but does not need to be present while the services are actually performed. “Remote supervision” is coded even if the dentist’s prior authorization is a general authorization of services to be provided by a hygienist, and even if the authorization precedes the services by weeks or months.
5. Coded “Dentist present within the treatment facility” if a dentist is not required to be physically present (in the treatment room) while a hygienist provides a service, but must be within the same office or facility.
6. Coded “No supervision” if a dentist is not required to authorize or supervise a hygienist providing a service.
7. Coded “Other” whenever the supervision required is a variation of a previous option; explained in a caution note.

**iv. Question 4C: In what settings may a dental hygienist perform scaling without supervision?**

1. Coded all settings where hygienists may perform scaling without supervision in any form by dentists; i.e., where dentists are not required to provide prior authorization for procedures, are not required to be present for consultation, and do not physically supervise procedures performed by hygienists. For example, in...
California, hygienists can provide services without supervision in public health programs; see Cal. Bus. & Prof. Code § 1911(c).

v. Question 5P: Are dental hygienists allowed to apply fluoride?

1. Coded “Yes” if the state authorizes hygienists with standard licenses to apply fluoride. In other words, if hygienists with an advanced license or permit can apply fluoride, but hygienists with standard licenses may not, the coded answer is “No.”

2. Coded “Yes” if state law explicitly allows hygienists to apply fluoride and if state law uses other terms that are synonymous or functionally equivalent to applying fluoride, such as the application of “topical solutions.” The following describes support for coding “Yes” in states where state law does not explicitly use the term “fluoride” or support for coding “No” when state law is not clear:
   a. Alaska: Alaska Stat § 08.32.110(a)(1)(F) indicates that licensed dental hygienists can perform services that are not prohibited by § 08.32.110(c), and § 08.32.110(c) does not prohibit application of fluoride; however, no Alaska law explicitly authorizes hygienists to apply fluoride, except when part of a collaborative agreement with a dentist as described by Alaska Stat. § 08.32.115. Therefore, the question “Are dental hygienists allowed to apply fluoride?” is coded “No.”
   b. Arkansas: No Arkansas law explicitly authorizes hygienists to apply fluoride, except when part of a collaborative agreement with a dentist as described by Ark. Code § 17-82-701(1). Hygienists must obtain a Collaborative Care Permit to perform services in a collaborative agreement (see coding of Question 12P). Therefore, the question “Are dental hygienists allowed to apply fluoride?” is coded “No.”
   c. Connecticut: Secondary sources indicate that hygienists with standard licenses may apply fluoride in Connecticut, but no Connecticut laws clearly authorize hygienists with a standard license to do so. Therefore, the question “Are dental hygienists allowed to apply fluoride?” is coded “No.”
   d. Delaware: Del. Code tit. 24 § 1101(11) defines an element of the practice of dental hygiene as “the performance of such prophylactic or preventive measures in the case of teeth, including the application of chemicals to the teeth and periodontal tissues, designed and approved for the prevention of dental caries and/or periodontal disease.”

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e. D.C.: D.C. Code § 3-1201.02(4)(A)(iii) defines the practice of dental hygiene as including the “application of a medicinal agent to a tooth for a prophylactic purpose,” and D.C. Mun. Regs. Tit. 17 § 4310.1(c) allows the “application of a medicinal agent to a tooth for a prophylactic purpose and the application of therapeutic agents.”

f. Indiana: Ind. Code § 25-13-1-11(4) describes a hygienist as someone who, among other tasks, “applies and uses within the patient’s mouth such antiseptic sprays, washes, or medicaments for the control or prevention of dental caries.”

g. North Dakota: N.D. Admin. Code 20-04-01-01(3) allows a dental hygienist to “Apply topical applications of drugs to the surface tissues of the mouth and to exposed surfaces of the teeth, including anticariogenic agents and desensitizing solutions.”

a. South Dakota: S.D. Codified Laws Â§ 36-6A-40 authorizes a dental hygienist to perform educational, diagnostic, therapeutic services and S.D. Admin. R. 20:43:04:04 authorizes dental hygienists to “perform preliminary examination of the oral cavity and surrounding structures, including periodontal screenings; complete prophylaxis; placement of sealants; and polishing of restorations,” but South Dakota law does not specifically authorize the application of fluoride. Therefore, the question “Are dental hygienists allowed to apply fluoride?” is coded “No.”

b. Wyoming: Secondary sources indicate that dental hygienists may apply fluoride, but no Wyoming laws clearly authorize hygienists with a standard license to do so. Therefore, the question “Are dental hygienists allowed to apply fluoride?” is coded “No.”

vi. Question 6C: What type of supervision is required for dental hygienists to apply fluoride?

1. See explanation of coding for Question 3C.

vii. Question 7C: In what settings may a dental hygienist apply fluoride without supervision?

1. Coded all settings where hygienists may apply fluoride without supervision in any form by dentists; i.e., where dentists are not required to provide prior authorization for procedures, are not required to be present for consultation, and do not physically

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supervise procedures performed by hygienists. For example, in California, hygienists can provide services without supervision in public health programs; see Cal. Bus. & Prof. Code § 1911(c).

viii. Question 8P: Are dental hygienists allowed to apply sealants?

1. Coded “Yes” if the state authorizes hygienists with standard licenses to apply sealants. In other words, if hygienists with an advanced license or permit can apply sealants, but regularly licensed hygienists may not, the coded answer is “No.”

2. Coded “No” when state law was unclear, as follows:
   a. Alaska: Alaska Stat § 08.32.110(a)(1)(F) indicates that licensed dental hygienists can perform services that are not prohibited by § 08.32.110(c), and § 08.32.110(c) does not prohibit application of sealants; however, no Alaska law explicitly and affirmatively authorizes hygienists to apply sealants, except when part of a collaborative agreement with a dentist as described by Alaska Stat. § 08.32.115.
   b. Idaho: No Idaho law explicitly authorizes hygienists to apply sealants, except when holding an unrestricted active status dental hygienist’s license in an extended access oral health care program, as described in Idaho Admin. Code r. 19.01.01.028.
   c. Mississippi: Secondary sources indicate that dental hygienists may apply sealants\(^3\), but no Mississippi laws clearly authorize hygienists with a standard license to do so.

ix. Question 9C: What type of supervision is required for dental hygienists to apply sealants?

1. See explanation of coding for Question 3C.

x. Question 10C: In what settings may a dental hygienist apply sealants without supervision?

1. Coded all settings where hygienists may apply sealants without supervision in any form by dentists; i.e., where dentists are not required to provide prior authorization for procedures, are not required to be present for consultation, and do not physically supervise procedures performed by hygienists. For example, in California, hygienists can provide services without supervision in public health programs; see Cal. Bus. & Prof. Code § 1911(c).

xi. Question 11P: What other services may dental hygienists provide without supervision?

\(^3\) Id.
1. Coded all services that the state authorizes regularly state-licensed hygienists to provide without any form of dentist supervision.

2. Coded “Educational functions” if the law authorizes hygienists to give oral hygiene instructions, whether to dental hygiene students, at community events or in public health settings, or to individual patients.

3. Coded “Preliminary dental/oral screenings” if the law authorizes hygienists to perform “dental charting” and if the law defines dental charting similarly to dental screenings.

4. Coded “Expose dental x-ray film” if the law authorizes hygienists to perform radiography, digital imaging, and/or roentgenography, which are functionally equivalent to exposing dental x-ray film.

5. If hygienists with an advanced license or permit can perform services without dentist supervision, but regularly licensed hygienists may not, those services would not be coded here; they would be coded in Question 13C (“What additional services can be provided with a special license or permit?”)
   a. As an exception, in Nevada, a public health dental hygienist receives an endorsement on her Nevada state license to practice public health dental hygiene “at a health facility, a school or a place in this State approved by the Board” according to Nev. Admin. Code § 631.210(5). Nev. Rev. Stat. § 631.287 indicates that hygienists receive this endorsement if they have “qualifications as the Board specifies by regulation.” Upon a thorough search of Nevada regulations, these qualifications are not explicitly stated. It is not clear whether these hygienists must have advanced experience or education to receive the endorsement; therefore, the services provided by public health dental hygienists are coded as services that may be provided by regularly licensed hygienists, rather than coded in Question 13C.

6. In Texas, under 22 Tex. Admin. Code § 115.5, a dentist may delegate a service, task or procedure to dental hygienists with at least two years of experience and the service is performed in a nursing facility, a school-based health center, or a community health center. The services provided by hygienists in these settings were not coded with this question for two reasons: 1) the services that may be provided by the experienced hygienists were not specified, and 2) the dentist must provide “express
authorization” for the procedures, which does not adhere to the coding methods for coding “without supervision.”

**xii. Question 12P: Can a dental hygienist provide services with a special license or permit?**

1. Coded “Yes” if hygienists with advanced experience and/or education may acquire a particular license, permit, or license endorsement in addition to their standard license to practice dental hygiene. The question is intended to identify when hygienists with advanced licenses may work under different conditions than hygienists with standard licenses, such as providing more advanced services, working in different settings, or working with limited or no supervision by dentists.

2. Coded “Yes” if hygienists with advanced experience or education may practice in affiliated practice agreements with dentists, in collaborative agreements with dentists, or under public health supervision of dentists.

3. Special licenses or permits permitting hygienists to practice as volunteers are coded in Questions 15 to 18, addressing volunteer hygienist services. For example, in Illinois, hygienists may obtain temporary permits to provide volunteer services; see 225 Ill. Comp. Stat. 25/19.2.

4. Special permits or licenses for hygienists who do not have a standard license (i.e., are not actively licensed in the state) are coded in Questions 20 and 21, addressing hygienists practicing without a standard, active state license.

5. Coded “Yes” in Texas pursuant to 22 Tex. Admin. Code § 115.5, which permits hygienists with advanced experience and in particular settings to perform services with lesser supervision by dentists; however, Texas law does not explicitly distinguish these hygienists by offering a special permit or license. Dentists with at least two years’ experience may perform services in settings specified under 22 Tex. Admin. Code § 115.5(2) without a dentist in the treatment facility, if the dentist has delegated the task or procedure to the hygienist. Without such experience and in all other settings, dentists must be present in the treatment facility while hygienists provide services.

**xiii. Question 13C: What services can be provided with a special license or permit?**

1. See explanation of coding for Question 11P.

2. If a state permits hygienists to practice with special licenses or permits, but does not explicitly state what services hygienists with such licenses or permits may provide, the Researchers coded all
services that the state authorizes hygienists with standard licenses to provide.

xiv. Question 14GC: What type of supervision is necessary to provide these services?
   1. See explanation of coding for Question 3C.

xv. Question 15P: Can a dental hygienist provide services on a volunteer basis?
   1. Coded “Yes” when hygienists may provide services without compensation.

xvi. Question 16C: In what settings can a dental hygienist provide services on a volunteer basis?

xvii. Question 17C: Is a dental hygienist required to have a specific license to provide services on a volunteer basis?

xviii. Question 18C: What services can be provided on a volunteer basis?
   1. See explanation of coding for Question 11P.
   2. If a state permits hygienists to practice as volunteers, but does not explicitly state what services volunteer hygienists may provide, the Researchers coded all services that the state authorizes hygienists with standard licenses to provide.

xix. Question 19GC: What type of supervision is necessary to provide these services?
   1. See explanation of coding for Question 3C.

xx. Question 20P: Can dental hygienists provide any services without a standard active state license?
   1. Coded “Yes” if a state permits hygienists to provide services without being actively registered or licensed by the state. Hygienists may be permitted to provide services with temporary licenses, retiree licenses, licenses on inactive status, or while licensed by another state or jurisdiction.

xxi. Question 21C: Who can provide services without a standard active state license?

c. Quality Control: The Supervisor oversaw the overall quality of the data by downloading the data from the Workbench into Microsoft Excel and reviewing it in order to find caution flags, missing answer choices, variations within state iterations, and errors in the coding. Regular coding review sheets were sent to the Researchers for their review. Issues in the coding were discussed by the Supervisor and the researchers in coding meetings.

i. The first 10 states coded (AL, AR, CA, IL, KY, MO, MS, MT, NJ and OH) were 100% redundantly coded by the Researchers. The Supervisor reviewed the redundant coding by downloading the data from the Workbench into Microsoft Excel and comparing the records, variable by
variable, looking for divergences. The measure of divergence, calculated by the Supervisor on August 5, 2014, was 30.8%. When a divergence was identified, it was discussed with the researchers. The reason for the divergence was identified and resolved. After resolution of divergences, all duplicate records were deleted.

ii. After all states had been coded, 20% of remaining states were redundantly coded, following the same process of review. The measure of divergence, calculated by the Supervisor on November 24, 2014, was 28.6%. All divergences were discussed by the team and easily resolved.

iii. A naïve coder was brought on at the conclusion of the redundant coding process to code 20% of the records. On December 3, 2014, the Supervisor assigned five states at random to the naïve coder who had not previously worked on this dataset. Once naïve coding was complete, the team met with the naïve coder to discuss and resolve any divergences. The measure of divergence, calculated by the Supervisor on December 4, 2014, was 42%. The Researchers discussed all of the divergences with the Supervisor and naïve coder, and all issues were resolved. Naïve coding records were deleted from Workbench prior to publication.