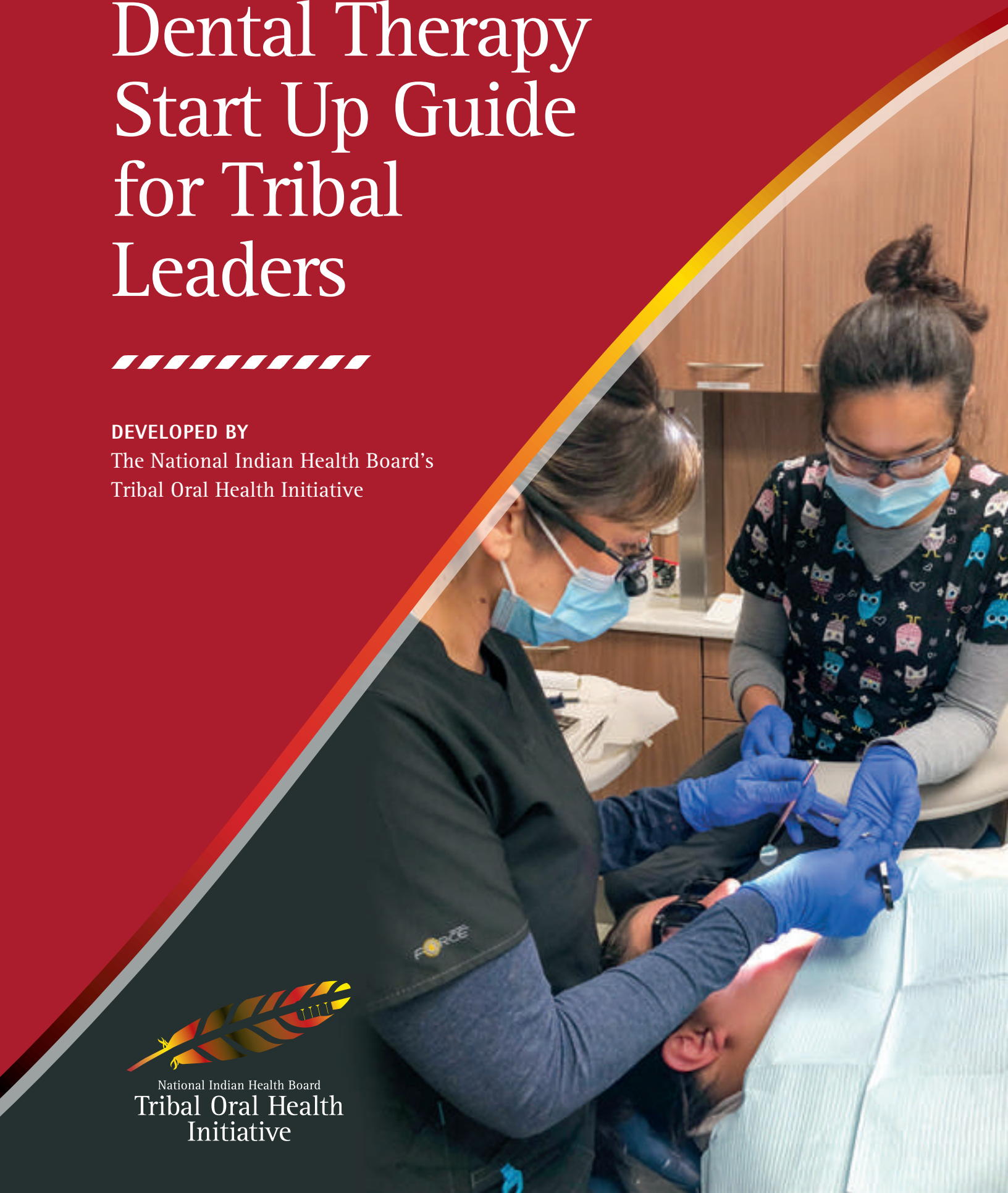
Dental Therapy Start Up Guide for Tribal Leaders



DEVELOPED BY

The National Indian Health Board's
Tribal Oral Health Initiative

National Indian Health Board
Tribal Oral Health Initiative

Acknowledgements

The National Indian Health Board would like to thank all those that contributed to the creation of this guide, including

Alaska Native Tribal Health Consortium
Northwest Portland Area Indian Health Board
W. K. Kellogg Foundation
Community Catalyst

NIHB would also like to thank the communities and individuals who shared their stories for the benefit of the Tribes.

This publication was prepared by the National Indian Health Board, 910 Pennsylvania Ave., SE, Washington, DC 20003 and supported by grant number P0131269, funded by the W.K. Kellogg Foundation. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the W.K. Kellogg Foundation.

For more information about this Guide or NIHB's Tribal Oral Health Initiative, please contact Brett Weber at bweber@nihb.org.

Contents

From the Chairperson

National Indian Health Board
Tribal Oral Health Initiative

DEAR FELLOW TRIBAL LEADERS,

The National Indian Health Board is pleased to present this Tribal Dental Therapy Start Up Guide. Achieving adequate oral healthcare and positive oral health outcomes has long been a priority in Indian Country. As Tribal leaders, we see the unmet need every day in the broken smiles of our children who lose teeth far too early.

This guide is intended to serve as a resource for Tribes searching for innovative, cost effective solutions to their community's oral health challenges. Tribes in Alaska, Washington State, Oregon, Arizona, and Michigan have found one such solution in dental therapy. These focused providers are educated and licensed to perform the most common preventative and restorative dental procedures, which can account for almost two thirds of patient need!

However, the road to implementing this workforce model was not easy or simple. It is my hope that this guide will help you understand the lessons learned by the Tribes that were early to incorporate dental therapists into their oral healthcare delivery team. Their courage in embracing dental therapy's promise paved the way for other Tribes to follow in their path.

I have heard from Tribes nationwide that oral health in our communities is in a state of crisis. As you will read in this guide, and as you no doubt understand as a Tribal leader, American Indians and Alaska Natives have some of the worst oral health indicators of any demographic.

If your Tribe struggles with inadequate oral healthcare, I hope you will give dental therapy a thorough examination to see how it might address your community's needs. I look forward to a day when our children's smiles are as bright as their dreams once again.

Yours in Health,

Victoria Kitcheyan

Victoria Kitcheyan
Chairperson | National Indian Health Board

The Oral Health Crisis in Tribal Communities

For thousands of years, American Indians and Alaska Natives (AI/ANs) lived in a sustainable manner eating healthful traditional foods and viewing the health of the mouth as an integral part of the health of the body. But destructive federal policies forced many Tribal members to live on reservations, without access to traditional foods, relying instead on government commodity food. This, combined with forced assimilation policies, created deep challenges for Tribes in continuing the intergenerational transmittal of healthy living practices, including practicing good oral health and access to a healthful diet. It has led to the severe health disparities that we still see today.

According to the Indian Health Service 2014 report, "The Oral Health of American Indian and Alaska Native Children Aged 1-5 Years: Results of the 2014 IHS Oral Health Survey," AI/AN children have on average four times more oral health disease than white children nationwide. The increased decay at such a young age often requires treatment under general anesthesia, which the agency estimates costs over $6,000 per child.[1]

Another survey conducted in 2016 by IHS found that "The oral health of American Indian and Alaska Native elementary school children aged 6-9 years has not changed significantly in the last five years." The survey also found that AI/AN children in that age group were an astounding five times more likely than the average child to have untreated cavities in *permanent* teeth.[2]

"The Oral Health of American Indian and Alaska Native Children Aged 1-5 Years: Results of the 2014 IHS Oral Health Survey," AI/AN children have on average four times more oral health disease than white children nationwide.

- INDIAN HEALTH SERVICE 2014 REPORT

1 Phipps, Kathy R. Dr.P.H. and Timothy L. Ricks, D.M.D., M.P.H. "The Oral Health of American Indian and Alaska Native Children Aged 1-5 Years: Results of the 2014 IHS Oral Health Survey." April 2015. Indian Health Service. Rockville, MD. https://www.ihs.gov/doh/documents/IHS_Data_Brief_1-5_Year-Old.pdf

2 Phipps, Kathy R. Dr.P.H. and Timothy L. Ricks, D.M.D., M.P.H. "The Oral Health of American Indian and Alaska Native Children Aged 6-9 Years: Results of the 2016-2017 IHS Oral Health Survey." April 2017. Indian Health Service. Rockville, MD. https://www.ihs.gov/doh/documents/Data%20Brief%20IHS%206-9%20Year%20Olds%2003-30-2017.pdf

That IHS survey did find significant improvement since 1999, the last time a comprehensive oral health survey in Indian Country was conducted by the agency. "Since 1999, the percent of dental clinic patients with untreated dental caries in a primary or permanent tooth has decreased by 36%; dropping from 73% in 1999 to 47% in 2016-2017. The percent with untreated dental caries in a permanent tooth has decreased by 44%; dropping from 34% in 1999 to 19% in 2016-2017."[3] While this is significant progress, the data show that generations of school children in Indian Country went without oral health care and that there is still much work to be done. The lack of oral health care services in Tribal communities has impacted generations, and fixing the problem will require sustained effort on the part of Tribes, providers, and advocates.

Oral Health as Part of Overall Health

Poor oral health leads to poor performance and absences from school and work and costly problems for families, employers, and federal and state governments. Poor oral health is associated with serious health concerns, including heart and lung disease, stroke, diabetes, low birth weight and premature births. Children with untreated decay not only suffer pain and infection; they have trouble eating, talking, sleeping and learning. This directly impacts school performance and causes missed school days.

Need for Education

Many Tribes have found that the intergenerational trauma has impacted American Indians and Alaska Natives at every age group. When children visit the dentist, they often find themselves in an unfamiliar environment that does not necessarily cater to their comfort or attempt to lessen their anxiety. Adults sometimes struggle to provide for their families and

sacrifice their own healthcare needs to prioritize their children's. Elders carry a lifetime of negative experiences in the dental chair which often results in them avoiding the dentist altogether.

Because of this trauma, every age group of AI/ANs has worse oral health than the national average. Because people lack a positive history with dentistry and oral health, they are not able to establish a pro-oral healthcare environment in their families, exacerbating the problem as their children grow up without a strong basis in oral health promotion. Too often, this lack of oral health promotion has resulted in Tribal communities without a strong basis for healthy oral health maintenance behaviors.

Tribes have increasingly stepped in to break this cycle, establishing educational campaigns showing

3 Ibid.

children and youth proper oral healthcare and encouraging them to take those lessons to their families. Oral health educators also serve to remind adults about the importance of regular healthcare, and Tribes with these educators have reported fewer people miss their appointments. This is a good idea, and efforts to create a culture of health for Native youth must continue. However, that alone will not solve Indian Country's crisis, which is exacerbated by a lack of oral health providers. Fortunately, Tribes have additional tools at their disposal.

Need for Solutions Beyond Education

While oral healthcare education is one of the most significant tools that can be used to disrupt the cycle of poor oral health outcomes over the long term, it is not the only solution. There is a real and urgent need throughout Indian Country for improved access to oral healthcare that must be addressed now. A patient in an emergency room needing an extraction will not see his or her pain addressed through education alone.

When faced with a challenge as pervasive and extensive as Indian Country's oral health, long term educational campaigns are praiseworthy but insufficient. Leaders will need to carefully evaluate their own community's needs, especially including shortcomings in the oral healthcare delivery system. Alaska Tribes did just that and found a solution that met their needs: dental therapy.

Alaska Natives Find a Solution: Dental Therapy

"...To this day, many elders have anxiety about visiting the dentist, which is then often passed down to their children and grandchildren."

- VALERIE NURR'ARAALUK DAVIDSON

Unique Challenges of Oral Health Care Delivery in Alaska

While many Tribes throughout the United States are in rural, harder-to-access areas, Alaska Native villages have unique challenges. Many are not connected to the road system at all, so the most common mode of transportation is often airplane. Some villages may be accessible only by boat or snow machine during the winter, but often airplane is the fastest, most reliable option, albeit expensive, in the absence of a road system.

Many Alaska Native elders remember the sporadic visits from dentists in the past. A dentist, almost always non-Native, would fly in and, in trying to see as many people as possible, would not be able to give each patient the dignified and thorough care he or she needed.

Valerie Nurr'araaluk Davidson, the former spokesperson for the Alaska Native Tribal Health Consortium's dental therapy program and 13th Lieutenant Governor of the state of Alaska remembers the scene from her own community. The children in the village would gather in the clinic waiting room while their fellow students were seen one by one by the dentist. As the dentist pulled the teeth of more and more children throughout the day, the children still waiting could hear their friends' screaming in pain and fear. The dentist would come out into the waiting room, butcher's apron stained with blood, and call the next child in. More than one child ran away from the room in the hopes that the dentist would leave their teeth alone. How can anyone expect that communities served in this way would develop a healthy attitude toward oral hygiene and oral health-care after such a traumatic experience? To this day, many elders have anxiety about visiting the dentist, which is then often passed down to their children and grandchildren.

Alaska Native leaders know of many such examples of traumatic oral 'healthcare' in their communities. They saw a strong and urgent need for change. In looking around the globe for anything that could help their people, these leaders found a solution in a flexible mid-level provider model called dental therapy.

How Dental Therapy Addresses the Challenges

Dental therapists are trained and licensed to perform certain oral healthcare services within a specific scope of practice. Through their training (which takes three academic years as opposed to eight for a dentist) dental therapists are able to perform common oral healthcare procedures and meet between one half and two-thirds of patients' needs. The Alaska Native health system, which struggled to recruit and retain dentists to work in rural Alaskan communities, found that dental therapists were able to see more people, visit the communities more regularly, and develop a rapport with patients that noticeably reduced anxiety.

The more accessible education standards for dental therapists mean that many of the dental therapists working in Alaska are Alaska Natives themselves. This creates the added benefit of opening a medical profession, which historically has not been an inclusive recruiter of AI/AN employees, to the very population it is serving.

Current Model

With the incorporation of dental therapists into the oral healthcare delivery system, Alaska Natives today have a totally different experience than generations past. Rather than providing inconsistent and insufficient care, dental therapists are able to address patient needs in their communities *before* they become emergencies.

The model today more closely resembles a "Hub and Spoke" design. Dental therapists in Alaska are usually based in a larger "Hub" town such as Bethel (population 6,000) or Sitka (population 9,000). They then travel to the smaller villages in the region for an extended period of time, perhaps up to a week. While there, the dental therapists do routine services and preventative care, catching issues early that, if left untreated, would become emergencies. They coordinate with dental health aides, also employed by the Community Health Aide Program, to remind patients of their appointments and reduce absenteeism.

Lincoln Bean's Story

For Councilman Lincoln Bean, Sr. of the Organized Village of Kake, Dental Therapy is personal.

Many years ago, his son woke up in the middle of the night in severe pain. Hand clutching his mouth, the younger Bean needed to reach the emergency room for a ruptured tooth to be removed. However, Kake is a village of 500 people on an island. The closest emergency room was a 40-minute plane away. As Lincoln's son boarded the plane, a storm set in and the 9-seater Cessna plane was force to fly much higher than normal. The lower pressure caused the tooth's exposed nerve to erupt in unimaginable pain until the plane landed in Sitka.

Councilman Bean believes that if his son had access to regular and routine preventative oral healthcare, problems with his teeth would have been addressed earlier and that night would never have happened. He's committed to making sure no Native family has to endure what his did.

Emergencies requiring airlifts to Hub towns or even to Anchorage do still happen. But because the dental therapists are able to address chronic issues and catch potential problems early, patients are less likely to develop emergency oral health issues requiring those expensive airlifts in the first place.

First Steps: Evaluating Dental Therapy's Potential for Your Tribe

As sovereign governments, Tribes are the rightful decision makers when it comes to what workforce models should be serving their communities. For both Direct Service Tribes and Tribes engaging in 638 self-governance compacts or contracts with IHS for their health services, some of the same issues in oral health are prevalent.

Vacancies and Dentists Per Population

Indian health is notoriously under resourced. This is true in the financial sense, but also true in terms of personnel. Healthcare providers in Indian Country are commonly overworked and under supported. Nationwide, there is typically one dentist for every 1,500 people. In Indian Country, there is one dentist for every 2,800 people on average.[4] This disparity is unacceptable, and Tribes across the country have recognized the need to increase the number of oral health providers for their people.

Nationwide, there is typically one dentist for every 1,500 people. In Indian Country, there is one dentist for every 2,800 people on average.[4]

Within the Indian Health Service, the vacancy rate for dentists was 28% in September 2016.[5] That is more than one out of every four positions. In the Portland Service Area, the vacancy rate was an astounding 54%. Clearly, Indian Country does not have the oral health provider workforce it needs. Like all rural communities, Indian Country struggles to recruit and retain providers due to salary constraints, housing and infrastructure availability, and competition from urban areas for a limited pool of providers, just to name a few. In an August 2018 report, the Government Accountability Office (GAO) found that the most common barriers to recruiting employees to work at facilities on the reservations include: housing

4 The 1999 Oral Health Survey of American Indian and Alaska Native Dental Patients. Rockville, Md: Indian Health Service, Division of Dental Services; 2002:106 http://dhss.alaska.gov/dph/wcfh/Documents/oralhealth/docs/Oral_Health_1999_IHS_Survey.pdf

5 Indian Health Service Briefing. October 9, 2016. Rockville, MD. https://www.ihs.gov/newsroom/includes/themes/newihstheme/display_objects/documents/2016_Speeches/IHSBriefingPresentation10092016.pdf

shortages, a lack of family infrastructure such as schools, and employment opportunities for spouses.[6]

GAO also found that IHS often relies on temporary, contracted providers to help meet demand while a position remains vacant. Even assuming a dentist vacancy can be filled, struggles with retention may lead to high turnover, which means Tribal members may not receive continuous care. The relationship AI/ANs have with their oral health is damaged if they have to meet and develop trust with a new provider every time they come to the clinic.

Dental therapy in Alaska has opened doors for Tribal members to become oral healthcare providers themselves. The two-year education program for a dental therapy license is an accessible career path, and Ilisagvik College, which runs a program in Alaska, has noted that over 90% of its students are AI/AN. These providers often come from the very communities they serve, and are far more likely to stay in the community and develop or build upon relationships with the patients they see every day. Dental therapy in Alaska has addressed the provider vacancy issue and ensured that dentists are able to focus on the more serious cases, which can cut their workload by more than half.

If a Tribe has a high vacancy rate for oral healthcare providers, vacancies that take a long time to fill, or a small number of dentists struggling to serve your entire population, dental therapy could be a practical solution.

Wait Times

Many Americans do not struggle to obtain dental care. If they notice a problem, in most cases, they call their local dentist and can be seen within the week. This is generally not the case in Indian Country. In spring 2018, NIHB conducted an assessment of the oral health situation at the Tribal level. Of the 67 Tribal leaders, health directors, or dental directors who completed the assessment, 61% said the average wait time for a dental appointment in their community was between one and three months. 5% of the respondents reported a wait time of over six months. Fewer than 1 in 4 respondents (22%) reported a wait time of under one month. By comparison, the average wait time nationally for pediatric dentists in 2012 was 10 days.[7]

Normally, long wait times are the result of a provider shortage, but they can also be impacted by facility limitations and high levels of absenteeism. Dental therapists often work with mobile equipment, so they can travel to schools, elders' community centers, and other settings to reach underserved populations that would struggle to reach a dentist's office. The Port Gamble S'kllalam Tribe in Washington hired a dental therapist in 2017 and by summer 2018 had almost completely eliminated its wait time for dental care. Other Tribes in Washington State using dental therapists have also seen their wait times for appointments drop by up to two-thirds.

Number of Extractions

One of the most glaring oral health disparities among the AI/AN population is the number of decayed teeth in children. AI/AN children by the age of five has, on average, four decayed teeth.[8] Nationally, a child has one decayed tooth on average by the time they are five.

A study from the University of Washington published in January 2018 examined child tooth extractions in Alaska's Yukon-Kuskokwim Delta. The study found

6 Government Accountability Office, "INDIAN HEALTH SERVICE: Agency Faces Ongoing Challenges Filling Provider Vacancies." GAO-18-580: Published: Aug 15, 2018. https://www.gao.gov/assets/700/693940.pdf

7 American Dental Association, "2012 Survey of Dental Practice: Pediatric Dentists in Private Practice." http://www.aapd.org/assets/1/7/SurveyofDentalPracticeReport.pdf

8 Kathy R. Phipps, Dr.P.H. and Timothy L. Ricks, D.M.D., M.P.H. "The Oral Health of American Indian and Alaska Native Children Agred 1-5 Years: Results of the 2014 IHS Oral Health Survey." Indian Health Service. April 2015. https://www.ihs.gov/doh/documents/IHS_Data_Brief_1-5_Year-Old.pdf

that 1.9% of Alaska Native children in the delta's communities with a dental therapist had a front tooth extracted, compared to 7.3% in communities without a DT.[9] The preventative care that DTs provide meant children were not developing cavities in the first place, nor letting early decay go untreated. The study also found that pediatric preventive care increased by 67%, and the number of children going under general anesthesia for dental work decreased by 25% in communities with DTs compared to those without.

Financial Reimbursement for Dental Services

One of the reasons dental therapy is so attractive is the ability of providers to bill Medicaid for their services. Read more about this topic in "Financial Sustainability: Third Party Billing."

Most states' Medicaid programs reimburse for specific services. A medical provider does a certain procedure, and they receive a set amount – and then another procedure, and another amount. It does not matter the experience the provider has or the credentials, beyond the license to provide treatment of course. Usally, reimbursement follows the service, not the provider. Because a dental therapist is certified to perform fewer services, the starting salary in Alaska is on average $60,000 compared to a dentist's $120,000.[10] Dental therapists receiving reimbursement for services that were previously conducted by a dentist can lead to significant cost savings. In fact, a private clinic in Minnesota found that one dental therapist saved over $60,000 in one year.

If a Tribe is struggling to maximize third party revenue and leverage resources, dental therapy may be a viable solution.

RECOMMENDATIONS:

Work with the Tribe's dental team to get a thorough and accurate look at the Tribe's oral health needs. Knowing how many patients your dentists see, how long patients have to wait between scheduling an appointment and being seen, the number of teeth extractions dentists perform on children, and the Tribe's capacity to take advantage of third party billing are all useful metrics in evaluating how dental therapy can meet your Tribe's unmet oral health need.

In this stage, working to ensure the Tribe is fully invested in dental therapy is well advised. A Tribal resolution stating the Tribe's support for dental therapy is a strong action a Tribal leader can take to demonstrate the Tribe's interest and raise awareness in the community.

9 Chi, Donald L., DDS, PhD; et al. "Dental Utilization for Communities Served by Dental Therapists in Alaska's Yukon Kuskokwim Delta: Findings from an Observational Quantitative Study." August 2017. University of Washington. http://faculty.washington.edu/dchi/files/DHATFinalReport.pdf

10 Interview with Dr. Mary Williard, Alaska Native Tribal Health Consortium. October 30, 2018.

Complying with State Statute and Regulations

If a Tribe has determined that dental therapy can help alleviate oral health needs in the community, Tribal leadership can explore ways to bring dental therapists to the Tribe. This section includes a background in federal law and state issues to be aware of regarding state dental therapy licensure.

Federal Law

In Alaska, Dental Therapists operate under the Community Health Aide Program (CHAP), which also provides clinical and behavioral health services for Tribes in Alaska. The program is funded by the Indian Health Service. Because of the program's success in Alaska, IHS has long considered expanding the program to Tribes throughout the country.

Because of the program's success in Alaska, IHS has long considered expanding the program to Tribes throughout the country.

As sovereign nations, Tribes should have the ability to determine their own oral healthcare delivery models independent of state supervision. Unfortunately, a provision of the Indian Health Care Improvement Act (IHICIA) (P.L. 111-148), inserted just before the bill's passage into law, presents a barrier. In a section governing IHS's expansion of CHAP, Congress included language limiting Tribal use of dental therapy.

This law, as currently written, is ambiguous and burdensome for Tribes. It has been interpreted to mean that a Tribe is prohibited from hiring a dental therapist only under CHAP unless state law authorizes dental therapists to practice within the state.

The exact legal text of IHCIA **with this limitation** is found in Section 25 U.S.C. § 1616/ (d), and reads:

"(d) Nationalization of program

(1) In general
Except as provided in paragraph (2), the Secretary, acting through the Service, may establish a national Community Health Aide Program in accordance with the program under this section, as the Secretary determines to be appropriate.

(2) Requirement; exclusion
Subject to paragraphs (3) and (4), in establishing **a national program** under paragraph (1), the Secretary-

(A) shall not reduce the amounts provided for the Community Health Aide Program described in subsections (a) and (b); and
(B) **shall exclude dental health aide therapist services from services covered under the program.**

(3) Election of Indian tribe or tribal organization
(A) In general
Subparagraph (B) of paragraph (2) shall not apply in the case of an election made by an Indian tribe or tribal organization located in a State (other than Alaska) in which the use of dental health aide therapist services or midlevel dental health provider services is authorized under State law to supply such services in accordance with State law.
(B) Action by Secretary
On an election by an Indian tribe or tribal organization under subparagraph (A), the Secretary, acting through the Service, shall facilitate implementation of the services elected."

Despite the law's ambiguity and the burden it places on Tribes, a remedy by Congress is unlikely in the short term. As the law states, Tribes must get permission from their states if they wish to hire a dental therapist under the expanded CHAP. This puts Tribes in an unusual position; Tribal health care is a federal responsibility, not a state one. On this issue, Congress has inappropriately delegated responsibility for Tribal healthcare to the states with no Tribal input.

Nevertheless, Tribal leaders acknowledge that this is an urgent situation. Tribes across the country have taken to their state legislatures to argue for their right to implement dental therapy. If a Tribe is interested in advocating for its right to hire dental therapists, this guide provides an overview of specific pro-Tribal legislative language, strategies formed by prior Tribes' experiences, and a comparison of formulating rules by statute or by regulation.

State Statute

The process of authorizing dental therapy has varied from state to state and from Tribe to Tribe; however, in observing the campaigns before multiple state legislatures, there are noticeable commonalities.

- Dental therapy is a nonpartisan issue. Some Republicans and some Democrats support it, and some oppose it.

- Tribal relations is also a nonpartisan issue. Some Republicans and some Democrats understand and respect sovereignty, and some Republicans and Democrats do not.

- Support from committee chairs is crucial. The chairmen and chairwomen decide if and when the dental therapy bill gets a legislative hearing. If they oppose the bill, they can kill it unilaterally.

- Support from leadership is also crucial. Leadership controls the floor calendar in the state legislature, they can also unilaterally kill a bill they do not like by not scheduling it for a vote, even if it is supported by the Committee chair.

Generally speaking, the state law regulating Tribal dental therapy must allow Tribes the greatest degree of flexibility in implementing dental therapy. This section will provide context on legislative strategies other Tribes have employed successfully, as well as detail the benefits of specific legislative language giving Tribes flexibility. Appendix C contains a template for state legislation that reflects Tribal needs.

Early states to pass dental therapy were groundbreaking and courageous, but in some instances compromises were made for the sake of legislative success that made the final rules burdensome for Tribes. Future campaigns have the opportunity to learn from these experiences, and if Tribes proclaim their needs loudly and clearly, the chances of success multiply.

DEGREE AND DUAL LICENSURE REQUIREMENTS:

In some states, dental therapists must hold a master's degree, be a registered dental hygienist, or both. This requirement is not ideal for Tribal communities.

A significant positive outcome of dental therapy in Tribal communities is that the providers often come from the communities they serve. In the Alaska Dental Therapy Education Program, more than 90% of the students are American Indian or Alaska Native. Read more about that program, and the education standards approved by the Commission on Dental Accreditation (CODA) in "Developing the Workforce: Keeping Students Close to Home" on page 19.

A requirement either to have a master's degree or maintain a dual dental hygiene/dental therapy license would reduce that benefit. Many barriers prevent AI/ANs from obtaining dental degrees, including socio-economic status, distance from dental schools, and lack of cultural competence in the classroom. The medical field has not historically actively engaged with the AI/AN population to develop pathways for Tribal members to become practicing medical providers. Dental schools and dental hygiene college programs exhibit very similar challenges.

As Alaska has shown, a four-year college program is not a necessity to produce a highly skilled dental therapist. A focused, three year program provides the education dental therapists need while still maintaining accessibility for nontraditional students, many of whom have families.

In states with dual licensure requirements, the dental therapy students come from the same pool of students as do the hygienists. By recruiting from an existing supply of dental providers, this dynamic fails to address the limitations of the current dental workforce and does not expand the pool of providers. Dental hygienists, who tend to be disproportionately white, also tend not to come from the communities they serve. In Alaska, by contrast, over 90% of the students are AI/AN, and many grew up in the communities in which they now work. Dental therapists are able to build trust with their patients by using existing bonds with their patients or forming new bonds based upon a shared or similar background or community. This is not as easy to accomplish if the state enacts a hygiene license or a master's degree requirement. These requirements only serve to act as additional barriers for individuals wanting to serve as dental therapists in their home communities.

DIRECT SUPERVISION:

Potentially, the most essential benefit of dental therapy is that the workforce model increases the number of providers, which increases the number of patients receiving care in a community. A direct supervision requirement reduces that potential.

Under direct supervision, a dentist must approve and supervise a dental therapist's work at all times. Requiring direct supervision can be a significant burden on a dentist because he or she must oversee each action of the employee. This takes a serious amount of time – time that could be spent seeing other patients. More effective models would allow for dental therapists to work under general supervision, where a dentist is not physically present but is available for phone or video consultation. This has worked in Alaska. Of course, if the dentist chooses to, he or she is free to require direct supervision in the terms of employment when the dental therapist is hired. Tribes need to be careful that state legislation does not mandate direct supervision, but instead gives Tribal providers the flexibility they need to operate in rural settings, schools, elders' centers, and other places where a dentist cannot always be present.

ARBITRARY RESTRICTIONS:

Opponents of dental therapy have tried to limit its effectiveness by adding unnecessary and arbitrary restrictions on the practice. For example, when it became clear that the Arizona legislature was going to pass dental therapy, opponents tried to insert a provision requiring a dentist to be within ten miles of a dental therapist working in the field. Dental therapists have a strong track record in Alaska of working remotely with a dentist available for consultation over teleconference, phone, or email. The ten-mile requirement would not have had any benefit and would have stretched Tribal dentists even further than they already are. Tribal advocates in Arizona circulated a map of the state showing just how little territory on reservations lay within ten miles of a dental clinic and how many people that restriction would leave out. The idea was quickly dropped.

Tribes must be cognizant of any attempts to limit dental therapy's ability to meet their needs as legislation is crafted in their state capitol.

MEDICAID REIMBURSEMENT:

Setting up a new type of provider within a state is a time consuming process. Even after the law is enacted, rules and regulations need to be established, not the least of which are the rules governing the provider's relationship with the state's Medicaid agency. To ensure that opponents of Tribal dental therapy are not able to take advantage of the rulemaking process to implement unfavorable rules, the legislative language should specify that services provided by dental therapists are eligible for reimbursement from Medicaid at the same rate as those identical services performed by a dentist. In the American healthcare financing system, fees are provided according to the service, regardless of the licensed provider's specific credentials. So it is inappropriate for dental therapists to be reimbursed at a lower rate for performing a service as a dentist performing that same service, just as it is inappropriate for the state Medicaid agency to reimburse a dentist with a Doctorate of Dental

Surgery and a dentist with a specialization in orthodontic dentistry at different rates for the same service. Read more about this issue in Section VII, "Financial Sustainability: Third Party Billing on page 22."

RECIPROCITY:

As more states and Tribes incorporate dental therapists into their oral healthcare workforce, reciprocity will increase in importance. Reciprocity is when a state recognizes a license given by another state or Tribe as sufficient to obtain a license to practice within its borders. Since dental therapists in Alaska are working under the federal Community Health Aide Program (CHAP), their federal certificate is analogous to a license to provide services under that program. As states debate dental therapy, Tribes should seek to ensure that legislation includes a provision for reciprocity for licenses given by other states and Tribes that meet CODA standards, as well as reciprocity for dental therapists certified by and working for the Indian Health Service. This will also help Tribes find qualified dental therapists quickly after the state bill becomes law, but before state and Tribal education programs in the state are set up, as dental therapists trained in Alaska are a ready pool of potential employees.

Statute vs. Rulemaking

An issue concerning states as far as Tribal use of dental therapy is concerned is licensing. The state determines what healthcare provider types it will license to perform what services. Licensing regulations can be created in two different ways - by statue or by regulation.

When dental therapy licensure law is created by statute, the legislature has written the exact language that governs the licensure process. This means that advocates must succeed in convincing the legislature to craft the legal language Tribes need. Doing so would ensure that interests opposed to dental therapy cannot do much to affect the rules after the bill becomes law. In short, specific and detailed legislation removes ambiguity for both Tribes and anti-dental therapy interests. However, Tribes have more input in the open political process than they do in the closed rulemaking process.

Creating the licensure rules by regulation, in contrast, has the advantage of more flexibility. It is far easier to change a rule than to change a statute. However, the rule making body in many instances is the state's board of dentistry, which is usually dominated by dentists and often ignorant of Tribal oral health needs. Tribes in Maine have unfortunately seen advocacy campaigns lead to a bill passing and then become stymied in the rule making process as dental therapy opponents try to impose rules to ensure dental therapists cannot practice in the state.

Legislative Strategy

Overall, a Tribe's surest way to success at the state level is to engage their allies in the state legislature to write as specific a bill as possible to limit the amount of rulemaking required, while still ensuring that the language gives Tribes the tools they need. In states with multiple Tribes, the Tribes should come together as a group and work together to advance a dental

Minnesota clinics such as the Native American Community Clinic in Minneapolis have been able to employ dental therapists since 2014.

therapy bill with a unified message. Tribes should then engage with the legislature as a whole and demonstrate the need for improved oral health care on reservations and how dental therapy can meet that need. In state after state, dental therapy campaigns have become increasingly informed on the unique needs in Indian Country. In many states, such as New Mexico, Arizona, and Washington Tribes are at the forefront of the campaigns.

Over the years, Tribal leaders have been champions for their people's oral health. Armed with data on oral health disparities, stories of inadequate care from their people, and a strong desire for change, Tribal leaders themselves have time and again taken to state legislatures as part of this campaign to advocate for their people. State lawmakers often develop a rapport with the Tribal leaders in their district in order to get a firmer grasp on the issue. Active involvement from Tribal leaders has the potential to shape the conversation to health equity on sovereign grounds and pay dividends for the Tribe in the form of strengthened understanding of Tribal needs at the state capitol.

RECOMMENDATIONS:

Decide with the rest of your Tribe's leadership the best path to take in bringing dental therapy to your Tribe. Knowing the Tribe's administrative capacity and its relations with the state government will help. If the Tribe chooses to pursue the state advocacy route, both working with state lawmakers to ensure the dental therapy law is written in a way that allows your Tribe to hire dental therapists and working within the state rulemaking process to ensure the regulations put in place after the law is enacted do not harm Tribes will be necessary.

Governor Jay Inslee signs Washington State's Tribal Dental Therapy Bill into Law, February 22, 2017.

Implementing Independent Tribal Licensing: The Swinomish Story

Complying with state employment law is not the only way a Tribe can hire a dental therapist. As discussed previously, federal law appears to prohibit Tribes from using dental therapy without state permission under the Community Health Aide Program. However, this provision is not an insurmountable barrier. Many Tribes have succeeded by advocating for their rights at the state level. One Tribe brought dental therapy to its reservation through sheer force of will.

Swinomish Indian Tribal Community in Washington State, wanted to gain control over its oral health crisis. The trailer serving as the Tribe's dental clinic did not offer sufficient space or equipment for the oral healthcare provider team to meet the Tribe's needs. People were going without the care they needed. While many of the Tribe's citizens receive Medicaid, only one in four Washington State dentists accepted Medicaid, so many members could not even access treatment outside of the Tribal facilities.

Since hiring their first dental therapist in January 2016, Swinomish has seen an increase in the number of patients seen, while at the same time decreasing its wait time by over four weeks on average.

The Tribal Chairman saw the success of dental therapy in Alaska and wanted to bring it to his Tribe. The Tribe was not limited by federal law because it was not served by the Community Health Aide Program (the umbrella program for dental therapists in Alaska), thus, it could create its own licensing board and license its own dental therapists independent of CHAP without federal or state permission. The Chairman also worked tirelessly to leverage national Tribal organizations and draw attention from across the country to his Tribe's efforts.

Licensing boards are typically state-run entities that issue licenses for specific professions. While this is traditionally a role for state governments, Swinomish used its sovereignty to create its own dental licensing board, something all Tribes have the right to do. However, creating a licensing board is no easy feat, and many Tribes may not have the capacity to undertake such steps in order to license their own

Rachael Hogan, DDS, is the Swinomish Tribe's head dentist.

providers. However, the leaders and providers at Swinomish pushed tirelessly to establish the Tribal board, ensuring that the Tribe's standards mirrored the CODA standards. This multi-year effort included a thorough examination of Alaska's dental therapy program and the Swinomish Tribe's oral health needs. They discovered that the majority of patient need in their community could be met with a dental therapist, and the Tribe's dentist would be free to focus on the remaining, more complicated cases.

The Tribe hired its first dental therapist in January 2016. The results since then have been impressive. Since hiring their first dental therapist in January 2016, Swinomish has seen an increase in the number of patients seen, while at the same time decreasing its wait time by over four weeks on average.

The Tribe's dentists are able to work at the top of their scope of practice, focusing on the patients with the most complex needs – seeing a 50% increase in the number of crowns , bridges, and partials performed.[11]

As of the end of 2018, Swinomish plans to hire two more dental therapists and expand its dental clinic to include more chairs. The Tribe has also entered into a collaborative effort with Skagit Valley College, a local community college, to develop a dental therapy training curriculum based on the program in Alaska.

RECOMMENDATIONS:

If a Tribe is interested in creating or expanding its own licensing board to license its own dental therapists, examine the Swinomish Tribe's experiences and the lessons learned throughout their process.

Tribal leadership should conduct an honest assessment of the Tribe's ability to establish and maintain a dental professional licensing board. These boards can take years to establish and require a significant time commitment. Working with the state government to establish a Tribal board is not required, but may make the process progress more smoothly.

The Tribe should also examine the CODA standards (Appendix A) to ensure that the Tribal dental licensing board has the same requirements.

11 Interview with John Stephens, Chief Executive Officer, Swinomish Indian Tribal Community. September 18, 2018.

Developing the Workforce: Keeping Students Close to Home

In part because of Ilisagvik College's culturally competent curriculum, in part because the students are learning about how to serve their own communities and families, and in part because of the students' drive to succeed, the Alaska Dental Therapy Education Program has a retention rate of 73%, twice as high as the typical two-year community college.[12]

In addition to establishing a structured legal framework to employ dental therapists, a Tribe must also consider the personnel it wishes to recruit. To ensure that dental therapists are brought to the Tribe without wasting too much time, the Tribe might consider developing a pool of potential dental therapists while it is also establishing the framework through either its own licensure board or working with the state government, as discussed previously. That means ensuring a potential student is well on his or her way to an available education program.

To practice as a licensed provider of oral healthcare in most states, one must receive a degree of certification from an educational institution that is either accredited by the Commission on Dental Accreditation (CODA) or uses equivalent standards.

In 2015, CODA recognized that the dental therapy model was becoming more understood and more popular. The Commission created standards for educational institutions offering dental therapy programs (see Appendix A).

The CODA standards for dental therapy require a student to complete a three academic year program, including didactic and clinical work. The standards do not mandate a degree conferred to graduates of the program nor do they require a postsecondary degree as a condition of entry to a dental therapy program.

The Dental Therapy Education Program in Alaska has offered a dental therapy education program since 2006, and partnered with a Tribal higher education institution, Ilisagvik College, to provide this curriculum. Prior to this, the only option for students wishing to become dental therapists was to study abroad, usually in New Zealand. While Tribes in Alaska now have access to a program closer to home, thanks to the efforts of many educators there, several

Tribes in the Lower 48 are looking at ways to keep their own students in their own communities.

Appendix B of this guide includes a sample curriculum for community colleges wanting to offer dental therapy education programs. This curriculum may be useful if a Tribe has a college or university, or works closely with local college or university.

While community colleges offering these programs would provide Native students with an opportunity to become a dental therapists and serve their community, Tribes may find even more potential in creating these programs at Tribal colleges and universities.

In the meantime, Tribes that are nearing implementation of dental therapy on their reservations have found success in sponsoring students to attend the two-year program at Ilisagvik College in Alaska in exchange for a guarantee of a certain number of years serving the Tribe as a dental therapist. The estimated cost of this sponsorship is $200,000 per student for the entire program, including tuition, housing, and other costs of living. As you can read in the next section, "Financial Sustainability: Third Party Billing," many dentists employing dental therapists have found that they bring in much more money than the cost to employ them, so the Tribe could see a return on its investment in as few as two years.

In part because of Ilisagvik College's culturally competent curriculum, in part because the students are learning about how to serve their own communities and families, and in part because of the students' drive to succeed, the Alaska Dental Therapy Education Program has a retention rate of 73%, twice as high as the typical two-year community college.[12]

As of the end of 2018, Ilisagvik College was in the process of obtaining CODA accreditation. Once that

college is successful, Tribal colleges will be able to replicate and adapt the Alaska Dental Therapy Education Program to best serve their own needs. As more institutions apply for dental therapy accreditation, the process will become more standardized and adaptable for Tribes nationwide. Tribes with their own colleges could potentially recruit dental therapists from their own community, train them in a local setting, and expand care within their own community.

12 Interview with Dr. Mary Williard, Alaska Native Tribal Health Consortium. August 1, 2018

How Dental Therapists Keep Roots in Their Communities

The crucial tool that dental therapists utilize every day in caring for their patients is cultural competency. Because the education standards make dental therapy an accessible career path for members of Tribal communities, the dental therapists often return to their homes and families, treating people they have known for their entire lives.

Shannon Hardy, a dental therapist working in her town of Fort Yukon, was so invested in her Alaskan Native community's wellbeing that she actively engaged with the schools to try and develop a system for her team to provide care and oral health education for all the children at the school with minimal disruption for the students. When the school board resisted, she didn't give up. She felt such a strong investment in her community and the wellbeing of the children that she ran for a seat on the school board and won. She leveraged her leadership as part of the board, and is now able to offer her services to over 300 children.

RECOMMENDATIONS:

Tribes should consider sponsoring local community members to become a certified Dental Health Aide Therapist through the Alaska certification program. An arrangement could be made for the Tribe to pay for the student's educational expenses in exchange for a length of time working for the Tribe's oral health department. Other dental therapy programs will be accepting students as soon as 2020, so keeping the student even closer to home will soon be a possibility.

If the Tribe has a college or university interested in a dental therapy program, see Appendix B for a sample curriculum that follows the CODA standards. The application process to obtain accreditation can be time and resource consuming, so the Tribe might consider applying for an oral health workforce grant from the federal Health Resources and Services Administration. Vermont Technical College was awarded such a grant to develop its dental therapy curriculum and expects to begin educating students in 2020.

Financial Sustainability: Third Party Billing

Once students are certified by CHAP or licensed by the state or Tribe, they can begin practicing as part of the Tribe's oral health care team. Many Tribes utilizing dental therapy as part of their self-governance contracts or compacts have been able to provide a financially sustainable dental workforce because of third party billing. When a Tribal member shows up to the dental clinic for an appointment, IHS funding pays for the service only if no other funding stream is available. If the patient receives Medicaid, Tricare, or has private insurance or another form of coverage, the dental clinic submits a claim for reimbursement.

Tribes and private practices employing dental therapists have experienced significant savings, in addition to the other benefits dental therapists bring. On average, dental therapists in Alaska bring in $150,000 to $250,000 more per year than it costs to employ them. This leads to significant cost savings, which allows the Tribes to reinvest the savings to address other areas of need or hire more dental therapists to see more new patients, creating a cycle of sustainability.[13]

...in Alaska, each dental therapist saves the system $40,000 per year in patient travel because patients no longer have to travel for routine dental care.

It is also worth noting that in Alaska, each dental therapist saves the system $40,000 per year in patient travel because patients no longer have to travel for routine dental care. Access to more preventive care means that problems are caught and treated before they become emergencies - the Alaska Native health system thusly has to pay for fewer emergency airlifts. Norton Sound Health Corporation reported that one village saw a decrease in patient travel from the village to the regional hub by over 75% after a dental therapist began serving the village.[14]

13 "Expanding the Dental Team: Increasing Access to Care in Public Settings." Pew Charitable Trusts. June 2014. https://www.pewtrusts.org/~/media/assets/2014/06/27/expanding_dental_case_studies_report.pdf

14 Ibid.

Issues to Be Aware of

Oral Health is often separated from other healthcare policy areas, and because of this many state Medicaid programs do not prioritize preventative oral health services.

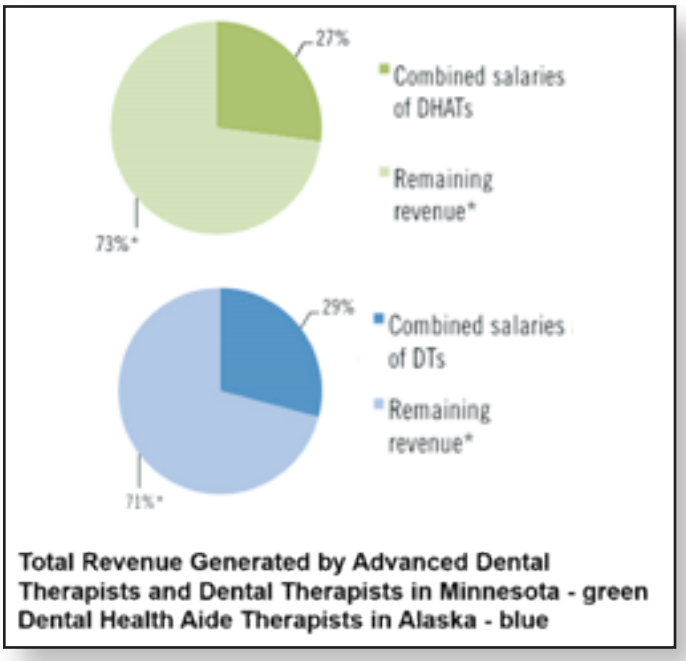
Some states will want to reimburse a service performed by a midlevel provider at a lower rate than the same service performed by a dentist.

While transportation costs in Alaska are understandably high, many Tribes with large, rural reservations would see cost savings related to transportation if they hired dental therapists due to fewer emergency visits.

Because Medicaid is a state-run program, Tribes implementing dental therapy will have to work with their states to ensure the services provided by a Tribal dental therapist are reimbursable. This process can take months and could potentially be influenced by a state's history with Tribal Nations and its relationships with individual Tribes. The state also must submit a state plan amendment to the federal government for approval that outlines the services to be performed by a dental therapist that Medicaid would cover.

RECOMMENDATIONS:

A Tribe's capacity to bill for third party revenue will greatly increase dental therapy's success. Building out that capacity is a good step to take for the Tribe's fiscal soundness. Additionally, a Tribe should work with the state to submit a state plan amendment to the federal government so that dental therapists can have their services reimbursed by Medicaid. Remember that the amendment must be approved by the federal government, and so Tribes should plan on providing ample time for that approval process to take place.



Total Revenue Generated by Advanced Dental Therapists and Dental Therapists in Minnesota - green Dental Health Aide Therapists in Alaska - blue

Report conducted by Dr. Frances M. Kim, May 2013. http://www.communitycatalyst.org/doc_store/publications/economic-viability-dental-therapists.pdf

Integrating Dental Therapists into Your Tribe's Oral Healthcare Team

...dental therapists are safe and reliable health care providers.[15]

In thinking long-term, Tribal leaders and health directors need to ensure that dental therapists are productive and integral components of the Tribe's oral healthcare team, which can also include dentists, dental assistants, hygienists, health educators, and care coordinators. As Tribes in Alaska and the Pacific Northwest continue to experience success with dental therapy, dentists in Tribal leaders and stakeholders have learned more and more about the model. Guaranteeing that dentists working for the Tribe are comfortable operating an oral healthcare team that includes dental therapists is essential.

There are special interest groups that erroneously oppose the implementation of dental therapy, due to misinformation about dental therapy's record of patient care, invalid concerns about competition with dentists, and misguided motives about Indian Country's oral health needs. Despite this obstacle, many Tribal dentists have become champions of dental therapy. A dentist with the Swinomish Indian Tribal Community has been an enthusiastic supporter of her Tribe's dental therapy program for years. Her dedication to expanded oral healthcare access made the process of hiring a dental therapist smooth and created a positive work environment – both of which have certainly impacted the therapist decision to remain working with the Tribe. Ensuring a Tribe hires a dentist willing to work with a dental therapist, or earning the support of the dentist already working for a Tribe before hiring a dental therapist is critical.

Dentists may feel more comfortable with dental therapists if they are involved in the decision making process from its initiation. This will give dentists time to process and address any concerns. One issue frequently brought up is liability. Because dental therapists work under dentists, the dentist is liable for any action performed by a dental therapist. As evidence from Minnesota shows, dental therapists are

safe and reliable health care providers[15]. The Federal Tort Claims Act covers health providers working in Tribal health programs, which removes concerns over the dentist's liability. This law offers protection from personal liabilities for federal and Tribal health providers acting within their scope: a dentist working for the Indian Health Service or a Tribe is not personally liable for the actions of any provider working under him or her. Giving dentists the time they need to understand the protections offered to them as a Tribal or federal employee is a productive investment to make before hiring a dental therapist.

It is realistic to expect that a dentist will need to spend time mentoring a dental therapist before he or she can practice independently. This time can ensure not only comfort with skill sets, scopes of work, job expectations, and departmental culture, but also build a level of comfort between the two providers. "Giving the Tribal dentist time to get comfortable with the dental therapist they will be working with improves morale and gives the dentist a sense of buy-in," says Dane Lenaker DMD, MPH, with the Southeast Alaska Regional Health Consortium. Dr. Lenaker has conducted extensive research on dental therapy's impact in Alaska Native communities.

15 Wovcha, S., Pietig, E. Dental Therapy in MN: A Study of Quality and Efficiency Outcomes. 2015.

Dentists may also need flexibility from Tribal leadership in the operation of the dental program. Because dental therapists work under a dentist, the dentist can determine the settings (such as clinics, schools, and elder centers) and the services the dental therapist can perform. Tribal leaders would be well advised to involve their dentists early in the conversation around oral health care access to ensure their level of comfort is sufficient for a smooth integration of dental therapists.

RECOMMENDATIONS:

Tribal leadership should involve the Tribe's head dentist as much as possible in the process of hiring a dental therapist. Allow the Tribe's dentist time to get comfortable with the idea of dental therapy and with working with new dental therapists as part of their team. Tribal leadership should also ensure the dentist understands the relevant federal liability laws and the Tribe's framework for employing dental therapists. The dentist should feel supported by the Tribe's leadership and given space to ensure the oral health team is up to the dentist's standards.

Conclusion

The National Indian Health Board was formed in 1972 by the Tribes to be their national advocate on matters of health. Tribes in Alaska and elsewhere have seen remarkable success in restoring their people's oral health through the use of dental therapists. This guide is intended to provide Tribal leadership with the tools they need to bring dental therapy to their communities.

For more information, please visit the National Indian Health Board's Tribal Oral Health Initiative webpage at www.nihb.org/oralhealthinitiative.

Please contact NIHB at bweber@nihb.org with any questions related to this guide or the Tribal Oral Health Initiative.

APPENDIX A: CODA Accreditation Standards

Accreditation Standards for Dental Therapy Education Programs

Commission on Dental Accreditation
211 East Chicago Avenue
Chicago, Illinois 60611-2678
(312) 440-4653
www.ada.org/en/coda

Effective: February 6, 2015

Definition of Terms Used in Accreditation Standards for Dental Therapy Education Programs

The terms used in this document indicate the relative weight that the Commission attaches to each statement. Definitions of these terms are provided.

Standard: Offers a rule or basis of comparison established in measuring or judging capacity, quantity, quality, content and value; criterion used as a model or pattern.

Must: Indicates an imperative need or a duty; an essential or indispensable item; mandatory.

Should: Indicates an expectation.

Intent: Intent statements are presented to provide clarification to dental therapy education programs in the application of, and in connection with, compliance with the *Accreditation Standards for Dental Therapy Education Programs*. The statements of intent set forth some of the reasons and purposes for the particular Standards. As such, these statements are not exclusive or exhaustive. Other purposes may apply.

Examples of evidence to demonstrate compliance include: Desirable condition, practice or documentation indicating the freedom or liberty to follow a suggested alternative.

Understanding: Knowledge and recognition of the principles and procedures involved in a particular concept or activity.

In-depth: Characterized by a thorough knowledge of concepts and theories for the purpose of critical analysis and the synthesis of more complete understanding (highest level of knowledge).

Competent: The levels of knowledge, skills and values required by the new graduates to begin dental therapy practice.

Competencies: Written statements describing the levels of knowledge, skills and values expected of graduates.

Instruction: Describes any teaching, lesson, rule or precept; details of procedure; directives.

Dental Therapy: Denotes education and training leading to dental therapy practice.

Community-based experience: Refers to educational opportunities for dental therapy students to provide patient care in community-based clinics or private practices under the supervision of faculty licensed to perform the treatment in accordance with the state dental practice act. Community-based experiences are not intended to be synonymous with community service

activities where dental therapy students might go to schools to teach preventive techniques or where dental therapy students help build homes for needy families.

Evidence-based dentistry (EBD): An approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the clinician's expertise and the patient's treatment needs and preferences.

Patients with special needs: Those patients whose medical, physical, psychological, cognitive or social situations make it necessary to consider a wide range of assessment and care options in order to provide dental treatment. These individuals include, but are not limited to, people with developmental disabilities, cognitive impairment, complex medical problems, significant physical limitations, and the vulnerable elderly.

Quality assurance: A cycle of PLAN, DO, CHECK, ACT that involves setting goals, determining outcomes, and collecting data in an ongoing and systematic manner to measure attainment of goals and outcomes. The final step in quality assurance involves identification and implementation of corrective measures designed to strengthen the program.

Service learning: A structured experience with specific learning objectives that combines community service with academic preparation. Students engaged in service learning learn about their roles as dental therapists through provision of patient care and related services in response to community-based problems.

Advanced Standing: Programs and their sponsoring institutions are encouraged to provide for 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.

Advanced standing means the program has the authority to grant full or partial course credit for a specific course toward the completion of the dental therapy program. This may apply to one or more courses in the dental therapy program curriculum.

Humanistic Environment: Dental therapy programs are societies of learners, where graduates are prepared to join a learned and a scholarly society of oral health professionals. A humanistic pedagogy inculcates respect, tolerance, understanding, and concern for others and is fostered by mentoring, advising and small group interaction. A dental therapy program environment characterized by respectful professional relationships between and among faculty and students establishes a context for the development of interpersonal skills necessary for learning, for patient care, and for making meaningful contributions to the profession.

STANDARD 1-INSTITUTIONAL EFFECTIVENESS

1-1 The program **must** develop a clearly stated purpose/mission statement appropriate to dental therapy education, addressing teaching, patient care, research and service.

Intent: *A clearly defined purpose and a mission statement that is concise and communicated to faculty, staff, students, patients and other communities of interest is helpful in clarifying the purpose of the program.*

1-2 Ongoing planning for, assessment of and improvement of educational quality and program effectiveness **must** be broad-based, systematic, continuous, and designed to promote achievement of institutional goals related to institutional effectiveness, student achievement, patient care, research, and service.

Intent: *Assessment, planning, implementation and evaluation of the educational quality of a dental therapy education program that is broad-based, systematic, continuous and designed to promote achievement of program goals will maximize the academic success of the enrolled students. The Commission on Dental Accreditation expects each program to define its own goals and objectives for preparing individuals for the practice of dental therapy.*

Examples of evidence to demonstrate compliance may include:

- program completion rates
- employment rates
- success of graduates on licensing examinations
- surveys of alumni, students, employers, and clinical sites
- other benchmarks or measures of learning used to demonstrate effectiveness
- examples of program effectiveness in meeting its goals
- examples of how the program has been improved as a result of assessment
- ongoing documentation of change implementation
- mission, goals and strategic plan document
- assessment plan and timeline

1-3 The dental therapy education program **must** have a stated commitment to a humanistic culture and learning environment that is regularly evaluated.

Intent: *The dental therapy education program should ensure collaboration, mutual respect, cooperation, and harmonious relationships between and among administrators, faculty, students, staff, and alumni. The program should also support and cultivate the development of professionalism and ethical behavior by fostering diversity of faculty, students, and staff, open communication, leadership, and scholarship.*

Examples of evidence to demonstrate compliance may include:

- Established policies regarding ethical behavior by faculty, staff and students that are regularly reviewed and readily available
- Student, faculty, and patient groups involved in promoting diversity, professionalism and/or leadership support for their activities
- Focus groups and/or surveys directed towards gathering information on student, faculty, patient, and alumni perceptions of the cultural environment

1-4 The program **must** have policies and practices to:

a. achieve appropriate levels of diversity among its students, faculty and staff;
b. engage in ongoing systematic and focused efforts to attract and retain students, faculty and staff from diverse backgrounds; and
c. systematically evaluate comprehensive strategies to improve the institutional climate for diversity.

Intent: *The program should develop strategies to address the dimensions of diversity including, structure, curriculum and institutional climate. The program should articulate its expectations regarding diversity across its academic community in the context of local and national responsibilities, and regularly assess how well such expectations are being achieved. Programs could incorporate elements of diversity in their planning that include, but are not limited to, gender, racial, ethnic, cultural and socioeconomic. Programs should establish focused, significant, and sustained programs to recruit and retain suitably diverse students, faculty, and staff.*

1-5 The financial resources **must** be sufficient to support the program's stated purpose/mission, goals and objectives.

Intent: *The institution should have the financial resources required to develop and sustain the program on a continuing basis. The program should have the ability to employ an adequate number of full-time faculty, purchase and maintain equipment; procure supplies, reference material and teaching aids as reflected in an annual operating budget. Financial resources should ensure that the program will be in a position to recruit and retain qualified faculty. Annual appropriations should provide for innovations and changes necessary to reflect current concepts of education in the discipline. The Commission will assess the adequacy of financial support on the basis of current appropriations and the stability of sources of funding for the program.*

Examples of evidence to demonstrate compliance may include:

- program's mission, goals, objectives and strategic plan
- institutional strategic plan
- revenue and expense statements for the program for the past three years
- revenue and expense projections for the program for the next three years

1-6 The program **must** be a recognized entity within the institution's administrative structure which supports the attainment of program goals.

Intent: *The position of the program in the institution's administrative structure should permit direct communication between the program administrator and institutional administrators who are responsible for decisions that directly affect the program. The administration of the program should include formal provisions for program planning, staffing, management, coordination and evaluation.*

Examples of evidence to demonstrate compliance may include:

- institutional organizational flow chart
- short and long-range strategic planning documents
- examples of program and institution interaction to meet program goals
- dental therapy representation on key college or university committees

1-7 Programs **must** be sponsored by institutions of higher education that are accredited by an institutional accrediting agency (i.e., a regional or appropriate* national accrediting agency) recognized by the United States Department of Education for offering college-level programs.

* Agencies whose mission includes the accreditation of institutions offering allied health education programs.

1-8 All arrangements with co-sponsoring or affiliated institutions **must** be formalized by means of written agreements which clearly define the roles and responsibilities of each institution involved.

Examples of evidence to demonstrate compliance may include:

- affiliation agreement(s)

1-9 The sponsoring institution **must** ensure that support from entities outside of the institution does not compromise the teaching, clinical and research components of the program.

Examples of evidence to demonstrate compliance may include:

- Written agreement(s)
- Contracts between the institution/ program and sponsor(s) (For example: contract(s)/agreement(s) related to facilities, funding, faculty allocations, etc.)

1-10 The authority and final responsibility for curriculum development and approval, student selection, faculty selection and administrative matters **must** rest within the sponsoring institution.

1-11 The program **must** show evidence of interaction with other components of the higher education, health care education and/or health care delivery systems.

Community Resources

1-12 There **must** be an active liaison mechanism between the program and the dental and allied dental professions in the community.

Intent: *The purpose of an active liaison mechanism is to provide a mutual exchange of information for improving the program, recruiting qualified students and meeting employment needs of the community. The responsibilities of the advisory body should be defined in writing and the program director, faculty, and appropriate institution personnel should participate in the meetings as non-voting members to receive advice and assistance.*

Examples of evidence to demonstrate compliance may include:

- policies and procedures regarding the liaison mechanism outlining responsibilities, appointments, terms and meetings
- membership list with equitable representation if the group represents more than one discipline
- criteria for the selection of advisory committee members
- an ongoing record of committee or group minutes, deliberations and activities

STANDARD 2-EDUCATIONAL PROGRAM

The dental therapist is a member of the oral healthcare team. The curriculum for dental therapy programs will support the overall education, training and assessment to a level of competency within the scope of dental therapy practice.

2-1 The curriculum **must** include at least three academic years of full-time instruction or its equivalent at the postsecondary college-level.

Intent: *The scope and depth of the curriculum should reflect the objectives and philosophy of higher education. The time necessary for psychomotor skill development and the number of required content areas require three academic years of study and is considered the minimum preparation for a dental therapist. This could include documentation of advanced standing. However, the curriculum may be structured to provide opportunity for students who require more time to extend the length of their instructional program.*

Examples of evidence to demonstrate compliance may include:

- copies of articulation agreements
- curriculum documents
- course evaluation forms and summaries
- records of competency examinations
- college catalog outlining course titles and descriptions
- documentation of advanced standing requirements

2-2 The stated goals of the program **must** be focused on educational outcomes and define the competencies needed for graduation, including the preparation of graduates who possess the knowledge, skills and values to begin the practice of dental therapy.

2-3 The program **must** have a curriculum management plan that ensures:

a. an ongoing curriculum review and evaluation process which includes input from faculty, students, administration and other appropriate sources;
b. evaluation of all courses with respect to the defined competencies of the school to include student evaluation of instruction;
c. elimination of unwarranted repetition, outdated material, and unnecessary material;
d. incorporation of emerging information and achievement of appropriate sequencing.

2-4 The dental therapy education program **must** employ student evaluation methods that measure its defined competencies and are written and communicated to the enrolled students.

Intent: *Assessment of student performance should measure not only retention of factual knowledge, but also the development of skills, behaviors, and attitudes needed for subsequent education and practice. The evaluation of competence is an ongoing process that requires a variety of assessments that can measure not only the acquisition of knowledge and skills but also assess the process and procedures which will be necessary for entry level practice.*

2-5 In advance of each course or other unit of instruction, students **must** be provided written information about the goals and requirements of each course, the nature of the course content, the method(s) of evaluation to be used, and how grades and competency are determined.

Intent: *The program should identify the dental therapy fundamental knowledge and competencies that will be included in the curriculum based on the program goals, resources, current dental therapy practice responsibilities and other influencing factors. Individual course documentation needs to be periodically reviewed and revised to accurately reflect instruction being provided as well as new concepts and techniques taught in the program.*

2-6 Academic standards and institutional due process policies and procedures **must** be provided in written form to the students and followed for remediation or dismissal.

Intent: *If a student does not meet evaluation criteria, provision should be made for remediation or dismissal. On the basis of designated criteria, both students and faculty can periodically assess progress in relation to the stated goals and objectives of the program.*

Examples of evidence to demonstrate compliance may include:

- written remediation policy and procedures
- records of attrition/retention rates related to academic performance
- institutional due process policies and procedures

2-7 Graduates **must** demonstrate the ability to self-assess, including the development of professional competencies related to their scope of practice and the demonstration of professional values and capacities associated with self-directed, lifelong learning.

Intent: *Educational program should prepare students to assume responsibility for their own learning. The education program should teach students how to learn and apply evolving and new knowledge over a complete career as a health care professional. Lifelong learning skills include student assessment of learning needs.*

Examples of evidence to demonstrate compliance may include:

- Students routinely assess their own progress toward overall competency and individual competencies as they progress through the curriculum
- Students identify learning needs and create personal learning plans
- Students participate in the education of others, including fellow students, patients, and other health care professionals, that involves critique and feedback

2-8 Graduates **must** be competent in the use of critical thinking and problem-solving, related to the scope of dental therapy practice including their use in the care of patients and knowledge of when to consult a dentist or other members of the healthcare team.

Intent: *Throughout the curriculum, the educational program should use teaching and learning methods that support the development of critical thinking and problem solving skills.*

Examples of evidence to demonstrate compliance may include:

- Explicit discussion of the meaning, importance, and application of critical thinking
- Use of questions by instructors that require students to analyze problem etiology, compare and evaluate alternative approaches, provide rationale for plans of action, and predict outcomes
- Prospective simulations in which students perform decision-making
- Retrospective critiques of cases in which decisions are reviewed to identify errors, reasons for errors, and exemplary performance
- Writing assignments that require students to analyze problems and discuss alternative theories about etiology and solutions, as well as to defend decisions made
- Asking students to analyze and discuss work products to compare how outcomes correspond to best evidence or other professional standards

Curriculum

2-9 The curriculum **must** include content that is integrated with sufficient depth, scope, sequence of instruction, quality and emphasis to ensure achievement of the curriculum's defined competencies in the following three areas: general education, biomedical sciences, and dental sciences (didactic and clinical).

Intent: *Foundational knowledge should be established early in the dental therapy program and be of appropriate scope and depth to prepare the student to achieve competence in defined components of dental therapy practice. Content identified in each subject may not necessarily constitute a separate course, but the subject areas are included within the curriculum.*

Curriculum content and learning experiences should provide the foundation for continued formal education and professional growth with a minimal loss of time and duplication of learning experiences. General education, social science, and biomedical science courses included in the curriculum should be taught at the postsecondary level.

Programs and their sponsoring institutions are encouraged to provide for 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) that results in advanced standing permitted for dental hygienists or dental assistants.

2-10 General education content **must** include oral and written communications, psychology, and sociology.

Intent: *These subjects provide prerequisite background for components of the curriculum, which prepare the students to communicate effectively, assume responsibility for individual oral health counseling, and participate in community health programs.*

2-11 Biomedical science instruction in dental therapy education **must** ensure an understanding of basic biological principles, consisting of a core of information on the fundamental structures, functions and interrelationships of the body systems in each of the following areas:

a. head and neck and oral anatomy
b. oral embryology and histology
c. physiology
d. chemistry
e. biochemistry
f. microbiology
g. immunology
h. general pathology and/or pathophysiology
i. nutrition
j. pharmacology

Intent: *These subjects provide background for both didactic and clinical dental sciences. The subjects are to be of the scope and depth comparable to college transferable liberal arts course work. The program should ensure that biomedical science instruction serves as a foundation for student analysis and synthesis of the interrelationships of the body systems when making decisions regarding oral health services within the context of total body health. The biomedical knowledge base emphasizes the orofacial complex as an important anatomical area existing in a complex biological interrelationship with the entire body.*

Dental therapists need to recognize abnormal conditions to understand the parameters of dental therapy care. The program should ensure that graduates have the level of understanding that assures that the health status of the patient will not be compromised by the dental therapy interventions.

2-12 Didactic dental sciences content **must** ensure an understanding of basic dental principles, consisting of a core of information in each of the following areas within the scope of dental therapy:

a. tooth morphology
b. oral pathology
c. oral medicine
d. radiology
e. periodontology
f. cariology
g. atraumatic restorative treatment (ART)
h. operative dentistry
i. pain management
j. dental materials
k. dental disease etiology and epidemiology
l. preventive counseling and health promotion
m. patient management
n. pediatric dentistry
o. geriatric dentistry
p. medical and dental emergencies
q. oral surgery
r. prosthodontics
s. infection and hazard control management, including provision of oral health care services to patients with bloodborne infectious diseases.

Intent: *These subjects provide the student with knowledge of oral health and disease as a basis for assuming responsibility for implementing preventive and therapeutic services. Teaching methodologies should be utilized to assure that the student can assume responsibility for the assimilation of knowledge requiring judgment, decision making skills and critical analysis.*

2-13 Graduates **must** be competent in managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment.

Intent: *Students should learn about factors and practices associated with disparities in health status among populations, including but not limited to, racial, ethnic, geographic, or socioeconomic groups. In this manner, students will be best prepared for dental therapy practice in a diverse society when they learn in an environment characterized by, and supportive of, diversity and inclusion. Such an environment should facilitate dental therapy education in:*

- *basic principles of culturally competent health care;*
- *recognition of health care disparities and the development of solutions;*
- *the importance of meeting the health care needs of dentally underserved populations, and;*
- *the development of core professional attributes, such as altruism, empathy, and social accountability, needed to provide effective care in a multi-dimensionally diverse society.*

Dental therapists should be able to effectively communicate with individuals, groups and other health care providers. The ability to communicate verbally and in written form is basic to the safe and effective provision of oral health services for diverse populations. Dental therapists should recognize the cultural influences impacting the delivery of health services to individuals and communities (i.e. health status, health services and health beliefs).

Examples of evidence to demonstrate compliance may include:

- student projects demonstrating the ability to communicate effectively with a variety of individuals and groups.
- examples of individual and community-based oral health projects implemented by students during the previous academic year
- evaluation mechanisms designed to monitor knowledge and performance

2-14 Graduates **must** be competent in communicating and collaborating with other members of the health care team to facilitate the provision of health care.

Intent: *Students should understand the roles of members of the health care team and have educational experiences, particularly clinical experiences, that involve working with other healthcare professional students and practitioners. Students should have educational experiences in which they participate in the coordination of patient care within the health care system relevant to dentistry.*

Ethics and Professionalism

2-15 Graduates **must** be competent in the application of the principles of ethical decision making and professional responsibility.

Intent: *Graduates should know how to draw on a range of resources, among which are professional codes, regulatory law, and ethical theories. These resources should pertain to the academic environment, patient care, practice management and research. They should guide judgment and action for issues that are complex, novel, ethically arguable, divisive, or of public concern.*

2-16 Graduates **must** be competent in applying legal and regulatory concepts to the provision and/or support of oral health care services.

Intent: *Dental therapists should understand the laws which govern the practice of the dental profession. Graduates should know how to access licensure requirements, rules and regulations, and state practice acts for guidance in judgment and action.*

Examples of evidence to demonstrate compliance may include:

- evaluation mechanisms designed to monitor knowledge and performance concerning legal and regulatory concepts
- outcomes assessment mechanisms

Clinical Sciences

2-17 Graduates **must** be able to access, critically appraise, apply, and communicate information as it relates to providing evidence-based patient care within the scope of dental therapy practice.

Intent: *The education program should introduce students to the basic principles of research and its application for patients.*

2-18 The program **must** ensure the availability of adequate patient experiences that afford all students the opportunity to achieve its stated competencies within a reasonable time.

Intent: *Sufficient practice time and learning experiences should be provided during preclinical and clinical courses to ensure that students attain clinical competence.*

Examples of evidence to demonstrate compliance may include:

- program clinical experiences
- patient tracking data for enrolled and past students
- policies regarding selection of patients and assignment of procedures
- monitoring or tracking system protocols
- clinical evaluation system policy and procedures demonstrating student competencies
- clinic schedules for each term

2-19 Graduates **must** be competent in providing oral health care within the scope of dental therapy to patients in all stages of life.

The dental therapist provides care with supervision at a level specified by the state dental practice act. The curriculum for dental therapy programs will support the following competencies within the scope of dental therapy practice.

2-20 At a minimum, graduates **must** be competent in providing oral health care within the scope of dental therapy practice with supervision as defined by the state practice acts, including:

a. identify oral and systemic conditions requiring evaluation and/or treatment by dentists, physicians or other healthcare providers, and manage referrals
b. comprehensive charting of the oral cavity
c. oral health instruction and disease prevention education, including nutritional counseling and dietary analysis
d. exposing radiographic images
e. dental prophylaxis including sub-gingival scaling and/or polishing procedures
f. dispensing and administering via the oral and/or topical route non-narcotic analgesics, anti-inflammatory, and antibiotic medications as prescribed by a licensed healthcare provider
g. applying topical preventive or prophylactic agents (i.e. fluoride) , including fluoride varnish, antimicrobial agents, and pit and fissure sealants
h. pulp vitality testing

i. applying desensitizing medication or resin
j. fabricating athletic mouthguards
k. changing periodontal dressings
l. administering local anesthetic
m. simple extraction of erupted primary teeth
n. emergency palliative treatment of dental pain limited to the procedures in this section
o. preparation and placement of direct restoration in primary and permanent teeth
p. fabrication and placement of single-tooth temporary crowns
q. preparation and placement of preformed crowns on primary teeth
r. indirect and direct pulp capping on permanent teeth
s. indirect pulp capping on primary teeth
t. suture removal
u. minor adjustments and repairs on removable prostheses
v. removal of space maintainers

Intent: *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. The school identifies the competencies that will be included in the curriculum based on the school's goals, resources, accepted dental therapy responsibilities and other influencing factors. Recognizing that there is a single standard of dental care, the care experiences provided for patients by students should be adequate to ensure competency in all components of dental therapy. Programs should assess overall competency, not simply individual competencies in order to measure the graduate's readiness to enter the practice of dental therapy.*

Additional Dental Therapy Functions

2-21 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.

Intent: *Functions allowed by the state dental board or regulatory agency for dental therapists are taught and evaluated at the depth and scope required by the state. The inclusion of additional functions cannot compromise the scope of the educational program or content required in the Accreditation Standards and may require extension of the program length.*

2-22 Dental therapy program learning experiences **must** be defined by the program goals and objectives.

2-23 Dental therapy education programs **must** have students engage in service learning experiences and/or community-based learning experiences.

Intent: *Service learning experiences and/or community-based learning experiences are essential to the development of a culturally competent oral health care workforce. The interaction and treatment of diverse populations in a community-based clinical environment adds a special dimension to clinical learning experience and engenders a life-long appreciation for the value of community service.*

STANDARD 3- FACULTY AND STAFF

3-1 The program director **must** have a full-time administrative appointment as defined by the institution and have primary responsibility for operation, supervision, evaluation and revision of the Dental Therapy educational program.

Intent: *To allow sufficient time to fulfill administrative responsibilities, teaching contact hours should be limited for the program director and should not take precedent over administrative responsibilities.*

3-2 The program director **must** be a licensed dentist (DDS/DMD) or a licensed dental therapist possessing a master's or higher degree. The director **must** be a graduate of a program accredited by the Commission on Dental Accreditation and who has background in education and the professional experience necessary to understand and fulfill the program's mission and goals.

Intent: *The program director's background should include administrative experience, instructional experience, and professional experience in general dentistry. The term of interim/acting program director should not exceed a two year period.*

Examples of evidence to demonstrate compliance may include:

- bio sketch of program director.

3-3 The program director **must** have the authority and responsibility necessary to fulfill program goals including:

a) curriculum development, evaluation and revision;
b) faculty recruitment, assignments and supervision;
c) input into faculty evaluation;
d) initiation of program or department in-service and faculty development;
e) assessing, planning and operating program facilities;
f) input into budget preparation and fiscal administration;
g) coordination, evaluation and participation in determining admission criteria and procedures as well as student promotion and retention criteria.

Examples of evidence to demonstrate compliance may include:

- program director position description

3-4 The number and distribution of faculty and staff **must** be sufficient to meet the program's stated purpose/mission, goals and objectives.

Intent: *The adequacy of numbers of faculty should be determined by faculty to student ratios during laboratory, radiography and clinical practice sessions rather than by the number of full-time equivalent positions for the program. The faculty to student ratios in*

clinical and radiographic practice should allow for individualized instruction and evaluation of the process as well as the end results. Faculty are responsible for both ensuring that the clinical and radiographic services delivered by students meet current standards for dental care and for the instruction and evaluation of students during their performance of those services.

Examples of evidence to demonstrate compliance may include:

- faculty teaching commitments
- class schedules
- listing of ratios for clinical, radiographic and laboratory courses

3-5 The faculty to student ratio for preclinical, clinical and radiographic clinical and laboratory sessions **must** not exceed one to six. The faculty to student ratio for laboratory sessions in the dental science courses **must** not exceed one to ten to ensure the development of clinical competence and maximum protection of the patient, faculty and students.

Intent: *The adequacy of numbers of faculty should be determined by faculty to student ratios during laboratory, radiography and supervised patient care clinics rather than by the total number of full-time equivalent positions for the program. The faculty to student ratios in clinical and radiographic practice should allow for individualized instruction and assessment of students' progression toward competency. Faculty are also responsible for ensuring that the patient care services delivered by students meet the program's standard of care.*

3-6 All faculty of a dental therapy program **must** be educationally qualified for the specific subjects they are teaching.

Intent: *Faculty should have current background in education theory and practice, concepts relative to the specific subjects they are teaching, clinical practice experience and, if applicable, distance education techniques and delivery. Dentists, dental therapists, dental hygienists, and expanded function dental assistants who supervise students' clinical procedures should have qualifications which comply with the state dental practice act. Individuals who teach and supervise students in clinical experiences should have qualifications comparable to faculty who teach in the main program clinic and are familiar with the program's objectives, content, instructional methods and evaluation procedures.*

Examples of evidence to demonstrate compliance may include:

- faculty curriculum vitae

3-7 The program **must** show evidence of an ongoing faculty development process.

Intent: *Ongoing faculty development is a requirement to improve teaching and learning, to foster curricular change, to enhance retention and job satisfaction of faculty, and to*

maintain the vitality of academic dentistry as the wellspring of a learned profession. Effective teaching requires not only content knowledge, but an understanding of pedagogy, including knowledge of curriculum design and development, curriculum evaluation, and teaching methodologies.

Examples of evidence to demonstrate compliance may include:

- evidence of participation in workshops, in-service training, self-study courses, on-line and credited courses
- attendance at regional and national meetings that address education
- mentored experiences for new faculty
- scholarly productivity
- maintenance of existing and development of new and/or emerging clinical skills

3-8 The faculty, as appropriate to meet the program's purpose/mission, goals and objectives, **must** engage in scholarly activity.

3-9 Faculty **must** be ensured a form of governance that allows participation in the school's decision-making processes.

3-10 A defined faculty evaluation process **must** exist that ensures objective measurement of the performance of each faculty member.

Intent: *An objective evaluation system including student, administration and peer evaluation can identify strengths and weaknesses for each faculty member (to include those at distance sites) including the program administrator. The results of evaluations should be communicated to faculty members on a regular basis to ensure continued improvement.*

Examples of evidence to demonstrate compliance may include:

- sample evaluation mechanisms addressing teaching, patient care, research, scholarship and service
- faculty evaluation policy, procedures and mechanisms

3-11 The dental therapy program faculty **must** be granted privileges and responsibilities as afforded all other comparable institutional faculty.

Examples of evidence to demonstrate compliance may include:

- institution's promotion/tenure policy
- faculty senate handbook
- institutional policies and procedures governing faculty

3-12 Qualified institutional support personnel **must** be assigned to the program to support both the instructional program and the clinical facilities providing a safe environment for the provision of instruction and patient care.

Intent: *Maintenance and custodial staff should be sufficient to meet the unique needs of the academic and clinical program facilities. Faculty should have access to instructional specialists, such as those in the areas of curriculum, testing, counseling, computer usage, instructional resources and educational psychology. Secretarial and clerical staff should be assigned to assist the administrator and faculty in preparing course materials, correspondence, maintaining student records, and providing supportive services for student recruitment and admissions activities. Support staff should be assigned to assist with the operation of the clinic facility including the management of appointments, records, billing, insurance, inventory, hazardous waste, and infection control.*

Examples of evidence to demonstrate compliance may include:

- description of current program support/personnel staffing
- program staffing schedules
- staff job descriptions
- examples of how support staff are used to support students

STANDARD 4-EDUCATIONAL SUPPORT SERVICES

Admissions

4-1 Specific written criteria, policies and procedures **must** be followed when admitting students.

Intent: *The dental therapy education curriculum is a postsecondary scientifically-oriented program which is rigorous and intensive. Previous academic performance and/or performance on standardized national tests of scholastic aptitude or other predictors of scholastic aptitude and ability should be utilized as criteria in selecting students who have the potential for successfully completing the program. Applicants should be informed of the criteria and procedures for selection, goals of the program, curricular content, course transferability and the scope of practice of and employment opportunities for dental therapists.*

Because enrollment is limited by facility capacity, special program admissions criteria and procedures are necessary to ensure that students are selected who have the potential for successfully completing the program. The program administrator and faculty, in cooperation with appropriate institutional personnel, should establish admissions procedures which are non-discriminatory and ensure the quality of the program.

Examples of evidence to demonstrate compliance may include:

- admissions management policies and procedures
- copies of catalogs, program brochures or other written materials
- established ranking procedures or criteria for selection
- minutes from admissions committee
- periodic analysis supporting the validity of established admission criteria and procedures
- results from institutional research used in interpreting admissions data and criteria and/or correlating data with student performance
- advanced standing policies and procedures, if appropriate

4-2 Admission policies and procedures **must** be designed to include recruitment and admission of a diverse student population.

Intent: *Admissions criteria and procedures should ensure the selection of a diverse student body with the potential for successfully completing the program. The administration and faculty, in cooperation with appropriate institutional personnel, should establish admissions procedures that are non-discriminatory and ensure the quality of the program.*

4-3 Admission of students with advanced standing **must** be based on the same standards of achievement required by students regularly enrolled in the program. Advanced standing requirements for career laddering into a dental therapy program **must** meet advanced standing requirements of the college or university offering advanced standing for dental therapy.

Intent: *Advanced standing refers to applicants that may be considered for admission to a training program whose curriculum has been modified after taking into account the applicant's past experience. Examples include transfer from a similar program at another institution, completion of training at a non-CODA accredited program, or documented practice experience in the given discipline. Acceptance of advanced standing students/residents will not result in an increase of the program's approved number of enrollees. Applicants for advanced standing are expected to fulfill all of the admission requirements mandated for students/residents in the conventional program and be held to the same academic standards. Advanced standing students/residents, to be certified for completion, are expected to demonstrate the same standards of competence as those in the conventional program.*

4-4 Students with advanced standing **must** receive an individualized assessment and an appropriate curriculum plan that results in the same standards of competence for graduation required by students regularly enrolled in the program.

Examples of evidence to demonstrate compliance may include:

- Policies and procedures on advanced standing
- Results of appropriate qualifying examinations
- Course equivalency or other measures to demonstrate equal scope and level of knowledge

4-5 The number of students enrolled in the program **must** be proportionate to the resources available.

Intent: *In determining the number of dental therapy students enrolled in a program (inclusive of distance sites), careful consideration should be given to ensure that the number of students does not exceed the program's resources, including patient supply, financial support, scheduling options, facilities, equipment, technology and faculty.*

Examples of evidence to demonstrate compliance may include:

- sufficient number of clinical and laboratory stations based on enrollment
- clinical schedules demonstrating equitable and sufficient clinical unit assignments
- clinical schedules demonstrating equitable and sufficient radiology unit assignments

- faculty full-time equivalent (FTE) positions relative to enrollment
- budget resources and strategic plan
- equipment maintenance and replacement plan
- patient pool availability analysis
- course schedules for all terms

Facilities and Resources

4-6 The program **must** provide adequate and appropriately maintained facilities and learning resources to support the purpose/mission of the program and which are in conformance with applicable regulations.

Intent: *The classroom facilities should include an appropriate number of student stations with equipment and space for individual student performance in a safe environment.*

4-7 The clinical facilities **must** include the following:

a) sufficient clinical facility with clinical stations for students including conveniently located hand washing sinks and view boxes and/or computer monitors; functional, equipment; an area that accommodates a full range of operator movement and opportunity for proper instructor supervision;
b) a capacity of the clinic that accommodates individual student practice on a regularly scheduled basis throughout all phases of preclinical technique and clinical instruction;
c) a sterilizing area that includes sufficient space for preparing, sterilizing and storing instruments;
d) sterilizing equipment and personal protective equipment/supplies that follow current infection and hazard control protocol;
e) facilities and materials for students, faculty and staff that provide compliance with accepted infection and hazard control protocols;
f) patient records kept in an area assuring safety and confidentiality.

Intent: *The facilities should permit the attainment of program goals and objectives. To ensure health and safety for patients, students, faculty and staff, the physical facilities and equipment should effectively accommodate the clinic and/or laboratory schedule. This Standard applies to all sites where students receive clinical instruction.*

4-8 Radiography facilities **must** be sufficient for development of clinical competence and contain the following:

a) an appropriate number of radiography exposure rooms which include: dental radiography units; teaching manikin(s); and conveniently located hand-washing sinks;
b) processing and/or imaging equipment;
c) an area for viewing radiographs;
d) documentation of compliance with applicable local, state and federal regulations.

Intent: *The radiography facilities should allow the attainment of program goals and objectives. Radiography facilities and equipment should effectively accommodate the clinic and/or laboratory schedules, the number of students, faculty and staff, and comply with applicable regulations to ensure effective instruction in a safe environment. This Standard applies to all sites where students receive clinical instruction.*

4-9 A multipurpose laboratory facility **must** be provided for effective instruction and allow for required laboratory activities and contain the following:

a) placement and location of equipment that is conducive to efficient and safe utilization;
b) student stations that are designed and equipped for students to work while seated including sufficient ventilation and lighting, necessary utilities, storage space, and an adjustable chair;
c) documentation of compliance with applicable local, state and federal regulations.

Intent: *The laboratory facilities should include student stations with equipment and space for individual student performance of laboratory procedures with instructor supervision. This Standard applies to all sites where students receive clinical instruction.*

4-10 Office space which allows for privacy **must** be provided for the program administrator and faculty

Intent: *Office space for full- and part-time faculty should be allocated to allow for class preparation, student counseling and supportive academic activities. Student and program records should be stored to ensure confidentiality and safety.*

4-11 Instructional aids, equipment, and library holdings **must** be provided for student learning.

Intent: *The acquisition of knowledge, skills and values for students requires the use of current instructional methods and materials to support learning needs and development. All students, including those receiving education at distance sites, should be assured access to learning resources. Institutional library holdings should include or provide*

access to a diversified collection of current dental and medical literature and references necessary to support teaching, student learning needs, service, research and development. There should be a mechanism for program faculty to periodically review, acquire and select current titles and instructional aids.

Examples of evidence to demonstrate compliance may include:

- a list of references on education, medicine, dentistry, dental therapy, dental hygiene, dental assisting and the biomedical sciences
- policies and procedures related to learning resource access
- timely electronic access to a wide variety of professional scientific literature
- skeletal and anatomic models and replicas, sequential samples of laboratory procedures, slides, films, video, and other media which depict current techniques
- a wide range of printed materials and instructional aids and equipment available for utilization by students and faculty
- current and back issues of major scientific and professional journals related to medicine, dentistry, dental therapy, dental hygiene, dental assisting and the biomedical sciences

Student Services

4-12 Student services **must** include the following:

a. personal, academic and career counseling of students;
b. assuring student participation on appropriate committees;
c. providing appropriate information about the availability of financial aid and health services;
d. developing and reviewing specific written procedures to ensure due process and the protection of the rights of students;
e. student advocacy; and
f. maintenance of the integrity of student performance and evaluation records.

Intent: *All policies and procedures should protect the students and provide avenues for appeal and due process. Policies should ensure that student records accurately reflect the work accomplished and are maintained in a secure manner. Students should have available the necessary support to provide career information and guidance as to practice, post-graduate and research opportunities.*

Student Financial Aid

4-13 At the time of acceptance, students **must** be advised of the total expected cost of their education and opportunities for employment.

Intent: *Financial information should include estimates of living expenses and educational fees, an analysis of financial need, and the availability of financial aid.*

4-14 The institution **must** be in compliance with all federal and state regulations relating to student financial aid and student privacy.

Health Services

4-15 The dental therapy program **must** advise prospective students of mandatory health standards that will ensure that prospective students are qualified to undertake dental therapy studies.

4-16 There **must** be a mechanism for ready access to health care for students while they are enrolled in dental therapy school.

4-17 Students **must** be encouraged to be immunized against infectious diseases, such as mumps, measles, rubella, and hepatitis B, prior to contact with patients and/or infectious objects or materials, in an effort to minimize the risk of infection to patients, dental personnel, and themselves.

Intent: *All individuals who provide patient care or have contact with patients should follow all standards of risk management thus ensuring a safe and healthy environment.*

Examples of evidence to demonstrate compliance may include:

- policies and procedures regarding infectious disease immunizations
- immunization compliance records
- declinations forms

STANDARD 5 – HEALTH, SAFETY, AND PATIENT CARE PROVISIONS

5-1 Written policies and procedures **must** be in place to ensure the safe use of ionizing radiation, which include criteria for patient selection, frequency of exposing radiographs on patients, and retaking radiographs consistent with current standard of care.

Intent: *All radiographic exposure should be integrated with clinical patient care procedures.*

5-2 Written policies and procedures **must** establish and enforce a mechanism to ensure adequate preclinical/clinical/laboratory asepsis, infection and biohazard control, and disposal of hazardous waste.

Intent: *Policies and procedures should be in place to provide for a safe environment for students, patients, faculty and staff.*

5-3 The school's policies and procedures **must** ensure that the confidentiality of information pertaining to the health status of each individual patient is strictly maintained

5-4 All students, faculty and support staff involved in the direct provision of patient care **must** be continuously certified in basic life support (B.L.S.), including healthcare provider cardiopulmonary resuscitation with an Automated External Defibrillator (AED), and be able to manage common medical emergencies.

Examples of evidence to demonstrate compliance may include:

- accessible and functional emergency equipment, including oxygen
- instructional materials
- written protocol and procedures
- emergency kit(s)
- installed and functional safety devices and equipment
- first aid kit accessible for use in managing clinic and/or laboratory accidents

5-5 The program **must** conduct a formal system of continuous quality improvement for the patient care program that demonstrates evidence of:

a. standards of care that are patient-centered, focused on comprehensive care and written in a format that facilitates assessment with measurable criteria;
b. an ongoing review and analysis of compliance with the defined standards of care;
c. an ongoing review of a representative sample of patients and patient records to assess the appropriateness, necessity and quality of the care provided;
d. mechanisms to determine the cause(s) of treatment deficiencies; and
e. implementation of corrective measures as appropriate.

Intent: *Programs should create and maintain databases for monitoring and improving patient care and serving as a resource for research and evidence-based practice.*

5-6 The program **must** have policies and mechanisms in place that inform patients, verbally and in writing, about their comprehensive treatment needs and the scope of dental therapy care available at the dental therapy facilities.

Intent: *All patients should receive appropriate care that assures their rights as a patient are protected. Patients should be advised of their treatment needs and the scope of care available at the training facility and appropriately referred for procedures that cannot be provided by the program. This Standard applies to all program sites where clinical education is provided.*

Examples of evidence to demonstrate compliance may include:

- documentation of an ongoing review of a representative sample of patients and patient records to assess the appropriateness, necessity and quality of care provided
- quality assurance policy and procedures
- patient bill of rights

5-7 The program **must** develop and distribute a written statement of patients' rights and commitment to patient-centered care to all patients, appropriate students, faculty, and staff.

Intent: *The primacy of care for the patient should be well established in the management of the program and clinical facility assuring that the rights of the patient are protected. A written statement of patient rights should include:*

a) considerate, respectful and confidential treatment;
b) continuity and completion of treatment;
c) access to complete and current information about his/her condition;
d) advance knowledge of the cost of treatment;

e) informed consent;
f) explanation of recommended treatment, treatment alternatives, the option to refuse treatment, the risk of no treatment, and expected outcomes of various treatments;
g) treatment that meets the standard of care in the profession.

5-8 The use of quantitative criteria for student advancement and graduation **must** not compromise the delivery of patient care.

Intent: *The need for students to satisfactorily complete specific clinical requirements prior to advancement and graduation should not adversely affect the health and care of patients.*

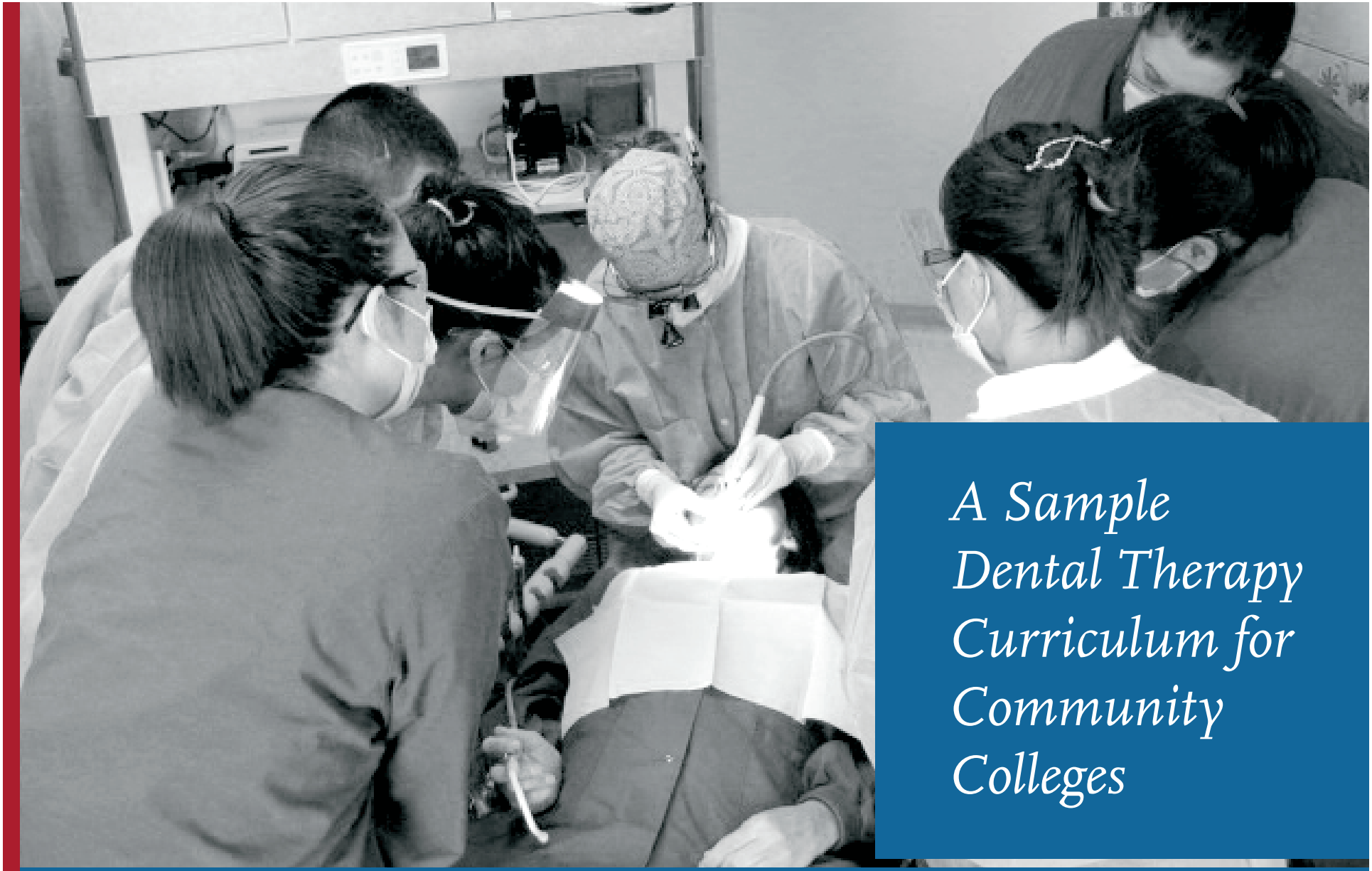
Examples of evidence to demonstrate compliance may include:
- patient bill of rights
- documentation that patients are informed of their rights
- continuing care (recall) referral policies and procedures

5-9 Patient care **must** be evidenced-based, integrating the best research evidence and patient values.

Intent: *The program should use evidence to evaluate new technology and products and to guide treatment decisions.*

5-10 The program **must** ensure that active patients have access to professional services at all times for the management of dental emergencies.

APPENDIX B: Sample Dental Therapy Curriculum for Community Colleges



A Sample Dental Therapy Curriculum for Community Colleges

Developed by

Community Catalyst

W.K. Kellogg Foundation™

American Association of Community Colleges

A Sample Dental Therapy Curriculum for Community Colleges

2017

Special thanks to Pew Charitable Trusts for their work and contributions to this report.

Community Catalyst
One Federal Street | Boston, MA 02110 | (617) 338-6035
twitter.com/healthpolicyhub | blog.communitycatalyst.org

Curriculum Standards: 2-12

Didactic dental sciences content must ensure an understanding of basic dental principles, consisting of a core of information in each of the following areas within the scope of dental therapy:

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 a. **Tooth Morphology**	**DHAT 101** *Intro to Dental Therapy I*	Understanding of basic tooth morphology and how this effects caries susceptibility
	DHAT 111 *Dental Therapy Lab I*	Gain a more in depth and clinically applicable understanding of dental anatomy and tooth morphology • Etiology and development of dental anomalies in tooth numbers, size, structure, shape, and color
	DHAT 152 *Anatomy/Physiology/Pathology of the Head and Neck*	Dental anatomy • Knowledge of primary and permanent teeth, including Morphology
	DHAT 153	Tooth morphology • Describe tooth morphology, including crowns and roots of the primary and permanent dentitions
2-12 b. **Oral Pathology**	**DHAT 152** *Anatomy/Physiology/Pathology of the Head and Neck*	Oral medicine & oral pathology • Normal oral cavity and variations, and recognition of changes from normal in the oral tissues with emphasis on pediatric age group • Recognition of common oral infections • Classification, description, and identification of common oral ulcerations, such as traumatic andaphthus
	DHAT 201A, B, C, D	• Application of Dental Therapy theory and principles through clinical scenarios • Development of improved clinical reasoning skills • Understanding of the limits of dental therapy, consultation and referral processes • Evaluation and consultation with supervising dentist for traumatic injuries • Advanced understanding of normal oral findings and presentations of the structures and tissues of the head and neck • General knowledge of how to evaluate, describe and note findings in the region of the head and neck that vary from normal • Consultation and referral processes for pathological findings outside the dental therapy scope of practice

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 b. **Oral Pathology**	**DHAT 156** *Hygiene/Perio for Dental Therapy*	• Explain the role of biofilm in periodontal disease • Explain the role of calculus in periodontal disease • Detect disease, supra and subgingival calculus
2-12 c. **Oral Medicine**	**DHAT 102** *Intro to Dental Therapy II*	• Have a basic understanding of the pharmacology of specific drugs in the following classes of medications • Antibiotics and Antimicrobials • Dental Analgesics • Antiemetics and Antiallergenics • Recognize and report potential problems relating to medications to the supervising dentist
	DHAT 135 *Advanced Diagnosis and Treatment Plan I*	Recognition and management of medical emergencies in the dental care environment
	DHAT 235 *Advanced Diagnosis and Treatment Plan II*	• Have knowledge and skills required to collect diagnostic data and to prioritize patient needs based on caries risk assessments, medical and pharmacological considerations. • Be able to develop and provide a tailored oral health program based on the individual knowledge and practices including • Have a basic understanding of the pharmacology of specific drugs in the following classes of medications • Antibiotics and Antimicrobials • Dental Analgesics • Antiemetics and Antiallergenics • To recognize and report potential problems relating to medical conditions and medications to the supervising dentist
2-12 d. **Radiology**	**DHAT 101** *Intro to Dental Therapy I*	• Competence at taking and processing the various film views used in general dental practice • Ability to identify anatomical features and interpreting common pathology relative to oral radiology • Understanding of radiographic techniques to include hazards and regulation • Assessment of image quality and use alternative imaging techniques

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 e. **Periodontology**	**DHAT 101** *Intro to Dental Therapy I*	Introduction to periodontal disease process
	DHAT 156 *Hygiene/Perio for Dental Therapy*	• Explain the role of biofilm in periodontal disease • Explain the role of calculus in periodontal disease • Detect disease, supra and subgingival calculus • Relate Community Periodontal Index of Treatment Needs (CPITN) scores to a need for potential periodontal treatment • Recommend effective toothpastes, mouth rinses and oral hygiene aids to patients • Motivate patients to improve plaque removal and periodontal health • Identify who is at risk for periodontal breakdown
2-12 f. **Cariology**	**DHAT 101** *Intro to Dental Therapy I*	Introduction to caries diseases process
	DHAT 125 A, B	• Understand the principles of cavity design in the primary and permanent dentition • Understand the principles of pulp protection for lesions in the primary and permanent dentitions • Describe the management and treatment options available for carious lesions in the primary and permanent dentitions • Describe the principles and techniques for assessing pulp vitality and management of pulp exposure
	DHAT 154 *Cariology and Minimally Invasive Dentistry*	• List the foods that are healthy for teeth and periodontal structures and those that are unhealthy • Explain demineralization and remineralization of tooth structure • Obtain skill in dental sealant placement and ITR /ART • Compare the epidemiology of dental caries among Alaska Native children and adolescents compared with children and adolescents of the same age in other parts of the United States • Describe the factors that determine whether a tooth should be sealed or treated operatively • Discuss the role of fluoride alternatives, such as Xylitol, Povidone-Iodine, and Chlorhexidine

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 g. **Atraumatic Restorative Treatment (ART)**	**DHAT 125 B** *Operative Dental Therapy Mod B*	• Understand the progression of dentinal caries from bacterial invasion through demineralization and frank cavitation • Describe the traditional approach to cavity preparation and compare it to the biological approach to cavity preparation • Describe the differences between application of glass-ionomer sealants using the ART approach and the traditional approach • Understand the principles and properties of adhesive restorative materials that enable minimally invasive cavity preparations, including glass-ionomers and chemically cured composite resins • List the instrumentation and materials required for the ART approach and discuss the function of each • Understand and discuss selection of appropriate cases for the ART procedure • Provide a step-by-step discussion of the ART procedure • List the primary reasons ART restorations fail
2-12 h. **Operative Dentistry**	**DHAT 125 A, B** *Operative Dental Therapy Mod A, B*	• List the classifications of cavity preparation design • Understand the principles of cavity design in the primary and permanent dentition • Understand the principles of cavity design for the preformed stainless steel crown procedure • Understand the principles of pulp protection for lesions in the primary and permanent dentitions • Describe the management and treatment options available for carious lesions in the primary and permanent dentitions • Describe the principles and techniques for assessing pulp vitality and management of pulp exposure
	DHAT 153 *Basic Restorative Function*	• Tooth Restoration • Perform a range of restorative procedures, including placement of amalgam and composite restorations in both primary and permanent dentitions • List and describe the classification of cavity preparations • Describe the basic principles of cavity preparation design including the protection of the pulp for lesions in the permanent and primary dentitions in relation to tooth morphology • Dental Biomaterials Science • Demonstrate the appropriate selection of the dental biomaterials used in the basic restoration of primary and permanent teeth • Describe the limitations of restorative dental biomaterials

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 i. **Pain Management**	**DHAT 155** *Local Anesthesia*	• Describe basic neurophysiology relating to local anesthesia, including fundamentals of impulse generation and transmission, mode and site of action of local anesthetics • Describe the basic kinetics of local anesthetic onset and duration of action • List the causes of failure to achieve profound anesthesia • Describe the basic pharmacology of local anesthetics used in dentistry • Demonstrate use of local anesthetic Armamentarium • Describe the clinical signs and symptoms of complications to local anesthetic agents
	DHAT 222 *Pharmocology*	• Have a basic understanding of the pharmacology of specific drugs in the following classes of medications • Antibiotics and Antimicrobials • Dental Analgesics • Antiemetics and Antiallergenics
2-12 j. Dental Materials	**DHAT 153** *Basic Restorative Function*	• Dental Biomaterials Science • Demonstrate the appropriate selection of the dental biomaterials used in the basic restoration of primary and permanent teeth • Describe the limitations of restorative dental biomaterials
2-12 k. **Dental Disease Etiology and Epidemiology**	**DHAT 101** *Intro to Dental Therapy I*	• Introduction to caries diseases process • Introduction to periodontal disease process • Understanding of theory of oral health promotion and disease prevention • Understanding of effective use of and issues related to fluoride • Understanding of basic tooth morphology and how this effects caries susceptibility
	DHAT 135 *Advanced Diagnosis and Treatment Plan I*	• Have knowledge on performing caries risk assessments for patients of all ages • Be able to develop and provide a tailored oral health program based on the individual knowledge and practices
	DHAT 131 *Community Oral Health Education I*	• Complete an oral health needs assessment of an Alaska Native community • Understand the rationale behind planning a comprehensive prevention program
	DHAT 156 *Hygiene/Perio for Dental Therapy*	• Identify who is at risk for periodontal breakdown • Relate Community Periodontal Index of Treatment Needs (CPITN) scores to a need for potential periodontal treatment.
2-12 k. **Dental Disease Etiology and Epidemiology**	**DHAT 231 & 232** *Community Oral Health Education II & III*	• Understand the terms epidemiology and etiology including how they apply to public health dentistry

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 l. **Preventive Counseling and Health Promotion**	**DHAT 101** *Intro to Dental Therapy I*	• Understanding the makeup of the dental health care team and workforce models • Understanding of theory of oral health promotion and disease prevention • Understanding of effective use of and issues related to fluoride
	DHAT 135 *Advanced Diagnosis and Treatment Plan I*	• Be able to develop and provide a tailored oral health program based on the individual knowledge and practices • Be able to recognize and implement the need to modify the proposed treatment plan based on behavioral and psychological variables • Be able to present the treatment plan to the patient and/or caregiver and answer questions and concerns
	DHAT 141 *Behavioral Health Sciences I – Oral Health Education I*	• Definition of preventive dentistry • Introduction to caries diseases process • Introduction to disease prevention strategies used when accessing patients' dental needs and providing patient education • Understanding of the concept of dental public health and how to apply the principles related to public health dentistry • Introduction to periodontal disease process • Introduction to dental disease prevention interventions and services • Fluoride and other topical agents • Caries control • Sealants • Disclosing and plaque removal
	DHAT 156 *Hygiene/Perio for Dental Therapy*	• Explain the role of biofilm in periodontal disease • Explain the role of calculus in periodontal disease • Detect disease, supra and subgingival calculus. • Relate Community Periodontal Index of Treatment Needs (CPITN) scores to a need for potential periodontal treatment. • Recommend effective toothpastes, mouth rinses and oral hygiene aids to patients. • Motivate patients to improve plaque removal and periodontal health. • Identify who is at risk for periodontal breakdown.
2-12 l. **Preventive Counseling and Health Promotion**	**DHAT 242** *Behavioral Health Sciences II- Oral Health Promotion II*	• Introduction to disease prevention strategies used when accessing patients' dental needs and providing patient education • Theory of oral health promotion and disease prevention • Evidence-based approach to treatment with regard to advice and information • Understanding of oral hygiene instruction techniques

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 m. **Patient Mangement**	**DHAT 101** *Intro to Dental Therapy I*	• Introduction of behavior management techniques • Introduction to the motivational interview technique
	DHAT 135 *Advanced Diagnosis and Treatment Plan I*	• Be able to develop and provide a tailored oral health program based on the individual knowledge and practices • Be able to recognize and implement the need to modify the proposed treatment plan based on behavioral and psychological variables
	DHAT 241 *Behavioral Science II, Oral Health Education II*	• Understanding and application of motivational interview technique • Understanding and application of behavior modification techniques for all ages • Management of fear and anxiety in diverse patient care settings
2-12 n. **Pediatric Dentistry**	**DHAT 101** *Intro to Dental Therapy I*	For all ages of patients: • Introduction to caries diseases process • Introduction to periodontal disease process • Understanding of theory of oral health promotion and disease prevention • Understanding of effective use of and issues related to fluoride • Understanding of basic tooth morphology and how this effects caries susceptibility • Understanding the makeup of the dental health care team and workforce models • Introduction of behavior management techniques • Introduction to the motivational interview technique • Understanding of moisture Control measures for dentistry • Understanding of matrix systems for restorative dentistry • Proficiency in use of dental instruments and four handed instrument transfer • Taking impressions for study casts • Competence at taking and processing the various film views used in general dental practice • Ability to identify anatomical features and interpreting common pathology relative to oral radiology • Understanding of radiographic techniques to include hazards and regulation • Assessment of image quality and use alternative imaging techniques

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 n. **Pediatric Dentistry**	**DHAT 102** *Intro to Dental Therapy II*	• Have a basic understanding for all ages of patients of the pharmacology of specific drugs in the following classes of medications • Antibiotics and Antimicrobials • Dental Analgesics • Antiemetics and Antiallergenics
	DHAT 125A, B *Operative Dental Therapy Mod A, B*	• This course provides the theoretical background for the pre-clinical operative technique course in the primary and adult dentitions.
	DHAT 135 *Advanced Diagnosis and Treatment Plan I*	• Be able to recognize and implement the need to modify the proposed treatment plan based on special circumstances related to pediatric and geriatric patient presentations • Have knowledge and skills required to collect diagnostic data, including • Medical and dental histories • Behavioral and psychological status • Dental health assessment • Pediatric considerations • Geriatric considerations
	DHAT 152 *Anatomy/Physiology/Pathology of the Head and Neck*	Oral anatomy • General knowledge of the development and histology of the head and neck from conception (embryology) to old age Dental anatomy • Knowledge of primary and permanent teeth, including: • Morphology • Function • Eruption patterns and times • Development and histology • Identification • Etiology and development of dental anomalies in tooth numbers, size, structure, shape, and color Oral medicine & oral pathology • Normal oral cavity and variations, and recognition of changes from normal in the oral tissues with emphasis on pediatric age group

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 n. **Pediatric Dentistry**	**DHAT 153**	• Tooth Morphology • Describe tooth morphology, including crowns and roots of the primary and permanent dentitions • Tooth Restoration • Perform a range of restorative procedures, including placement of amalgam and composite restorations in both primary and permanent dentitions • List and describe the classification of cavity preparations • Describe the basic principles of cavity preparation design including the protection of the pulp for lesions in the permanent and primary dentitions in relation to tooth morphology • Dental Biomaterials Science • Demonstrate the appropriate selection of the dental biomaterials used in the basic restoration of primary and permanent teeth
	DHAT 241 *Behavioral Science II, Oral Health Education II*	Course Objectives: For patients of all ages including pediatric, geriatric and special needs: • Introduction to disease prevention strategies used when accessing patients' dental needs and providing patient education • Theory of oral health promotion and disease prevention • Evidence-based approach to treatment with regard to advice and information • Understanding of oral hygiene instruction techniques • Understanding and application of motivational interview technique • Understanding and application of behavior modification techniques for all ages • Management of fear and anxiety in diverse patient care settings
2-12 o. **Geriatric Dentistry**	*See all references for n. Pediatric dentistry*	
2-12 p. **Medical and Dental Emergencies**	**DHAT 135** *Advanced Diagnosis and Treatment Plan I*	• Recognition and management of medical emergencies in the dental care environment
	DHAT 155 *Local Anesthesia*	• Describe the clinical signs and symptoms of complications to local anesthetic agents

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 p. **Medical and Dental Emergencies**	**DHAT 201A, B, C, D**	• Application of Dental Therapy theory and principles through clinical scenarios • Development of improved clinical reasoning skills • Understanding of the limits of dental therapy, consultation and referral processes. • Evaluation and consultation with supervising dentist for traumatic injuries • Have knowledge of the internal anatomy of permanent anterior teeth • Have knowledge of the principles of treatment for permanent teeth traumatized by: • Subluxation • Fractures in the dentin • Fractures involving the pulp • Avulsion • Demonstrate laboratory competency in performing appropriate emergency treatment for patients with traumatized teeth including, but not limited to, temporary and permanent restoration of non-pulpally involved teeth, stabilization of subluxated teeth, open and broach procedures, and re-placement of avulsed teeth.
2-12 q. **Oral Surgery**	**DHAT 135** *Advanced Diagnosis and Treatment Plan I*	• Theory and principles of tooth extraction and oral surgery
2-12 r. **Prosthodontics**	**DHAT 101** *Intro to Dental Therapy I*	• Taking impressions for study casts • Introduction to prosthodontics
	DHAT 112 *Dental Therapy, Lab II*	• Hands-on learning of resin base dentures
2-12 s. **Infection and Hazard Control Management, Including Provision of Oral Health Care Services to Patients with Blood Borne Infectious Diseases**	**DHAT 120, 121** *Infection Control*	• Description of the purpose and scope of OSHA's Bloodborne Pathogens Standard and its importance to dental employees • Definition, description, application, and differentiation between sterilization and disinfection as best practices essential to maintaining a safe environment. • Description of physical, chemical, and biological hazards in the dental office and understand ways to reduce them. • Description and implementation of current ADA, CDC, and OSAP recommendations on dental office waterline • Demonstration of proper hand hygiene techniques, appropriate use of infection control equipment, and use of personal protective equipment.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-12 s. **Infection and Hazard Control Management, Including Provision of Oral Health Care Services to Patients with Blood Borne Infectious Diseases**	**DHAT 122, 123** *Infection Control*	• Describe the stages of processing contaminated instruments and how these instruments become re-sterilized • Describe physical, chemical, and biological hazards in the dental office and understand ways to reduce them • Describe current ADA, CDC, and OSAP recommendations on dental office waterline safety. Employ techniques to reduce waterline biofilms • Demonstrate placing and removing protective barriers • Demonstrate proper hand hygiene techniques • Demonstrate all infection control equipment use and maintenance and all stages of processing contaminated instruments • Demonstrate use of personal protective equipment safely within a dental office and to prevent the spread of microbial diseases.

Curriculum Standards: **2-13**

Graduates must be competent in managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-13	**DHAT 131** *Community Oral Health Education I*	• Understand the rationale behind planning a comprehensive prevention program • Understand the elements of the POARE format of prevention planning with particular emphasis on development of the problem statement and the evaluation • Introduction of skills needed to successfully communicate and work in diverse settings and cultures • Understand the components of culturally competency and culturally appropriate care • Understand the components of SMART objectives as they relate to an indigenous culture • Complete an oral health needs assessment of an Alaska Native community • Develop a culturally relevant community oral health promotion project based on an initial needs assessment, using the POARE format.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-13	**DHAT 231, 232** *Community Oral Health Education II, III*	• Understand the terms epidemiology and etiology including how they apply to public health dentistry • Plan a comprehensive prevention program for an Alaska Native community • Apply the elements of the POARE format of prevention planning with particular emphasis on development of the problem statement and the evaluation • Apply skills needed to successfully communicate and work in diverse settings and cultures • Integrate the components of culturally competency and culturally appropriate care into dental therapy practice • Apply the components of SMART objectives as they relate to an indigenous culture. • Complete an oral health needs assessment of an Alaska Native community • Implement a culturally appropriate community oral health promotion project based on an initial needs assessment, using the POARE format.

Curriculum Standards: **2-14**

Graduates must be competent in communicating and collaborating with other members of the health care team to facilitate the provision of health care.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-14	**DHAT 101** *Introduction to Dental Therapy I* **DHAT 135** *Diagnosis and Treatment Plan I*	• Understanding the makeup of the dental health care team and workforce models • Including effective communication and teamwork strategies • Recognition of when consultation or referral is needed
	DHAT 201A, 201B, 201C, 201D *Advanced Dental Therapy* **DHAT 211A, 211B,211 C, 211D** *Advanced Dental Therapy Clinic*	• Understanding of the limits of dental therapy, consultation and referral processes. • Evaluation and consultation with supervising dentist for traumatic injuries • Evaluation and consultation with supervising dentist for traumatic injuries

Curriculum Standards: 2-15

Graduates must be competent in the application of the principles of ethical decision making and professional responsibility.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-15	**DHAT 102** *Introduction to Dental Therapy II* **DHAT 112** *Dental Therapy Lab II* **DHAT 221** *Professional DHAT Practice I* **DHAT 222** *Professional Practice II;* **DHAT 201A, DHAT 201B, DHAT 201C, and DHAT 201D** *Advance Dental Therapy;* **DHAT 211A, DHAT 211B, DHAT 211C, and DHAT 211D** *Advance Dental Therapy Clinc*	• Define professionalism and ethics as they relate to the practice of the Dental Health Aide Therapist. • Identify and discuss the importance of professional, ethical behavior. • Understand why the application of professional behavior is recommended and expected. • Demonstrate professional, ethical behavior in patient and community interactions.

Curriculum Standards: 2-16

Graduates must be competent in applying legal and regulatory concepts to the provision and/or support of oral health care services.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-16	**DHAT 102** *Introduction to Dental Therapy II;* **DHAT 112** *Dental Therapy Lab II;* **DHAT 221** *Professional DHAT Practice I;* **DHAT 222** *Professional Practice II;* **DHAT 201A, DHAT 201B, DHAT 201C, and DHAT 201D** *Advance Dental Therapy;* **DHAT 211A, DHAT 211B, DHAT 211C, and DHAT 211D** *Advance Dental Therapy Clinc*	• Understand the legal and regulatory aspects of health care service provision including; • Understanding of the federal authority for dental therapy practice in Alaska. • Knowledge and understanding of the Community Health Aide Certification Board Standards and Procedures • HIPPA, Patient Confidentiality, compliance, and risk management

Curriculum Standards: 2-17

Graduates must be able to access, critically appraise, apply, and communicate information as it relates to providing evidence-based patient care within the scope of dental therapy practice.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-17	**DHAT 111** *Dental Therapy Lab I;* **DHAT 112** *Dental Therapy Lab II*	• Introduction to the concept and skill of critical self-evaluation
	DHAT 131 *Community Oral Health Education I*	• Understand the rationale behind planning a comprehensive prevention program • Understand the elements of the POARE format of prevention planning with particular emphasis on development of the problem statement and the evaluation • Introduction of skills needed to successfully communicate and work in diverse settings and cultures • Understand the components of culturally competency and culturally appropriate care • Understand the components of SMART objectives as they relate to an indigenous culture • Complete an oral health needs assessment of an Alaska Native community • Develop a culturally relevant community oral health promotion project based on an initial needs assessment, using the POARE format.
	DHAT 201A, DHAT 201B, DHAT 201C, and DHAT 201D *Advanced Dental Therapy*	• Application of Dental Therapy theory and principles through clinical scenarios • Development of improved clinical reasoning skills • Understanding of the limits of dental therapy, consultation and referral processes. • Evaluation and consultation with supervising dentist for traumatic injuries
	DHAT 141 *Behavioral Sciences I, Oral Health Education I;* **DHAT 241** *Behavioral Sciences II, Oral Health Education II*	• Introduction to disease prevention strategies used when accessing patients' dental needs and providing patient education • Theory of oral health promotion and disease prevention • Evidence-based approach to treatment with regard to advice and information • Understanding of oral hygiene instruction techniques

Curriculum Standards: 2-18

The program must ensure the availability of adequate patient experiences that afford all students the opportunity to achieve its stated competencies within a reasonable time.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-18	**DHAT 221** *Professional DHAT Practice I;* **DHAT 222** *Professional Practice II;* **DHAT 201A, DHAT 201B, DHAT 201C, and DHAT 201D** *Advance Dental Therapy;* **DHAT 211A, DHAT 211B, DHAT 211C, and DHAT 211D** *Advance Dental Therapy Clinc*	This course runs each week, with the exception of the out of clinic rotations, of the Semester and involves the students providing direct patient care. There is a minimum of 1200 hours. Students either serve as the provider or assistant during the below time frames. For credit purposes, only 50% of the allocated time is counted based on average patient "no-shows." Week Patient Encounters • Monday 10 AM, 1 PM, 3 PM • Tuesday 10 AM, 1 PM, 3 PM • Wednesday 10 AM, 1 PM, 3 PM • Thursday 10 AM, 1 PM, 3 PM • Friday 10 AM, 1 PM, 3 PM

Curriculum Standards: 2-19

Graduates must be competent in providing oral health care within the scope of dental therapy to patients in all stages of life.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-19	**DHAT 101** *Introduction to Dental Therapy I;* **DHAT 102** *Introduction to Dental Therapy II;* **DHAT 125A** *Operative Dental Therapy;* **DHAT 125B** *Operative Dental Therapy;* **DHAT 141** *Behavioral Sciences: Oral Health Education I;* **DHAT 241** *Behavioral Sciences: Oral Health Education II*	• Understand the principles of cavity design in the primary and permanent dentition • Understand the principles of cavity design for the preformed stainless steel crown procedure • Understand the principles of pulp protection for lesions in the primary and permanent dentitions • Describe the management and treatment options available for carious lesions in the primary and permanent dentitions

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-19	**DHAT 201A, DHAT 201B, DHAT 201C, DHAT 201D** *Advanced Dental Therapy*	Application of Dental Therapy theory and principles through clinical scenarios addressing patients in all stages of life
	DHAT 235 *Advanced Diagnosis and Treatment Planning II*	Have knowledge and skills required to collect diagnostic data and to prioritize patient needs based on caries risk assessments, medical and pharmacological considerations throughout the stages of a patient's life.
	DHAT 211A, DHAT 211B, DHAT 211C, DHAT 211D *Advanced Dental Therapy Clinic*	Understand and competently provide the dental therapy scope of care across all stages of patient life

Curriculum Standards: 2-20

At a minimum, graduates must be competent in providing oral health care within the scope of dental therapy practice with supervision as defined by the state practice acts, including:

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-20 a. **Identify oral and systemic conditions requiring evaluation and/or treatment by dentists, physicians or other healthcare providers, and manage referrals**	**DHAT 201A, B, C, D** *Advanced Dental Therapy, Mod A, B, C, D*	• Understanding of the limits of dental therapy, consultation and referral processes. • Evaluation and consultation with supervising dentist for traumatic injuries • Understanding of normal oral findings and presentations of the structures and tissues of the head and neck • General knowledge of how to evaluate, describe and note findings in the region of the head and neck that vary from normal • Consultation and referral processes for pathological findings outside the dental therapy scope of practice
	DHAT 222 *Pharmocology*	• To recognize and report potential problems relating to medications to the supervising dentist
	DHAT 235 *Advanced Diagnosis and Treatment planning II*	• To recognize and report potential problems relating to medical conditions and medications to the supervising dentist
2-20 b. **Comprehensive charting of the oral cavity**	**DHAT 135** *Diagnosis and Treatment Planning I*	• Have knowledge and skills required to collect diagnostic data, including • Comprehensive charting of the oral cavity

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-20 c. **Oral health instruction and disease prevention education, including nutritional counseling and dietary analysis**	**DHAT 101** *Introduction to Dental Therapy I*	Understanding and skill provide oral health instruction and disease prevention instruction, including nutritional counseling and dietary analysis
2-20 d. **Exposing radiographic images**	**DHAT 101** *Introduction to Dental Therapy I*	• Competence at taking and processing the various film views used in general dental practice • Ability to identify anatomical features and interpreting common pathology relative to oral radiology • Understanding of radiographic techniques to include hazards and regulation • Assessment of image quality and use alternative imaging techniques
2-20 e. **Dental prophylaxis including sub-gingival scaling and/or polishing procedures**	**DHAT 156** *Hygiene and Periodontology for Dental Therapy*	Understanding and skill provide oral health instruction and disease prevention instruction, including nutritional counseling and dietary analysis
2-20 f. **Dispensing and administering via the oral and/or topical route non-narcotic analgesics, anti-inflammatory, and antibiotic medications as prescribed by a licensed healthcare provider**	**DHAT 222** *Pharmocology*	Competence at dispensing and administering via the oral and/or topical route non-narcotic analgesics, anti-inflammatory, and antibiotic medications as prescribed by a license healthcare provider including appropriate patient education related to the medication
2-20 g. **Applying topical preventive or prophylactic agents (i.e. fluoride) , including fluoride varnish, antimicrobial agents, and pit and fissure sealants**	**DHAT 141** *Behavior Sciences I, Oral Health Education I*	• Introduction and competency in dental disease prevention interventions and services • Fluoride and other topical agents • Caries control • Sealants • Disclosing and plaque removal
2-20 h. **Pulp vitality testing**	**DHAT 125 A & B** *Operative Dental Therapy, Mod A & B*	Describe the principles and techniques for assessing pulp vitality and management of pulp exposure

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-20 i. **Applying desensitizing medication or resin**	**DHAT 153** *Basic Restorative Function*	Competency in applying desensitizing medicaments, linings and other pulp protection biomaterials available and factors influencing their selection
2-20 j. **Fabricating athletic mouthguards**	**DHAT 101** *Introduction to Dental Therapy I*	Fabrication of athletic mouthgards
2-20 k. **Changing periodontal dressings**	**DHAT 156** *Hygiene and Periodontology for Dental Therapy*	Knowledge and skill of changing periodontal dressings
2-20 l. **Administering local anesthetic**	**DHAT 155** *Local Anesthetic*	Demonstrate the use of local anesthetics to adequately anesthetize the oral structures such that comfortable treatment can be provided in the dental therapy scope of practice
2-20 m. **Simple extraction of erupted primary teeth**	**DHAT 135** *Diagnosis and Treatment Planning I*	Theory and principles of tooth extraction and oral surgery
	DHAT 211A, B, C, D *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Apply dental therapy skills in a clinical site, including cavity preparations and restorations, preventive services and extractions of primary and permanent teeth
2-20 n. **Emergency palliative treatment of dental pain limited to the procedures in this section**	**DHAT 222** *Pharmocology*	• Have a basic understanding of the pharmacology of specific drugs in the following classes of medications • Antibiotics and Antimicrobials • Dental Analgesics • Antiemetics and Antiallergenics • To recognize and report potential problems relating to medications to the supervising dentist • Competence at dispensing and administering via the oral and/or topical route non-narcotic analgesics, anti-inflammatory, and antibiotic medications as prescribed by a license healthcare provider including appropriate patient education related to the medication
	DHAT 211A, B, C, D *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Competence in providing urgent and emergent palliative treatment of dental pain and infection

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-20 o. **Preparation and placement of direct restoration in primary and permanent teeth**	**DHAT 125 A & B** *Operative Dental Therapy, Mod A & B;* **DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Apply dental therapy skills in a clinical site, including cavity preparations and restorations, preventive services and extractions of primary and permanent teeth
2-20 p. **Fabrication and placement of single-tooth temporary crowns**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Demonstration of fabrication and placement of single-tooth temporary crowns
2-20 q. **Preparation and placement of preformed crowns on primary teeth**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Demonstration of preparation and placement of preformed crowns on primary teeth
2-20 r. **Indirect and direct pulp capping on permanent teeth**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Competence in performing indirect and direct pulp capping on permanent teeth, and indirect pulp capping on primary teeth
2-20 s. **indirect pulp capping on primary teeth**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Competence in performing indirect and direct pulp capping on permanent teeth, and indirect pulp capping on primary teeth
2-20 t. **Suture removal**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Demonstrate skill of suture removal, minor adjustments and repairs on removable prosthesis, removal of space maintainers
2-20 u. **Minor adjustments and repairs on removable prostheses**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Demonstrate skill of suture removal, minor adjustments and repairs on removable prosthesis, removal of space maintainers
2-20 v. **Removal of space maintainers**	**DHAT 211A, B, C, D** *Advanced Dental Therapy Clinic, Mod A, B, C, D*	Demonstrate skill of suture removal, minor adjustments and repairs on removable prosthesis, removal of space maintainers

Curriculum Standards: **2-23**

Dental therapy education programs must have students engage in service learning experiences and/or community-based learning experiences.

CODA Relevant Standards	Ilisagvik Course number	Ilisagvik Learning outcomes
2-23	**DHAT 131** *Community Oral Health Education I*	
	DHAT 242 & 243 *Community Clinical Rotations I & II*	• Apply dental therapy skills in a remote clinical site • Apply community prevention program practice to real life situations

Dental Therapy Curriculum Project Work Group Members

Caswell A. Evans, DDS, MPH*
Workgroup Chairperson
Associate Dean for Prevention & Public Health Sciences
College of Dentistry
University of Illinois at Chicago

Ruth Ballweg MPA, PA-C*
Professor and Sr. Advisor on Advocacy,
Health Policy and PA Global Development
MEDEX Northwest PA Section
School of Medicine
University of Washington
Seattle, WA

Colleen M. Brickle EdD, RDH†
Dean, Health Sciences
Normandale Community College
Bloomington, MN

Ona Canfield Med, RDH*
Director, Dental Hygiene
Seattle Central College
Seattle, WA

Roxanne Fulcher, MPP†
Consultant
American Association of Community Colleges
Washington, DC

Sharon Hagan RDH, M.S.*
Faculty Instructor
Lane Community College
Dental Hygiene Program
Eugene, OR

Cheryl Madman*
Workforce Division Chair
Blackfeet Community College
Browning, MT

Ana Karina Mascarenhas, B.D.S., M.P.H., Dr.P.H*
Associate Dean of Research
School of Dental Medicine
Nova Southeastern University
Ft. Lauderdale, FL

Stacey Ocander, EdD*
Dean, Health and Public Services
Metropolitan Community College, and
President,
National Network of Health Career Programs
in Two Year Colleges
Omaha, NE

Julie Satur, PhD*
Associate Professor Oral Health, Head of Oral Health,
Melbourne Dental School
University of Melbourne, Australia

Mary Williard, DDS*
Director
Dental Health Aide Therapist Educational Program
Alaska Native Tribal Health Consortium
Anchorage, AK

Anne M. Loochtan, PhD*
Provost
NOVA Medical Education Campus (MEC)
Springfield, VA

**Denotes endorsement of curriculum*
†*Denotes input on curriculum*

APPENDIX C: Sample Legislative Language

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:

National Indian Health Board

Tribal Oral Health Initiative

National Indian Health Board
910 Pennsylvania Avenue, SE
Washington, D.C. 20003
202-507-4070