Dental Health Aide Therapist:
A New Health Professional in the United States

By:

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Many of our population’s most common diseases are influenced by our health behavior. Oral health is an integral part of overall health. Dental caries is the most common chronic disease in children and adults in the U.S. Dental caries is largely, if not entirely, preventable. Yet in 2011, there were over 850,000 visits to emergency rooms for preventable dental conditions.¹ Poor oral health increases risk for diabetes, heart disease and poor birth outcomes. It can affect a child’s ability to eat, sleep and learn. A recent study by the University of Southern California showed that teens with poor oral health were four times more likely to have a low grade point average.² Other studies show bad teeth prevent otherwise qualified candidate from getting jobs or promotions.

In 2000, the Surgeon General’s report, *Oral Health in America*, called attention to oral health in relation to overall health and well-being.³ When reviewing the current disparities in oral health in the U. S. it is
clear that millions of Americans – adults and children – lack access to routine dental care and preventive services. Over the past 20 years, the number of dental Health Professional Shortage Areas has grown six-fold – from nearly 800 in 1993 to more than 4,900 in 2014.\(^4,5\) As you might expect, dental caries disproportionately impacts low income and rural populations in the U. S. More than 47 million people live in places where it is difficult to access dental care.\(^6\) More than 14.5 million low-income children received no dental care in 2011.\(^7\) Low income adults are almost twice as likely as higher –income adults to have gone without a dental check up in the prior year.\(^8\) More than 70 Million Americans receiving water from community water systems have no access to fluoridation which is known to significantly reduce tooth decay.\(^9\) More than one fourth of adults in the U.S. aged 65 and over have lost all their teeth.\(^10\)

About 130 million Americans (43% of the population) have no dental coverage whatsoever.\(^11\) Only 20 percent of the nation’s 179,000 practicing dentists accept Medicaid.\(^12\) And of those practitioners who do, fewer than 8,500 devote a substantial part of their practice to serving the poor, chronically ill and rural residents.\(^13\) It is worth noting that 62% of National Dental Association members serve Medicaid patients.\(^14\) We will need to address the lack of a robust reimbursement policy for dental care. But we must do more.

The implementation of the Affordable Care Act has brought, and will bring, many thousands into the health system. That is a good thing and will ultimately improve the health of our nation but it demands we produce more well trained health professionals across the professions able to deliver care in new ways in more places.
Certainly we need more dentists. Current HRSA numbers indicate we need 7,300 new dental providers in order to meet the country’s oral healthcare needs.\textsuperscript{15} We need to increase the number of dentists from diverse social and ethnic backgrounds. Less than 8 percent of students enrolled in dental school are African-American, Latino or American Indian. Only 14 percent of dentists are from racial or ethnic minority populations. Of course training new dentists takes time. We hope those new dentists will want to practice in areas of need.

However, dentists joining the National Health Service Corps have, on average, $142,000 in student loan debt - this is more than 10\% greater debt than the average for physicians.\textsuperscript{16} While we can hope and expect these new dentists to bring passion for their profession and the responsibility to care for their fellow citizens, what is their financial incentive to locate traditional practices in these dental HPSAs?

We must consider new models of care if we are to meet the oral health needs of our citizens. One proven model is that of the Dental Therapist. Similar to nurse practitioners and physician assistants in medicine, dental therapists are professionally trained, midlevel dental providers who can help people get the dental care they need. They support the work of a dentist and can work in different locations, often using telehealth technology, while under a dentist’s supervision. When dentists are in short supply, dental therapists—\textit{who actually receive more clinical training hours than dentists do on a specific number of routine and preventive procedures}—can expand the reach of dentists and provide vital dental services, oral health education and prevention, offering continuity of care for underserved communities. Dental therapists are trained to provide a limited scope of routine dental services, including:
• Preventive care such as patient instruction, oral health outreach and oral screenings

• Dental exams, x-rays and fluoride treatments

• Cleanings and placement of sealants

• Fillings

• Simple extractions

These mid-level dental providers have been in place in other countries – Canada, the UK, Australia and New Zealand for up to 90 years. In fact in New Zealand, a school-based delivery system using dental therapists has been in place since 1921.

In this country, Alaska Native Tribes have led the way in establishing the dental therapist model.\textsuperscript{17}
2014 marks the 10th year of practice for the Alaska Dental Health Aide Therapists (DHATs). Today more than 40,000 Alaska Native people living in 81 rural, mostly remote communities across the state, have access to dental care and prevention services as a result of this community driven solution. Alaska Dental Health Aide Therapists (DHATs) are trained in Alaska according to a proven worldwide model: a two-year, post-high school competency-based primary care curriculum, incorporating innovative preventive and clinical strategies.

It was not always this way. The children of Alaska’s villages rarely smiled. Whole classes of students were graduating without teeth. Prior to the DHAT innovation, 87 percent of 4 and 5 year old children and 91 percent of 12-15 year olds had tooth decay.\(^\text{18}\)

Alaska’s Tribal leadership tried many ways to get dentists to locate or practice in the remote areas. None was successful. So the tribal leadership began to identify potential Dental Therapist students from these communities. Originally, in 2002-2004 these students left their lives and their villages for two years of training in New Zealand. By 2007 the Alaska Native Tribal Health Consortium (ANTHC) was able to establish in-state training. In partnership with the University of Washington Medical School (specifically with the PA program within the Department of Family Medicine) an academic curriculum was developed and new classes of dental therapists began to train in state-of-the-art facilities in Anchorage and Bethel Alaska. It should be noted that the University of Washington Dental School was approached and was originally interested in partnering with the Alaska Native tribes, but significant pressure, from alumni and organized dentistry squelched that possibility.
The Tribes are leading this effort. Certainly because the need is so dramatic among their populations, but in addition, because federal funds for pilot programs – or funding of any sort – for Dental Therapists was specifically restricted in congressional legislative language, this has developed as a state by state, community by community initiative rather than a federally supported one. However, dental therapist services are specifically identified and eligible for reimbursement within the Medicaid/CHIP guidance for “dental service” and “oral health service”.

In the lower 48 states where in many areas of the country the need is just as great as that of Alaska’s remote villages, change is coming, but more slowly. The pushback by organized dentistry is significant.

Not unlike the pushback in medicine in the 1960’s, 70’s and 80’s, when nurse practitioners and physician assistants were introduced into the health system.
As you can see on this map, other states are following Alaska’s pioneer efforts with variations of their original training model.

Currently Minnesota has launched a DT and Advanced DT training program. The first classes graduated in 2011. Their models call for a longer training window -- approximately 4 years. Two schools, the University of Minnesota School of Dentistry and Normandale Community College offer training toward Dental Therapist and Advanced Dental Therapist licenses. The Minnesota program is already showing good success in treating underserved populations in both rural and urban settings.

Maine has just passed their legislation and are now in the rule-making phase of that state’s implementation. Their model establishes a new license for a Dental Hygiene therapist who will work under a dentist’s supervision and preform procedures like filling cavities and pulling teeth.
Everyone in this room is familiar with our nation’s abysmal health disparities statistics. We need more well trained health professionals available to deliver care where it is needed -- in culturally appropriate ways, in safe community settings. The next decades will see many changes in our health delivery models – team delivery of care – telemedicine – patient centered homes . . . all will become the norm – over time.

We don’t have time. Today’s children are suffering needlessly from poor oral health . . . and, from chronically poor health as a result. Much of what is needed to improve the health of our communities requires a complex response to community, education and health needs.

The introduction of Dental Therapists to the health team is not complicated, and it is a proven, safe, “immediate” way to improve oral health.

I say to my colleagues in dentistry; Change can be difficult and fraught with misinformation, fear and efforts to delay. But change that results in an immediate improvement in the lives and futures of those suffering from poor oral health is something worth fighting for.

I urge the health professions community, and most importantly the dental community, to do the right thing and begin to train and place Dental Therapists in the communities currently without regular dental care. It changes lives – it repairs neighborhoods and communities. It expands the reach of dentists to those most in need of oral health care. It is the right, necessary and noble thing to do.
4. American Dental Education Association. “How HRSA’s Title VII and Title VIII Health Professions Programs Help Shape the Health Care Workforce.” September 2010. [https://www.aamc.org/advocacy/hpnec/events/catalanottoapresentation.pdf](https://www.aamc.org/advocacy/hpnec/events/catalanottoapresentation.pdf)
6. Ibid.
13. Ibid.