

JAN 2019

POLICY BRIEF



Summary

- Millions of Americans suffer from the country's large and growing shortage of dentists, which has worsened oral health outcomes.
- Several states have started to train, license, and deploy dental professionals called "dental therapists," who have dramatically increased dental care access and improved oral health.
- Lawmakers can alleviate America's dental shortage, reduce wait times, and provide high-quality dental care to families, especially the most vulnerable, by allowing dental therapists to practice under the supervision of a fully licensed dentist.

The State Lawmaker's Case for Legalizing Dental Therapy

By Michael T. Hamilton and Charlie Katebi

Executive Summary

At its most fundamental level, the debate over whether to allow mid-level oral health care providers known as dental therapists to practice is not about teeth, dental hygiene, cost, access, years of schooling, or quality of care. These are undoubtedly crucial facets of the dental therapy issue, but just as facets of a diamond determine the shine of the stone, the key facets of dental therapy determine how effectively these midlevel providers help dentists deliver safe, high-quality care to underserved patients. But the facets are not the diamond.

The diamond at stake is the liberty of two discrete groups, neither of which includes dental therapists. The first is ordinary patients of every strata across the United States. The second group is licensed dentists who have dared to dream beyond the establishment groupthink.

The liberty of patients and dentists is at risk of being lost or stolen by people who imagine giving dental therapists the freedom to practice will threaten oral health care as we know it. Opponents of dental therapy would use their freedom to obstruct the freedom of others—and all in the name of the common good.

Ultimately, state lawmakers face one question looming above all other questions, claims, and statistics generated by the dental therapy debate: Is the freedom of patients to choose their oral health care providers and the freedom of licensed dentists to choose their employees so danger-

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ous that the state should deprive patients and dentists of their liberty?

We submit that liberating patients and dentists is a more rational, beneficial course of action than criminalizing dental therapy.

This *Policy Brief* keeps the liberty question front-and-center in the dental therapy debate. In Section One, the authors unpack the assumptions and logical fallacies that frequently obscure the liberty question.

In Section Two, the authors provide a narrative history of dental therapy in the United States and throughout the world. We show dental therapy to be a long-established, fully functional occupation with all the maturity and checks and balances that opponents fear dental therapy lacks. We also track the movement of dental therapy in the United States, from Alaska to Minnesota, then to tribal territories, and finally to states that have recently passed dental therapy laws and programs but do not yet have practicing therapists.

In Section Three, we explicate the natural relationship between supervising dentists and their hired dental therapists, in addition to the rigorous education and training requirements for dental therapists in the United States.

Section Four dives deeper into the application of dental therapists' training to perform services and procedures within their scope of practice. This section explores options available to lawmakers who want to learn more

about treatment, best practices, and safeguards in order to draft dental therapy laws tailored to their state's interests.

Section Five distinguishes appropriate metrics for evaluating dental therapy from the inappropriate metrics opponents often use. Dental therapy emerges as a successful, innovative model that achieves results favorable to patients, dentists, and state lawmakers.

WE SUBMIT THAT LIBERATING PATIENTS AND DENTISTS IS A MORE RATIONAL, BENEFICIAL COURSE OF ACTION THAN CRIMINALIZING DENTAL THERAPY.

Section Six quotes dentists in their own words expressing unbridled support for dental therapy.

1. Dental Therapists Expand Health Care Access

Dental therapists would dramatically alleviate a growing dentist shortage that plagues communities across the United States. According to the U.S. Department of Health and Human Services, 56.7 million Americans, roughly 17 percent of the population, live in areas designated as dental care health professional shortage areas.¹

Reduced access to dental therapists is especially harmful for poor Americans. According to the American Dental Association (ADA), nearly half of low-income families failed to visit a dentist in 2017 because dental care is too expensive, unavailable nearby, or isn't covered by their insurance.² Even for impoverished individuals enrolled in government-funded

health insurance, coverage for dental care is hard to come by. More than 62 percent of dentists refuse to treat patients enrolled in Medicaid, which is the primary insurer for poor Americans, especially impoverished children.³

Due to this dental-care crisis, 13 percent of U.S. children aged two to eight suffer from tooth decay and cavities.⁴ In addition, 27 percent of American adults suffer from untreated tooth decay.⁵ And without reliable access to dentists, these patients often visit emergency room (ER) physicians, their dentists of last resort. Research conducted by ADA found patients made 2.2 million visits to hospital ERs for dental conditions in 2015, which cost patients and taxpayers \$2 billion.⁶

The Dental Therapy Solution

To address this dental-access crisis, states will need to license an additional 10,802 practicing dental professionals to work in underserved communities.⁷ One way states can do this is by licensing midlevel professionals known as dental therapists to practice preventive and basic restorative dental care.

Dental therapists practice under the supervision of a dentist but can treat patients in remote settings where the dentist isn't available to treat them, including nursing homes, public schools, and community centers. They provide a variety of preventive care and basic services

under a limited scope of practice, including extracting loose and badly diseased teeth, placing temporary crowns, and drilling cavities.

Licensing dental therapists to provide these services would dramatically expand access to underserved areas lacking dentists. Unlike dentists, who typically obtain eight years of higher education and pay \$322,000 in tuition and fees, dental therapists can earn a certification within three years at a cost of \$86,740 in tuition and fees.^{8,9} This allows dental therapists to easily deploy to un-

derserved areas and provide less costly treatments to patients than those typically offered by dentists.

Let Dentists Choose

Under existing and proposed legislation to legalize dental therapy, dentists would remain 100 percent free to choose not to hire a dental therapist. Dentists who hire therapists would assume responsibility for the therapists they employ. Most dentists employ at least one hygienist or dental assistant. The dentist is responsible for these employees. He or she freely hires them or decides not to hire them. Legalizing dental therapy would put therapists in the same, well-tested employment situation as hygienists and dental assistants.

Simply put, dental therapy proponents trust dentists, and opponents do not trust dentists,

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as one of this *Policy Brief's* authors wrote in *Dentistry Today* in 2017:

When arguing to lawmakers, dentists opposing dental therapy typically appeal to their own professional judgment as licensed dentists. But blocking dental therapists from licensure robs licensed dentists of the ability to exercise their professional judgment. ... Opponents at least have this correct: dentists know best. So, instead of eating their own, dentists should support the right of dentists to make the best hiring decisions for their individual practices.¹⁰

Either you trust dentists or you don't. The authors of the liberty argument once again assert that dentists know best. Therefore, lawmakers should liberate dentists to choose whether to hire a dental therapist, instead of choosing for them.¹¹

2. History in the Making

A newcomer to the dental therapy debate might surmise from opponents' objections that dental therapy is new to the dental industry, untested in the United States, and unproven on a global scale.¹² Nothing could be further from the truth. Dental therapists have been authorized to treat patients for 98 years. They currently practice in more than 53 countries.¹³ Therapists have been treating patients in Native American tribal territories within in the United States since 2005.

Old Arguments Die Hard

Dental therapy emerged on the world stage a century ago, when New Zealand put 29 dental therapists, then termed "school dental nurses," into action treating children.¹⁴ The idea originated with Dr. Norman K. Cox, president of the New Zealand Dental Association, in 1913.¹⁵

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The dentistry establishment blocked Cox for seven years. However, at a special meeting in 1920, the New Zealand Dental Association voted 16–7 in favor of adopting a dental nurse

school. The graduates were commissioned to treat patients aged six to 14 years.¹⁶

Opposition was as fierce then as it is today. Critics charged that school dental nurses would prove "a menace to the public, [a] menace to the [dental] profession and an injustice to those seeking to enter the ranks of the [dental] profession by recognized avenues."¹⁷

Similarly, in faraway England, the dentistry establishment prevailed on Parliament to pass the Dentists Act of 1921. Organized dentistry had successfully lobbied to ban the role of "dental dressers," who had examined and treated children during World War I. Thirty-six years later, England authorized dental therapists "on the strength of the New Zealand scheme ... when the high dental needs of children were 'rediscovered' in the 1960s," Dr. Julie Satur wrote on the website of the Australian Dental and Oral Health Therapists' Association.¹⁸

In the same decade, Australia's National Health and Medical Research Council's Dental Health Committee recommended any instrumentality responsible for the dental care of Australian children "should now give consideration to the utilization of dental auxiliary personnel in the form of the school dental nurse."¹⁹

"The NHMRC noted the success of such schemes in other countries and in particular, the 98% participation rate and social acceptance attached to the New Zealand [s]cheme and also, the reluctance of the dental profession to support the concept of operative dental auxiliaries in Australia," Satur wrote.²⁰

There is nothing new under the sun. Critics today hurl the same objections before state legislatures that the previous century's fearmongers hurled at the New Zealand Dental Association.²¹ Today's dentistry establishment, like England's in 1921, continues to limit access to dental therapists in states legislatures. And today's state lawmakers increasingly realize, as Australia and England did in the 1960s, that a solution to oral health care shortages was right in front of them for decades.

Moreover, the dental therapy solution is popular among today's patients who have been treated by therapists, similar to how 98 percent of New Zealanders embraced the dental therapy model.²² It is only a matter of time before a majority of U.S. state legislatures embraces dental therapy as a solution to oral health care shortages.

Therapists Sweep the Globe

In the 98 years following the first accepted proposal to establish auxiliary dental-care providers, the dental therapy model migrated to more than 50 countries. The providers are recognizable by their scope of practice, not by their names, which vary by country.

Malaysia launched its comparable dental-nurse program in 1949. Since then, more than 2,000 dental nurses have graduated, and dental nurses now serve 90 percent of students in preschool, primary school, and secondary school.²³

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Tanzania has used dental therapists since 1955. Tanzania launched dental therapy schools in 1981 and 1983.²⁴ Today, tooth extractions make up most of the care provided by dental therapists because many patients fail to seek treatment until the tooth is too damaged to save. Furthermore, restorative materials that could be used to perform alternative treatments are not readily available due to their cost.²⁵

Canada initiated its dental therapy program in 1972. Currently, dental therapists practice in all Canadian provinces except Quebec and Ontario. Therapists typically serve in a public health capacity. However, in Manitoba and Saskatchewan, dental therapists may work in private practices. In Saskatchewan, more than half of therapists work with dentists in a private practice.²⁶

States Discover Dental Therapy

Dental therapy's migration to the United States has direct ties to the world's first dental therapy program—the program approved by the New Zealand Dental Association in 1920. This is because the first dental therapists to start practicing in Alaska in 2005 received training through Otago University in New Zealand.²⁷

The Alaska Native Tribal Health Consortium (ANTHC), which is part of the Alaska Tribal Health System, is a nonprofit tribal health organization that provides a range of health care and community services for more than 166,000 Alaska Native and American Indian individuals.²⁸ ANTHC sent three cohorts of Alaska Natives to train as dental health aide therapists (DHATs) in New Zealand.²⁹

The first six DHATs started serving Alaskan tribes in 2004.³⁰ Since then, DHATs have brought care to more than 40,000 Alaska Native Americans in 81 rural and isolated communities.³¹ In 2017, ANTHC partnered with Iliisaġvik College, the only federally recognized tribal college in Alaska, to offer an associate's degree in dental health therapy.³²

Recognizing dental therapy's potential to help dentists reach more patients, four states have liberated patients and dentists to choose dental therapists in the past decade alone. Minnesota launched its landmark program in 2009,

allowing its first wave of therapists to enter the workforce in 2011.³³

In 2011, Oregon authorized dental therapists to practice in certain area of the state under a pilot program. Maine authorized its dental therapy program in 2014, and Vermont authorized its program in 2016.³⁴ Each state continues to develop new educational standards and programs required prior to allowing dental ther-

apists to start practicing. And in 2017,³⁵ the State of Washington authorized DHATs to practice on tribal lands.³⁶

In 2018, Arizona authorized dental therapy.³⁷ Arizona dental therapists may work in a federally qualified community health center,

a federal-lookalike program, or a community health center. They may also work for private practices that treat patients referred to them from community health centers.

Most importantly, the Arizona law permits dental therapists to work for a nonprofit dental practice or organization “that provides dental care to low-income and underserved individuals.” Moreover, therapists may be attached to mobile units and dispatched into underserved rural or urban communities.³⁸

Therapists Uphold Ancient Safeguards for Patients, Dentists

Absent from the history of dental therapy in the United States and around the world is the

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suggestion that dental therapists can or should replace dentists. Proponents of dental therapy have always properly distinguished between dentists and therapists.

Australia's NHMRC Dental Health Committee, which recommended the rapid introduction of therapists in the 1960s after observing the success of New Zealand's program, similarly recognized the limitations of therapists. The committee "made recommendations that demanded systematic and regularised non-university training, the complementary (rather than substitute) nature of dental auxiliary practice, the need to define the range of skills they could practice and the need for direction and control of their services by a registered dentist," Satur wrote.³⁹

The committee also "stressed the need for administration by a dentist of such services and for each state to train sufficient auxiliaries for their own needs to engender allegiance in its staff," according to Satur. One byproduct of requiring therapists to be overseen by dentists was this policy's reinforcement of dentists' implied superiority. More extensive training and a wider scope of practice entitled dentists to higher salaries than therapists, and everyone recognized it.⁴⁰

Today's dental therapy proponents endorse similar distinctions. Dentists are the senior dental care provider; therapists are auxiliary providers. Dental therapists expand services and reduce shortages by *complementing*, not replacing, licensed dentistry. Dentists should

oversee therapists. Therapists' scope of practice should be rigidly structured—first by lawmakers, then additionally by the supervising dentists who employ them. And it is appropriate that dentists earn higher salaries than therapists (and they do).⁴¹

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The Commission on Dental Accreditation (CODA) standards require dental therapists to have a minimum of three academic years of training.

3. Teamwork and Training

Legalizing dental therapy among the states would allow much-needed reforms to finally reach the public. These ideas have been tested over the past century, but they are still "new" to most American dentists and patients.

The point of legalizing dental therapy is to expand options for dentists, options for patients in all communities, and access for patients in underserved communities. The more options lawmakers provide to dentists, the more options those dentists can pass on to their patients.

Team Players

Some dentists would immediately exercise their liberty to hire dental therapists to their teams. Other dentists (perhaps most) would exercise their liberty not to hire therapists. Each choice is perfectly consistent with the dental therapy model. This is because dental

therapists are not the focus of dental therapy legislation. The focus is on freeing dentists to run their practices according to their best judgment and freeing patients to decide whether those dentists have succeeded.

One of the many benefits of liberating dentists to hire therapists is the evolution of patient choice. In most states, patients making dental appointments are faced with these scenarios: Book with one of multiple dentists in the area, book with the only dentist in the area, or forgo treatment.

In each case, the patient asks himself or herself, “Will I be healthier and happier if I go to the dentist than if I don’t?” and often, “Which dentist will make me healthiest and happiest?” If the patient decides to visit a dentist, he or she will most likely receive treatment from a dental hygienist or assistant before being joined by the dentist during the second half of the appointment. All eyes are on the dentist.

Now consider the numerous additional ways patients might receive care from dentists who freely choose to hire dental therapists. Patients might continue to receive initial treatment from dental hygienists and dental assistants (this is up to the dentist). Then patients may or may not be examined by a dental therapist (this is up to the dentist). When the dentist arrives, he or she may be accompanied by a therapist (this is up to the dentist).

Alternatively, if conditions permit, a dentist might ask his or her dental therapist to finish

a patient’s examination. Alternatively, a dental therapist could serve as the sole provider for a patient’s dental-care needs, depending on the level of treatment the patient needs. Each of these alternatives is up to the dentist, who is free to make his decisions within the limits set by the state.

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In these scenarios that imagine dental therapy to be legalized, all eyes remain on the dentist, who makes the rules and oversees the care his team provides. But

the patient’s criteria for whether to obtain care and where to obtain it are broadened. The patient’s calculus can mature when dentists in their region hire, supervise, and assume responsibility for the therapists they hand-pick for their teams.

Dream Teams

Within parameters set by the state, every aspect of therapists’ service to patients is and ought to be defined by the dentists who freely choose to hire them.

State lawmakers are the ultimate authority over the range of services therapists provide. Lawmakers define therapists’ scope of practice. Yet despite therapists’ credentials to operate within their scope of practice, therapists do not practice on their own.

Therapists are team players, by definition. The University of Minnesota (UMN) School of Dentistry website defines a dental therapist as “a licensed oral health professional who

practices as part of the dental team to provide educational, clinical and therapeutic patient services. Dental therapists provide basic preventive and restorative treatment to children and adults, and extractions of primary (baby) teeth under the supervision of a dentist.”⁴²

Collaborative Agreements

Just as nurse practitioners and physician assistants typically operate in coordination with a supervising doctor, dental therapists are accountable to and supervised by dentists. Their terms of engagement are defined in *collaborative agreements*.

Supervising dentists use collaborative agreements to define the specific roles dental therapists play on the team. These agreements establish practice protocols, including which procedures dental therapists can deliver without the direct supervision of their dentists and which ones require a dentist’s physical presence.

Lawmakers term these agreements differently by state. Dentists and DHATs serving Alaskan tribes use “collaborative care agreements.”⁴³ Minnesota dentists control therapists’ activity through “collaborative management agreements.”⁴⁴ Maine dentists will soon offer the first Maine therapists “written practice agreements.”⁴⁵ In due course, Vermont dentists will roll out “collaborative agreements” with dental therapists.⁴⁶

In 2018, Arizona lawmakers overwhelmingly approved legislation requiring therapists to work “under the direct supervision of a dentist or pursuant to a *written collaborative practice*

agreement,” according to House Bill 2235.⁴⁷ Supervising dentists and their dental therapists may create and amend these agreements.

Checks and Balances

Arizona’s rules for written collaborative management agreements incorporate various requirements and safeguards. Legitimate agreements do all of the following:

1. Stipulate any limits the supervising dentist wishes to place on services and procedures therapists provide, on the populations therapists treat, and on case selection criteria.
2. Stipulate any limits the supervising dentist wishes to place on practice settings and specify “the level of supervision required for various services or treatment settings.”
3. Set practice protocols, “including protocols for informed consent, recordkeeping, managing medical emergencies and providing care to patients with complex medical conditions, including requirements for consultation before initiating care.”
4. Set protocols for “quality assurance, administering and dispensing medications, and supervising dental assistants.”
5. Establish protocols for situations in which dental therapists discover that their patients require treatment beyond either their scope of practice or their collaborative agreements.
6. Specify that permanent teeth may be extracted only under the direct supervision of

a dentist and in compliance the therapist’s legally defined scope of practice.

The above requirements generally resemble those approved by the Minnesota Legislature in 2009 to govern dental therapists.⁴⁸ They ensure that dentists who choose to incorporate therapists into their dental teams prioritize patient safety, quality of treatment, and legal compliance.

Arizona requires that dentists make themselves available to the dental therapists (and the patients being treated by therapists) in their practice. Each dentist shall “be available to provide appropriate contact, communication and consultation with the dental therapist,” the law states. Dentists must be “geographically available” to provide timely referrals to patients referred by dental therapists for examination by a licensed dentist.

The Arizona law specifies that therapists must operate exclusively “within the terms of the written collaborate practice agreement” and “maintain an appropriate level of contact with the supervising dentist.”

A dental therapist’s action beyond his or her legally defined scope of practice, or outside the rules set by his or her written collaborative practice agreement, shall be considered “unethical conduct,” the Arizona law states. A practice’s unethical conduct subjects the practice to disciplinary action by the state board of dental examiners.⁴⁹

Education Requirements

The legalization of dental therapy is entirely adaptable to each state’s specific needs. Arizona lawmakers fine-tuned HB 2235 to satisfy 47 out of 60 state representatives and 30 out of 30 state senators.

In 2015, CODA, the sole national body that accredits dental education programs, issued standards for dental therapy education programs.⁵⁰ Lawmakers can model their state’s program using these standards.

Currently, there are two educational institutions

training dental therapists and advanced dental therapists in Minnesota, the University of Minnesota School of Dentistry and Metropolitan State University (in collaboration with Normandale Community College). They have been working to meet oral health care shortages since 2009, the year Minnesota lawmakers authorized the state’s experiment in dental therapy. Because these programs predate CODA’s 2015 standards, they operate “under approval and authority of the Minnesota Board of Dentistry,” a 2018 brief from the Minnesota Department of Health states.⁵¹

The UMN School of Dentistry was distinguished as a pioneer of undergraduate and graduate dental therapy degrees when it began in 2009. It educates 68 percent of all dental therapists in the state, according to its website.⁵²

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The school offers two therapist tracks: dental therapists and advanced dental therapists (ADTs).

Prior to 2019, UMN's dental therapists without advanced degrees graduated with a bachelor's degree in dental therapy. To obtain licensure, they were required to pass the clinical and Minnesota jurisprudence exams.⁵³ ADTs were (and still are) required to graduate with a master's degree and pass the clinical and jurisprudence exam. They had to (and still must) meet additional requirements. ADTs must "complete 2,000 hours of dental therapy clinical practice under direct or indirect supervision," graduate from a master's-level advanced dental therapy degree program, and pass the ADT certification exam.⁵⁴ The exam has three parts: (1) Prospective ADTs must submit the records of three to five patients they have treated, (2) pass a "scenario exam" administered by the Minnesota Board of Dentistry, and (3) pass an interview with the board's Licensing and Credentials Committee.⁵⁵

Once ADT candidates fulfill these requirements, they can practice all their certified procedures under general supervision, including performing nonsurgical permanent tooth extractions and crafting treatment plans for patients.

Dual Licensure

Starting in 2019, all dental therapists to graduate from the UMN School of Dentistry will

have master's degrees. Moreover, each dental therapist will also be a licensed dental hygienist. This is because in 2016, the UMN School of Dentistry converted its dental therapy program into a Bachelor of Science in Dental Hygiene/Master of Dental Therapy Dual Degree (BSDH/MDT) program. The first wave of dually licensed therapists will emerge from UMN in 2019.

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Other dually licensed graduates already exist in the state, having completed Metropolitan State University's (Metro State) Advanced Dental Therapy Program, a

two-year graduate program for licensed dental hygienists to obtain their master's in advanced dental therapy. Like UMN's programs, Metro State's ADT program is approved by the Minnesota Board of Dentistry. The 44-credit program has three phases: science of health care delivery (eight credits), clinical practice development (31 credits), and leadership and synthesis (five credits).⁵⁶

UMN's BSDH/MDT program, which runs year-round for 32 months, is longer than Metro State's because their candidates enter the program as licensed hygienists. UMN's program "reduces the educational cost to students and also reduces the length of time to earn both degrees from 6 to 4½ years," the website states. "Dual-licensed dental hygienists/therapists provide flexibility in meeting the preventative and restorative needs of patients."⁵⁷

Unlike Minnesota, other states have written dual-licensure requirements into their dental therapy laws. Maine authorized "dental hy-

giene therapists” in 2014. Vermont authorized “dental therapists” in 2016. In Maine, dental hygiene therapists must maintain their hygiene licenses to perform the duties of a dental hygienist. License maintenance entails reregistration, continuing education, and renewal fees.⁵⁸

Arizona requires dental therapy license applicants to be licensed first as dental hygienists, but they are not required to maintain their hygiene license. The State Board of Dental Examiners may waive this requirement for applicants who have passed a different state’s comparable clinical exam requirements at least five years prior

to making application in Arizona. Moreover, applicants must have graduated from a dental therapy program accredited by CODA and offered by a university recognized by the U.S. Department of Education. Finally, applicants must have passed the Arizona dental jurisprudence exam and the Western Regional Examining Board exam (or a similar exam).⁵⁹

Exceptional Alaska

If anything highlights the flexibility lawmakers have in establishing dental therapy programs tailored to their state, it is the difference between Alaska’s educational requirements and those of Arizona, Maine, Minnesota, and Vermont.

IF ANYTHING HIGHLIGHTS THE FLEXIBILITY LAWMAKERS HAVE IN ESTABLISHING DENTAL THERAPY PROGRAMS TAILORED TO THEIR STATE, IT IS THE DIFFERENCE BETWEEN ALASKA’S EDUCATIONAL REQUIREMENTS AND THOSE OF ARIZONA, MAINE, MINNESOTA, AND VERMONT.

DHATs serving Alaska’s tribes can practice without higher-education degrees. To obtain certification from the Alaska Community Health Aide Program, DHATs need to complete a two-year program after high school and 400 clinical hours of training under the direct supervision of a dentist.⁶⁰

To maintain certification, DHATs must prove to a supervising dentist their competency in the entire DHAT scope of practice, including the following: “medical evaluation; dental evaluation; periodontic techniques; clinic management and supervision; restorative dentistry; oral surgery and local anesthesia;

infection control; equipment maintenance and repair; and community and preventative dentistry.”⁶¹

In 2017, the ANTHC DHAT program partnered with Ilisagvik College, a two-year tribal college, to offer an associate degree.⁶² In the Spring 2018 semester, the dental health therapy program was one of the college’s three most popular academic programs.⁶³

Despite having the shortest-term educational requirements among the dental therapy programs in the United States, the DHAT program has demonstrated it’s the most successful dental therapy programs in the country.

In 2010, the W.K. Kellogg Foundation released a study that found Alaska’s newly certi-

fied therapists provide patients dental care that is as safe and effective as the care provided by dentists. Kellogg's report found that dental therapists perform sealant placement, composite and amalgam preparations, stainless steel crown placement, and oral health instructions of equal quality as dentists.⁶⁴

Once Alaska's dental therapists started delivering dental care, oral health outcomes in the state's underserved areas dramatically improved. After analyzing electronic health records, researchers at the University of Washington found that when dental therapists are regularly present in Alaskan communities, the residents of those communities receive more preventive care and need fewer invasive teeth extractions.⁶⁵

4. Scope of Practice

State lawmakers customize not only educational requirements, but also the scope of practice of dental therapists.

Maine's authorizing legislation lists nine categories of treatment (comprising numerous procedures) within dental therapists' scope of practice.⁶⁶ Arizona's HB 2235 lists 27 procedures,⁶⁷ and Vermont's legislation lists 34 services.⁶⁸

Limited Scope, Unlimited Gains

Once again, Minnesota's distinction between

dental therapists and ADTs is instructive. The state has authorized dental therapists and ADTs to perform a limited list of preventive and restorative procedures.⁶⁹

Authorized services and procedures include oral exams, disease prevention education, and communication with the pediatricians of patients younger than four years old. Therapists may also cement and remove space maintainers, implant crowns, replace missing and broken teeth, and remove sutures.⁷⁰

Minnesota's ADTs may also perform numerous procedures under general supervision, as noted

by the following list appearing on the State of Minnesota's website:

Extraction of periodontally [sic] diseased permanent teeth with mobility of +3 to +4 as permitted by the collaborative management agreement. Not to include unerupted, impacted, fractured, or need for sectioning.

Oral evaluation and assessment of dental disease and the formation of an individualized treatment plan authorized by a collaborating dentist.

Make appropriate referrals to dentists, physicians, and other practitioners in consultation with the collaborating dentist.⁷¹

The main difference between the scopes of practice of dental therapists and ADTs, however, is in the required level of supervision. ADTs may perform their entire scope of prac-

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tice under general supervision, whereas dental therapists are more restricted.⁷²

General vs. Indirect Supervision

Dental therapists and ADTs are limited by two strictures other than their scopes of practice—(1) the collaborative management agreements of individual therapists and their supervising dentists (2) and the kind of supervision required for the treatment they provide.

Minnesota Dental care providers are familiar with the following levels of supervision of allied dental personnel, as outlined by Minnesota statute:

“Personal supervision” means the dentist is personally operating on a patient and authorizes the allied dental personnel to aid in treatment by concurrently performing supportive procedures.

“Direct supervision” means the dentist is in the dental office, personally diagnoses the condition to be treated, personally authorizes the procedure, and before dismissal of the patient, evaluates the performance of the allied dental personnel.

“Indirect supervision” means the dentist is in the office, authorizes the procedures, and remains in the office while the procedures are being performed by the allied dental personnel.

“General supervision” means the supervision of tasks or procedures that do not require the presence of the dentist in the office or on the premises at the time the tasks or procedures are being performed but require the tasks be performed with the prior knowledge and consent of the dentist.⁷³

LAWMAKERS WHO TRULY TRUST THE PROFESSIONAL JUDGMENT OF DENTISTS WILL BE MORE INCLINED THAN OTHERS TO DEFER SUPERVISION DECISIONS TO INDIVIDUAL DENTISTS.

The level of supervision that states require dentists to provide therapists is a potential linchpin for whether a dental therapy program merely improves on a state’s oral health care shortage or revolutionizes the status quo.

ADTs who are granted more discretion to provide services and procedures under general supervision are most at liberty to expand access to dental care in underserved areas. This is because their supervising dentists can dispatch them in mobile units or to operate in brick-and-mortar practices where the dentists themselves cannot be physically present (because they are treating patients in their own offices).

Lawmakers who truly trust the professional judgment of dentists will be more inclined than others to defer supervision decisions to individual dentists. In other words, lawmakers that write general supervision into therapists’ scope of practice allow dentists to be the authority—and assume the liability—regarding whether their employees are qualified and skilled enough to provide certain treatments. Dentists exercise such authority through collaborative agreements with their therapist employees.

Watching Closely

When crafting dental therapy legislation, lawmakers have unlimited flexibility to set supervision levels right for their states. For example, Arizona law stipulates “the extraction of permanent teeth [by dental therapists] may be performed only under the direct supervision of a dentist” and in a manner consistent with the therapist’s scope of practice.” The level of supervision of other services and procedures, however, is up to dentists to define in their written collaborative practice agreements.⁷⁴

Alaska’s program—the longest running success, despite DHATs’ relatively short training period—grants dentists extraordinary discretion. Dr. Dane Lenaker, a doctor of medical dentistry with the Southeast Alaska Regional Health Consortium in Juneau, started serving Alaska’s tribes in 2009. Lenaker says general supervision enables DHATs to extend the reach of licensed dentists: “They work as part of a dentist-led team under general supervision to provide preventive and restorative services within a defined scope of practice,” Lenaker wrote in the June 2017 issue of the *American Journal of Public Health*. “Under this model, DHATs function as extensions of their dentist supervisors, working in underserved communities to provide routine services that prevent and treat oral disease.”⁷⁵

Minnesota law grants ADTs general supervision for all 29 categories of services and procedures within their scope of practice, according to the state’s 2016 list of delegated duties. The state grants regular dental therapists general supervision for 16 categories of treatment. An additional 10 treatment categories require

indirect supervision.⁷⁶ [For clarity, numbers were added to the original text.]:

1. Cavity preparation; and restoration of primary and permanent teeth.
2. Pulpotomies on primary teeth; and indirect and direct pulp capping on primary and permanent teeth.
3. Stabilization of reimplanted teeth.
4. Remove sutures.
5. Brush biopsies.
6. Repair of defective prosthetic devices.
7. Placement of temporary crowns; and preparation and placement of preformed crowns.
8. Provide emergency palliative treatment of dental pain.
9. Recement permanent crowns.
10. Extractions of primary teeth.

Dental therapists are eligible for ADT certification after completing 2,000 hours of clinical practice under direct supervision and passing the requisite exams. With that certification, they can practice their entire scope of practice under general supervision pursuant to a collaborative agreement with a supervising dentist.

Scopes Up

Whether dental therapists have earned advanced degrees, dual licensure, or the privilege to work under general supervision, these qualified professionals provide “restorative services beyond the scope of preventive services traditionally provided by dental hygienists,” states a paper published by the National Governors Association in 2014.⁷⁷

Moreover, according to Dr. Kevin Nakagaki, a dentist at the nonprofit health care organization HealthPartners, “Dental therapists are actually doing more of the same kinds of procedures by the time they leave school than dental students, because the dental students spread out.”⁷⁸

Therapists get this additional reinforcement while learning the treatment in their scope of practice because dentists must learn hundreds more procedures than therapists. Better still, the testing dental therapists undergo for the procedures in their narrower scope of practice matches that of dentists, according to Alyssa Beaulieu, operations manager at Children’s Dental Services in Minneapolis, Minnesota. “Advanced dental therapists and dental therapists undergo the same licensure tests [as dentists] for the services they provide,” Beaulieu told researchers during the same UMN site visit.⁷⁹

Midlevel, Top Flight

In the 1960s, Australia’s National Health and Medical Research Council’s (NHMRC) Dental Health Committee urged all people who bore responsibility or wielded influence over children’s oral health to make use of “auxiliary” dental care providers as a solution to a growing crisis.⁸⁰

Although dental therapists, as members of the teams assembled by their supervising dentists, are certainly auxiliary practitioners, they are often termed “midlevel” providers or practitioners.

The term “midlevel” is accurate in the sense that therapists are more highly trained and have

a broader scope of practice than hygienists yet are less highly trained and have a narrower scope of practice than dentists. The same term can be misleading, however. To some, the “midlevel” descriptor may obscure the profound education and training of the people the term describes.

For example, as Nakagaki and Beaulieu have noted, there is nothing “midlevel” about the training, testing, rigor, or reinforcement dental therapists undergo. If there were, the same or worse would have to be true of the dentists who underwent the same training for the procedures in therapists’ scope of practice, yet for less time and fewer repetitions than therapists.

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One of the reasons the term “midlevel practitioner” has stuck is because of the U.S. Justice Department’s Drug Enforcement Administration’s (DEA) reliance of the term in its reports about controlled substances.⁸¹ DEA’s website states, “the term mid-level practitioner means an individual practitioner, other than a physician, dentist, veterinarian, or podiatrist, who is licensed, registered, or otherwise permitted by the United States or the jurisdiction in which he/she practices, to dispense a controlled substance in the course of professional practice. Examples of mid-level practitioners include, but are not limited to, health care providers such as nurse practitioners, nurse midwives, nurse anesthetists, clinical nurse specialists and physician assistants who are authorized to dispense controlled substances by the state in which they practice.”⁸²

The health care industry’s adoption of DEA’s drug law-enforcement jargon term “midlevel practitioner” trivializes the expertise of highly trained health care providers holding advanced degrees, according to Dr. Catherine Bishop, a doctor of nursing practice and oncology nurse practitioner at Sibley Memorial Hospital (Johns Hopkins Medicine) in Washington, DC. Bishop referenced the same DEA website statement in her 2012 article in the *Journal of the Advanced Practitioner in Oncology*, which concludes, “the adopted terminology of mid-level, physician extender, and non-physician practitioner [should] be abolished. If we are referred to as a group, call us advanced practitioners. Otherwise, let us sim-

ply be called what we are: nurse practitioners and physician assistants.”⁸³

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The expansion of patient choice and access to care resulting from the proliferation of mid-level practitioners (i.e., advanced practitioners) is well documented. Patients have benefitted as midlevel practitioners have served in phar-

macies,⁸⁴ hospitals and clinics,⁸⁵ private practices,⁸⁶ elder and home care facilities,⁸⁷ and out-of-hospital labors and deliveries.⁸⁸ Dental therapists are the next midlevel practitioner in line.

5. Rational Results

Critics frequently urge lawmakers to dismiss dental therapy as unproven, untested, and unsustainable.⁸⁹ These critics ignore and spin away bodies of evidence.

This is not to accuse opponents of dental therapy of being disingenuous. Much disagreement over dental therapy stems from the two sides valuing different metrics. Which measurements of dental therapist activity are useful is a matter of debate.

Rural vs. Urban Placement

Opponents point out that the Minnesota lawmakers who authorized the state’s dental therapy program expected therapists to work primarily in rural areas lacking an adequate

supply of dentists,⁹⁰ but less than half of the state’s therapists have done so. However, this complaint is misleading. The data clearly reveal therapists are improving the provider/patient ratio in rural areas despite the fact their distribution narrowly favors urban settings.

In April 2018, there were 86 licensed dental therapists in Minnesota. Thirty-four of those therapists were also licensed hygienists. Forty-eight were ADTs.⁹¹ In 2017, 93 percent of the state’s therapists were employed. Of those employed, 41 percent of dental therapists were serving suburban and rural communities, while 59 percent worked in urban areas.

These percentages would seem to prove opponents’ point—until one considers that dental therapists are distributed in geographical proportion to the state’s population: 55 percent of Minnesota residents live in the Greater Twin Cities metro area and 45 percent live outside of the metro area, in the rural areas of the state. Furthermore, dental therapists provide services in community and rural settings in more than 370 mobile dental sites throughout the state.⁹²

The evidence shows that dental therapists can play an important role in providing dental care for areas that lack dentists. After these qualified providers became available, a study by the Minnesota Department of Health found that nearly one-third of Minnesota patients experienced a reduction in their average wait time to receive dental care. In addition, the number of patients that had to travel more than an hour to receive dental treatments fell by 73 percent.⁹³

City People

Another misleading metric apparently important to opponents is the number of dentists existing in a region. The suggestion is that a city saturated with dentists is treating virtually all the patients who are likely to seek care in that region.

This is a logical fallacy; it essentially says, “One hundred percent of current dental patients are

already being treated by dentists; therefore, virtually no untreated patients who are likely to seek care now or in the future exist.” This is an absurd deduction. It is like saying that because all the inhabitants of a

village who are likely to brush their teeth do so using baking soda, there is no market for toothpaste.

One example of the misconception that urban centers lack underserved dental patients comes from North Dakota, whose legislature rejected a bill in 2017 that would have legalized dental therapy. The University of North Dakota’s Center for Rural Health surveyed long-term care facilities regarding their preparedness and procurement of dental care in 2016. They found 41 percent of urban long-term facilities lacked a list of dental providers to refer their residents to, compared to 20 percent for rural facilities.⁹⁴

There may be a market for dental therapists anywhere there is a market for dentists. The only categories of people equipped to decide this are patients and individual dentists making decisions for their own practices—not lawmakers, and certainly not Big Dentistry.

THE EVIDENCE SHOWS THAT DENTAL THERAPISTS CAN PLAY AN IMPORTANT ROLE IN PROVIDING DENTAL CARE FOR AREAS THAT LACK DENTISTS.

Raise Your Hands Down?

Critics point to a supposedly formidable level of unmet demand for dental therapists. Their implication is that few, if any, of the dentists who want to hire a therapist are prohibited from doing so. In other words, most dentists supposedly don't want to hire therapists, and those who do tend to live in Arizona, Maine, Minnesota, or Vermont, or among tribal territories in Alaska, Oregon, or Washington State.

This objection fails to register the unlikelihood that widespread demand would exist in the United States yet for an innovation like dental therapy—not only because it is new to the states, but also because established dentistry has so far succeeded in stamping out most attempts to legalize choice.

Spending and Saving

Another dubious metric used by opponents of dental therapy is whether dental therapy programs have reduced bills for payers or whether they are likely to do so in the future. Once again, reliance on this metric obscures the truly important underlying considerations.

This question is a two-edged sword. Suppose lawmakers propose that dental practices can or shall bill the same amount for services regardless of whether a dentist or dental therapist treats the patient (as is the case in Minnesota).

Critics will readily point out that this provision would do nothing to decrease the state's Medicaid bill. Critics may even assert the likelihood that legalizing dental therapy in this way would run up the state's Medicaid expenditures as more patients obtain treatment. (This last assertion concedes that dental therapy does indeed expand access to underserved or low-income populations.)

ANOTHER DUBIOUS METRIC USED BY OPPONENTS OF DENTAL THERAPY IS WHETHER DENTAL THERAPY PROGRAMS HAVE REDUCED BILLS FOR PAYERS OR WHETHER THEY ARE LIKELY TO DO SO IN THE FUTURE.

Now suppose lawmakers instead propose to require or allow dental practices to charge less for services and procedures provided by a therapist than by a dentist. Opponents will accuse lawmakers of trying to establish a two-tiered system of care—the rich, who receive treatment from dentists, and the poor, who receive treatment from therapists.

In areas with dental care provider shortages, however, a two-tiered system already exists: those who have convenient, affordable access to high-quality dental care and those who do not. Legalizing dental therapy would help close this gap. According to several studies by the Pew Charitable Trusts Foundation, dentists that recruit dental therapists can treat higher numbers of Medicaid patients while also earning upwards of \$20,000 to \$30,000 in additional annual profits.^{95,96}

Further dulling the edge of the “two tiers” objection, Arizona's law stipulates that “each dental practice shall disclose to a patient whether the patient is scheduled to see the dentist or the dental therapist.”⁹⁷ Once again,

it is dental therapy proponents who champion the patient’s interests and right to choose providers.

Stuck on Shortages

One of the strangest measurements opponents cite as grounds for lawmakers to continue banning dental therapy is the number of programs that already exist in a state for the purpose of meeting dental-care shortages. They say that because dentists and lawmakers are already working to curb shortages through philanthropy and by hiring dental hygienists, authorizing dental therapy would be redundant.⁹⁸

Opponents torpedo themselves with this argument in three ways. The first is by admitting dental-care shortages do indeed exist in their states, a point often denied by trivializing as “non-local” provider/population ratios harvested by the U.S. Department of Health and Human Services. In the course of a legislative session, dental therapy critics might make these contradictory assertions several times. If there are no shortages, why are dentists and lawmakers already working to curb them?

The second problem with boxing out dental therapy is that opponents ultimately box out members of underserved populations. Clearly, other dental-care shortage programs have not totally met demand, or those programs would

not still exist. Dentists and lawmakers have tried to fill the shortage. They have partially succeeded. Liberating dentists to hire therapists is simply the next step to build on those successes.

The third and biggest problem with blocking dental therapy on the basis of parallel efforts is critics’ insinuation that such efforts are not parallel. They are parallel. They do not and would not collide. They would not cannibalize each other. They would complement each other toward a common goal—reaching more patients—instead of contradicting each other.

The authors of this *Policy Brief* applaud and affirm the efforts of dentists and lawmakers to reach underserved patients. Legalizing the hire of dental therapists by willing dentists does not in *any* way jeopardize concurrent efforts. We submit that the more options lawmakers authorize, the more options dentists will have at their disposal to reach patients in need, with the help of their hired dental hygienists, dental assistants, and dental therapists.

The Almighty Straw Man

Another metric touted by opponents is the relative scarcity of dental therapy programs and of dental therapists in the United States, generally, compared to the proliferation of dental schools and dentists and to hygienist programs

ONE OF THE STRANGEST MEASUREMENTS OPPONENTS CITE AS GROUNDS FOR LAWMAKERS TO CONTINUE BANNING DENTAL THERAPY IS THE NUMBER OF PROGRAMS THAT ALREADY EXIST IN A STATE FOR THE PURPOSE OF MEETING DENTAL-CARE SHORTAGES.

and hygienists. The suggestion is that paucity implies failure.

The real reason for the scarcity of dental therapy programs and dental therapists in the United States is all too obvious: Forty-three states outlaw them by default. Of the seven states that allow therapists to practice, only four permit therapists to serve all population groups within their borders. Therefore, measuring the success of dental therapy by counting its participants would only make sense if it were to be broadly legalized.

It is curious that organized dentistry should be so animated, adamant, and preoccupied with obstructing an experiment supposedly doomed to fail on its own. It is odd that a supposed “failure” like dental therapy could succeed in mobilizing the dentistry establishment against the freedom of dentists to hire dental therapists.

Is dental therapy an upstart trend rebellious of the collective wisdom of almighty dental associations—or is it an antique relic from the Outback already in its sunset?

Unfortunately, the answer often appears to depend on whether opponents are in the first or second half of their contradictory legislative testimony. Instead, the answer should depend on dental therapy’s long history abroad and promising track record in the United States.

6. Dentists for Dental Therapy

One hundred percent of dental therapists operate under the supervision of a willing dentist. Zero dentists would be forced to hire a dental therapist if their state lawmakers were to legalize dental therapy.

This section excerpts the notable letters of two dentists who willingly immersed themselves in the dental therapy model.

THE REAL REASON FOR THE SCARCITY OF DENTAL THERAPY PROGRAMS AND DENTAL THERAPISTS IN THE UNITED STATES IS ALL TOO OBVIOUS: FORTY-THREE STATES OUTLAW THEM BY DEFAULT.

Dr. Dane Lenaker – Alaska

Dr. Dane Lenaker is a doctor of medical dentistry with the Southeast Alaska Regional Health Consortium in Juneau. He wrote the following account in the article “The Dental Health Aide Therapist Program in Alaska: An Example for the 21st Century,” published by the *American Journal of Public Health* in June 2017:

In 2009, I stepped off a plane in Bethel, Alaska, to begin my career as a dentist for the Yukon Kuskokwim Health Corporation (YKHC), a regional medical hub for more than 26,000 Alaska Natives in 48 remote villages. Although I knew of Alaska’s dire need for dentists, I was unprepared for what awaited me.

Within a few days, I had treated three children from outlying villages who needed their decayed and abscessed front teeth removed. All were younger than three years.

All were strapped to papoose boards for protective stabilization.

These were not isolated cases. A 2008 investigation of oral disease in Alaska Native children found that

Among children aged 4-5 years and 12-15 years who were evaluated, 87% and 91%, respectively, had dental caries, compared with 35% and 51% of U.S. children in those age groups. Among children from the Alaska villages, those aged 4-5 years had a mean of 7.5 dental caries, and those aged 12-15 years had a mean of 5.0, compared with 1.6 and 1.8 dental cares in same-aged U.S. children. [Emphasis in original.]

I had walked into an epidemic of oral disease. Fortunately, a solution was already in the works—one with the potential to change everything.

At that time, YKHC was in the early stages of implementing the Dental Health Aide Therapist (DHAT)

program, which was established by the Alaska Native Tribal Health Consortium (ANTHC), a nonprofit tribal health organization, to expand oral health care access. After repeated failures to recruit and retain dentists, ANTHC adopted the DHAT model, which was developed nearly a century ago in New Zealand to improve the oral health of underserved schoolchildren.

DHATs—also known as dental therapists—are midlevel dental care providers, similar to physician assistants in medical care. They work as part of a dentist-led team under general supervision to provide preventive and restorative services within a defined scope of practice. Under this model, DHATs function as extensions of their dentist supervisors, working in underserved communities to provide routine services that prevent and treat oral disease. ...

Between 2009 and 2014, we significantly shifted our services from emergent to preventive care. In 2009, emergency care accounted for 38% of dental services provided by YKHC; by 2014, that proportion had fallen to 24%.³ During that same period, the proportion of preventive services increased from 28% to more than 40%.

“I HAD WALKED INTO AN EPIDEMIC OF ORAL DISEASE. FORTUNATELY, A SOLUTION WAS ALREADY IN THE WORKS—ONE WITH THE POTENTIAL TO CHANGE EVERYTHING.”

The number of pediatric patients who received annual, comprehensive, nonurgent examinations almost tripled, from 976 in 2013 to 2770 in 2016. Our clinical data showed that the numbers of examinations

and completed treatments were significantly higher in communities served by DHATs than in those not served by DHATs.

For example, in the village of Russian Mission, my team examined 64% of all children aged zero to five years during 2015 and treated 75% of those children. ...

By comparison, in Quinhagak, a village 140 miles south of Russian Mission that did not have DHATs, 23% of children aged zero to five years received oral health examinations during 2015, and 29% of those children received full treatment of problems identified. ...

There are challenges to onboarding DHATs to dental teams. Many dentists are unfamiliar with how to work with DHATs, and new dentists may find themselves paired with DHATs who have more clinical experience in the field. This can make for a difficult dynamic.

Communities interested in employing DHATs should recruit experienced dentists with a public health mission to lead a DHAT program and support preceptorships between DHATs and dentists. They should also collect and track data on per-encounter performance to secure dentist buy-in, enhance team communication, and improve quality. ...

The team-based approach to treatment under the DHAT model supports care that is high quality, timely, patient centered, coordinated, and efficient. ... I believe that, together, DHATs and dentists can bring high-quality dental care to communities where oral health needs are not being met.”⁹⁹

Dr. John Powers – Minnesota

Dr. John Powers operated a rural dental practice in Montevideo, Minnesota. He also taught at a dental clinic in Wilmar, Minnesota, a collaboration between UMN’s School of Dentistry and Rice Memorial Hospital.

“THE THERAPIST HAS DONE AN EXCELLENT JOB IN MY PRACTICE, AND [I] HAVE THE UTMOST CONFIDENCE IN HIS ABILITY TO EFFECTIVELY CARE FOR OUR PATIENTS.”

Powers wrote to the North Dakota Legislature on November 1, 2016, refuting testimony previously provided to the Interim Health Services Committee by Dr. Anthony J. Hilleren.¹⁰⁰ (Powers was the

supervising dentist who had employed the same dental therapist who had previously worked for Hilleren.):

I am sorry I was unable to be in person at this committee meeting due to an out-of-town obligation. The reason [I] am sorry is that I would have been able to refute the testimony of Dr. Hilleren. The fact is that the dental therapist he refers to is the same person I hired part-time in my office. The therapist has done an excellent job in my practice, and [I] have the utmost confidence in his ability to effectively care for our patients. However, he has described to me a situation at Dr. Hilleren’s office where he is only allowed to do the most menial of tasks, resulting in an inefficient and ineffective use of his skills as a dental therapist.

This individual was a student at the outreach clinic where I am adjunct faculty for the University of Minnesota School

of Dentistry, and I was one of his clinical instructors. I knew his skill level and was excited that he would come and work for me. I originally offered him a full time position in my office, but out of a sense of loyalty for Dr. Hilleren, he only accepted to work two days per week. This dental therapist has, while working for me, passed the exam that gives him the advanced dental therapist certification. This increases his scope of practice to include examination of patients of record and extractions of adult teeth with 3-4 mobility.

When allowed to work at the full degree of their scope of practice, the four dental therapists that work for me have increased the revenue to the practice well beyond their cost of employment. This has helped the whole team to achieve bonuses that dramatically increase their hourly income for the team. While that is a wonderful outcome, the best outcome is the sheer number of people on state programs that we can provide with quality and effective care. This could not be done without the skilled therapists that I have hired. It is interesting that if Dr. Hilleren didn't think dental therapy works, then why would he actually refer Medicaid patients to my office 30 minutes away? ...

“THE POINT OF HAVING THE DENTAL THERAPIST SCOPE, AS IT IS WAS DEVELOPED, WAS TO ALLOW THE DENTIST TO BE ABLE TO PERFORM MORE COMPLICATED TREATMENTS SUCH AS ENDODONTICS, PERIODONTICS, ORAL SURGERY, CROWNS AND BRIDGES, AND DENTURES. THE DENTAL THERAPIST DOING FILLINGS, NO MATTER HOW LARGE, THE DENTIST CAN CONCENTRATE ON THE HIGHER ORDER TREATMENTS.”

I have seen more dental students with sub-standard skills than dental therapy students, including both technical treatments and intellectual diagnostic skills. The dental therapist education is the same as dental student for overlapping procedures because they take the same classes, both didactic and clinical, and are required to pass the same state licensing exam for those procedures. So if the dental therapists are getting a sub-standard education, then so are the dental students.

The point of having the dental therapist scope, as it is was developed, was to allow the dentist to be able to perform more complicated treatments such as endodontics, periodontics, oral surgery, crowns and bridges, and dentures. the dental therapist doing fillings, no matter how large, the dentist can concentrate on the higher order treatments. This means that the employing dentist needs to allow the dental therapist to work at their highest scope of practice. Since our first dental therapist, Brandi Tweeter, came to work for me in 2012 as a dental therapist (and now an advanced dental therapist), we have increased from 5 chairs to 9 chairs and are looking to re-open the building that we once resided in. We have increased to 16 auxiliary team members, including 4 dental therapists, and needed to hire an-

other dentist just to keep up with growth resulting from utilizing dental therapists. So to say it won't work is proven wrong. Even with being paid state insurance program reimbursement, we have tripled our income in the last four years. When Dr. Hilleren spoke on how this can't work, he was either ignoring this evidence or intentionally misrepresenting the fact that dental therapists are an effective way to expand a private dental practice.

I feel that Dr. Hilleren is frustrated that he couldn't figure out how to utilize this valuable member of the dental team in a profitable way and explains why his testimony is so inflammatory. As for our mutual dental therapist not being competent,

not only would I hire him full time, but he also began working for an office in the Twin Cities and they want him full time. He is also adjunct faculty for the University of Minnesota School of Dentistry and a clinical instructor at Rice Regional Dental Clinic at Rice Memorial Hospital in Willmar, MN that I mentioned previously. In short, I would not allow another provider in my office to perform fillings and extractions of teeth if I were not completed confident they could do so as well as, if not better, than I can. I am proud to say all of my dental therapists are exceptional providers and receive high patient satisfaction from our new and existing patients.

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Endnotes

- ¹ *Fourth Quarter of Fiscal Year 2018 Designated HPSA Quarterly Summary*, Resources and Services Administration, U.S. Department of Health and Human Services, September 30, 2018, https://ersrs.hrsa.gov/ReportServer?/HGDW_Reports/BCD_HPSA/BCD_HPSA_SCR50_Qtr_Smry&rs:Format=PDF
- ² “The Dental Divide In America,” American Dental Association, accessed December 18, 2018, https://www.ada.org/~media/ADA/Public%20Programs/Files/ADH%20PDFs/ADA_Dental-Divide-in-America-Infographic.pdf
- ³ “Medicaid Fee-for-Service (FFS) Reimbursement and Provider Participation for Dentists and Physicians in Every State,” American Dental Association, https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic_0417_1.pdf?la=en
- ⁴ Eleanor Fleming, “Prevalence of Total and Untreated Dental Caries Among Youth: United States, 2015–2016,” Centers for Disease Control and Prevention, April 2018, <https://www.cdc.gov/nchs/data/databriefs/db307.pdf>
- ⁵ Bruce A. Dye, “Dental Caries and Tooth Loss in Adults in the United States, 2011–2012,” Centers for Disease Control and Prevention, May 2015, <https://www.cdc.gov/nchs/data/databriefs/db197.pdf>
- ⁶ “Emergency Department Visits for Dental Conditions – A Snapshot,” American Dental Association, https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic_0218_2.pdf?la=en
- ⁷ “Dental Care Health Professional Shortage Areas (HPSAs)” *Kaiser Family Foundation*, December 31, 2017, <https://www.kff.org/other/state-indicator/dental-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>
- ⁸ Jay W. Friedman and Kavita R. Mathu-Muju, “Dental Therapists: Improving Access to Oral Health Care for Underserved Children,” *American Journal of Public Health*, June 2014, 104(6): pp. 1005–1009, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4062028>; also see “Dental Therapy in Minnesota,” *Issue Brief*, Minnesota Dental Association, July 2013, <http://www.ncsl.org/documents/health/OralHealth121113webinarhandout.pdf>
- ⁹ “Our Vision: Alaska Native people are the healthiest people in the world,” Alaska Native Tribal Health Consortium, November 1, 2017, <https://acoihc.az.gov/sites/default/files/Alaska-Native%20Dental-Therapy-Training-Program.pdf>
- ¹⁰ Michael T. Hamilton, “Dentists Know Best, So Let Them Choose,” *Dentistry Today*, April 19, 2017, <http://www.dentistrytoday.com/news/todays-dental-news/item/1897-dentists-know-best-so-let-them-choose>.
- ¹¹ *Ibid.*
- ¹² North Dakota Legislative Assembly, Health Services Committee, Minutes of the Health Services Committee, 64th Assembly, Interim Session, pp. 2–6, September, 21, 2016, <https://www.legis.nd.gov/assembly/64-2015/interim/17-5168-03000-meeting-minutes.pdf>
- ¹³ J.W. Friedman, “The international dental therapist: history and current status,” abstract, *Journal of the California Dental Association*, 39(1):23-9, January 2009, <https://www.ncbi.nlm.nih.gov/pubmed/21337959>
- ¹⁴ David A. Nash *et al.*, “Table 2: History, training and scope of practice of dental therapists (DT) in seven selected countries, (Adapted from Dental therapists: a global perspective by Nash *et al.*),” accessed November 21, 2018, <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1875-595X.2008.tb00177.x>
- ¹⁵ Julie Satur, “ADOHTA History,” Australian Dental and Oral Health Therapists’ Association, accessed November 21, 2018, <https://adohta.net.au/content/history>
- ¹⁶ David A. Nash, Jay W. Friedman, and Kavita R. Mathu-Muju, *A Review of the Global Literature on Dental Therapists*, W.K. Kellogg Foundation, April 2012, <https://www.heartland.org/publications-resources/publications/a-review-of-the-global-literature-on-dental-therapists>

- ¹⁷ Julie Satur, *supra* note 15.
- ¹⁸ *Ibid.*
- ¹⁹ *Ibid.*
- ²⁰ *Ibid.*
- ²¹ Mary Jordan, “The unexpected political power of dentists,” *The Washington Post*, July 1, 2017, https://www.washingtonpost.com/politics/the-unexpected-political-power-of-dentists/2017/07/01/ee946d56-54f3-11e7-a204-ad706461fa4f_story.html?utm_term=.c4c71d05e0f1
- ²² David A. Nash, Jay W. Friedman, and Kavita R. Mathu-Muju, *supra* note 16.
- ²³ *bid.*
- ²⁴ David A. Nash *et al.*, *supra* note 16.
- ²⁵ David A. Nash, Jay W. Friedman, and Kavita R. Mathu-Muju, *supra* note 16.
- ²⁶ *Ibid.*
- ²⁷ “History,” Alaska Native Tribal Health Consortium, accessed November 21, 2018, <https://anthc.org/who-we-are/history>
- ²⁸ “Who We Are,” Alaska Native Tribal Health Consortium, accessed November 21, 2018, <https://anthc.org/who-we-are/overview>
- ²⁹ Sarah Shoffstall-Cone and Mary Williard, “Alaska Dental Health Aide Program,” *International Journal of Circumpolar Health* 2013, 72: 211198, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3753165/pdf/IJCH-72-21198.pdf>
- ³⁰ Alaska Native Tribal Health Consortium, *supra* note 27.
- ³¹ “Alaska Dental Therapy Educational Programs,” Alaska Native Tribal Health Consortium, accessed November 21, 2018, <https://anthc.org/alaska-dental-therapy-education-programs>
- ³² “Dental Health Aide Therapy Training Program becomes a Degree program, gains financial aid eligibility and comes home to Alaska in 2017,” Alaska Native Tribal Health Consortium, June 3, 2016, <http://anthc.org/wp-content/uploads/2016/06/2016-06-06-DHATProgramChanges.pdf>.
- ³³ David A. Nash, Jay W. Friedman, and Kavita R. Mathu-Muju, *supra* note 16.
- ³⁴ Bob Salsberg, “Dental therapists fill gap with oral care, Associated Press, February 27, 2017, <https://www.burlingtonfreepress.com/story/news/2017/02/17/dental-therapists-fill-gap-oral-care/98020540>
- ³⁵ “Dental Pilot Project #100,” Oregon Health Authority, accessed November 21, 2018, <https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/ORALHEALTH/DENTALPILOTPROJECTS/Pages/projects.aspx>
- ³⁶ Walker Orenstein, “Long-sought bill to help dental care on tribal land is first to pass Legislature,” *The News Tribune*, February 10, 2017, <https://www.thenewstribune.com/news/politics-government/article132077434.html>
- ³⁷ Kelsey Mo, “Gov. Doug Ducey signs bill allowing ‘dental therapists’ to practice in Arizona,” AZcentral.com, May 17, 2018, <https://www.azcentral.com/story/news/politics/arizona/2018/05/17/ducey-signs-bill-allowing-dental-therapists-practice-arizona/587163002>
- ³⁸ House Bill 2235, Arizona House of Representatives, 53rd Legislature, May 16, 2018, <https://legiscan.com/AZ/text/HB2235/id/1796989>
- ³⁹ Julie Satur, *supra* note 15
- ⁴⁰ *Ibid.*
- ⁴¹ Jay W. Friedman and Kavita R. Mathu-Muju, *supra* note 8.
- ⁴² “Dental Therapy: Our Division,” University of Minnesota School of Dentistry, accessed November 30,

2018, <https://www.dentistry.umn.edu/degrees-programs/dental-therapy/our-division>

⁴³ Sarah Shoffstall-Cone and Mary Willard, *supra* note 30.

⁴⁴ Minnesota Legislature, Minnesota Session Laws, Chapter 95, Revisor of Statutes, Senate File 2083, Article 3, 86th Legislature, 2009, https://mn.gov/boards/assets/enabling%20Legislation_tcm21-46113.pdf

⁴⁵ Maine Legislature, 2014, An Act To Improve Access to Oral Health Care, 126th Legislature, 28 April, 2009, http://www.mainelegislature.org/legis/bills/bills_126th/billtexts/HP087001.asp

⁴⁶ Vermont General Assembly, An Act Relating to Establishing and Regulating Dental Therapists, 2015–16 Session, June 2016, <http://legislature.vermont.gov/assets/Documents/2016/Docs/ACTS/ACT161/ACT161%20As%20Enacted.pdf>

⁴⁷ Arizona State Legislature, House Bill 2235, 2018, <https://legiscan.com/AZ/text/HB2235/id/1796989>

⁴⁸ “Dental Therapy Collaborative Management Agreement,” Minnesota Board of Dentistry, accessed November 21, 2018, https://mn.gov/boards/assets/NEW_DentalTherapistCMA_tcm21-285566.pdf

⁴⁹ Arizona State Legislature, *supra* note 47.

⁵⁰ Commission on Dental Accreditation. [2015] 2016. *Accreditation Standards for Dental Therapy Programs*. <http://www.ada.org/~media/CODA/Files/dt.ashx> (February 6 2015).

⁵¹ “Dental Therapy in Minnesota,” *Issue Brief*, Minnesota Department of Health and Minnesota Board of Dentistry, 2018, https://www.dentistry.umn.edu/sites/dentistry.umn.edu/files/dental_therapy_in_minnesota.pdf

⁵² “Dental Therapy,” University of Minnesota School of Dentistry, accessed November 21, 2018, <https://www.dentistry.umn.edu/degrees-programs/dental-therapy>

⁵³ “Dental Therapists & Advanced Dental Therapists,” Minnesota Board of Dentistry, accessed November 21, 2018, <https://mn.gov/boards/dentistry/currentlicensees/processingandapplications/dental-therapists.jsp>

⁵⁴ Minnesota Legislature, *supra* note 44.

⁵⁵ “Adv dental therapy certification process,” Minnesota Board of Dentistry, accessed November 21, 2018, https://mn.gov/boards/assets/Adv%20dental%20therapy%20certification%20process_tcm21-46119.pdf.

⁵⁶ “Advanced Dental Therapy MSADT,” Metropolitan State University, 2015, <https://www.metrostate.edu/academics/programs/advanced-dental-therapy-msadt>

⁵⁷ University of Minnesota School of Dentistry, *supra* note 52.

⁵⁸ Maine Legislature, *supra* note 46; Vermont General Assembly, *supra* note 46.

⁵⁹ Arizona State Legislature, *supra* note 47.

⁶⁰ National Governors Association, *The Role of Dental Hygienists in Providing Access to Oral Health Care*, 2014, <https://classic.nga.org/files/live/sites/NGA/files/pdf/2014/1401DentalHealthCare.pdf>

⁶¹ “ADTEP Certification & Scope of Practice,” Alaska Native Tribal Health Consortium, accessed November 21, 2018, <https://anthc.org/alaska-dental-therapy-education-programs/adtep-certification-scope-of-practice>

⁶² Alaska Native Tribal Health Consortium, *supra* note 27.

⁶³ “Il̄isaġvik sees highest enrollment to date,” Il̄isaġvik College, July 5, 2018, <https://www.ilisagvik.edu/i%E1%B8%B7isagvik-sees-highest-enrollment-to-date>

⁶⁴ Nicole de Beaufort, “Alaska Dental Therapist Program: RTI Evaluation Report” W.K. Kellogg Foundation, October 26, 2010, <https://www.wkkf.org/resource-directory/resource/2010/10/alaska-dental-therapist-program-rti-evaluation-report>

⁶⁵ Donald L. Chi , “Dental Utilization for Communities Served by Dental Therapists in Alaska’s Yukon

Kuskokwim Delta,” University of Washington, School of Dentistry, August 11, 2017, <http://faculty.washington.edu/dchi/files/DHATFinalReport.pdf>

⁶⁶ Maine Legislature, *supra* note 45.

⁶⁷ Arizona State Legislature, *supra* note 47.

⁶⁸ Vermont General Assembly, *supra* note 46.

⁶⁹ “Delegated Duties for Dental Therapists and Advanced Dental Therapists,” MN.gov, State of Minnesota, November 9, 2016, https://mn.gov/boards/assets/DT%20Chart%20BA_tcm21-262696.pdf

⁷⁰ Michael T. Hamilton, Bette Grande, and John Davidson, “The Case for Licensing Dental Therapists in North Dakota,” *Policy Brief*, The Heartland Institute and Texas Public Policy Foundation, January 2017, <https://www.heartland.org/publications-resources/publications/the-case-for-licensing-dental-therapists-in-north-dakota>

⁷¹ State of Minnesota, *supra* note 69.

⁷² “Our Division,” University of Minnesota School of Dentistry, accessed November 21, 2018, <https://www.dentistry.umn.edu/degrees-programs/dental-therapy/our-division>

⁷³ “Minnesota Administrative Rules,” Office of the Revisor of Statutes, State of Minnesota, accessed November 21, 2018, <https://www.revisor.mn.gov/rules/3100.0100>

⁷⁴ Arizona State Legislature, *supra* note 47.

⁷⁵ Dane Lenaker, “The Dental Health Aide Therapist Program in Alaska: An Example for the 21st Century,” *American Journal of Public Health*, 2017 June; 107 (Suppl 1): S24–S25, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5497887>

⁷⁶ State of Minnesota, *supra* note 69.

⁷⁷ National Governors Association, *supra* note 60.

⁷⁸ Michael T. Hamilton, *supra* note 10.

⁷⁹ Michael T. Hamilton, “‘Dental Therapist’ Teammates Enhance Practices Treating Low-Income Patients,” *Health Care News*, The Heartland Institute, December 2016, <https://www.heartland.org/news-opinion/news/dental-therapist-teammates-enhance-practices-treating-low-income-patients>

⁸⁰ Julie Satur, *supra* note 15.

⁸¹ Catherine S. Bishop, “Advanced Practitioners Are Not Mid-Level Providers,” *Journal of the Advanced Practitioner in Oncology*, U.S. National Library of Medicine, National Institutes of Health, September 1, 2012, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4093350>

⁸² “Mid-Level Practitioners Authorization by State,” Drug Enforcement Administration, U.S. Department of Justice, <https://www.deadiversion.usdoj.gov/drugreg/practioners/index.html>

⁸³ Catherine S. Bishop, *supra* note 81.

⁸⁴ Edward J. Timmons and Conor Norris, “CLIA Waiver Pharmacy Growth: How Does Broadening Scope of Practice Affect the Pharmacist Labor Market?” Mercatus Center, George Mason University, October 18, 2016, <https://www.mercatus.org/publications/CLIA-waiver-pharmacy-growth>

⁸⁵ Victoria Garment, “Nurse Practitioners and Physician Assistants: Why You Should Hire One (or the Other),” *The Profitable Practice*, May 2013, <http://profitable-practice.softwareadvice.com/nurse-practitioners-and-physician-assistants-why-you-should-hire-one-or-the-other-0513>

⁸⁶ Thomas Heath, “Local orthopedist now helps command the biggest practice of its kind in the U.S.,” *The Washington Post*, November 6, 2016, https://www.washingtonpost.com/business/economy/local-orthopedist-now-helps-command-the-biggest-practice-of-its-kind-in-the-us/2016/11/06/4f193596-a142-11e6-8d63-3e0a660f1f04_story.html

⁸⁷ Sue Webber, “North Memorial offers TotalCare program for Seniors,” *Sun Current* (Minnesota),

November 1, 2016, <http://current.mnsun.com/2016/11/01/north-memorial-offers-totalcare-program-for-seniors>

⁸⁸ Michael T. Hamilton, “State Laws Force Pregnant Mothers to Rely on Black Market to Find Midwives,” *Consumer Power Report*, The Heartland Institute, October 13, 2016, <https://www.heartland.org/news-opinion/news/pregnant-mothers-call-the-midwife-in-their-states-black-market>; also see Michael T. Hamilton, Bette Grande, and John Davidson, *supra* note 70.

⁸⁹ North Dakota Legislative Assembly, *supra* note 12.

⁹⁰ Michael T. Hamilton, “Testimony before the North Dakota House Human Services Committee, the Case for Licensing Dental Therapists in North Dakota,” January 18, 2017, <https://www.heartland.org/publications-resources/publications/testimony-before-the-north-dakota-house-human-services-committee-the-case-for-licensing-dental-therapists-in-north-dakota>

⁹¹ Minnesota Department of Health and Minnesota Board of Dentistry, *supra* note 48.

⁹² *Ibid.*

⁹³ “Early Impacts of Dental Therapists in Minnesota: Report to the Minnesota Legislature,” Minnesota Department of Health, Minnesota Board of Dentistry, accessed December 13, 2018, <http://www.health.state.mn.us/divs/orhpc/workforce/oral/dtlegisrpt.pdf>

⁹⁴ Michael T. Hamilton, *supra* note 79.

⁹⁵ Susan K. Urahn and Alexis Schuler, “Expanding the Dental Team: Increasing Access to Care in Public Settings ,” The Pew Charitable Trusts, June 2014, https://www.pewtrusts.org/-/media/assets/2014/06/27/expanding_dental_case_studies_report.pdf

⁹⁶ Susan K. Urahn and Alexis Schuler, “Expanding the Dental Team: Studies of two private practices,” The Pew Charitable Trusts, February 2014, https://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2014/expandingdentalteamreportpdf.pdf

⁹⁷ Arizona State Legislature, *supra* note 48.

⁹⁸ North Dakota Legislative Assembly, *supra* note 12.

⁹⁹ Dane Lenaker, *supra* note 75.

¹⁰⁰ “Letter Praising Dental Therapy from Dr. John Powers to ND Interim Health Services Committee,” Heartland.org, November 1, 2016, <https://www.heartland.org/publications-resources/publications/letter-praising-dental-therapy-from-dr-john-powers-to-nd-interim-health-services-committee>

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