Dentists provide effective supervision of Alaska’s dental health aide therapists in a variety of settings

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Abstract

Objectives: This paper examines the supervisory relationships between Alaska’s dental health aide therapists (DHATs) and their supervising dentists to gain insight into how DHATs are being deployed and supervised to increase access while ensuring safety and quality.

Methods: Telephone interviews were conducted with four DHATs, their supervising dentists, and the dental directors at three health corporations in geographically distinct areas of Alaska. Follow-up questions were submitted and responded to via e-mail.

Results: This article profiles three DHATs and their supervising dentists, and offers observations on how dentists supervise and work in a team format with DHATs.

Conclusions: DHATs practice as part of a care team, with dentists providing direct, indirect, and general supervision. Both DHAT training, with its mandatory preceptorship, and the group practice model are designed to assure that DHATs provide safe, competent, and appropriate care within their limited scope of practice. The presence of DHATs allows dentists on the care team to play roles commensurate with the full extent of their training. Tribal health organizations in Alaska are deploying these providers safely and effectively in a variety of roles, according to regional needs and preferences. This suggests the model’s potential adaptability to settings outside Alaska.

Introduction

Nationally, the dental workforce debate seems to be shifting from the question of whether new provider types will be introduced to the question: “What is the appropriate way to supervise new providers to ensure safety and quality?”

This article presents three profiles that look closely at how dentists supervise the most skilled of Alaska’s four new oral health providers: the dental health aide therapist (DHAT).

Background

DHATs receive 2 years of post-high school training, which prepares them to provide a limited scope of dental education, prevention, and urgent and basic restorative care. The program is run by the Alaska Native Tribal Health Consortium (ANTHC). The first year of training is held at the University of Washington DENTEX Training Center in Anchorage; the second year of training is held at the Yuut Elitnaurviat Dental Training Clinic in the rural community of Bethel.

In early 2000, the ANTHC introduced an initiative to address critical, long-term dental access issues and oral health disparities. The dental health aide (DHA) Initiative introduced four new dental workers to the dental care delivery teams serving American Indian/Alaska Native (AI/AN) populations through the Alaska Tribal Health System.

The DHA Initiative grew out of the existing Community Health Aide Program (CHAP) in Alaska. The CHAP began in the 1950s when healthcare providers were scarce in Alaska, and tuberculosis was threatening the entire AI/AN population in the state. In the beginning, healers and community leaders in remote villages were recruited to act as the eyes and hands of physicians located in the larger cities. Through the years, the program developed a well-established network of
healthcare workers whose training and scope of practice is regulated by a federal CHAP Certification Board through a formalized Standards and Procedures document (1). In 1968, CHAP received congressional recognition and funding. Because CHAP is a federally recognized program, CHAP providers practice outside of state practice act legislation.

In the last decade, CHAP expanded its reach with the introduction of DHAs. DHAs are certified by the CHAP Certification Board after successful completion of training and a preceptorship. Unlike licensed healthcare providers, certified DHAs must demonstrate competency throughout their careers in their full scope of practice in order to retain their certification. This demonstration of competency requires that DHAs perform all procedures in their scope under the direct observation of supervisors during the 2 years prior to applying for recertification.

CHAP’s four new dental providers are geared to meet the specific unmet needs of the Alaska Tribal Health System by improving access to care and the dental teams’ ability to provide prevention services. Each DHA has a specific scope of practice. The DHAT has the most diverse and skill-intensive scope of the new providers. Of the four types of DHA, the DHAT is also the most controversial and misunderstood.

After completing more than 3,000 hours of training, DHATs must be directly supervised during a preceptorship lasting a minimum of 400 hours. The preceptorship can be thought of as a short residency. During this typically 6-month period, the supervising dentist acquires an intimate knowledge of the DHAT’s skills. In the Alaska Tribal Health System, these dentists often work in group practices. More than one dentist may be involved in the supervision of a particular DHAT, but the designated supervising dentist decides when the DHAT is ready for certification. The dentist then establishes individual standing orders for the DHAT based on his or her direct observation of the DHAT’s skills and clinical competence. After certification, the DHAT can only perform services under general supervision if they are listed in the standing orders. Other services in the DHAT scope of practice that are not on the standing orders must only be performed under direct or indirect supervision (see Figure 1).

Although supervising dentists do not receive special training in supervision or evaluation, the experience of the ANTHC suggests that the supervisory abilities of its dentists are more than adequate to assure the clinical competence of the DHATs they supervise. Like other dentists, they come to DHAT supervision with previous experience supervising dental hygienists, dental assistants, and administrative personnel. They also routinely supervise dental students who rotate through public health settings. All DHAT supervisors receive training in the use of teledentistry technologies, and

Definitions of Types of Supervision

CHAP Standards and Procedures state, “The supervision of a dental health aide may be general, indirect or direct,” and define supervision as follows:

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

“General supervision” means the dentist … has authorized the procedures and they are being carried out in accordance with standing orders issued to a specific dental health aide.

“Indirect supervision” means a dentist … is in the facility, authorizes the procedures, and remains in the dental facility while the procedures are being performed by the dental health aide.

Figure 1 Source: Community Health Aide Program Certification Board Standards and Procedures, Amended June 19, 2008. Sec. 2.30.010. Supervision of Dental Health Aides.
in January 2011, the ANTHC began offering a course for supervising dentists in order to acquaint them with the newer evidence-based protocols that are part of the DHAT curriculum and to share supervisory best practices among the regions.

**Methods**

Eleven of Alaska’s 27 native health corporations have hired DHATs, deploying them in a variety of settings and under several types of supervision. This paper presents three profiles of well-established relationships between DHATs and dentists. These specific provider pairs were chosen because they offer a window on three types of DHAT supervision and the various ways in which DHATs are safely and effectively expanding access to oral health services. In order to illustrate the flexibility of the model, pairs were selected from three separate health corporations, each of which faces different geographic, cultural, and infrastructure challenges.

One to 2-hour telephone interviews were conducted with the DHATs, their supervising dentists, and their dental directors using a list of questions formulated by the authors. Three of the supervising dentists and one of the DHATs also submitted answers to follow-up questions via e-mail.

**Limitations**

The corporations profiled and most of the others that have chosen to participate in the DHA Initiative are pleased with the model and intend to continue or expand its use. Our sample does not represent the small minority of the corporations that have encountered difficulties in integrating DHATs. These difficulties typically involve compensation for newly established positions in under-resourced communities and the problems individuals with challenging personal situations face in meeting the demands of full-time employment.

**Profiles**

Aurora Johnson, Norton Sound Health Corporation (NSHC)

**DHAT location:** Coastal village in western Alaska

**Supervising dentist:** Dr. Mark Kelso, Nome

**Supervision:** General

**Additional staff support:** Dental assistant, itinerant dentists

**Population served by the DHAT:** The village’s 727 residents, another 743 people in 3 surrounding villages and 15 school-based clinics

**Population served by the corporation:** The Nome clinic serves the 9,403 residents of Alaska’s Bering Straight Region, a 44,000 square mile area with few roads (2).*

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*Where the state of Alaska was not able to certify numbers, state estimates were used.*

Aurora Johnson began her preceptorship under the supervision of Dr. Mark Kelso, Dental Director of the NSHC headquartered in Nome. She enjoyed the support and indirect supervision of a resident dentist in her village for the first 2 years of her practice. Since that dentist moved away, Johnson has continued to practice under Dr. Kelso’s general supervision from Nome in accordance with her standing orders. She has the help of a full-time dental assistant, and NSHC supplements her services with those of an itinerant dentist who travels to the village every 6-8 weeks. Patients needing urgent complex treatment must fly to Nome to see a dentist.

Johnson initially moved to the village when she married. She has been active in village life and has raised three children in the community. As a DHAT, she divides her time among treating patients in her village clinic, providing care in three surrounding villages, overseeing school-based hygiene and prevention programs in 15 schools, and pursuing other public health initiatives. She lobbied for a “no pop” rule in the local schools, which no longer sell carbonated beverages during school hours, and she has made it her personal business to help the town’s new water plant manager become certified so that fluoride can be reintroduced in the local water supply.

Dr. Kelso supervises four DHATs, two of whom work remotely. He says that the DHAT in Nome and the other dentists in his office seek his opinion on a daily if not hourly basis simply because he is available, and his group practice model encourages provider interactions. Dr. Kelso is confident of Johnson’s ability to handle routine care within her scope of practice with less frequent interaction. When she does consult with him, typically by phone, it is usually to discuss more complex situations such as inadequate orthodontic space in children. Twice in her career, Johnson has sought Dr. Kelso’s help in handling a rare dental emergency.

“I just came across to town from my fish camp, and as soon as I parked my boat, the community health aide came to me [with a patient], and just looking at him, it was obvious that he needed help. I was just thankful that Dr. Kelso was home [when I called].

Dr. Kelso talked her through the delicate process of lifting up the patient’s lower teeth, which a baseball had knocked loose, and pushing them back in. She describes Dr. Kelso as “always encouraging,” giving her the confidence to provide the necessary care.

“We put four of his lower teeth back into place,” she concludes, “and I thought for sure he would need root canals, but you know what? His teeth are perfectly fine. He eventually went to Nome to see Dr. Kelso, and his teeth are still in and functioning.”

Once a year, Dr. Kelso has an opportunity to observe Johnson at work when they travel together for two intensive weeks providing care in the surrounding villages. Dr. Kelso...
Conan Murat, Yukon Kuskokwim Health Corporation (YKHC)

**DHAT location:** Village on the Kuskokwim River

**Supervising dentist:** Dr. Edwin Allgair, Bethel

**Supervision:** General

**Additional staff support:** Dental assistant, itinerant dentists

**Population served by the DHAT:** The village’s 485 residents and another 1,788 people in 13 communities nearby

**Population served by the corporation:** Bethel’s 5,803 residents and another 19,157 people living in 56 villages in an area the size of the state of Oregon are served by this regional hub.

The village where Conan Murat practices had a dentist stationed there for about 1 year in the late 1990s. Otherwise, Murat has been its only resident dental provider. Dental care was traditionally provided by itinerant dentists from Bethel, 150 miles down river. They would visit one or two times per year for a couple weeks, not enough time to provide comprehensive care for all the people in the village and surrounding communities. When Murat first started practicing in the village, he recalls sending people to Bethel for emergency extractions on a regular basis, but after 5 years in the community providing both clinical and prevention services, he says, “I'll go to a school screening, and the rate of decay is a whole lot lower than it was.” Nevertheless, he still faces disturbing evidence on a regular basis that much work remains to be done.

A parent will come in with a one- or two-year-old, and I'll end up taking out four front teeth 'cause the parents are giving ’em pop and giving ’em candy to suck on. If it’s the first time, a lot of the parents will be in there crying. Other parents have been in before for dental surgery with their older kids, so they just think it’s the normal thing to do.

The biggest challenge I face is just trying to talk those parents into taking care of their kids’ teeth.

Murat’s supervisor, Dr. Edwin Allgair, resides in Bethel. Murat remebers calling him a minimum of three times a day during his first year on the job, but the frequency of their contacts has diminished considerably over time. Dr. Allgair agrees with Murat’s assessment that the need for close supervision diminishes as DHATs gain experience. He supervises three DHATs, all stationed in remote locations. Each has different standing orders commensurate with the skills they demonstrated during their preceptorships. Two of these DHATs are newly certified and have just moved to their respective village clinics. Dr. Allgair expects that these two will initially require more interactions, which will likely taper off as they gain experience and build confidence.

When Murat needs to consult a dentist, he calls Dr. Allgair, but when Dr. Allgair is out, he will speak to any of the dentists in Bethel. Although they are less familiar with his work, Murat believes that he receives comparable assistance from every dentist on the team.

Murat can only remember two times in 5 years working as a DHAT when he began a procedure he could not complete.

“I was over in a village and started extracting a tooth,” he recalls. “It just didn’t want to come out. I informed the patient, and he said, ‘Okay, I understand’ and we put him on a flight to Bethel that same day. The dentist had trouble with it, too, but he got it out.”

Dr. Allgair comes to the supervisory role with extensive experience supervising predoctoral and postgraduate dental students. To facilitate a systematic approach to overseeing all of YKHC’s junior providers, he has developed the following protocols and tools:

- He teaches DHATs a scripted way of communicating a patient presentation to make sure that, when possible, everything relevant can be communicated to a dentist in 30 seconds.
- He and the other dentists on staff keep a shared log of all DHAT/dentist contacts to facilitate continuity of care.
- He provides DHATs with a form to keep track of patients who need care beyond their scope of practice so that visiting dentists have a plan of action when they arrive.
- He orientates all new staff dentists in how to provide clinical guidance, not only to DHATs, but also to extern dental students and the community health aides in the villages who refer patients with dental pain.
- He has assembled an ad hoc preceptor “manual” that he shares with other supervisors around Alaska.

Dr. Allgair also conducts education sessions for his DHATs, some tailored to their particular needs, and they participate in quarterly chart reviews and other quality assurance activities that are typically part of the hospital-based group practices in the Alaska Tribal Health System.

Dr. Allgair’s approach to supervision is more formalized than most and may be particularly appropriate to YKHC, which has recently undergone a vast expansion of its dental staff. Since Dr. Brian Hollander became dental...
Daniel Kennedy, SouthEast Alaska Regional Health Consortium (SEARHC)

**DHAT location:** Island village in Alaska’s panhandle  
**Supervising dentist:** Dr. Stephen Ericksen  
**Supervision:** Direct and indirect, occasionally general  
**Additional staff support:** Dental hygienist, dental assistant, primary dental health aide

**Population served by the DHAT:** 782 people living in the village and another 1,497 in three other island villages connected by roads  
**Population served by the corporation:** The 53,000 Alaska Native and American Indian residents of Juneau, Ketchikan, and Sitka, and the residents of the surrounding villages.

Daniel Kennedy’s first job with SEARHC was as a dental assistant in Juneau. Two years later, SEARHC’s dental director, Dr. Tom Bornstein, approached Kennedy about becoming a DHAT, and a year after that, Kennedy joined the first class of DHATs to be trained in Alaska. He returned to his island village for his preceptorship in June of 2009 alongside Dr. Stephen Ericksen.

“I was a little skeptical of the DHAT program at first,” says Dr. Ericksen, who originally encountered it while working in Nome, “but the four that I’ve worked with have all been great, even to the point where I would be comfortable having them work on me and my own family.”

Dr. Ericksen estimates that the dental clinic handles 30 percent more patient visits since Kennedy’s arrival on the island and that his presence has allowed the dentist to provide approximately twice as many higher level services such as root canals, wisdom tooth surgery, and construction of prosthetic restorations. That is just what SEARHC intended when it decided to station its DHATs side by side with dentists. In the view of dental director Dr. Tom Bornstein, DHATs have a very specific role to play in the clinic: clean out decay and fill cavities.

“That was the Achilles heel of the whole system,” he believes. “We didn’t have enough horsepower to get routine fillings done. The DHAT fits in this niche.”

Most of Kennedy’s clinical time is spent filling adult teeth, with the remainder divided among conducting comprehensive exams, placing sealants and varnishes, and the occasional extraction. Fewer than 10 percent of the clinic’s patients are walk-ins, so Kennedy discusses his patients with Dr. Ericksen at the start of every morning and consults him as questions arise.

Both providers described their relationship as collaborative and collegial. It is not uncommon for Kennedy to conduct an exam on a new patient, calling Dr. Ericksen in to perform a root canal, and then place the final filling while Dr. Ericksen works on a patient seated next door. At other times, travel to outlying villages forces them to collaborate at a distance.

“I typically supervise my DHAT remotely only one day each week,” says Dr. Ericksen, “but I consider the extensive time we spend working side-by-side to be invaluable for our confidence and communication when we are working in separate locations.”

In addition to providing clinical services, Kennedy also leaves the clinic to conduct screening and education events about four times a month, visiting grade schools, Head Start programs, and other sites. His presence on the island brings significant public health benefits and is helping to diminish dental fear. According to Kennedy, a lot of people, especially in his generation, are “deathly afraid of coming to the clinic,” and they convey this fear to their children. He retains unwelcome memories of the once or twice yearly visits that dentists made to the village prior to the opening of the dental clinic. Children had to line up in the community hall to be seen by a dentist, all the while listening to their peers crying as they received local anesthetic or underwent extractions.

Kennedy credits his ability to deliver local anesthetic with very little pain to winning some residents over to the idea of seeing a DHAT. “I get a lot of people returning to the clinic and wanting to see me,” he says.

Kennedy has also begun reaching out to villagers who are uncomfortable with the clinic setting. With the help of his dental assistant, he provides nonsurgical clinical services, preventive services, and screenings in the home. According to Dr. Ericksen,

Having Dan here is allowing us to think outside the box on some of these situations. We are doing more preventive care like in-office fluorides in the home for a single mother with many kids. For elders who have trouble coming in, I’ll have Dan clean their dentures for them and do a brief oral exam [in the home] to find out their needs. Like the other dentists interviewed, Dr. Ericksen acknowledges that supervision has its challenges, including adjusting to the roles of teacher and mentor. It is time consuming, especially during the DHAT’s preceptorship, forcing dentists to reduce their patient loads. He also expresses a desire to expand his DHAT’s standing orders to include more urgent care-related services.
Discussion

These brief profiles provide representative snapshots of how DHATs are providing care in Alaska. They are consistent with the larger picture revealed in the course of our interviews, and they may shed light on the process of employing dental therapists in Alaska and other settings.

Observation #1. Dentists can provide effective supervision for DHATs whether they are in the operatory next door or many miles away

Although contact between DHATs and their supervisors varies considerably, the lengthy required preceptorship and the dentist’s discretion to establish and modify the DHAT’s standing orders provide the basis for a trusting, collegial relationship characterized by excellent two-way communication. Communications technologies such as telehealth carts and electronic health records can enhance supervision by facilitating the secure transmission of radiographs and patient data, but in actual practice, most remote contact occurs via the telephone. During visits to the remote clinics, supervising dentists can perform audits of paper charts. At corporations with electronic dental records, dentists can perform these audits remotely.

Supervising DHATs appears comparable to or easier than the other supervisory roles that dentists play. Dr. Allgair observes, “I haven’t found the DHATs to be any more of a burden than a dental student. In fact, most of them are less likely to exceed their skills or authority.” Dr. Bornstein conurs. “It’s more the new dentists that I worry about. The [DHAT] training stresses knowing your scope of practice.”

Indeed, DHATs’ strict adherence to scope-of-practice limitations was a common refrain in all our conversations. Both dentists and DHATs credited the training programs with inculcating this ethic in their students. DHATs are aware of just how critical this fundamental tenant is to safeguarding not only their patients, but also their own professional futures. During their yearly professional gathering in Anchorage, DHATs have been overheard challenging one another on adherence to this principle, in effect policing each other in the interest of the group.

Observation #2. Care is perceived as a team effort with both DHATs and dentists sharing responsibility for improving the population’s oral health

Even when DHATs and dentists are in separate locations, DHAT practice is supervised, not independent, with DHATs being viewed as an integral part of the care team.

Each of the dentists and dental directors interviewed emphasized that consultation is part of their normal routine whether or not they are working with DHATs. Their offices frequently incorporate dental students doing externships and newly minted dentists who also need supervision, and it is not unusual in their group practices for other dentists to seek their advice when they encounter unusual situations.

Observation #3. Quality assurance is integral to the DHAT model

Critics of the DHAT model have expressed concerns about patient safety, but the evidence from nearly 100 years of dental therapy practice worldwide does not support these concerns. A growing body of evidence demonstrates that dental therapists – and DHATs specifically – provide safe, competent, and appropriate care. A recent evaluation by RTI International (3) of the implementation of the DHAT program in Alaska found that the DHATs included in its study were “performing well and operating safely and appropriately within their defined scope of practice.” The study also reported high patient satisfaction with DHAT care.

All of the corporations profiled in this paper have traditional quality assurance measures in place such as periodic chart reviews, yearly performance evaluations, and continuing education requirements. CHAP also requires that every 2 years, DHATs demonstrate their competency on all of the procedures within their scope of practice under the direct observation of a supervising dentist in order to renew their certification.

Additionally, the group practice model itself functions as a powerful quality assurance mechanism. Patients typically have encounters with several providers within each corporation. Even in practices where providers maintain separate patient panels, regular out-of-office travel, the periodic presence of itinerant dentists, the availability of walk-in appointments, and the need for patients to travel to hub sites for higher level care all converge to increase the likelihood that patients will be seen by multiple providers.

Observation #4. Problems encountered during delivery of care by a DHAT are well handled by the existing system of referral

The use of DHATs has produced notable improvement in the oral health of the communities served, and according to Dr. Hollander and the other dentists interviewed, the clinical care provided by DHATs is “of excellent quality and no different from what the dentist would be doing.” All the dentists indicated that DHATs know their scope of practice and err on the side of caution. As a result, clinical problems, such as the difficult extraction that Conan Murat encountered, are true
rarities, and when they arise, systems are in place to transport patients to a dental provider with a broader scope of practice.

**Observation #5. The presence of DHATs allows dentists to play roles commensurate with the full extent of their training**

DHATs address oral healthcare needs that have long been overwhelming the traditional dental provider pool. Adding DHATs, with their limited scope of practice, frees the dentists to provide the higher levels of care for which they have trained. As Dr. Mandie Smith, who works with DHAT Brian James in one of the larger clinics in Sitka, explains, “Because Brian is able to work off existing treatment plans, to do simple fillings and a lot of prevention and disease control, it frees up slots in my schedule where I can provide third molar extractions, root canals, prosthodontics, ortho, and advanced perio.”

Dr. Bornstein foresees additional benefits. “The presence of DHATs should make dentists better physicians of the oral cavity,” he says. “Fifty percent of oral cancers don’t have a good outcome because they’re discovered late. Dentists should be doing a good oral cancer screening. They should highlight the medical aspects of their training.”

**Conclusion**

DHATs practice as part of a care team, with dentists providing effective direct, indirect, and general supervision. DHAT training and certification, mandatory preceptorships, and the group practice model further reinforce and assure that DHATs provide safe, competent, and appropriate care. The presence of DHATs allows dentists on the care team to play roles commensurate with the full extent of their training. While adding another person to the dental team poses some challenges for supervisors, these are managerial, not clinical. The clear message from the dentists interviewed was that the overall result – improved access to care – was well worth the effort.

Our profiles also reveal the flexibility of the DHAT model. The tribal health corporations are deploying these providers safely and effectively in a variety of roles, according to regional needs and preferences. This suggests the model’s potential adaptability to settings outside Alaska.

**Acknowledgments**

We wish to acknowledge the contributions of those employees of the Alaska Tribal Health System whose interviews made the profiles possible: Dr. Edwin Allgair, Dr. Brian Hollander, and DHAT Conan Murat from the Yukon Kuskokwim Health Corporation; Dr. Tom Bornstein, Dr. Stephen Erickson, Dr. Mandie Smith, DHAT Daniel Kennedy, and DHAT Brian James from the SouthEast Regional Health Consortium; and Dr. Mark Kelso and DHAT Aurora Johnson from the Norton Sound Health Corporation. We also wish to acknowledge the contribution of Dr. Allan Formicola, who served as a consultant to the W.K. Kellogg Foundation regarding the work of the American Association of Public Health Dentistry (AAPHD) panel and provided constructive criticism of the early drafts of the manuscript. We would especially like to thank the W.K. Kellogg Foundation, which provided a small grant through AAPHD to assist us in gathering the information for the profiles and preparing the manuscript. Lastly, we would like to acknowledge the efforts of the Alaska Native Tribal Health Consortium and member Tribal Health Organizations to bring innovation to the dental workforce in Alaska so that they may realize their vision of making Alaska Natives “the healthiest people in the world.”

**Conflict of interest**

Dr. Williard is employed by the Alaska Native Tribal Health Consortium, Division of Community Health Services and has an appointment as clinical instructor in the Medex Northwest Physician Assistant Training Program of the Department of Medical Education and Biomedical Informatics at the University of Washington, School of Medicine, Seattle, WA. Ms. Fauteux’s services were paid for with funding provided by the W.K. Kellogg Foundation to the American Association of Public Health Dentistry.

**References**