Evidence-based policies for licensing or certification of Dental Therapists based on emerging national standards for the profession.
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A Growing Profession and the Need for National Consistency.

An increasing number of states and tribal governments have authorized a new dental practitioner called a dental therapist (DT), and more are preparing to do so. A primary purpose for authorizing the new profession is to address the nationwide crisis of lack of access to affordable dental care, which is especially acute for low-income and underserved patients and communities experiencing poor access and high rates of dental disease. As the new profession has grown and expanded nationwide, the need for more national consistency of the standards for the emerging new DT profession has become evident. In 2015, the Commission on Dental Accreditation (CODA) of the America Dental Association took an important step by approving a national accreditation program with uniform national standards for DT education programs.

The state and tribal DT programs that were early adopters differ substantially and not all align with CODA’s new accreditation standards or reflect the most current research and experiences of existing programs. National variability and the lack of uniform, evidence-based standards will hamper the growth of the new profession and delay or diminish the new profession’s ability to improve access and oral health. The variability causes problems in several ways:

- DT education institutions face challenges in preparing DTs to practice in all jurisdictions, not just the one in which they are located, because of the substantial differences in scope of practice, education and supervision requirements.

- State and tribal governments that have recently established licensing or certification programs to address an urgent dental access crisis but do not have education programs will see slow growth of the profession because of the lack of education programs available to train DTs to practice under the unique laws and regulations of their jurisdiction.
Unlike dentists and dental hygienists, many new DTs will be limited to practicing only in the state or jurisdiction where they received their education, and experienced DTs will find it difficult to relocate to practice in a different jurisdiction in the future.

Unnecessary regulatory requirements and restrictions will reduce the impact of the profession on improving access and oral health.

**National Model Act Policies and Legislation.**
In response to the need to overcome these problems by working toward greater national uniformity of standards for the profession, a consortium of individuals and organizations with experience with the DT profession began working together in the summer of 2018 to develop this Model Act. The Model Act will provide guidance to policymakers, state agencies, licensing boards, oral health professionals, and consumer organizations in states that have DT licensing systems or are planning to establish them. The legislative language that accompanies the Model Act policies will be useful to policymakers and legislative staff who are working on legislation to authorize DTs in their states or jurisdictions.

The Model Dental Therapy Program is based on extensive research and review of the dental therapy literature, a comparison of existing dental therapy scope of practice standards and licensing or certification policies, and contributions from many experienced and knowledgeable experts and leaders. The Model Program is based on the following three primary sources of information on emerging standards and best practices in dental therapy licensing:

- The research evidence on DT programs in the areas of oral health access, quality, safety, patient satisfaction, and financial/business impact on dental practices.
- The laws, policies and lessons learned in the states and tribal communities that have DT licensing or certification programs.
- The expertise of researchers, educators, practitioners, employers and regulators who have direct experience with the profession.

**Model Program Review Panel.**
Model program policies were developed and endorsed by a multi-disciplinary review panel of individuals with extensive expertise with dental therapy programs. The consortium identified individuals to serve on the review panel based on the following criteria:

1. All panel members have existing, direct professional experience with and knowledge of dental therapists, dental health aide therapists, and similar oral health professionals;
2. Panel membership is multi-disciplinary, representing educators, researchers, licensing agencies, employers, supervising dentists, and dental therapists;
3. The panel has a range of expertise with different types of dental practices, practice models, geographic areas, and patient populations served; and
4. The panel includes individuals with expertise in improving access, oral health, and health equity for underserved, low-income and historically underrepresented population.
The review panel approved, by consensus, the Model Act Policies for Dental Therapy Licensing and Certification in the next section. The review panel was not responsible for developing or approving the model state legislative language that is provided later in this report as a guide to policymakers, legislative staff and others who will be drafting legislation to implement the Model Act Policies. Legislative language was prepared by MS Strategies, LLC, based on the existing state and tribal licensing and certification laws and regulations and in consultation with other individuals with experience with legislative drafting.

**Guiding Principles.**
The following principles guided development of the Model Act. The guiding principles are based on the policy goals and legislative intent expressed by the policymakers and stakeholders who were responsible for establishing DT programs or are seeking to establish new programs.

- **Effective:** the program is effective in achieving the following policy goals:
  - a. Increase access to oral health services for underserved populations
  - b. Improve oral health of underserved populations
  - c. Improve health equity and achieve greater diversity of the oral health workforce
  - d. Provide for safe, high quality oral health services
  - e. Control the cost of health care services
  - f. Control the cost of oral health education and reduce barriers to entry to the profession, especially for people from underserved populations

- **Evidence-based:** the program is supported by research and documented facts on the experience and outcomes of DT programs.

- **Flexible:** the program allows for effective DT practice in a wide range of geographic locations, types of dental practices, sites of service including mobile or community-based, and populations served.

- **Facilitates Growth of the Profession:** the national standards facilitate the growth of the DT profession nationwide through greater uniformity of standards for education, scope of practice, supervision, reciprocity, and other professional licensing requirements, while preserving an appropriate amount of flexibility for states and tribal governments to adapt to their unique circumstances, priorities and policies.

- **Consensus-based:** the national standards represent the consensus of experts with direct expertise and knowledge with all aspects of the DT/DHAT profession including education, licensing, service delivery, access, quality, equity, and clinical practice.
Acknowledgements.
The National Dental Therapy Standards Consortium formed organically as the need for greater national uniformity became more pressing. Even though many individuals and organizations came together to participate in the consortium and have contributed to the development of the Model Act, some deserve special acknowledgment here. First, the Review Panel members volunteered many hours of their time reviewing and commenting on documents, discussing policies on webinars and phone calls, and working through differences to achieve consensus. Dr. Caswell Evans continued his leadership in the advancement of the dental therapy profession by serving as Chair of the review panel.

Michael Scandrett and Pat White, of MS Strategies, LLC., staffed the panel. The Commission on Dental Accreditation of the American Dental Association completed an extensive review of the research and literature on the DT profession and worked through an overwhelming volume of public comment to establish the national standards for DT education, which are an important cornerstone of the Model Act. Finally, it is important to acknowledge that the development of the Model Act would not have been possible without the groundbreaking work of those who launched this profession in its early years: tribal leaders, dentists, dental educators, researchers, consumer advocates, safety net providers, legislators, public health agencies, and many others. Thanks to their work, dental therapy has become a valuable, recognized and respected national profession that is making a difference in the lives of many people.

Comments welcome.
The consortium welcomes comments and suggestions on the Model Act policies in this section and the Model Act legislation in the next section so they can be continuously improved and expanded. Please send comments and suggestions to Michael Scandrett at mscandrett@msstrat.com.
National Model Policies
for Dental Therapy Licensing or Certification

**Licensing Agency:**
The entity responsible for licensing or authorizing the practice of dental therapy is the state or tribal board or agency that is responsible for licensing or authorization of dentists and other health professionals in that jurisdiction.

**Comment:** In most states, a board of dentistry made up primarily of dentists is responsible for licensing and regulation of dental professionals. The Panel acknowledges the history of some boards of dentistry being opposed to or establishing overly restrictive regulations of new or expanded roles of non-dentist practitioners even when state policymakers have established new policies in state law. This history has led the Federal Trade Commission to increase its antitrust monitoring of, and in some cases intervention in response to, board activities that are unnecessarily restrictive of new types of practitioners that will benefit consumers by increasing access or lowering costs of providing dental services. The panel concluded that most boards of dentistry will respect and honor their responsibility to implement legislation enacted by policymakers and will establish a licensing program for dental therapists that is consistent with the legislative intent. However, given this history, in some circumstances policymakers may determine that it is appropriate for dental therapy licensing to be administered by a state entity other than the board of dentistry.

**Education Requirements:**

**Accreditation.** Applicants must have graduated from an education program that is either accredited by the Commission on Dental Accreditation (CODA) or approved by the licensing board or agency. An applicant who attended a non-accredited dental therapy education program prior to the development and full implementation of the CODA dental therapy accreditation program meets the education requirement if the applicant's education program's education and competencies are comparable to those required of a CODA-accredited program including any supplemental education the applicant may have obtained after initial graduation in order to achieve a comparable education.
Comment: The option of graduation from a non-accredited but board-approved education program is included to give flexibility to licensing agencies to allow for special circumstances such as licensing of qualified foreign-trained professionals who did not graduate from a CODA accredited program. The Model Program also provides for licensure of dental therapists who were educated before CODA accreditation was fully implemented or before their education institution completed the accreditation process, such as those who were educated at a University of Minnesota dental therapy school or an Alaskan dental health aide therapist education program.

> **Length of Education and Degree Requirement.** The Model Program does not establish a minimum length of education or specify a degree requirement. CODA accreditation requires a minimum of three full-time academic years, which serves as the minimum for jurisdictions that require graduation from a CODA-accredited dental therapy program.

*Note:* “Academic year” is generally understood to mean two semesters or three quarters, which is about nine months. Programs which are less than three calendar years must be equivalent to three academic years.

Comment: Some of the main purposes for establishing the new profession are to improve access to underserved populations, reduce the cost of dental services, and enable people from underserved communities to become educated and licensed to serve their communities. These purposes are served by controlling and containing the expense and time commitment of obtaining basic dental therapy education. For this reason, the Model Program does not mandate a minimum length of education or specify a particular degree such as a baccalaureate or master’s. Some dental therapists are likely to seek additional education or an advanced degree, some dental employers may choose to hire dental therapists with additional education, and educational institutions are free to determine their own prerequisites for entry into their program, the length of the program, and the degrees granted, which may be higher than CODA accreditation requires.

> **Education program flexibility.** Education requirements should have flexibility to allow advanced standing in education programs for individuals with prior education, training or experience, career pathways for existing practitioners such as dental hygienists or dental assistants to expand their skills and opportunities, accommodations for dual licensure, and pathways for foreign-trained professionals to satisfy education requirements.

*Comment:* CODA’s accreditation standards include the following statement: “Programs and their sponsoring institutions are encouraged to provide for the educational mobility of students through articulation arrangements and career laddering (e.g., between dental therapy education programs and dental hygiene or dental assisting education programs).
Institutions and programs are also strongly encouraged to develop mechanisms to award advanced standing for students who have completed coursework at other educational programs accredited by the Commission on Dental Accreditation or by use of appropriate qualifying or proficiency examinations.”

Barriers to the profession. Education requirements allow flexibility and minimize barriers to entry to the profession to enable individuals from underserved communities or historically unrepresented minorities to obtain education and gain access to the profession, some of whom will return to and serve their communities.

Examination or Competency Assessment:

Competency assessment. The competency assessment for dental therapists should use the same standard of competency as is expected of dentists but for the more limited set of competencies that are within the dental therapist’s scope of practice. With the advancement in competency-based dental education programs and CODA’s dental therapy accreditation standards, which require demonstrated competency upon graduation, completion of an accredited dental therapy education program with a competency-based supervised clinical practice component should be sufficient demonstration of competency for licensure.

Comment: There is growing concern about the use of patient-based clinical licensing examinations for dental professionals. It is likely that changes to existing, traditional licensing examination methods will be made in the future. Anticipating this, the Panel chose not to specifically recommend the use of traditional patient-based licensure examinations to determine competency of an applicant for dental therapy licensure. This decision was based in part on the findings and recommendations in a recent report of a Joint Task Force of the American Dental Association, the American Dental Education Association, and the American Student Dental Association. The following excerpts explain the rationale for this decision.

“The Task Force opposes single encounter, procedure-based examinations on patients, which virtually all states currently use to fulfill the clinical examination requirement. This approach has been demonstrated to be subject to random error; does not have strong validity evidence; is not reflective of the broad set of skills and knowledge expected of a dentist; and poses ethical challenges for test-takers, dental schools and the dental profession.

“There is a critical need to modernize the dental licensure process that reflects current practices in pedagogy, assessment and licensure and that includes opportunities for third-party review and assurance throughout the process.”
“However, thanks to the adoption and evolution of competency-based education in accredited dental schools over the past 25 years, along with new effective pathways for dental clinical assessment, state dental boards no longer need to rely on this dated approach for the clinical assessment of candidates for licensure.”

“After careful study, the Task Force calls upon state dental boards to eliminate the single encounter, procedure-based patient exams, replacing these with clinical assessments that have stronger validity and reliability evidence.”


**Supervision:**

> **General Supervision.** Dental therapists practice under the “general supervision” of a licensed dentist. Because jurisdictions use varying definitions of “general supervision,” the Model Program defines “general supervision” to mean that dental therapists are authorized to provide services without the supervising dentist being on site when services are provided and without a prior examination and diagnosis by a dentist, provided they have the supervising dentist’s authorization to do so. Supervising dentist authorization may be provided through standing orders and/or collaborative agreement provisions, case-by-case authorization prior to services being provided, or other methods as determined by the dentist. Phone, telehealth and other technologically enhanced methods are equivalent and acceptable additional tools for dentist supervision when the dentist is not on-site.

> **Supervising dentist.** The supervising dentist determines the services within the dental therapy scope of practice that the dental therapist is authorized to provide and the conditions, parameters and protocols for practice and supervision. Other licensed dentists may be involved in daily supervision of dental therapists to the extent authorized or delegated by the supervising dentist.

**Comment:** Supervising dentists are given responsibility and discretion in determining the services an individual dental therapist is authorized to provide. Some panel members raised concerns that this creates a risk that some supervising dentists will be overly restrictive and result in some dental therapists being unable to perform services needed by patients that fall within the dental therapy scope of practice and for which they are fully trained, qualified and competent. The actual experience of Alaska and Minnesota has been that supervising dentists rarely impose long-standing restrictions after the initial period of closer oversight and development of the working relationship with each dental therapist.
Written supervision agreement. The supervising dentist and the dental therapist are required to have a written agreement, sometimes called a “collaborative management agreement” that reflects the current agreement between the dentist and dental therapist and is updated whenever changes are made. The agreement must be maintained on file and be made available to the licensing authority upon request for purposes of regulatory audits or reviews. The agreement must include at least the following components:

a. The services the dental therapist is authorized to provide, including any limitations on the services authorized by the licensing jurisdiction for the scope of practice of dental therapists generally.
b. The setting in which the supervising dentist authorizes dental therapy services to be provided and the circumstances or conditions under which services may be provided in particular settings.
c. The methods of supervision, consultation and approval that the supervising dentist will use in the supervisory relationship.
d. Practice protocols for informed consent, recordkeeping, quality assurance, dispensing medications, and supervising dental assistants.
e. Policies for handling referrals when a patient needs services the dental therapist is not authorized to provide.
f. Policies for handling medical emergencies.

Number of agreements. The Model Program does not limit the number of dental therapist agreements a supervising dentist or dental therapist may have.

Comment: The Model Act does not impose a limit so that dental providers with substantial numbers of dentists and/or dental therapists do not face unnecessary restrictions in their ability to schedule work times and locations for their dentists and dental therapists. Both dentists and dental therapists have a professional responsibility not to enter into an agreement unless both can maintain an effective collaborative relationship with appropriate dentist supervision.

Supervision of dental assistants. Dental therapists are authorized to supervise dental assistants.

Practice in community settings. Dental therapists are authorized to practice under general supervision in community settings that are not dental or medical clinics or facilities if authorized by the supervising dentist.

Comment: A major purpose of establishing the dental therapy profession is to improve access to dental services for underserved patients and communities, many of whom face substantial barriers to obtaining care in traditional dental clinic settings. The experience of existing dental therapy programs demonstrates that community-based services are a powerful tool for improving
access for underserved populations experiencing the greatest barriers to access. Examples of community settings are schools, Head Start programs, nursing facilities, and community settings in rural communities.

**Clinical Training:**
The Model Program does not establish a minimum number of hours of clinical practice under direct supervision or indirect supervision of a licensed dentist or dentist preceptor before a dental therapist is allowed to practice. CODA dental therapy education standards require accredited education programs to provide clinical training and practice experiences that will result in students being prepared for clinical practice upon graduation from the education program.

*Comment:* Seven of the eight jurisdictions that have authorized dental therapy licensing or certification require dental therapists to complete a post-graduation supervised clinical practice period before performing certain dental therapy procedures or practicing under general supervision. This is not always necessary, due to the advancement of competency-based education and CODA accreditation standards that require clinical training and evidence of competency before graduation and/or provide a clinical preceptorship program during or after the education program. Applicants for licensure who have graduated from accredited or board-approved dental therapy education programs and satisfied the required methods of demonstrating or assessing competency are expected to have the competence needed to practice under general supervision. This is the assumption that is the basis for the existing policy for licensing of dentists, who are not required to complete an additional supervised clinical practice experience before they are allowed to practice without supervision. CODA’s accreditation standards for education programs require that students in an accredited program should achieve and demonstrate competency prior to graduation. ¹ Panel members discussed that there may be times when a dental therapist – or a dentist or other practitioner – is not fully prepared to provide all authorized services or practice in all types of settings despite graduating from an accredited or approved education program. The dental profession faces the broad issue of whether all oral health professionals should be mandated to complete additional supervised clinical practice experiences either as part of their education or as part of a post-graduation preceptorship, residency or other supervised practice experience. This is a broader issue facing the entire health profession that cannot be addressed or resolved in the dental therapy context alone. In the case of dental therapists, there is the additional safeguard of the requirement of ongoing supervision of a dentist who has the authority and discretion to require a dental therapist who has not shown full competency to practice under direct or indirect supervision until the supervising dentist determines the individual is fully prepared to practice under general supervision.

¹ CODA 2-20, p. 30. Graduates should be able to evaluate, assess, and apply current and emerging science and technology. Graduates should possess the basic knowledge, skills, and values to practice dental therapy at the time of graduation.
Reciprocity:
Dental therapists who have been licensed and practicing in other jurisdictions states or tribal communities may be licensed by reciprocity or other alternative means in the same way as dentists and dental hygienists in that jurisdiction.

Comment: Because of the unique history of the emergence of dental therapists in both tribal environments and through state licensing, each with somewhat different approaches to education and licensing or certification, state dental therapy licensing laws should provide the flexibility to enable appropriately trained and qualified individuals with education or experience in either environment to obtain a license or certification in a new jurisdiction.

Scope of practice:

> Services listed in CODA’s accreditation standards. The Model Program scope of practice includes all of the dental therapy services listed in CODA’s Accreditation Standards for Dental Therapy Education Programs (Section 2-20, pages 29-30).

Comment: CODA’s dental therapy scope of practice list includes performing a dental therapy diagnosis or assessment of a patient’s oral health condition and then either providing dental therapy services or referring the patient to a dentist or other health care professional if the patient needs services that are beyond the dental therapist’s scope of practice. A dental therapist is educated and competent to identify conditions that they are authorized to treat as well as conditions that require referral of the patient to a dentist or other health care professional for additional evaluation, diagnosis or treatment. The Panel members discussed the variations in wording and terminology used by different jurisdictions and CODA, including “identify,” “diagnose,” “evaluate,” “assess” or other terms. The variations are likely due to political or professional considerations rather than substantive differences in meaning or application. The Panel acknowledges that a dentist is educated and authorized to identify and diagnose a much broader range of conditions than a dental therapist. A dental therapist is educated to “diagnose” a more limited set of conditions and to “identify” or “determine” whether a patient has or may have a dental problem or condition requiring a dentist’s examination and diagnosis. In the interest of working toward greater national uniformity, the Panel recommends using the following terminology in the laws and regulations that establish the dental therapist’s scope of practice:

1. “Oral examination, evaluation and diagnosis of conditions within the dental therapist’s scope of practice and education and the supervising dentist’s authorization;” and

2 CODA’s wording on this item can be confusing and is not ideal for use in licensing statutes or rules. It reads “identify oral and systemic conditions requiring evaluation and/or treatment by dentists, physicians or other healthcare providers, and manage referrals.” (CODA, 2-20, p. 29). By necessity, this includes identifying those conditions the dental therapist is able to treat without referral to another practitioner.
2. “Identification of conditions requiring evaluation, diagnosis or treatment by dentists, physicians or other health care providers, and management of referrals.”

Additional services beyond those listed in CODA’s accreditation standards. The Model Program includes the following additional services that are not specifically listed in CODA’s standards. These are services that are commonly needed by patients and can be safely performed by dental therapists if they are trained on these services as part of their dental therapy education program or through additional post-graduation education or training.

1. **Nonsurgical extractions of permanent teeth** under limited conditions
2. **Pulpotomy on primary teeth**
3. **Tooth reimplantation** and stabilization
4. **Recement permanent crown**
5. **Administration of nitrous oxide**
6. **Placement of unilateral single tooth space maintainers** (CODA lists removal but not placement)
7. **Reading x-rays** (CODA lists “exposing” but not “reading” radiographic images)
8. **Direct pulp capping of primary teeth** (CODA lists indirect but not direct)
9. **Fabricating soft occlusal guards**
10. **Other related services and functions** for which the dental therapist has education and training and to the extent authorized by the supervising dentist

**Comment:** CODA’s accreditation standards explicitly acknowledge that some jurisdictions will authorize additional dental therapy services not listed in the CODA standards and requires that accredited programs must provide education and training on these services to students who will practice in these jurisdictions. The Panel identified additional services that are either already included in the authorized scope of practice in some jurisdictions or are commonly needed by patients and could be provided by dental therapists who are adequately trained. Including these additional services in the Model Program will promote greater national uniformity and consistency so that education programs can train students to practice in multiple jurisdictions and so that experienced dental therapists can become licensed in another jurisdiction and have the education and training needed to provide additional services the new jurisdiction includes in its dental therapy scope of practice.

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3 CODA 2-21 page 30: “Where graduates of a CODA-accredited dental therapy program are authorized to perform additional functions defined by the program’s state-specific dental board or regulatory agency, program curriculum must include content at the level, depth, and scope required by the state. Further, curriculum content must include didactic and laboratory/preclinical/clinical objectives for the additional dental therapy skills and functions. Students must demonstrate laboratory/preclinical/clinical competence in performing these skills.”
“Other related services and functions” is intended to encompass only those specific services and functions that are directly related to the provision of services that are listed in the authorized dental therapy scope of practice. It is not intended to allow expansion of a dental therapist's scope of practice beyond these services.

The Panel recognizes that there may be other services a dental therapist could safely provide with appropriate education and competency assessment. To prevent escalation of the costs and length of a general dental therapy education, the Panel chose not to specify additional services that would not be commonly provided by many or most dental therapists. However, the Panel encourages jurisdictions to approve a mechanism to allow dental therapists to provide additional services beyond those explicitly listed if they obtain appropriate additional education and training and have demonstrated competency.

**Limitations on Practice Settings:**
The Model Program leaves it to each jurisdiction to decide whether to limit dental therapists to practice only in certain settings or types of dental organizations or serving primarily low-income and Medicaid patients or people living in rural dental professional shortage areas.

**Comment:** Of the eight U.S. state and tribal programs that have authorized dental therapy licensing or certification, only one state – Vermont – authorizes dental therapists to practice in any setting or type of practice without limitations. Most jurisdictions with practice limitations have some flexibility for dental therapists to serve some patients or communities that are not underserved, as long as they primarily serve underserved populations. The rationale for limiting dental therapy practice primarily to these settings or populations is to have the greatest possible impact on improving access for those patients, communities and populations who are currently underserved, experience the poorest oral health, and face the greatest barriers to access. Policymakers in states with practice limitations concluded that, without limitations, many new dental therapists would likely be employed by private dental clinics serving primarily patients who already have access to dental care and have dental insurance or can afford to pay for dental care because of the higher compensation and benefits. Because their primary goal was to improve access for underserved populations, they established the policy that all dental therapists should serve primarily these populations. Jurisdictions vary to some degree on their definitions of “underserved patients and communities.” Section 3, National Model Act - State Licensing Legislation includes several examples of jurisdictional limits on dental therapy practice.

**Continuing education:**

A. Hours of continuing education. Dental therapists must satisfy the same requirements for continuing education as are required for other licensed dental professionals.
Jurisdictions vary in the number of hours required for different types of dental professionals, such as dental hygienists or dentists.

B. CE hours for dual licensure. Jurisdictions may choose to allow individuals who are dually licensed as a dental therapist and another type of oral health practitioner to apply relevant hours to both licenses to limit the total number of hours that a dually licensed individual must complete in order to maintain both licenses.

**Dental hygiene:**
The Model Program does not require dental therapists to be dental hygienists but allows flexibility and accommodations to allow dual licensure of individuals as both a dental hygienist and a dental therapist.

*Comment:* The majority of jurisdictions do not require that dental therapists must have dental hygiene education and licensure. Different jurisdictions, dental employers, and communities have different needs and some do not need or prefer a practitioner who is both a dental hygienist and dental therapist. For them, mandating dental hygiene education and licensure extends the length of education required, increases the cost of education, increases the level of compensation, and acts as a barrier to entry into the profession for people from underrepresented minorities and underserved communities.

**Health insurance:**
State legislation authorizing licensing of dental therapists may or may not include provisions related to Medicaid and insurance coverage and payment along with dental practice act changes. The Panel chose not to address details of health insurance coverage and billing and payment methods beyond the following three items.

A. **Medicaid coverage.** Dental therapy services should be covered by Medicaid and any state or local health coverage programs to the same extent that dental services are covered if provided by a dentist or other dental practitioner.

B. **Provider number.** Dental therapists should be assigned a unique provider number (NPI) to be used for billing purposes even if the services are billed through a dentist or dental clinic. Identifying dental therapists as the “rendering provider” in claims will allow dental therapy services to be separately identified and tracked for purposes of research and evaluation of the new profession.

C. **Federally Qualified Health Centers and Look-Alikes.** Medicaid policies should make it economically feasible for a community health center to use dental therapists. To maximize improvements in access for underserved populations with barriers to access, policies should provide for adequate payment to community health centers for dental therapy services provided services in community settings in addition to at clinic locations.
Comment: The Panel discussed whether to propose that the payment rate for dental therapy services should be the same rate as is paid if a dentist provides the services. For a specific service, the same level of competency and the same standard of care applies whether the service is provided by a dentist or dental therapist. Additionally, based on Minnesota’s experience paying the same rate will have a stronger impact on the dental access problem by making it more financially viable for dental clinics to provide services to Medicaid patients under low Medicaid reimbursement rates because the clinics are paid the same rate as a dentist but have lower operating costs for these services due to the lower salaries paid to dental therapists. The Panel concluded that it was not within the scope of their Panel activities and their expertise to recommend more specific policies relating to payment rate-setting and policy beyond items A, B and C.

Native and indigenous people:
A Model state licensing law will authorize the practice of dental therapy everywhere within the state’s borders, but exempt American Indian and Alaska Native Tribes and Organizations from state licensing regulations for services provided on Tribal lands or through Tribal Organizations. The exemption is not necessary from a legal perspective but may ensure that Indian Health Services funding may be used to pay for dental therapy services and allow for different licensure or certification of dental therapists in Tribal and Indian Health Service facilities.
Introduction.
The Model Act legislative language is intended to serve as a guide for legislators, legislative staff, and others when drafting legislation to enact a state dental therapy licensing system based on the Model Act policies in the previous section. Most states license and regulate dentists, dental hygienists and other dental professionals through a dental licensing board that is established by state law and follows policies enacted by the state legislature. The Model Act legislation in this section designed for this type of state licensing system. If a state or jurisdiction uses a different approach, the legislative language and policies will need to be revised accordingly. Additionally, even for states that use a dental board licensing system, every state dental practice act has differences in structure, policies and terminology that will require further adaptations of the Model Act legislative language. Finally, because of the differences between state dental practice acts the Model Act legislation provides recommended wording for the major components of licensing legislation but does not indicate where each provision would be placed in a state’s dental practice act or identify the particular state laws which will require routine conforming changes.

The main components of a state DT licensing bill in a state with a dental licensing board are:

1. Establishing licensure of DTs by the state board of dentistry
2. Establishing the requirements for obtaining a license, which generally include:
   a. Graduation from an accredited or approved education program
   b. Passing licensing examinations
   c. Paying an application fee
   d. Satisfying other general licensing requirements, such as being of a minimum age and not having been convicted of certain crimes.
3. Listing the services that a DT is authorized to provide (“scope of practice”)
4. Specifying the type of dentist supervision that is required
5. Applying existing general dental professional licensing provisions to dental therapists, such as licensing fees, continuing education, prohibited actions and disciplinary proceedings.

6. State dental therapy laws may also establish limitations on the types of settings in which a DT is authorized to practice in order to initially target the new profession where access problems are the greatest.

7. State dental therapy legislation may also contain provisions relating to health insurance coverage, such as adding DT services to Medicaid benefits.

Dentist supervision is an important cornerstone of dental therapy practice. Because terminology and definitions of dental supervision vary from state to state, the Model Act uses the following definitions of levels of supervision:

1. **General Supervision** means the dental therapist is authorized to provide services without the supervising dentist being on site when services are provided and without a prior examination or diagnosis by a dentist, provided they have the supervising dentist's authorization to do so.

2. **Indirect Supervision** means the supervising dentist or a dentist designated by the supervising dentist is on site, authorizes the services to be provided, and remains onsite while services are being performed.

3. **Direct Supervision** means the dentist is on site, diagnoses the condition to be treated, authorizes the procedure, and evaluates the performance of the procedure.

A legislative drafter will use their jurisdiction's terminology to establish these levels of supervision for dental therapists.

**Comments welcome.**
The consortium welcomes comments and suggestions on the legislative language in this section so that it can be continuously improved and expanded. Please send comments and suggestions to Michael Scandrett at mscandrett@msstrat.com.
National Model Act Legislative Language

I. Add to definition section of the Dental Practice Act

(xx) “Dental therapist” means an individual licensed under this chapter to provide the dental therapy services set forth in section A(5).

II. Add dental therapist representation to the Board of Dentistry

Most state dental practice acts establish a board of dentistry with representation of the different types of dental professionals that are licensed by the board as well as having public members that are not part of the dental profession or industry. Because in the years after initial enactment of licensing legislation the pool of dental therapists in a state will be very small and appointing one to represent the profession may not be considered efficient or appropriate. A dental therapy licensing bill may include a provision adding a representative to the board with a delayed effective date or at a future time when a minimum number of state-licensed dental therapists are in practice.

III. Add new sections for DT licensing to the Dental Practice Act

A. Dental Therapy

   (1) Licensing. The board shall issue a dental therapy license to an applicant who:
   (a) Submits an application and license fee in the manner prescribed by the board;
   (b) Is a graduate of a dental therapy education program that is accredited by the Commission on Dental Accreditation of the American Dental Association or any other dental accrediting entity recognized by the United States Department of Education. A graduate of a non-accredited education program is also eligible for licensure if the applicant’s education and training is comparable to an accredited program considering both the applicant’s education program and any additional education, training or supervised practice that was completed by the applicant after graduation, as determined by the board.
   (c) Has demonstrated clinical competency to provide dental therapy services through at least one of the following methods:
      (i) Graduation from an accredited, competency-based dental therapy education program that includes supervised clinical practice and requires demonstration of clinical competency prior to graduation, as determined by the board;
      (ii) Completion of a total of 400 hours of clinical practice under the direct or indirect supervision of licensed dentist which may be completed during or after the applicant’s dental therapy education or a combination of both; or
(iii) Passing a clinical licensing examination administered by a board-approved regional or national dental testing service or another examination approved by the board;
(d) Has successfully completed a written examination on the laws and rules of this state relating to the practice of dental therapy.
(e) (Also include other general licensing requirements consistent with licensing requirements for dentists, dental hygienists and other dental professionals).

(2) Dentist supervision. A licensed dental therapist may perform the dental therapy services in paragraph (5) under the general supervision of a state-licensed dentist to the extent authorized by the supervising dentist and provided consistent with the terms of a written collaboration agreement that meets the requirements of paragraph (3). The supervising dentist may restrict or limit the dental therapist’s practice to be less than the full set of dental therapy services set forth in paragraph (5). A supervising dentist may authorize a dental therapist to provide dental therapy services without a prior examination or diagnosis by a dentist.

(3) Collaborative agreement. Prior to performing any of the services authorized under this chapter, a dental therapist shall enter into a written collaboration agreement with a state-licensed supervising dentist. The agreement must be signed by the dental therapist and the supervising dentist, updated whenever changes are made in the supervisory or collaborative relationship, and maintained on file. A dentist may enter into a collaborative agreement with more than one dental therapist and a dental therapist may enter into a collaborative agreement with more than one dentist. The collaborative agreement must include at least the following components:
(a) Methods of dentist supervision, consultation and approval.
(b) The services the dental therapist is authorized to provide, including any limits or conditions set by the supervising dentist on the provision of any of the services set forth in paragraph (5);
(c) The settings in which the supervising dentist authorizes dental therapy services to be provided and the circumstances or conditions under which services may be provided in particular settings;
(d) Protocols for informed consent, recordkeeping, quality assurance, and dispensing or administering medications;
(e) Policies for handling referrals when a patient needs services the dental therapist is not authorized or qualified to provide;
(f) Policies for handling medical emergencies; and
(g) Policies for supervision of dental assistants and working with dental hygienists and other dental practitioners and staff.
(4) **Supervision of dental assistants.** A dental therapist may supervise one or more dental assistants.

(5) **Dental therapy services.** A licensed dental therapist may provide the following dental therapy services to the extent authorized in the written collaboration agreement:

(a) All the services for which education is provided by accredited dental therapy education programs under the Commission on Dental Accreditation’s accreditation standards for dental therapy education programs;
(b) Oral examination, evaluation, diagnosis and treatment planning for conditions and services that are within the dental therapist's scope of practice and education;
(c) Any of the following services if a dental therapist's education program or post-graduation education included education on the provision of the service:
   (i) Evaluation of radiographic images
   (ii) Administration of nitrous oxide
   (iii) Placement and removal of intraoral sutures
   (iv) Pulpotomy on primary teeth;
   (v) Fabrication of soft occlusal guards;
   (vi) Tooth reimplantation and stabilization;
   (vii) Recementing permanent crowns;
   (viii) Simple extractions of periodontally diseased permanent teeth with mobility of +3 or +4.
(d) Other related services and functions for which the dental therapist has education and training; and
(e) Other services authorized by the board in rule.

(6) **Continuing education.** (State-specific wording should be included requiring a dental therapist to satisfy continuing education requirements that are appropriate for the jurisdiction and consistent with requirements for other dental professionals.)

(7) **Reciprocity.** (Use state-specific wording to apply to dental therapists existing policies for licensing of other dental professionals by reciprocity, also known as licensing by credential. However, because of the initial variability in the licensing requirements, education standards, scope of practice, and terminology between jurisdictions, some additional flexibility is needed compared to other well-established professions. Below is suggested wording for accommodating this variability.)
**Terminology:** Licensing by credential is authorized for an applicant who “holds a license or certification as a dental therapist, dental health aide therapist, or comparable professional in another state or tribal jurisdiction.” Similar terminology should be used in any reciprocity provision that requires a minimum number of hours or years of licensed or certified practice.

**Education:** For those states whose dental reciprocity laws require a certain level or type of education, such as graduation from an accredited education program, the provisions for dental therapists should allow flexibility for alternative education programs and pathways, such as the following example: “graduated from an accredited dental therapy program or has a combination of dental therapy education, post-graduation education or training, and clinical practice experience that is comparable to an accredited education program.”

**Competency Examination:** If general dental reciprocity provisions require proof of passing clinical competency licensing examination in another jurisdiction, the provisions for dental therapists should allow flexibility for other methods used in other jurisdictions to demonstrate competency, such as the following example: “successfully completed a dental therapy clinical competency examination approved by the jurisdiction in which the applicant is licensed or satisfied other methods of demonstrating competency approved by that jurisdiction including, but not limited to, completion of a competency-based education program or completing a minimum number of hours of preceptorship or supervised practice.”

**IV. Amend Medicaid and state health care program laws to add coverage of dental therapy services**

(xx) **Medicaid coverage.** Medicaid covers dental therapy services provided to Medicaid eligible enrollees under the supervision of a state-licensed dentist who is enrolled as a state Medicaid dental provider. The dental therapist must be enrolled as a Medicaid provider and be designated as the rendering provider on claims submitted by an enrolled and authorized Medicaid billing provider.

(xx) **FQHCs and Rural Health Clinics.** (Make appropriate policy changes to FQHC and Rural Health Clinic payment methodologies to enable them to employ and utilize dental therapists without losses or financial disincentives.)
V. Exempt Indian tribes.

(xx) This (chapter or section) does not prohibit, restrict or impose state licensure or regulatory requirements or obligations on the practice of dental therapy on tribal lands or by a dental therapist who is employed by a tribal health program authorized pursuant to Public Law 93-638 or an urban Indian health programs.

VI. Make conforming changes to existing laws.

A bill establishing state licensure of dental therapists will also include many conforming changes to standard Dental Practice Act provisions that relate to licensing of all dental practitioners and to other state laws that relate to dental providers generally. Most of these changes will consist of inserting the words “dental therapist” or “dental therapy” into provisions that contain references to dentists and/or dental hygienists. Examples of state laws that will need to be amended to incorporate references to this dental professional include:

1. Investigatory and disciplinary authority of the board of dentistry;
2. Prohibited actions of licensed professionals;
3. Licensing procedures and fees;
4. Health professional loan forgiveness programs; and
5. Data privacy and recordkeeping requirements.

A legislative bill drafter may choose to search the state statutes for the words “dentist,” “dentistry,” “dental hygienist,” and “dental hygiene” and then include sections in the dental therapy bill to amend laws that contain any of these terms by inserting “dental therapist” or “dental therapy” where appropriate.

VII. OPTIONAL: Establish Practice Setting Limitations.

The Model Program Policies section provides the rationale for why most state dental therapy licensing laws limit dental therapists to practicing only in certain settings or serving certain populations. It also provides the rationale for a policy decision not to impose practice setting limitations. Policymakers in each jurisdiction will decide which policy to choose. For those considering establishing practice limitations, below examples from the four state dental therapy licensing laws that have limitations:
Minnesota:
Section 150A.105, subdivision 8

Subd. 8. Definitions.
(a) For the purposes of this section, the following definitions apply.
(b) “Practice settings that serve the low-income and underserved” mean:
   (1) critical access dental provider settings as designated by the commissioner of human services under section 256B.76, subdivision 4;
   (2) dental hygiene collaborative practice settings identified in section 150A.10, subdivision 1a, paragraph (d), and including medical facilities, assisted living facilities, federally qualified health centers, and organizations eligible to receive a community clinic grant under section 145.9268, subdivision 1;
   (3) military and veterans administration hospitals, clinics, and care settings;
   (4) a patient’s residence or home when the patient is home-bound or receiving or eligible to receive home care services or home and community-based waivered services, regardless of the patient’s income;
   (5) oral health educational institutions; or
   (6) any other clinic or practice setting, including mobile dental units, in which at least 50 percent of the total patient base of the dental therapist or advanced dental therapist consists of patients who:
      (i) are enrolled in a Minnesota health care program;
      (ii) have a medical disability or chronic condition that creates a significant barrier to receiving dental care;
      (iii) do not have dental health coverage, either through a public health care program or private insurance, and have an annual gross family income equal to or less than 200 percent of the federal poverty guidelines; or
      (iv) do not have dental health coverage, either through a state public health care program or private insurance, and whose family gross income is equal to or less than 200 percent of the federal poverty guidelines.
(c) “Dental health professional shortage area” means an area that meets the criteria established by the secretary of the United States Department of Health and Human Services and is designated as such under United States Code, title 42, section 254e.
Arizona:
32-1276.04, A.

A dental therapist may practice only in the following practice settings or locations, including mobile dental units, that are operated or served by any of the following:
1. A federally qualified community health center.
2. A health center program that has received a federal look-alike designation.
3. A community health center.
4. A nonprofit dental practice or a nonprofit organization that provides dental care to low-income and underserved individuals.
5. A private dental practice that provides dental care for community health center patients of record who are referred by the community health center.

Michigan:
Sec. 16654.

A dental therapist may provide services described in section 16656 included within the scope of practice as a dental therapist and under the supervision of a dentist in any of the following health settings:

(a) A hospital that is licensed under article 17.
(b) A health facility or agency, other than a hospital, that is licensed under article 17 and is reimbursed as a federally qualified health center as defined in 42 USC 1395x(aa)(4) or that has been determined by the United States Department of Health and Human Services, Centers for Medicare and Medicaid Services to meet the requirements for funding under section 330 of the public health service act, 42 USC 254b.
(c) A federally qualified health center, as defined in 42 USC 1395x(aa)(4), that is licensed as a health facility or agency under article 17.
(d) An outpatient health program or facility operated by a tribe or tribal organization under the Indian selfdetermination act, 25 USC 5321 to 5332, or by an urban Indian organization receiving funds under title V of the Indian health care improvement act, 25 USC 1651 to 1660h.
(e) A correctional facility. As used in this subdivision, “correctional facility” means a facility or institution that houses a prisoner population under the jurisdiction of the department of corrections.
(f) A health setting in a geographic area that is designated as a dental shortage area by the United States Department of Health and Human Services.
(g) A school-based health center, as that term is defined in 42 USC 280h-5.
(h) A local health department.
(i) Any other clinic or practice setting, including a mobile dental unit, in which at least 50% of the annual total patient base of the dental therapist will consist of patients who meet any of the following:
   (i) Are enrolled in a health care program administered by the department of health and human services.
(ii) Have a medical disability or chronic condition that creates a significant barrier to receiving dental care.
(iii) Do not have dental health coverage, either through a public health care program or private insurance, and have an annual gross family income equal to or less than 200% of the federal poverty level. As used in this subparagraph and subparagraph (iv), “federal poverty level” means the poverty guidelines published annually in the federal register by the United States Department of Health and Human Services under its authority to revise the poverty line under 42 USC 9902.
(iv) Do not have dental health coverage, either through a state public health care program or private insurance, and whose family gross income is equal to or less than 200% of the federal poverty level.

Maine:
18377, 3. Practice requirements. A dental hygiene therapist must comply with the following practice limitations.
A. A dental hygiene therapist may provide services only in (bullets added)
   • a hospital
   • a public school, as defined in Title 20-A, section 1, subsection 24
   • a nursing facility licensed under Title 22, chapter 405
   • a residential care facility licensed under Title 22, chapter 1663
   • a clinic
   • a health center reimbursed as a federally qualified health center as defined in 42 United States Code, Section 1395x(aa)(4) (1993) or that has been determined by the federal Department of Health and Human Services, Centers for Medicare and Medicaid Services to meet the requirements for funding under Section 330 of the Public Health Service Act, 42 United States Code, Section 254(b)
   • a federally qualified health center licensed in this State
   • a public health setting that serves underserved populations as recognized by the federal Department of Health and Human Services or
   • a private dental practice in which at least 50% of the patients who are provided services by that dental hygiene therapist are covered by the MaineCare program under Title 22 or are underserved adults.
Appendix A: Model Act Review

Panel Members

**Bridgett Anderson, LDA, MBA** is the Executive Director of the Minnesota Board of Dentistry, with over 15 years of experience in the dental field. Previously she was the Director of Regulatory Affairs with the Minnesota Dental Association. Her expertise ranges from clinical dentistry, previously as a licensed dental assistant and dental office manager, to dental safety, prevention and regulation, and as a lecturer in dental therapy and to providing guidance on regulation of dental therapy to other state boards. She holds a MBA degree from Bethel University, St. Paul, MN.

**Ruth Ballweg, MPA, PA, Professor Emeritus**, University of Washington School of Medicine was Program Director of the University of Washington’s MEDEX Northwest Physician Assistant Program for 29 years from 1985-2014. A graduate of MEDEX in 1977, Ruth practiced in Primary Care and Public Health before joining the MEDEX Faculty in 1981. Professor Ballweg is currently the Director of International Affairs for the NCCPA and Historian for the PA History Society.

Ruth has been a leader in all phases of the Physician Assistant profession including a 3-year Presidential term with Physician Assistant Educational Association, representing the American Association of Physician Assistants as a federal Primary Care Health Policy Fellow, and serving as a Commissioner for the National Commission on Certification of Physician Assistants. Professor Ballweg is founding editor for the first textbook developed for PA education, PHYSICIAN ASSISTANT: A Guide to Clinical Practice—now in its sixth edition. She is an expert on the health workforce, women’s roles in health care, health care in rural and remote areas, global PA development and the regulation of PAs.

Ms. Ballweg has been collaborating with the Alaska Native Tribal Health Consortium on the development of the Dental Health Aide Therapist program since 2005. Her shared leadership activities involved the development of the program’s
Colleen Brickle, EdD, RDH, RF is Dean of Health Sciences at Normandale Community College and one of 31 colleges and universities in the Minnesota State System, which is the largest education system in the Minnesota. Her current appointment as the Dean of Health Sciences began in 2008. For nearly 22 years, her primary role was as a full-time dental hygiene educator at Normandale Community College that included five years of serving as the dental hygiene department chair. Through a partnership with Metropolitan State University, she developed and implemented a dual admissions program allowing dental hygiene students to complete a baccalaureate degree in one to two semesters after completing an associate degree.

Colleen was instrumental in the development and implementation of a master’s level graduate education program for advanced practice in dental therapy that was the basis for Minnesota’s initial dental therapy legislation that was introduced in 2008. Through her leadership and the collaborative effort of nearly 60 organizations, Minnesota became the first state to enact a state dental therapy licensing law in May 2009.

Colleen has served on committees within many dental related professional organizations whose primary focus has been access to oral health care, such as the American Dental Hygienists’ Association, Minnesota Department of Health, Minnesota Board of Dentistry, HealthForce Minnesota, Oral Health Committee of the Minnesota Health Care Safety Net Coalition, and the Minnesota Department of Human Services.

Colleen graduated with a dental hygiene degree from the University of Minnesota in 1976 and completed a Master’s degree in Curriculum and Instructional Design in 1988 from the University of Minnesota and a Doctorate in Health Care Education in 2000 from Nova Southeastern in Florida.

Drew Christianson, MDT, CADT is a Minnesota advanced dental therapist, educator and researcher with a strong passion for patient-centered care and is focused on breaking down barriers to increase access to oral health care. Mr. Christianson joined the faculty of the University of Minnesota School of Dentistry in 2014 as a clinical assistant professor, and is involved with engaging and teaching students in dentistry, dental therapy, and dental hygiene in preclinical and clinical settings as well as in the classroom. He also practices in a private dental clinic in Maple Grove, MN.

Mr. Christianson earned his Master’s in Dental Therapy from the University of Minnesota School of Dentistry in 2013 and completed the Advanced Dental Therapy Certificate Program in 2016.
Caswell A. Evans, Jr., D.D.S., M.P.H. is the Associate Dean for Prevention and Public Health Sciences at the University of Illinois, Chicago College of Dentistry; he is also a faculty member in the UIC School of Public Health. Previously he served as the Executive Editor and Project Director for Oral Health in America: A Report of the U.S. Surgeon General. For twelve years, Dr. Evans was Director of Public Health Programs and Services, for the Los Angeles County Department of Health Services. Prior to that he was director of the King County Division of the Seattle-King County Department of Public Health. He is a member of the National Academy of Medicine and the National Academy of Sciences. He is a past president of the American Public Health Association, the American Association of Public Health Dentistry, and the American Board of Dental Public Health. He is the current President of the Institute of Medicine of Chicago and, by mayoral appointment, serves on the Chicago Board of Health.

Dr. Evans earned his DDS from the School of Dental and Oral Surgery at Columbia University and his Masters of Public Health from the University of Michigan.

Rachael Hogan, DDS is the Dental Director at the Swinomish Clinic in LaConner, WA and is helping lead the effort to address the oral health crisis in Indian Country. She supervises the first Alaska-trained dental health aide therapist in the Lower 48 States. She is an advocate for well-rounded dental teams utilizing dental therapists and expanded function dental assistants as well as recognizing the importance of culturally competent care and improving the traditional dental delivery system. Prior to joining the Swinomish Clinic in 2013, she was employed at the Sea Mar Community Health Clinic in Bellingham, WA specializing in oral health to a Latino population where her interest in public health dentistry grew into her passion.

Equitable access to high quality health care is a priority. Dr. Hogan has involvement in the American Dental Association’s Diversity in Leadership Program, the Steering Committee of the Whatcom County Oral Health Coalition and the Mount Baker District Dental Society. She is actively engaging minority students in the dental profession and encourages dental students to consider public health dentistry as a profession.

She holds a DDS degree from Marquette University, Milwaukee, WI and a bachelor’s degree from the University of Utah in Salt Lake City, UT.

Ana Karina Mascarenhas, BDS, MPH, DrPH is the Associate Dean for Research, College of Dental Medicine; Professor, College of Dental Medicine; and Professor, College of Osteopathic Medicine at Nova Southeastern University.

Prior to joining Nova, she was Director of the Division of Dental Public Health, Graduate Program Director in Dental Public Health, and Professor of Health Policy and Health Services Research at the Henry M. Goldman School of Dental Medicine at Boston University. From 1996 to 2001
she taught at the College of Dentistry at The Ohio State University and held appointments in the College of Medicine and Public Health as Scholar in the Center for Health Outcomes Policy & Evaluation Studies and at the John Glenn Institute for Public Service and Public Policy. Her primary areas of research interest are in access to care, oral epidemiology and health services research. Dr. Mascarenhas served on the Dental Therapy Curriculum Project Work Group that developed a Dental Therapy Curriculum for Community Colleges.

Dr. Mascarenhas received the BDS in 1985 from the Goa Dental College and Hospital, Goa, India. She received an MPH in 1992 and the DrPH in 1995 from the University of Michigan School of Public Health. She is a Diplomate of the American Board of Dental Public Health and Fellow in Dental Surgery of the College Royal College of Physicians and Surgeons of Glasgow.

Jean Moore, DrPH, FAAN is the Director of the New York Center for Health Workforce Studies at the School of Public Health, State University of New York (SUNY) at Albany. Dr. Moore serves as the Principal Investigator for two Cooperative Agreements funded by the Health Resources and Services Administration, the Oral Health Workforce Research Center and the Health Workforce Technical Assistance Center. She has extensive experience in health workforce research and planning.

Dr. Moore received her Doctorate in Public Health from the SUNY Albany School of Public Health. She also holds two master’s degrees in nursing from Russell Sage College, and a bachelor’s degree in nursing from SUNY Plattsburgh.

Naomi Petrie, DHAT, Oregon is the first dental therapist to practice in the state of Oregon where she works for the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians, of which she is an enrolled member. At the 2017 National Indian Health Board Awards Gala, she received a Youth Leadership for her contribution to improving the health of American Indians and Alaskan Natives. Naomi believes that dental therapy will be an important tool in reducing health disparities affecting American Indians and Alaskan Natives.

Ms. Petrie graduated from the Alaskan Dental Health Aide Therapy Program in June of 2017.

Bob Russell, DDS, MPH, MPA, CPM, FACD is the Public Health Director and Bureau Chief for Oral & Health Delivery at the Iowa Department of Public Health. His other experience includes work as a practicing dentist and the Clinical Dental Director at a community care center in Michigan.

Dr. Russell has provided consulting to a DentaQuest Initiative on Safety Net Solutions, as a Dental Practice Consultant to HRSA and as a Technical Advisor to HRSA Region V Federally Qualified Health Centers. He currently is a Team Advisory Consultant with DentaQuest’s Dental Disease Elimination Project and a member of the National Network for Oral Health Access Advisory Committee. He has served by federal appointment on the HRSA Bureau of Health
Professions Advisor Committee on Training in Primary Care Medicine and Dentistry. In addition, he served on the HRSA Work Group on Interprofessional Oral Health Care Core Competencies, and the CDC Division of Oral Health Infrastructure and Capacity Development Program Indicator Project.

Dr. Russell received his DDS from Loyola University School of Dentistry, a MPH degree from the University of Michigan School of Public Health and is a candidate for a CMP/MPA in 2019 from Drake University in Des Moines, IA.

Mark Schoenbaum, MSW was in a unique state government leadership position throughout Minnesota’s consideration and development of dental therapy. He recently retired from a 38-year career in government and public health, most recently serving from 2005 to 2018 as Director of the Office of Rural Health and Primary Care at the Minnesota Department of Health (MDH).

During his tenure, Mark and MDH played a leadership role in the process through which dental therapy became law in Minnesota and has since grown into an integral profession alongside other dental disciplines. Mark was lead staff to the 2008 Oral Health Practitioner Work Group established by the Minnesota Legislature to developed specific recommendations for a state dental therapy licensing system that was the basis for legislation that was enacted in 2009. He represented MDH during the 2009 legislative considerations and enactment of Minnesota’s dental therapy law, built relationships between MDH, the Medicaid agency, Board of Dentistry, higher education and dental stakeholders; authored the 2014 report Early Impacts of Dental Therapists in Minnesota; chartered Minnesota’s multi-stakeholder Dental Therapy Research Group; and developed toolkits for prospective dental therapy employers.

Mark is also recognized nationally and in Minnesota as an expert on health workforce, scope of practice, licensing and emerging health professions issues. He directed health care workforce research and development for MDH, staffed the Minnesota Legislative Health Care Workforce Commission and led Minnesota’s participation in National Governor’s Association and National Conference of State Legislature scope of practice and health workforce Policy Academies. He is able to put dental therapy in a broader context for legislators, public health officials and regulators and has presented and testified nationally on dental therapy, emerging professions and scope of practice issues.

Mark holds an MSW from the University of Minnesota and a BA in Social Work from Antioch College.

Karl Self, DDS, MBA joined the faculty of the University of Minnesota School of Dentistry in 2006 and in January 2010 was selected to be the Director of the newly created Division of Dental Therapy. In addition to managing all aspects of the implementation of the University’s dental therapy education program, he is engaged in teaching dental, dental therapy, and dental
hygiene students. His current research efforts are focused on the implementation of dental therapy in Minnesota. His general research interests include as well as team-based care, access to care, and global health.

During his professional career, Dr. Self has been engaged in a variety of dental practice types including private practice and large group practice but he spent most of his professional life working at a Federally Qualified Healthcare Center where, among other roles, he served as executive director for six years. Other professional roles include being a consultant for the Department of Human Services’ Medical Assistance program and the director of Diversity and Inclusivity for the School of Nursing. Dr. Self serves on the board of a number of non-profit dental-focused organizations and has been involved in improving oral healthcare in Africa.

Dr. Self holds a DDS degree from the University of Minnesota School of Dentistry and a MBA from the University of Minnesota Carlson School of Business.

Mary Williard, DDS, Capt. US Public Health Service is the Director of the Department of Oral Health Promotion at the Alaska Native Tribal Program (ANTHC) and Director of the Ilisagvik College of Alaska Dental Therapy Educational Program. Dr. Williard joined the US Public Health Service in August of 1996 and is currently a Captain in the Commissioned Corps stationed at the Alaska Native Tribal Health Consortium (ANTHC). She has worked in American Indian/ Alaska Native (AI/AN) dental programs since 1996, including having experience as a clinician and administrator, supervising Dental Health Aide Therapists (DHAT) and working in remote Navajo and Alaska Native communities.

As a recognized national expert in dental therapy education, supervision and practice, she has presented around the country on dental therapy and has been called to testify in legislative venues from Washington State to Washington DC. As a dental instructor, Dr. Williard has been recognized by the National Rural Health Association with the Distinguished Educator Award in 2008. From 2010-2013 she participated on the HHS Office of Minority Health National Project Advisory Committee for Cultural Competency Curriculum for Dental Professionals. She was appointed to the Federal Alaska Community Health Aide Program Certification Board in 2012.

Dr. Williard graduated from The Ohio State University College of Dentistry in 1994 and completed a 2-year General Practice Residency at the Carolinas’ Medical Center in Charlotte, North Carolina in 1996.

Sarah Wovcha, JD, MPH is the Executive Director of Children’s Dental Services in Minneapolis, Minnesota’s largest provider of school and Head Start-based dental care serving over 37,000 children annually. Ms. Wovcha has been a leader in Minnesota’s development of the dental therapy profession – as a key leader in the development and enactment of the licensing legislation, as an early adopter by employing dental therapists and making her organization
available as a training site, and by contributing to research and evaluation of the dental therapy profession. Children’s Dental Services currently employs eight dental therapists who together treat over 12,000 patients annually. As a result of her work in expanding access to dental care for low-income Minnesotans she received the 2007 Betty Hubbard Maternal and Child Health Leadership Award and the 2013 Macalester College Distinguished Citizen Award.

She holds a law degree from the University of Minnesota and a master’s degree from the Harvard School of Public Health

Ken Wright, DMD, MPH, is Vice President, Kaiser Permanente Dental Care Services. Dr. Wright joined the Kaiser Permanente Dental Program in September 2011 and leads the Dental Program as a business unit within the Kaiser Permanente Northwest Region (KPNW) and is responsible for its strategy, dental and financial operations, service and quality of care. Dr. Wright oversees the Program’s 20 offices that serve more than 287,000 members and is absolutely committed to a holistic approach to health care that enables coordination of care across the medical-dental continuum, leverages an expanded role for dentists as extenders of primary care, improves patient health outcomes, and results in enhanced service and patient care experiences. He chairs the Harvard School of Dental Medicine’s Initiative Integrating Oral Health and Medicine.

Prior to joining Dental Care Services, Dr. Wright served as Chief of Dental Services at the Department of Veterans Affairs (VA) Medical Center in Alexandria, LA. He was responsible for overall operation, oversight and performance measures of all Dental Service operations at the center. Now a retired Captain, U.S. Navy, he served in numerous leadership roles including Chief Executive Officer for the Navy’s largest dental command at the National Naval Dental Center in Bethesda, Md., Chief Operating Officer for Navy Dentistry’s $380 million integrated dental program and Deputy Director, Operations Plans and Policy for Navy Medicine on the Chief of Naval Operations staff.

Dr. Wright is a Board-Certified periodontist who earned his DMD and Masters in Public Health from Harvard University, completed his periodontal residency at University of North Carolina School of Dentistry in Chapel Hill and completed the Executive Leadership Program at Harvard Business School.

Staff:

Michael Scandrett, JD is an attorney and consultant with MS Strategies, LLC with over 25 years of professional experience in health policy and health care reform, with a focus on innovations and policy change to improve access, quality and equity for low-income, underserved and historically underrepresented populations. Michael served as consulting executive director of the Minnesota Health Care Safety Net Coalition for over ten years, and in this role shared leadership of a large alliance of individuals and organizations who collaborated on the development, legislative enactment, and implementation of Minnesota’s dental therapy profession and licensing system. His former positions include: shareholder and chair of the
health law and consulting practice with Halleland Habicht, PA, executive director of the Minnesota Council of Health Plans, executive director of the Minnesota Health Care Commission, and nine years as legislative counsel for the Minnesota Senate.
Appendix B. Dental Therapy Bibliography

Access and Equity.


Quality and Safety


Education and Competency Assessment

Alaska Native Health Training Consortium
https://anthc.org/alaska-dental-therapy-education-programs/

University of Minnesota Dental Therapy Education Program
https://www.dentistry.umn.edu/degrees-programs/dental-therapy

Normandale Community College-Metropolitan State University Dental Therapy Education Program
http://www.normandale.edu/dental-hygiene-advanced-degrees
https://www.metrostate.edu/academics/programs/dental-hygiene-bsdh
https://www.metrostate.edu/academics/programs/advanced-dental-therapy-msadt


General Information


Dental Health Aide Therapist (“DHAT”) Program


State Licensing (Minnesota)

Employment, Hiring and Integration (Minnesota)


Financial Viability (Minnesota)


**U.S. and Global Research Literature**


Appendix C.
Comparison of State and Tribal Dental Therapy Licensing and Certification Requirements and CODA
### Dental Therapists: Comparison of Existing U.S. Licensing or Certification Requirements - with CODA Comparison

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<td>Dental Health Aide Therapist</td>
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<td>CODA: Type or level of dentist supervision not addressed in CODA standards</td>
<td>General</td>
<td>General</td>
<td>General</td>
<td>Varies by Service (see below)</td>
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<td>On-site supervision, except some dental hygiene services may be performed under general supervision.</td>
<td>General</td>
<td>General after completion of 1000 hours of practice under direct supervision</td>
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<td>CODA: Prior examination and diagnosis by dentist not addressed in CODA standards</td>
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</tr>
<tr>
<td>CODA: Accredited education programs must meet CODA Dental Therapy Education Program accreditation standards.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CODA: Minimum length of education is three academic years</td>
<td>Minimum length not specified</td>
<td>Minimum length not specified</td>
<td>Minimum length not specified</td>
<td>Minimum bachelor's degree</td>
<td>Minimum master's degree</td>
<td>Dental hygiene education plus at least 4 semesters of dental therapy training</td>
<td>Minimum length not specified but must meet CODA standards</td>
<td>Minimum length not specified but must meet CODA standards</td>
</tr>
<tr>
<td>CODA: Dental hygiene education is not included in dental therapy education</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes at initial DT licensure</td>
</tr>
<tr>
<td>Supervised Clinical Practice Required after Graduation?</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CODA: Required hours of clinical practice not specified. CODA-accredited programs must provide students with sufficient clinical training and practice experiences to demonstrate competence prior to graduation.</td>
<td>Preceptorship of 400 hours or 3 months</td>
<td>No</td>
<td></td>
<td></td>
<td>2000 hours under direct or indirect supervision</td>
<td>2000 hours supervised practice</td>
<td>1000 hours under direct supervision</td>
<td>1000 hours under direct supervision before practicing under general supervision</td>
</tr>
<tr>
<td>Practice Setting Limitations?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CODA: Not applicable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Scope of Practice - Services Listed in CODA Education Standards

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Alaska</th>
<th>Washington</th>
<th>Oregon</th>
<th>Minnesota</th>
<th>Maine</th>
<th>Vermont</th>
<th>Arizona</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing oral health conditions and identifying treatment needs (diagnosis within DT scope and training)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Charting of the oral cavity</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Oral health instruction and disease prevention education</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Exposing radiographic images</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Dental prophylaxis including below-the-gum scaling and/or polishing procedures</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Dispensing and administering non-narcotic pain relief, anti-inflammatory, and antibiotic medications prescribed by a licensed healthcare provider</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Applying fluoride varnish and other topical disease prevention agents</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Pulp vitality testing</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Applying desensitizing medication or resin</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fabricating athletic mouthguards</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Changing periodontal dressings</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Administering local anesthetic</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Simple extraction of erupted primary teeth</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Emergency palliative treatment of dental pain for dental therapy</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Preparation and placement of direct restoration in primary and permanent teeth</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td>Fabrication and placement of single-tooth temporary crowns</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td>Preparation and placement of preformed crowns on primary teeth</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</tr>
<tr>
<td></td>
<td>Dental Health Aide Therapist</td>
<td>Dental Health Aide Therapist</td>
<td>Dental Health Aide Therapist</td>
<td>Dental Therapist</td>
<td>Advanced Dental Therapist</td>
<td>Dental Hygiene Therapist</td>
<td>Dental Therapist</td>
<td>Dental Therapist</td>
</tr>
<tr>
<td>Indirect and direct pulp capping on permanent teeth</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Indirect pulp capping on primary teeth</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Suture removal</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Minor adjustments and repairs on removable prostheses</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Removal of space maintainers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>

### Additional Dental Therapy Services Not Listed in CODA Education Standards

<table>
<thead>
<tr>
<th>Treatment planning</th>
<th>Alaska</th>
<th>Washington</th>
<th>Oregon</th>
<th>Minnesota</th>
<th>Maine</th>
<th>Vermont</th>
<th>Arizona</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

| Fabricating soft occlusal guards | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Administration of nitrous oxide | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Extraction of periodontally diseased permanent teeth under limited conditions | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Placing sutures | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Brush biopsy (sample of oral tissue) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tissue conditioning and soft reline to improve denture fit | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tooth reimplantation and stabilization following traumatic evulsion | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Recementing permanent crowns | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Pulpotomy on primary teeth | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Performing other related services and functions authorized by the supervising dentist and for which the dental therapist is trained. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

### NOTES:

1. As used in this document “general supervision” means that dental therapists are authorized to provide services without the supervising dentist being on site when services are provided and without a prior examination and diagnosis by a dentist, provided they have the supervising dentist’s authorization to do so.

2. The list of services in the column for CODA’s education program accreditation standards is in general terminology that is not always identical to CODA’s wording. The comparisons of CODA and each program’s authorized scope of practice required analysis of differences in wording and use of some judgment in determining whether a service is comparable or not.

3. Those jurisdictions with limitations on practice settings require that dental therapists serve primarily underserved, low-income or Medicaid populations, communities or native or indigenous people to improve access where access barriers are the greatest. Each jurisdiction varied to some degree in types of organizations, settings or patient populations to be served. Most states with limitations had flexibility to allow dental therapists to serve some patients or communities who are not in the identified priority populations as long as the primary population served was one of those specified.

4. Alaska, Washington and Oregon programs are authorized under state or tribal law to serve primarily native and indigenous people. The remaining dental therapy programs were authorized through legislative enactment of a state licensing law.

5. Some jurisdictions require prior approval of a supervising dentist before some services are provided.