Approved: March 23, 2011
Date

MINUTES OF THE PUBLIC HEALTH AND WELFARE COMMITTEE

The meeting was called to order by Chairman Vicki Schmidt at 1:30 p.m. on March 8, 2011, in Room 546-S of the Capitol.

All members were present.

Committee staff present:
Nobuko Folmsbee, Office of the Revisor of Statutes
Melissa Calderwood, Kansas Legislative Research Department
Iraida Orr, Kansas Legislative Research Department
Carolyn Long, Committee Assistant

Conferees appearing before the Committee:
Suzanne Wikle, Kansas Dental Project
Ron Nagel, Registered Dental Practitioners
Dr. Daniel N. Minnis, DDS
Melinda K. Miner, DDS

Others attending:
See attached list.

The Chair called for final action on **SB 138—Pharmacy audit integrity act.** Staff gave a brief explanation of the proposed amendments to **SB 138** stating that "pharmacy benefits manager" means a person, business or other entity that performs pharmacy benefits management. It also indicates that the audit must be conducted by or in consultation with a pharmacist licensed in Kansas; that the pharmacy may request a rescheduling of an audit, if the audit is scheduled during the first seven days of the month; that either party not satisfied with the results of the mediation may seek arbitration; a copy of the final report must be provided to the plan sponsor and the commissioner of insurance; and the act shall apply to anything entered into, amended, or extended with the effective date of this act.

The Chair recognized Senator Pilcher-Cook who indicated another party had an amendment. When asked by the Chair if she was prepared to introduce the amendment. She stated she was not prepared to introduce it. The Chair inquired as to the origin of the amendment and was informed that it was the same attachment to testimony presented February 17, 2011 by MedCo. Although there was no time to review the balloon at that time, it was their intent to introduce it today. Senator Steineger offered to introduce and explain the amendment. Senator Steineger moved to adopt the amendment, Senator Pilcher-Cook seconded. Senator Steineger explained the amendment. Senator Reitz wondered where the compromise failed and why it failed. After further discussion, Senator Brungardt made a motion to table **SB138** until Thursday, March 10, 2011. Seconded by Senator Huntington. Motion carried.

The Chair called the committee's attention to a letter sent to the Kansas Association of Oriental Medicine in care of John Federico indicating the recommendation of the committee that the Kansas Association of Oriental Medicine make application for review under the Health Occupation Credentialing Act (Attachment #1).

The Chair opened the hearing on **SB 192—Kansas Dental Board; licensure of registered dental practitioners**. This bill would create a new category of dental service providers called registered dental practitioners, who must be licensed by the Kansas Dental Board to practice dental therapy. All licensing requirements, regulations, and powers and duties of the Kansas Dental Board related to registered dental practitioners would be identified under the bill.

Suzanne Wikle, representing the Kansas Dental Project, said that the key parts of this bill relating to Registered Dental Practitioners (RDP) were the additional education which would require 18 months of advanced training beyond the dental hygiene degree; that they must be supervised by a dentist and would not be practicing independently; that the services that may be provided by an RDP include all the services provided by the Registered Dental Hygienists plus additional services, including fillings, cavity preparation, extractions of baby teeth, and extractions of already loose permanent teeth. The supervising dentist may limit the scope of an RDP under their supervision through the written supervision agreement. To insure that the RDP would serve the communities that need them most they would be required to meet one of the following standards: work in a federally designated workforce shortage area; be employed by a

The minutes of the Public Health and Welfare Committee at 1:30 p.m. on March 8, 2011, in Room 546-S of the Capitol.

safety-net clinic; or work for a private practice that derives at least 20% of their revenues from Medicaid (Attachment #2)

Ron Nagel, registered dental practitioner, is a recent retiree from the U.S. Public Health Service in Alaska. He was responsible for the federal oral health activities in the Alaska Tribal Programs and was the principle investigator for grants aimed at workforce development and developed the federal certification standards for these new providers. He said that the available evaluations and evidence suggests that the RDP would be able to deliver high quality, safe oral health care (Attachment #3).

Dr. Daniel N. Minnis has been a private practice dentist for 22 years and has dedicated 30% of his practice to care for Medicaid recipients, Head Start children, the mentally challenged, frail elders, individuals living with HIV, Hepatitis C, and high risk pregnant mothers. He stated he would hire a Registered Dental Practitioner in his practice tomorrow and allow them to perform procedures within their scope on himself, his family members, and his patients. He said Kansas has the opportunity to develop a new dental practitioner model which would benefit both patients and the dentists who employ these practitioners and would encourage us to seize this opportunity (Attachment #4).

Melinda K. Miner, DDS, is in private practice with her husband and the two of them serve a clientele which includes a lot of children covered by the state Medicaid and Healthwave programs. She reminded the committee of the additional intense dental training required and also that any dentist that would employ a RDP would understand that they are ultimately responsible for the successes and the failures of that employee (Attachment #5).

Due to a time restraint, the Chair informed the rest of the proponents for **SB 192** that she would continue their testimony on Wednesday, March 9, 2011.

The next meeting is scheduled for March 9, 2011.

The meeting was adjourned at 2:35 p.m.

SENATE PUBLIC HEALTH AND WELFARE COMMITTEE GUEST LIST

DATE: March 8, 2011

NAME	REPRESENTING
Claire Crawford	Intern - Sen. Kelly
Heidi Foster	Rawlins County Dental Clinic
Jason Wesco	Comm Health Center of SEK
Kendra Poole	KAMU
ROBERT TREPINSKI	MARIAN CLINIC
DENISE MAUS, RDH	SELF
Janette Delinger, RDH	KDHA
MAX HEDRICK	SFSDevg —
Nikki King	Health Care Access - Lawrence
Elise Higgins	Ks Health Consumer Coalition
Sonia Olmos	KHCC
Anna Lamberton	KHCC
Mandy Nille	SCORKS
DAVID SCHOECH	Ks PHARMACISTS ASSOC.
Mike Humphrey	Ks Pharmacist Assoc
Van G. Cable	Ks. Pharmaceut Assn
Josh Quier	KS. Pharmacist Assoc
TanyaDorf	OHK

SENATE PUBLIC HEALTH AND WELFARE COMMITTEE GUEST LIST

DATE: 3-8-11

NAME	REPRESENTING
	Ks Pharmacists Assoc.
	KAC
Leigh Keck	Capitol Strategies
John Peterson	" "
	United Health Group
Eric Kohl	Federico Cons.
Sonja Arnbruster	Sedgwick County Health Dept.
	Strat Cons of KS
MIKE LARKIN	KS PHARMACISTS ASSOC
Doug Mays	Community Healthcare.
	KS Dental Board
Megan Brooks	Legislative Intern - Rep. Don Hill
	KDHA
	KDHA
	KDHA
	SCL Health System

STATE OF KANSAS

SENATOR, 20TH DISTRICT
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TOPEKA, KANSAS 66610-1632
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STATE CAPITOL—ROOM 552-S
TOPEKA, KANSAS 66612
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SENATOR VICKI SCHMIDT
ASSISTANT MAJORITY LEADER

COMMITTEE ASSIGNMENTS
CHAIR: PUBLIC HEALTH AND WELFARE
VICE-CHAIR: ETHICS AND ELECTIONS
MEMBER: INTERSTATE COOPERATION
TRANSPORTATION
WAYS AND MEANS
HEALTH CARE STABILIZATION FUND OVERSIGHT
STATE EMPLOYEE PAY PLAN OVERSIGHT

JOINT COMMITTEES
CHAIR: ADMINISTRATIVE RULES AND REGULATIONS
CHAIR: HEALTH POLICY OVERSIGHT
MEMBER: INFORMATION TECHNOLOGY

March 8, 2011

Kansas Association of Oriental Medicine
c/o John Federico
900 S. Kansas Avenue., Suite 300
Topeka, Kansas 66612

Dear Mr. Federico:

On February 16, the Senate Committee on Public Health and Welfare had the opportunity to review SB 195, a bill that would create the Acupuncture and Oriental Medicine Act and allow for the licensure of and standards for regulation of acupuncturists by the State Board of Healing Arts. The Committee appreciated the testimony of practitioners and patients.

The Committee notes the testimony by opponents to the legislation as written, namely the concern that this bill would bypass the statutory review under the Health Occupation Credentialing Act (HOCA) [KSA 65-5001 *et seq.*] that establishes a review process to determine if the public good is served by credentialing a health occupation. One area that would best be reviewed under the established criteria would be the scope of practice created under SB 195 in Section 2, subsection (k) for acupuncturists in light of the scope of practice established under Kansas law for physicians licensed to practice medicine and surgery. The Committee also learned during its consideration of the 2011 legislation that prior legislation has been offered on behalf of acupuncturists in 1997, 1999, and 2001. The Committee notes that review under the HOCA previously has been recommended (two documents regarding 1999 SB 144 are attached).

The Committee has visited with a representative of the Kansas Department of Health and Environment and has learned that it is possible for a review to be completed prior to the 2012 Session, if an application is made in a timely manner. Therefore, it is the recommendation of this Committee that the Kansas Association of Oriental Medicine make application for review under the Health Occupation Credentialing Act.

Sincerely,

Vicki Schmidt

Vicki Schmidt, Chairman
Senate Public Health and Welfare Committee
Senate Majority Leader
Kansas Senate

VS/ctl
Attachments (2)
c: Doug Petrie, Pres. KAOM w/attachments

Senate Public Health and Welfare
Date 3-8-2011
Attachment 1

KANSAS
DEPARTMENT OF HEALTH & ENVIRONMENT
BILL GRAVES, GOVERNOR
Clyde D. Graeber, Acting Secretary

February 11, 1999

The Honorable Sandy Praeger, Chair
Committee on Public Health and Welfare
128-S, State House

Dear Chairperson Praeger:

I am writing in regard to SB 144, an act which provides for the licensure of acupuncture.

The Credentialing Act found in KSA 65-5001 et seq. establishes a process to help the legislature determine whether a health occupation should be credentialed. Under the authority of K.S.A. 65-5001 et seq., more than 20 health care professions have either submitted a letter of intent or application for credentialing. A technical review is conducted during which time specific criteria established in statute and regulation are applied to gather critical information in order to evaluate the need for public protection from the unregulated practice of a given health care provider.

Senate Bill 144 establishes the licensing of acupuncture without appropriate documentation of the need under application through the Credentialing Act. The Act and its provisions are important tools for legislative decision-making. The applicant group desires to be able to be licensed to practice through amending the board of healing arts act without meeting any of the statutory requirements for a new health care profession in the state of Kansas.

With all due consideration to those who practice acupuncture, the department believes any decision to license persons to practice acupuncture must follow the process set forth in the Credentialing Act.

Sincerely,

Lesa Bray

Lesa Bray, Director
Health Occupations Credentialing
Bureau of Health Facility Regulation

c: Acting Secretary Graeber, KDHE
Lorne Phillips, PhD, Acting Director of Health
Joseph F. Kroll, Director, Bureau of Health Facility Regulation

KMS

KANSAS MEDICAL SOCIETY

February 11, 1999

TO: Senate Public Health and Welfare Committee

FROM: Meg Draper
Director of Government Affairs

SUBJ: SB 144: Acupuncture

The Kansas Medical Society appreciates the opportunity today to testify on SB 144. This bill relates to the practice of acupuncture and would allow acupuncturists to receive a license in Kansas if they meet certain criteria. KMS does not support the bill as currently drafted.

SB 144 would make it illegal for individuals to practice acupuncture unless they are licensed pursuant to this law. The purpose of licensing a health care provider group is to ensure that the public is protected. Only licensed individuals may practice within a provider's designated scope of practice. However, this bill creates a rather broad scope of practice for acupuncturists, permitting them to use "adjunctive therapies and diagnostic techniques for the promotion, maintenance and restoration of health and the prevention of disease." This implies that acupuncturists could perform a wide variety of treatments on patients, even treatments beyond what acupuncturists are trained to do. Additionally, the bill establishes no minimum level of education, clinical training or competency for this group. All that is required is certification as a diplomate in acupuncture by a national certification commission, licensure in a comparable state, or five years of practice in Kansas. The American Academy of Medical Acupuncture is an organization of physician acupuncturists. These physicians receive a minimum of 200 hours of training in acupuncture. We are unclear as to the level of education or training that non-physician acupuncturists receive and believe that minimum education requirements should be codified to help ensure competence and to protect the public.

KMS also suggests that the legislature wait to grant licensure to acupuncturists until they have completed the credentialing process through the Kansas Department of Health and Environment. Kansas law requires all health care provider groups seeking to be credentialed or requesting a change in their level of credentialing to file an application with KDHE, which reviews the application and makes a recommendation as to whether the change is warranted. The legislature may use the recommendations in determining whether to grant licensure to acupuncturists.

Studies have shown that acupuncturists, along with other alternative care providers, may provide beneficial care for certain conditions. Many states recognize these types of providers through some level of certification, and it is not our opinion that acupuncturists should not be able to practice their profession in the state. However, as the number of alternative health groups seeking recognition in Kansas grows - this committee has already held hearings on another alternative group, naturopaths - KMS believes that the legislature should study the education and training of alternative providers as a whole before acting on this legislation.

Thank you very much for considering our comments.

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Western Kansas office • 108 E 12th St. • Hays KS 67601 • 913.625.8215 • 800.293.2363 • FAX 913.625.8234

Registered Dental Practitioner

Senate Bill 192

KDP KANSAS DENTAL PROJECT

To: Public Health and Welfare
From: Suzanne Wikle
Re: SB 192

Good afternoon Madame Chair and members of the committee. Thank you for the opportunity to speak today in support of SB 192. I appear before you today as a representative of the Kansas Dental Project, a joint effort by Kansas Action for Children, Kansas Association for the Medically Underserved, and the Kansas Health Consumer Coalition.

The Kansas Dental Project evolved out of a joint recognition by our respective organizations that Kansas must address our dental workforce shortage. For all the populations we represent – children, the patients of the safety-net clinics (Medicaid insured, uninsured and underinsured), and for all Kansans who seek affordable care, too often dental care is not accessible. The goal of our project and SB 192 is to create a sustainable solution to the dental workforce shortage in Kansas, thereby creating greater access, especially in the rural and underserved areas of the state.

Here are some facts about the dental access and workforce shortage problems in Kansas:

- Dental Care is the most frequent unmet health need of children.
- 55% of Kansas third graders have experienced dental decay; 25% of third grade children have untreated decay.
- 93 Kansas counties do not have enough dentists to serve their population; 13 counties have no dentist.
- Only 1 in 4 dentists accept Medicaid; Only 10% of dentists see more than 100 Medicaid patients a year.
- The average age of a dentist in Kansas is 50, with older dentists practicing in more rural areas of the state.

The addition of a mid-level provider to the dental team is an absolute necessity to finding a long-term solution. Without an additional provider, equipped with the skills to provide treatment of dental disease, the workforce shortage will continue to worsen. The Registered Dental Practitioner proposed to you in SB 192 is a Kansas specific model that has been crafted to utilize the resources in Kansas in order to meet the needs of our state. The education, supervision, and scope included in the bill are the right fit for Kansas because we can use the existing dental hygiene education system and because it will create greater access to dental care, especially for the underserved populations and rural areas of our state. Access will be increased by:

- Allowing safety-net clinics to serve more people in a more efficient and affordable manner.
- Expanding the reach of safety-net clinics by using RDPs in the "hub and spoke" system.
- Provide private practice dentists with a more affordable way to treat patients insured through Medicaid.
- Expanding the reach of private practice dentists in rural areas by allowing RDPs to work in neighboring communities.

The Kansas Dental Project appreciates the opportunity to appear before you today and we strongly urge your support of the legislation.

Registered Dental Practitioner

Senate Bill 192

KDP KANSAS DENTAL PROJECT

Key Parts of SB 192

Education

Registered Dental Practitioners will be hygienists that choose to obtain 18 months of advanced training beyond their dental hygiene degree. The training program for RDPs will include intensive, hands-on experience to master their scope of practice.

Kansas is well-positioned to create training programs for this new career path. Across the state there are five dental hygiene schools, potentially allowing RDPs to be trained close to the communities they will serve.

Supervision

Registered Dental Practitioners must be supervised by a dentist; they will not be practicing independently. There are two types of supervision levels under which RDPs may practice: direct and general. Under direct supervision, the RDP must practice in the same setting as the dentist. Under general supervision, the RDP may practice in a different setting after receiving permission from their supervising dentist.

As part of general supervision, the dentist may limit what services the RDP may provide, and through a written supervision agreement the dentist and RDP will have protocols in place for unintended complications. All RDPs must work under direct supervision for at least 500 hours before being able to work under general supervision.

Scope of Practice

The services that may be provided by an RDP include all the services provided by Registered Dental Hygienists plus additional services, including fillings, cavity preparation, extractions of baby teeth, and extractions of already loose permanent teeth. The supervising dentist may limit the scope of an RDP under their supervision through the written supervision agreement.

Registered Dental Practitioners will bring a valuable combination of skills to the dental team – they will be able to provide the education and preventative care of hygienists and basic restorative care needed to alleviate pain and treat dental disease.

Practice Locations

To ensure that Registered Dental Practitioners will serve the communities that need them most, parameters around practice locations have been included in the legislation. RDPs would be required to meet one of the following standards: work in a federally designated workforce shortage area; be employed by a safety-net clinic; or work for a private practice that derives at least 20% of their revenues from Medicaid.

THE COALITION

Members of the Coalition

Registered Dental Practitioner
Senate Bill 192

KDP KANSAS DENTAL PROJECT

Association of Community Mental Health Centers

Children's Alliance of Kansas

Kansas Action For Children

Kansas Advocates for Better Care

Kansas Area Agencies on Aging Association

Kansas Association for the Medically Underserved

Kansas Association of Community Action Programs

Kansas Association of Homes and Services for the Aging

Kansas Association of Local Health Departments

Kansas Chapter, American Academy of Pediatrics

Kansas Children's Service League

Kansas Dental Hygienists' Association

Kansas Farmers Union

Kansas Health Care Association

Kansas Health Consumer Coalition

Kansas Public Health Association

Kansas Statewide Homeless Coalition

Keys for Networking

National Alliance on Mental Illness, Kansas Chapter

Youthville

Senate Ways and Means Committee

Ron Nagel DDS, MPH

Supporting SB 192: Registered Dental Practitioner

3/8/11

I would like to thank the committee for the opportunity to address you regarding the creation of the Registered Dental Practitioner here in Kansas. My name is Dr. Ron Nagel, I recently retired from the U.S. Public Health Service in Alaska where I was responsible for the federal oral health activities in the Alaska Tribal Programs. I was the principle investigator for grants aimed at workforce development and developed the federal certification standards for these new providers. During my career I have practiced on the Rosebud Reservation in South Dakota, and the Navajo reservation in New Mexico. I also spent 6 years as the area dental director in the Marianas Islands in the Western Pacific where I supervised over 30 dental therapists and a half dozen dentists. The similarities of each of these places far outweigh the differences. In each case patients found it difficult to access basic oral health care, and there simply was not enough capacity to provide that care. These common challenges led my work to integrate Dental Health Aide Therapists (DHAT) into the health delivery system in Alaska. The first three cohorts of DHAT attended Otago University, the National School of Dentistry in New Zealand. In 2006 the Alaska tribes received funding that enabled them to develop a DHAT education program in Alaska. The new program call DENTEX is collaboration with the University of Washington's School of Medicine's Physician Assistant program. Three cohorts of DHAT have now graduated from this program.

There have been several other attempts to develop new dental providers like the RDP in the U.S. dating back to the 1940s. In every case these attempts were aggressively stopped by organized dentistry. In January 2006 the American Dental Association and the Alaska Dental Society along with several private practice dentists filed a lawsuit against the Alaska Tribes and the practicing DHAT. The Alaska Superior Court ruled against the ADA and the dental society and today there are 32 practicing DHAT and DHAT students in Alaska. Despite significant supportive evidence, organized dentistry's position has changed little in the past 70 years. The most recent significant change in our oral health workforce occurred in 1908 with the advent of dental hygienists.

In 2008 I collaborated on a paper that was published in the International Dental Journal that examined the practice of the Dental Therapy in 52 countries. In every case these providers work under general supervision without the dentist present. Expanding access and creating a safety net by necessity calls for the establishment of more entry points

into the oral health care system. To increase access the RDP should be able to practice where there are no dentists. The scope of practice of the RDP will be an important element in the safety net and should be based on the needs of the population. The ability to address pain, infection and the function of teeth (fillings and extractions) is so important to patients that there is little support for any program that cannot provide these. In order to develop effective preventive programs, patients must first have their immediate needs met. The literature is clear and it is confirmed by my own first-hand experience working with these providers in the Western Pacific and in Alaska that the RDP will be able to fill and extract teeth under general supervision safely and effectively. Making references to fillings and extractions as "irreversible surgical procedures" is simply a scare tactic that detracts from meaningful discussions about the development of new providers. Everyone in the system should be concerned with quality and safety. The only way to monitor these elements is through an ongoing quality assurance program that evaluates both dentists and the RDP over time. Altering the scope of practice, the length of training or level of supervision does not address the issue of quality.

The development of the Alaska based program has not created a two tiered system or a lower quality of care. DHATs are evaluated in the program based on the same standards as dentists. I am confident that the RDP will also meet these same standards. My understanding is that the new RDP educational program will be competency based. Students will progress in the program by demonstrating competency in specified skills. This methodology should address concerns about the adequacy of the new training program and ensure that once they matriculate they provide high quality care.

In summary, the available evaluations and evidence suggests that the RDP will be able to deliver high quality, safe oral health care. There simply is no evidence to the contrary. The RDPs ability to practice under general supervision is critical to increase access. Equally important is the ability to provide critical services that will address pain, infection and the function of teeth and meet the basic needs of patients.

Thank you for the opportunity to share my experience working with and developing mid-level dental providers.

Daniel N. Minnis DDS 2002 South Rouse Street Pittsburg, KS

Phone: 620-231-2871
Fax: 620-231-3550
E-mail:
daniel@accentdental.kscoxmail.com

Testimony of Dr. Daniel N. Minnis, Proponent SB-192

Good afternoon Madame Chair and Committee Members. My name is Dr. Daniel Minnis and I thank you for the opportunity to testify today in support of the Registered Dental Practitioner Bill SB-192.

I am a private practice dentist of 22 years in Pittsburg Kansas. In that time, I have dedicated 30% of my practice to care for Medicaid recipients, Head Start children, the mentally challenged, frail elders, individuals living with HIV and Hepatitis C and high risk pregnant mothers.

Currently, I serve on the Board of Directors for the Community Health Center of SEK, a non-profit safety-net clinic. I founded the first CHC/SEK Dental Clinic in 2005. During my tenure at CHC/SEK we have opened four Dental and Medical Clinics and will open our fifth clinic in Baxter Springs next month. I serve on the Board of Directors for Southeast Kansas Community Action Program (SEKCAP) Head Start and am a past board member of Oral Health Kansas and past chairman and adviser to the Kansas Mission of Mercy. I am also a volunteer faculty member of the University of Missouri Kansas City School Of Dentistry. I am a member of both the Kansas and American Dental Associations but must admit I am extremely disappointed and ashamed of their opposition to dental mid-level providers.

My work with vulnerable populations has been recognized on local, State, and national levels and SEK leads the State in solving the access to care issues.

I am here today to represent the thousands of children and other vulnerable populations in Kansas who are affected by my professions unwillingness to work on real and long term solutions to access to dental care. I also represent a growing minority of dentists who feel it is vital to develop a Registered Dental Practitioner Program to increase access to care.

What Is The Problem?

Access to dental care has been a dilemma for Kansas as long as I have practiced. We as a profession have applied a multitude of possible solutions to this issue and we have failed. Dentistry is a monopoly as is evident by our self regulation, stringent anti-corporation laws, mal-distribution of dentists, lack of Medicaid providers, and lack of mid level practitioners.

Our profession has a social responsibility to expand access to care and we have broken this covenant by maintaining and protecting our monopoly while denying vulnerable populations tooth and life saving care.

KDA testimony in front of the House declared an access to care victory by extracting 4,300 teeth at the Hutchison Kansas Mission of Mercy, filling a record number of 5 gallon buckets full of teeth. At each KMOM thousands of teeth are extracted leaving patients partially or completely toothless. How would you legislators respond if the Kansas Medical Association bragged about how many fingers and toes they amputated during a Mission of Mercy. As a past Chairman and adviser to the Kansas Mission of Mercy I can testify, first hand, that we leave patients handicapped when we leave their communities. This fact alone that we remove thousands of teeth each year at KMOM is evidence enough that we are in a crisis and we as a profession and you as legislators can begin today to bring resolution to this crisis.

Safety First

My fine and honorable colleagues, of the KDA, will testify before you tomorrow that Mid Level Providers are undereducated, undertrained, and unsafe. They will not provide you with any research or studies to substantiate this false claim but instead are trying to scare you into believing you are putting your constituents at risk by passing this Bill. Having spent the last 22 years trying t
care" issues in Southeast Kansas I am confident and can assure you the R

Senate Public Health and Welfare
Date 3-8-2011
Attachment 4

w... be a safe and vital component to solving the dilemma we face. Each and every report concurs that Mid Level Dental Providers perform equal standards of care as a dentist for the small scope of procedures they are intensely trained to do. We can guarantee safety to the public by developing a Registered Dental Practitioner Program unique to Kansas and superior to all other dental therapist models in 53 countries and now 2 States. As part of my testimony, you have in front of you multiple research reports substantiating the safety and standards of care of Mid Level Dental Providers. This research was conducted by dentists and in every instance the standard of care and safety is upheld. The Kansas Dental Board will license the Registered Dental Practitioner to further insure safety to the public. The RDP will work under the supervision of a dentist and will not be an independent practitioner but instead an employee and new member of the dental team.

History of Opposition to Mid Level Providers in Kansas

In 1906 the profession of dental hygiene was founded despite strong resistance from dentists. It took another 40 years for all states to license dental hygienists, which were our first mid level dental providers. Despite this initial resistance, dentists now realize the vital role dental hygienists play in the dental health of our public. My colleagues will tell you they were instrumental in developing the Extended Care Permit Hygienist in Kansas but I contend they were in strong opposition to the ECP hygienist during its inception. In this session of legislation they now have a new Senate Bill expanding the duties of the ECP they once vehemently opposed. Just as dentists were wrong to oppose dental hygienists in 1906 and ECP hygienists in 2001, they are wrong to oppose the Registered Dental Practitioner in 2011. **Dentistry is 50 years behind the medical profession concerning mid level providers.** Our medical colleagues have physician assistants, nurse practitioners, nurse anesthetists, EMS, and midwives to name a few.

My colleagues testified for the KDA comparing Dental Hygiene School and the Registered Dental Practitioner Program as an equivalent to sending a high school student to a vocational/technical school for 2 years. This is far from the truth due to the fact that all Kansas Dental Hygiene Programs require college pre-requisites prior to entering the program. Each Dental Hygiene Student completes 15-44 college credit hours prior to acceptance into the programs. Upon completion of Dental Hygiene School and the 18 month Registered Dental Practitioner Program the RDP will have between 3 1/2 years and 5 1/2 years of intense dental training as compared to the 4 years of dental training we dentists receive. Twenty eight dental schools across the US offer accelerated or direct entry dental programs accepting dental students after 2 years of college credits. I happen to be a dentist who does not have a college degree because of early acceptance into UMKC School of Dentistry in 1984.

Risk, Benefit, and Charitable Care

In 2007, two Medicaid children died from lack of access to care. Deamonte Driver, age 12 and Alexander Callendar, age 6. You have in my testimony a picture of Deamonte after his surgery. Unfortunately Deamonte did not survive. A simple $80 extraction should have saved his life. Ultimately the State of Maryland paid out in excess of $250,000 in hospital and surgical charges. A Child from Coffeyville Kansas was dangerously close to sepsis and shock when we treated him for life threatening dental disease because of lack of access to care. Dental decay is the most prevalent childhood disease and legislators and dentists alike must be bold and creative if we are to bring resolution to this crisis. The benefits of dental mid level providers are well documented in 53 countries and Kansas has the opportunity to develop a Registered Dental Practitioner Model which will become a "gold standard" for other States to envy and adopt.

While it is unfair to lay the burden of these children's deaths at anyone's feet, my profession's general unwillingness to treat Medicaid patients is at least partially to blame.

In Kansas, only 136 Private Practitioners, out of 1400 total dentists, see more than 100 Medicaid children in a year. Dentists blame the bureaucracy of Medicaid as the reason they do not participate. I beg to differ, in this opinion, and am proud to say Medicaid claims submissions are a breeze and reimbursement is weekly. In my private practice we performed in excess of $1.1M worth of dentistry on 2800 Medicaid

children visits and were reimbursed $500,000 in 2010. This translates to treating 11 Medicaid children per day. My private practice is at capacity and children must wait up to three months for restorative care. The addition of a Registered Dental Practitioner in private dental offices and Community Health Centers would dramatically increase access to care for Medicaid children. Medicaid children are our most vulnerable population and highest risk for serious illness and death due to untreated decay. The real reason most dentists do not treat Medicaid children is simple supply and demand. Dentists have a plentiful supply of commercial and self pay patients due to the shortage of dental providers especially in rural areas. There is no demand to treat Medicaid children because the dentist's chairs and schedules are already full. The dentists who treat a large number of Medicaid recipients do so because we feel we have a social responsibility to care for those who cannot care for themselves.

The KDA testified that every dentist in Kansas provides $33,000 in charitable or reduced fee care each year for a total of $47 Million dollars annually. This is absolutely false. They extrapolated this number from a Pew Foundation Report which ironically advocates the development of mid level practitioners. The report actually comes from the "ADA Key Dental Facts 2008" and says only 70% of the dentists in the US provide an estimated average of $33,000 in reduced fee or charitable care annually. Since Medicaid pays out $27,000,000 annually and the majority of this reimbursement goes to the 136 Private Practice Dentists and 30 Community Health Dentists the reality is that non Medicaid Dentists may only perform about $8,800 in reduced fee or charitable care versus $33,000. The Kansas Dental Association, and I am a concerned member, is not being truthful in testimony to legislators. I am confident these are inadvertent mistakes brought on by their passion but mistake or not they are providing you with invalid data. It is imperative that legislators have valid data to decide the merit of this Bill.

Here are the real facts and substantiated data you should consider as you contemplate this Bill.

1. There are 1425 active dentists in Kansas. (Kansas Dental Board/Facts and Stats 2010)
2. The number of Medicaid billing dentists who saw 100 or more beneficiaries under the age of 21 is 166, only 12% of the total number of dentists. (KHPA/State Synopsis)
3. The number of counties in Kansas without an enrolled Medicaid dentist is 19. (KHPA/State Synopsis)
4. The number of counties in Kansas without an enrolled SCHIP dentist is 27. (KHPA/State Synopsis)
5. The current number of counties in Kansas with no dentist at all, is 13. (KHPA/State Synopsis)
6. State dental policies fail 1 in 5 children. (The Pew Center on the States, Cost of Delay)
7. Dental Decay is the number 1 childhood disease and the US Surgeon General called dental disease the "silent epidemic". (The Pew Center on the States, Cost of Delay)
8. Only 34-40% of Kansas Medicaid children receive dental treatment, not the 70% claimed by the KDA. (CMS Medicaid/CHIP Oral Health Services)
9. Children between 2-5 years old, with decay, has increased 15% in the past decade. (The Pew Center on the States, Cost of Delay)
10. More than 51 Million hours of school is missed each year in the US due to dental illness. (The Pew Center on the States, Cost of Delay)
11. The US Surgeon General reports that untreated dental disease in children impairs classroom learning and behavior and both social and cognitive development. (The Pew Center on the States, Cost of Delay)

12. Children die from untreated dental disease which causes systemic infections.

13. Children with severe dental disease grow up to be adults with severe dental disease which impairs their ability to work.

14. Restorative treatments delivered by dental mid levels are equivalent in standard of care to that of dentists. (Dental Therapists: A Global Perspective, Nash)

The KDA claims their comprehensive oral health initiative, currently in the Senate, is the answer to our crisis but is does not go far enough to impact access to care. They will tell you raising Medicaid reimbursement rates and including adult Medicaid dental coverage will bring in new providers. Increasing Medicaid rates has historically never increased providers. It is not feasible for the State to raise reimbursement rates in this economic climate. It is however prudent to pass SB-192 to create a new dental practitioner who will receive intense education and training, be board certified, work under the supervision of dentists, and benefit the vulnerable populations of Kansas.

Last month, the Kansas Dental Association notified members saying, quote "We had an all-star lineup of dentists who opposed that bill on behalf of the Kansas Dental Association." They were referencing HB 2280. Their comment about an all-star lineup might give one the impression we are playing some kind of a game. I am here to convince you this is not a game but instead a crisis in access to care. Children and adults continue to suffer and even die from untreated dental disease.

Dr. Edwin Mehlman, past American Dental Association Vice President and Trustee wrote a letter to the ADA stating the ADA and State Associations are acting " like an ostrich with its head in the sand" by not working with organizations to help develop mid level provider programs. I am asking this committee to help the KDA pull its head out of the sand and instruct us to work together to develop a Registered Dental Practitioner Program unique to Kansas and designed to deliver vital dental care to vulnerable populations.

I would hire a Registered Dental Practitioner in my private practice tomorrow and allow them to perform procedures within their scope on myself, my family members, and my patients. The Registered Dental Practitioner could provide vital care to an additional 1500 Medicaid children/year in the typical office or clinic. We have an opportunity to develop a new dental practitioner model for Kansas which will benefit both patients and the dentists who employ these practitioners. I encourage you to seize this opportunity and as legislators help bring an end to the suffering of our vulnerable populations in Kansas.

Respectfully yours,

Daniel N. Minnis DDS

ADA News: Letters to the Editor

December 13, 2010

DHATs

By Edwin S. Mehlman, D.D.S.

Dental Health Aide Therapists have been practicing in Alaska under dentists' supervision, and without any untoward incidents, since 2005. Congress, in the reauthorization of the Children's Health Insurance Program, required the General Accounting Office to study the addition of a new provider to the dental team to expand access to care. The Health Resources and Services Administration has funded the Institute of Medicine to undertake major studies on access to oral health services and an appropriate oral health initiative. The Pew Center Report on the States included the existence of a new primary care provider of oral health care as one of its eight criteria in grading states on the dental policies affecting children. The Kellogg Foundation, which helped fund the Alaska initiative, has funded the American Public Health Association to develop a two academic year curriculum to train dental therapists and in committing additional funding to the therapist initiative.

In response to what is occurring all around us, our House of Delegates passed a resolution that supports pilot programs that do not allow a nondentist to perform irreversible/surgical procedures ("Workforce Resolutions: House Emphasizes Dentist's Role as Team Leader," Nov. 1 ADA News). Why do we need pilot programs to advance what is already ADA policy? The purpose of pilot programs is to determine the efficacy of new and innovative ideas. The Kellogg training of dental therapists is being undertaken as an attempt to improve access for the economically disadvantaged.

The ADA is acting like an ostrich with its head in the sand. Outside agencies and foundations will continue training dental therapists at institutions, such as community colleges. If the ADA were really serious and got involved in such programs, we might assure that these people would be educated at an accredited dental education program in either a hospital or a dental school that has documented the ability to conduct and evaluate such efforts, which were approved by an appropriate institutional review body.

Such programs could be used to determine what dental therapists can actually perform, under what circumstances, and for what populations. Also, representatives of the ADA could be included in the planning, implementation and evaluation process.

Keep hiding your heads, House of Delegates, until dental therapists trained for one year at trade schools are practicing in all 50 of our states.

Edwin S. Mehlman, D.D.S.
Warren, R.I.
ADA Former Vice President (1994-95)
ADA Former Trustee (1999-2003)

Developing a Pediatric Oral Health Therapist to Help Address Oral Health Disparities Among Children

David A. Nash, D.M.D., M.S., Ed.D.

Abstract: Oral Health in America: A Report of the Surgeon General documented the profound and significant disparities that exist in the oral health of children in the United States. Recently, the country has been issued a *National Call to Action to Promote Oral Health*, under the leadership of the Office of the Surgeon General. Among the significant factors contributing to the disparities problem is the access to oral health care by disadvantaged populations. There are inadequate numbers of dentists able and willing to treat children, particularly poor and minority children. In the early part of the twentieth century, New Zealand faced a significant problem with oral disease among its children and introduced a School Dental Service staffed by allied dental professionals, known as "school dental nurses," who had received two years training in caring for the teeth of children. A number of other countries have since adopted this model. This article reviews attempts to develop a comparable approach in the United States. Furthermore, it justifies and advocates the development of pediatric oral health therapists in the United States as a means of addressing the disparities problem that exists in this nation. These pediatric oral health therapists would be trained in a two-year program to provide dental care services to children. The article concludes by asserting that such action is a practical and cost-effective way for dentistry to fulfill its professional obligation to care for the oral health of all children, thus ensuring justice in oral health for America's children.

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In 2002 the Robert Wood Johnson Foundation (RWJ) commissioned the National Conference of State Legislatures to conduct a study of policy barriers to accessing oral health care and to suggest opportunities for intervention by the foundation.[1] The report expressed the view that "those who work on oral health issues seem very much rooted in (and mired in) the present, and are not thinking about bold new solutions." Among the several recommendations to RWJ was one to fund "out-of-the-box" thinking.

Developing a pediatric oral health therapist is not a bold new solution, nor is it out-of-the-box thinking. While it may be out-of-the-box in the United States, it is clearly within-the-box of international thinking. This potential solution for helping address the access problem for low-income and minority children in the United States is actually an old solution that was boldly undertaken by the New Zealand Dental Association and the people of that nation, who in 1921 developed the now internationally famous New Zealand school dental nurse,[2-4] the progenitor of the pediatric oral health therapist advocated in this article.

The disparities that exist in oral health among children in the United States have been documented in *Oral Health in America: A Report of the Surgeon General*[5] and the recent *National Call to Action to Promote Oral Health.*[6] This article will review these disparities in the context of exploring one strategy to help address the problem, and it will suggest reasons for these disparities, focusing primarily on the problems of access to dental care for which the dental profession has not provided a solution. It will also review the use of allied dental professionals in other countries, with the New Zealand school dental nurse (now called a dental therapist) as an example; describe the curriculum in which these allied professionals are trained; delineate the competencies they attain; profile the environment in which they practice; and suggest means by which these international

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programs can inform the development of pediatric oral health therapists to help address dental care disparities in the United States. Finally, the existence of oral health disparities in the world's most affluent nation will be addressed as a moral problem, an issue of justice, and a problem American dentistry must resolve if it is to validate its continuation as a profession, in the classic sense of that word and concept. President John Kennedy once said that "Children may be the victims of fate—they must never be the victims of neglect."

Epidemiology of Oral Disease and Access to Care

A recent article in the journal *Pediatrics* identified dental care as the most prevalent unmet health need in U.S. children.[7] Numerous studies, many of which were cited in the *Surgeon General's Report*, document the profound and significant disparities in oral health among America's children. Children lose 52 million hours of school time each year due to dental problems,[8] and poor children experience nearly twelve times as many restricted activity days from dental disease as do children from higher income families.[9] Eighty percent of dental disease among children is found in 20-25 percent of children (approximately 18 million), and these are primarily children from African-American, Hispanic, American Indian/Alaskan Native, and low-income families.[10] The prevalence and severity of dental disease are linked to socioeconomic status across all age groups.

Access can be understood as the ability to personally utilize professional health services to achieve optimal health results. Clearly, the problem of access to oral health care for children is multidimensional; involving complex social, cultural, educational, and financial issues. Access to oral health care also is influenced by the system that the profession of dentistry operates today to deliver its services to the public.

Relevant facts regarding children's access to oral health care include the following:

- Children with no dental insurance are three times more likely to have an unmet dental need than their counterparts with either public or private insurance.[5]
- Children from families with incomes below 200 percent of the federal poverty level (FPL) are three times more likely to have unmet dental care needs than children from families at or above 200 percent of the FPL.[7] One in four children are born into families with incomes below the FPL,[6] which in 2003 was $18,400 for a family of four.[11]
- Nearly 25 percent of America's children are entitled to comprehensive dental coverage by Medicaid, yet fewer than one in five of these received a single preventive visit in a recent year-long study period.[12] Poor children have one-half the number of dental visits of higher income children.[9]
- One in four American children have not seen a dentist prior to beginning kindergarten.[6]
- While almost 90 percent of poor children have a usual source of medical care and 74 percent of poor children nineteen to thirty-five months of age receive all their vaccinations, only 22 percent of all children under age six years receive any dental care.[13]

Barriers to Access

While multiple barriers to access have been identified,[1,5,14,15] two will be examined here in the context of advocating for the development of a pediatric oral health therapist. These two are dentists and leadership/advocacy.

Dentists

Dentists are among the more significant barriers to access for disadvantaged populations: their numbers, distribution, and ethnicity; their education; and their attitudes.

First, the number and distribution of dentists in the United States contribute to the inadequate access to care for children in greatest need. The dentist/population is declining from its peak of 59.5/100,000 in 1990 and will drop from the current 58/100,000 to 52.7/100,000 in the year 2020—a decline of 10 percent.[16,17] Compounding the access issue is the location of dental practices. The overwhelming majority of dentists practice in suburbia, with few practicing in the rural and inner-city areas where children with the greatest need live. In fact, the number of federally designated shortage areas has more than doubled from 792 in 1993 to 1,895 in 2002.[14]

Approximately 12 percent of the population is African-American, but only 2.2 percent of dentists are. Individuals of Hispanic ethnicity make up another 10.7 percent of the population, yet only 2.8 percent of dentists are Hispanic.[18] Less than 5 per-

cent of entering student dentists are African-American, and less than 5 percent are Hispanic.[19] Yet the demographics of oral disease indicate that these two minority groups comprise a significant proportion of the disparity problem.

A second barrier is that student dentists do not receive adequate instruction and experience in treating children. In a recent study entitled "U.S. Predoctoral Education in Pediatric Dentistry: Its Impact on Access to Dental Care," Seale and Casamassimo concluded that "U.S. pediatric dentistry predoctoral programs have faculty and patient pool limitations that affect competency achievement and adversely affect training and practice."[20]

The number of pediatric dentists also contributes to access barriers for children. There has been a significant increase in the number of pediatric dentists over the past thirty years, but there are still only 4,357 trained specialists in children's dentistry practicing in the United States today.[21] Compare this with the 57,000 pediatricians who care for the general health of the nation's children.[22]

In a President's Report entitled "We Need Help," Dr. Paul Casamassimo, then-president of the American Academy of Pediatric Dentistry, stated it bluntly and well: "even with a Herculean increase in training positions [for pediatric dentists], improved workforce distribution, and better reimbursement and management of public programs, pediatric dentistry [the specialty] will never be able to solve this national problem [of disparities] alone. *We need help.*"[23]

The third factor that contributes to access barriers is the attitude of dentists. Dentists generally do not want to treat publicly insured children, be they children covered by Medicaid or the State Children's Insurance Program (S-CHIP). It is difficult to discuss the issue of access to care, particularly when focusing on the disparities that exist in oral health among America's children, without referencing the Medicaid system. Medicaid provides an entitlement to comprehensive dental services for children who live at 150 percent of the federal poverty level ($27,600 for a family of four in 2003) or below; such care is a mandate.[24] The S-CHIP program, [25] authorized by Congress in 1997, extends dental services to children living at 200 percent of poverty ($36,800 for a family of four in 2003) or below. Yet Medicaid and S-CHIP fail to meet the oral health needs of America's children.

Dentists offer multiple reasons for failing to treat children with publicly financed insurance, including low reimbursement schedules, demanding paper work and billing requirements, and the frequent failure of parents of these children to keep scheduled appointments. A 1996 study indicated only 10 percent of America's dentists participate in the nation's program to help ensure access to oral health care for poor American children.[12] The report to RWJ by the National Conference of State Legislatures (NCSL) states that even though reimbursement rates may be dismal, many state legislators believe that dentists "have a community service obligation . . . [to participate in these programs], that they are not meeting."[1]

However, reimbursement does not appear to be the major issue. The General Accounting Office released a report in 2000 stating that "raising reimbursement rates—a step 40 states have taken recently—appears to result in a marginal increase in use, but not consistently."[15] For example, the state of Maine increased its fees for dental services by 40 percent in 1998, but utilization increased by only 2 percent. The state of Indiana increased its Medicaid reimbursement rates to those approximating private insurance, and dentist participation increased by 6 percent—but total participation by dentists was only 26 percent. If raising reimbursement rates is a component of the solution to the Medicaid/S-CHIP dilemma, such is not likely to happen any time soon, as states are struggling to deal with significantly shrinking state revenues.

The problem is more complex than just reimbursement. Most dentists are already as busy as they care to be, as they manage the increasing number of baby-boomers and others who require implants, esthetic dentistry, and other complex services in high demand. The NCSL study indicated that dentists do not believe they need to see more patients to deal with the access issue, particularly when this action would mean seeing publicly insured patients. There is a significant cultural issue at work. Many dentists just do not want publicly insured patients in the reception areas and offices.

Dentists, in general, are also leery of any program affecting their practices that has any sort of government relationship; it is the *private practice* of dentistry. American dentistry has relentlessly eschewed government programs it believes might negatively impact private practice even though such programming could improve access to care for disadvantaged populations. In a recent issue of the *Journal of the Massachusetts Dental Society*, coeditors Drs. Norman and David Becker, in an editorial entitled "Raise Your Voice," commented that "the

problem of children's untreated dental disease is beyond the scope of an organized charitable function . . . the solution must be found in government programs."[26]

As a result of the failure of dentistry to fulfill its professional obligation to care for the health of the public, society is becoming increasing impatient with dentists. This is borne out by informative, but disturbing, comments made to the researchers in the NCSL study. One consistent finding was that there is a steady undercurrent of negative feelings about dentists among many of the people interviewed. People in every state included in the study made some potentially offensive and controversial comments about typical personality types of dentist: they are difficult to work with, extremely independent, resistant to change, and don't partner well with other professionals.[1]

If dentistry fails to engage and creatively develop solutions to the problem of oral health care for the poor and disadvantaged (especially children), we run the serious risk of losing the status a society grants to a profession and jeopardizing the monopoly we have received to practice dentistry.

Lack of Effective Leadership/ Advocacy

The NCSL report to RWJ further states that "a consistent theme . . . is the lack of effective advocacy for oral health issues in general and access to dental care for low-income people in particular."[1] Those individuals who form public policy, both at the state and federal level, have a low level of awareness, knowledge, and/or interest concerning issues of oral health. There are few champions of the issue in the halls of Congress or our state capitols. And there are not strong coalitions of support among public advocacy bodies.

The report went on to emphasize that the main and most powerful advocacy group for oral health issues in most states is the state dental association. While calling such associations extremely powerful, possibly second in influence only to state medical associations, the report expressed the view that dental associations are "poor advocates for access to dental services, particularly for Medicaid and S-CHIP beneficiaries, as they are perceived as self-serving in seeking increased reimbursement rates." It also suggested they are perceived as providing "false leadership or 'lip service' to access issues for low-income people."[1]

There is a dearth of leaders in dentistry advocating elimination of barriers to oral health, improving access, and erasing the disparities that exist. One would expect the American Dental Association (ADA) to provide such leadership and advocacy; however, the comment in the NCSL report about "lip service" is probably accurate. Although the ADA supports the concept in principle, it generally opposes any programs that would significantly alter the status quo. It advocates voluntary charity care by its members, but rejects expansion of organized public health programs that would be more effective. The *ADA News*[27] recently praised the generosity of dentists in addressing the disparity problem through their donation of time to the "Give Kids a Smile" promotion during National Children's Dental Health Month and stated, without documentation, that dentists provide $1.7 billion of charity care annually. The public relations campaign extended to having a legislator (Rep. Cantor, R-Virginia) introduce a resolution in Congress commending dentists for their efforts in addressing the issue of access for poor children and congratulating the American Dental Association on its efforts. Certainly there is merit in feeling good about oneself and one's profession; however, it is difficult to document substantive advocacy for genuine access from the ADA.

In March 2003 a President's Commission of the American Dental Education Association (ADEA) released a report entitled "Improving the Oral Health Status of All Americans: Roles and Responsibilities of Academic Dental Institutions."[14] The report provides comprehensive background information and justification for change, and while none of the five major categories of recommendations are inappropriate, no specific strategies are advocated that provide creative leadership for change. Rather, the report seems to encourage more intensive continuance of what is been being done—that is, working at the margins, rather than initiating significant change.

The report does propose, as one of its thirty-four recommendations, educating dental and allied dental students to assume new roles in the prevention, detection, early recognition, and management of a broad range of complex oral and general diseases and conditions in collaboration with their colleagues from other health professions. Including student dentists in the recommendation certainly dilutes any specific emphasis on developing new types of allied professionals or expanding roles for current ones.

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New Zealand's School Dental Nurses

In 1921 a group of thirty young women entered a two-year training program at Wellington, New Zealand, to study to become "school dental nurses" and in so doing transformed the oral health of the children of a country, laying the basis for what was to become an international movement.[2] New Zealand's School Dental Service continues to this day and has developed an enviable record of caring for the oral health of all children in New Zealand. There have been changes in the School Dental Service through the years, as well as in the training program for school nurses. However, the basic training and service strategies of over eighty years ago remain intact, having stood the test of time. The program's mantra through the years has been: "we train first-rate technicians, not second-rate dentists."[28]

By the 1970s the School Dental Service had grown to approximately 1,350 school dental nurses deployed in schools throughout New Zealand.[29] At that time there were training programs in Wellington, Auckland, and Christchurch. Each elementary school in New Zealand had its own dental clinic and, in most instances, its own dental nurse, though in some rural areas one dental nurse served more than one school. School dental nurses were employees of the federal health care system and were certified to perform oral examinations; develop treatment plans; provide preventive services, including prophylaxis; administer local anesthesia; prepare and restore primary and young permanent teeth; and extract primary teeth, all under the general supervision of a Ministry of Health dentist. Today, the health care system has been devolved to district health boards, and the school dental therapists (the name change occurred in 1988 by a vote of the dental nurses) "operate under the direction and supervision of the principal dental officer [of the district board], or other [licensed] dentist acting on behalf of the principal dental officer."[30]

The advent of high-speed instrumentation, water fluoridation, and modern transportation created changes in the New Zealand School Dental Service. Caries prevalence declined, dental nurses were able to provide care more efficiently, and they could travel to multiple schools more easily. The need for educating school dental nurses was reduced, not only due to these factors, but also because the attrition rate for dental nurses declined as more and more women chose to continue their careers as dental nurses even after marrying and having children. In 1998 there were 569 school dental therapists in New Zealand.[31] They care for 497,000 school children in over 2,000 schools.[32] (The population of New Zealand is 4 million.) Due to the decrease in the number of new therapists required, the training programs at Auckland and Christchurch were phased out in the 1980s, leaving only the one at Wellington. It too was closed in 1999, and the program moved to the national dental school at the University of Otago, in Dunedin. In 2001 Auckland University of Technology established a program as well. The two training programs each admit approximately twenty students each year into the two-year curriculum.[33]

New Zealand's record of oral health for children is notable. All children from age two and one-half years of age (six months for children at high risk) through age thirteen are eligible to participate in the School Dental Service and receive free comprehensive preventive and restorative care at their local school clinic by the school dental therapist. Children requiring root canal therapy, management of dental trauma, or extraction of permanent teeth are referred to private practitioners, who serve under contract with the government. Enrollment is not compulsory, yet 97 percent of all school-aged children and 56 percent of preschoolers participate.[30] The School Dental Service remains a New Zealand "icon."[34] As one colleague expressed it, "The School Dental Service has become an integral component of the New Zealand culture. To Kiwis it is like motherhood, apple pie, and the flag."[35] And it is highly valued, not only by the public, but by dentists as well.[32]

Children who are medically compromised, handicapped, or present significant management problems are enrolled in a Special Dental Benefits program and are served by private practitioners, frequently specialists. There are nine licensed pediatric dentists in New Zealand, with eight of these working in the public sector and only one in private practice.[36] These special needs children account for some of the 3 percent of children not enrolled in the School Dental Service. Adolescents from fourteen to seventeen are seen in private dental offices under a General Dental Benefits program whose funding is managed by the government on a capitation basis. Children who do not participate in the School Dental Service are generally seen in private practices, but without government financial support for such

care. After age seventeen, government support for oral health care is limited to emergency care for pain and/or infection.

Dental caries continues to be a significant problem for New Zealand children. It disproportionately affects the Maori (aboriginal New Zealanders), Pacific Islanders, and individuals from lower socioeconomic groups.[30,37] Only 56 percent of the population drinks fluoridated water.[37] While the number of decayed, missing, and filled primary and permanent teeth (deft and DMFT) of the children of New Zealand and the United States is roughly comparable, of particular note are the differences in the components of these epidemiological indices. A 2003 report[38] notes that 53 percent of five year olds are caries-free, with a mean eft of 1.8. At age twelve to thirteen, 42 percent of children are caries-free with a mean MFT of 1.6. What is surprising and fascinating about these data is that the decayed (d/D) components are not included in these figures. When asked about this anomaly, the University of Otago School of Dentistry's epidemiologist indicated that these data represent the children enrolled in the School Dental Service and are collected at the end of each school year.[35] During the school year the decayed teeth have either been restored or extracted. Because of this emphasis on treatment, essentially all of the school children in New Zealand are free of carious infection at the end of a school year. How does one explain the success of such a program? In a 1972 article in the *Journal of the American Dental Association*, Friedman suggested that "perhaps it is the unusual circumstance of the application of common sense."[28]

Sir John Walsh, dean of New Zealand's national dental school at the University of Otago from 1946 to 1971, in addressing the Centennial Conference on Oral Health at Harvard in 1968, suggested the employment of a "Care Index," with such an index being calculated by developing a ratio of the filled teeth component (the f/F) of the deft or the DMFT to the overall deft or DMFT.[39,40] In 1968, the Care Index in New Zealand was 72 percent—meaning 72 percent of all teeth of children affected by caries had been restored. In the United States, that figure was 23 percent. Dean Walsh made the claim that the Care Index provides a convenient measure of the effectiveness of a country in treating dental caries. Today the Care Index for New Zealand children approximates 100 percent.[39] In the United States, the Care Index drops significantly when adjusted for income status. For primary teeth it is 72.3 percent for children at 300 percent of the FPL, but only 48.7 percent for children at 100 percent of the FPL.[41] For permanent teeth it is 93.2 percent for children at 300 percent of the FPL and only 72.3 percent for children at the 100 percent of the FPL.[41] Such disparities help underscore the access to care issue for poor children.

Training Dental Therapists in New Zealand and Elsewhere

A prerequisite for admission to one of the two dental therapy educational programs in New Zealand is graduation from high school, with the completion of a course in biology. Each of the two years in the curriculum is thirty-two weeks in duration. The total curriculum clock hours are approximately 2,400. During the first year, topics of study include the basic biomedical sciences (general anatomy, histology, biochemistry, immunology, and oral biology), as well as clinical dental sciences (dental caries, periodontal disease, preventive dentistry, patient management, radiography, local anesthesia, restorative dentistry, dental materials, and dental assisting). In the second year, course content includes pulpal pathology, trauma, extraction of primary teeth, clinical oral pathology, developmental anomalies, health promotion/disease prevention, New Zealand society, the health care delivery system, and recordkeeping, as well as administrative and legal issues associated with dental therapy practice in New Zealand. Approximately 760 hours of the 2,400-hour curriculum are spent in the clinic treating children. Graduates entering the School Dental Service must serve for one year with another school dental therapist who provides assistance, support, and supervision, much in the manner of a residency program. (The preceding general information was obtained through personal communication with Helen Tane, director of the University of Otago's program in dental therapy.)

During my recent visit to New Zealand, members of the dental profession whom I interviewed, both within and outside the School of Dentistry, were highly complimentary of the skills of the dental therapists, as well as the work of the School Dental Service. As a result of legislative changes in 2002, dental therapists are now also able to practice in private offices in New Zealand under the direct supervision of a dentist.[42]

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The New Zealand school dental nurse/therapist has served as a prototype for adding such a member to the dental team in many additional countries throughout the world, although the specific approach, including practice environments and restrictions, varies from country to country. A 1978 comprehensive assessment of dental nurses worldwide suggested that a major factor predisposing to the introduction of dental nurses was an access problem related to a shortage of dental manpower.[43] The World Health Organization documents forty-two countries with some variant of a dental therapist; these include Australia, China (Hong Kong), Singapore, Thailand, Malaysia, Great Britain, and Canada.[44] The Canadian experience is relevant to this discussion as it apparently is the only country in the Western hemisphere to have a training program for dental therapists.

The National School of Dental Therapy for Canada is a component of the First Nations University of Canada in Prince Albert, Saskatchewan. The school, which began in 1972 at Fort Smith in the Northwest Territories, was modeled after New Zealand's, with modifications appropriate for the anticipated service area.[45,46] The mission was to train dental nurses in a two-year program to provide care for the remote First Nation (aboriginal Indians) and Inuit (Eskimo) villagers of the Canadian North, where dental care was virtually inaccessible. In 1984 the school was moved to Prince Albert due to an inadequate supply of patients in the Fort Smith area. The school continues to prepare dental therapists, with an emphasis on training aboriginal people to care for aboriginal people, specifically on First Nation reserves and in the North.

In the early 1970s, the province of Saskatchewan implemented a school-based dental plan for all children; and in 1972 a dental nurse training program was opened in Regina, Saskatchewan, at the Wascana Institute of Applied Arts and Sciences, now the Saskatchewan Institute of Applied Science and Technology (SIAST).[47] In the mid-1980s, the province faced budgetary constraints, as well as pressure from dentists to focus on funding dental hygiene rather than dental therapy. As a consequence, the dental therapy training program at Regina was closed in 1987.

Dental therapists are able to work for Health Canada (Canada's ministry of health) on federal First Nation reserves throughout Canada, with the exception of the provinces of Ontario and Quebec. There are eighty-eight dental therapists employed today by Health Canada.[48] Similar to New Zealand, recent legislation (2001) enables therapists to also work in private dental offices in the province of Saskatchewan, under the indirect supervision of a dentist.[49] Currently there are 208 licensed dental therapists in Saskatchewan.[50]

The educational program at the National School of Dental Therapy is fully funded by Health Canada and maintains an affiliation agreement with the School of Dentistry at the University of Saskatchewan. The school accepts twenty students each year into a two-year curriculum. The program is focused on training to care for children, although instruction is also provided in treating dental emergencies in adults, including extraction of permanent teeth.

Each year of the two-year curriculum is forty weeks in length. The basic didactic curriculum in the biomedical sciences and clinical dental sciences is taught in the first year, with the second year devoted primarily to clinical care. Thus the students receive approximately 1,600 clock hours of didactic instruction in the first year and an equivalent amount of clinical instruction the second year, for a total of 3,200 clock hours. (The preceding general information was obtained through personal communication with Dr. Glenn Schnell, director of the National School of Dental Therapy.)

Double-blind studies of the work of the Canadian dental therapists in comparison to federal dentists have been conducted.[46,51] The results indicated that the restorations placed by dental therapists were equal to those placed by dentists. Trueblood documented the cost-benefit effectiveness of Health Canada's developing and deploying dental therapists in a doctoral dissertation in 1992.[52]

The United States Experience

In the United States, studies of expanded functions for dental auxiliaries began in the 1960s. During that decade six notable programs studied the delegation of *reversible* expanded functions to dental assistants: the Great Lakes Naval Training Center,[53] the Division of Indian Health,[54] the University of Alabama,[55] the University of Minnesota,[56] USPHS Dental Manpower Development Center in Louisville,[57] and a program in Philadelphia.[58] All demonstrated that reversible procedures could be effectively taught to dental assistants in a reasonable period of time.[59]

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During the 1970s, the emphasis changed, and studies were conducted involving the delegation of both reversible and *irreversible* procedures to dental hygienists. Notable among these studies were those at the Forsyth Dental Center,[60] the University of Kentucky,[61] and the University of Iowa.[62] Before considering these, however, it is important to note that there have been two attempts to develop a New Zealand dental nurse in the United States. Both were met with strong opposition from the practicing profession.

In 1949 the Massachusetts legislature passed a bill authorizing the receipt of funding from the United States Children's Bureau by Forsyth Dental Infirmary for Children to institute a special five-year program of dental research in this area.[63,64] The research would prepare "feminine personnel," in a two-year training program, to prepare and restore cavities in children's teeth under the supervision of a dentist in a dispensary or clinic approved by the Massachusetts Commissioner of Health. The training program was to be conducted under the supervision of the Department of Health and the Board of Dental Examiners. Thus, the passage of this legislation provided for the establishment of an experimental dental care program for children similar to the school dental nurse of New Zealand.

The reaction of organized dentistry was swift and negative. The ADA House of Delegates passed resolutions "deploring" the program; expressing the view that any such program concerning the development of "sub-level" personnel, whether for experimental purposes or otherwise, be planned and developed only with the knowledge, consent, and cooperation of organized dentistry; and stating that a teaching program designed to equip and train personnel to treat children's teeth cannot be given in a less rigorous course or in a shorter time than that approved for the education of dentists.[64] Faced with increasing pressure from organized dentistry in Massachusetts, as well as nationally, the Massachusetts governor signed a bill in July 1950 rescinding the enabling legislation.[65]

In February 1972, Dr. John Ingle, dean of the University of Southern California School of Dentistry (USC), proposed the use of school dental nurses, as employed in New Zealand, to address the problem of dental caries among America's school children.[66] In the spring of that year he authorized the submission, on behalf of USC, of a proposal for a training grant of $3.9 million from the U.S. Public Health Service to train dental nurses, with Dr. Jay W. Friedman, who had studied New Zealand's School Dental Service, as the project director. At the same time, the then-governor of California, Ronald Reagan, established a committee to study the functions of all dental auxiliaries, in order to make recommendations to the California legislature and the State Board of Dental Examiners.[67] As a result of these two significant developments, the then-two California Dental Associations established a committee to study the New Zealand dental care system, analyze the relationship of the school dental nurse to private practice, assess the work of the school dental nurse, and compare the New Zealand and California systems.[67] The committee of four individuals visited New Zealand in late 1972. Their report, published in 1973, stated that "there is little doubt that dental treatment needs related to caries for most of the New Zealand children age 2½ to 15 have been met."[67,68] However, the report concluded that the public of California would "probably not" accept the New Zealand type of school dental service, as it would be perceived as a "second class system." Drs. Ingle and Friedman wrote sharp rebukes to the committee's report, pointing out the inconsistencies of the objective findings of the investigation in relation to the subjective conclusions of the report, which they judged to be drawn to placate the practicing profession in California.[69,70] Dunning also criticized the report's conclusions in a letter to the *Journal of the American Dental Association* editor,[71] and Goldhaber, in a *Journal of Dental Education* article, called the committee's conclusion "absurd."[72] According to Dr. Ingle, the American Dental Association mounted a nationwide protest against him and the dental nurse project, which probably contributed to the Public Health Service's failure to fund the grant. He subsequently resigned his position as dean at USC to join the staff of the Institute of Medicine.[73]

In 1970 the Forsyth Dental Center initiated what was subsequently designated, and described in a book of the same title, "The Forsyth Experiment."[60] The House of Delegates of the Massachusetts Dental Association had recently passed a resolution favoring research on expanded function dental auxiliaries. Forsyth communicated, to both the Massachusetts Board of Dental Examiners and to the Massachusetts Dental Society, its plans to initiate a research project to train dental hygienists in restorative procedures for children, which were typically reserved for dentists alone. The experiment was designed to teach and evaluate clinical performance for administering local anesthesia and preparing and placing Class I, II, and V amalgam restorations and

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Class III and V composites. No problems were encountered between 1970 and 1973. However, in October 1973 the Board of Dental Examiners notified Forsyth that a hearing would be held to review the project's feasibility. Subsequently, the state board voted unanimously that the drilling of teeth by hygienists was a direct violation of the Dental Practice Act of Massachusetts and submitted such a decision to the attorney general's office for a ruling and action. In March 1974, the attorney general ruled that "drilling teeth is deemed in the act to be undertaking the practice of dentistry, and the legislature had not exempted research from this provision." Forsyth was forced to close its "experiment" in June 1974, but not before it was able to objectively document that hygienists could be taught to provide restorative dental services effectively, efficiently, and at a positive cost-benefit. Whereas the projected curriculum time to achieve the competencies desired was forty-seven thirty-hour weeks, the project was able to achieve its desired educational outcomes in twenty-five thirty-hour weeks.

Another expanded functions project was implemented between 1972 and 1974 at the University of Kentucky, supported by the Robert Wood Johnson Foundation.[61] This project also involved the training of dental hygienists in restorative dentistry. Thirty-six students, who were completing a four-year baccalaureate program in dental hygiene, participated in a compressed curriculum that provided for 200 hours of didactic instruction in children's dentistry, as well as 150 hours of clinical practice. The program was specifically addressed to providing primary care for the child patient, including administration of local anesthesia, restoration of teeth with amalgams and stainless steel crowns, and pulpal therapy. Toward the conclusion of the curriculum, these hygienists trained in dentistry for children participated in a double-blind study comparing their restorative skills with fourth-year student dentists. No significant differences were found between the quality of their work and that of the student dentists.

At the College of Dentistry at the University of Iowa, a five-year project was conducted between 1971 and 1976, supported by the W.K. Kellogg Foundation, that trained dental hygienists to perform expanded functions in restorative dentistry and periodontal therapy for both children and adults. The results were the same as the studies at Forsyth and Kentucky: hygienists could be effectively trained, in a relatively brief time period, to perform, at a comparable quality level, procedures that traditionally are reserved solely for dentists.[62]

Justifying a Pediatric Oral Health Therapist

Despite documentation of the ability of individuals other than dentists to successfully provide quality care to children, both in the United States and internationally, American dentistry has been immovable in its resistance to this type of allied professional. The crisis faced today, as represented by the disparities in oral health among our more disadvantaged populations, demands challenging the traditional practice paradigm and advocating the addition of a new member of the dental team—a pediatric oral health therapist.

Throughout this article, references have been made to circumstances that justify the development of pediatric oral health therapists to help address the disparities in oral health among children in the United States. To summarize:

- There are profound disparities in oral health between the children of the rich and the poor in America.
- There is a general lack of access to care for the nation's disadvantaged children.
- There is a general lack of training of general dentists in children's dentistry in the current predoctoral dental curricula.
- There are insufficient numbers of dentists in urban inner-city and rural areas, where children are most in need of care.
- There are inadequate numbers of minority dentists to work with minority populations.
- There is a declining dentist to population ratio.
- There are far too few pediatric dentists to have an impact on access for disadvantaged populations.
- There is a general lack of interest on the part of dentists in treating children, given the current demand for other dental therapies.
- There is even less interest by dentists in treating low-income children, particularly if their care is being financed by Medicaid or S-CHIP programs.
- There is a need to provide care in a cost-effective manner, particularly for patients whose care is being publicly funded.
- There is ample evidence, from within the United States and internationally, that high school gradu-

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ates can be trained in a two-year academic program to render, under general supervision by a dentist, safe, effective, high-quality preventive and restorative care for children.

All of these circumstances point to the reasonableness and value of developing and deploying pediatric oral health therapists.

Developing Pediatric Oral Health Therapists

A curriculum for developing pediatric oral health therapists exists and has been documented to be effective in numerous countries throughout the world. It is the traditional curriculum of the school dental nurse/therapist. It is known that high school graduates can safely, effectively, and efficiently provide oral health care for children after two academic years of training. The curriculum for a pediatric oral health therapist could be considered comparable to the two academic year (associate degree) curriculum for preparing dental hygienists: 230 of the 260 dental hygiene training programs in the United States are two-year programs. The primary difference would be the focus of the training—with that of the hygienist being on periodontal disease, particularly in the adult, and the therapist on dental caries, specifically for the child. The curricula would share areas of commonality, such as the basic biomedical sciences, oral biology, preventive dentistry, infection control, the diagnostic sciences, and radiography. The perceptual motor skills required to restore the teeth of children are no more complex than those to perform scaling and root planing. Research has demonstrated these skills can be taught in a two-year program to individuals with a high school degree.

It may be possible to shorten the training period if the students matriculating in a pediatric oral health therapist program were already certified dental hygienists; however, there is reason to encourage hygienists to continue to be the expanded-function allied dental professional for managing adult periodontal health and disease. Hygienists are too valuable in their current role, particularly in the context of their relative shortage and the aging of the population, with concomitant needs for periodontal therapy. Rather, it appears more reasonable to create a new allied dental professional who focuses on the unique oral health needs of children, specifically as these relate to the problem of dental caries.

Where and under what circumstances might a pediatric oral health therapist practice? To effectively address the access problem, it appears practitioners must go to where children are located. As in New Zealand, the most logical place to capture this audience is in the school system. As Dunning stated over thirty years ago, "any large-scale incremental care plan for children, if it is to succeed, must be brought to them in their schools."[29] A number of our colleges of dentistry are having some success with mobile dental van programs. Such approaches enable student dentists to learn children's dentistry in an era when it is increasingly difficult to draw children in need of dental care to institutional facilities. It is reasonable for pediatric oral therapists to practice (under the general supervision of a dentist) in mobile vans providing care on a financial needs-tested basis, for example, to all Medicaid- and S-CHIP-eligible children in a school, moving through the year from one school to another. Such a program, begun in an incremental manner with the youngest children (with the least carious experience and the greatest potential for implementation of preventive care), would seem to be a cost-effective way of managing the oral health needs for our poorest and neediest children.

In New Zealand, a dental therapist with an assistant is responsible for 1,450 children.[32] The Commonwealth of Kentucky has essentially the same population as New Zealand. Kentucky has 384,832 children ages five to eleven (K-6). Of these, approximately 43 percent (or 172,418 children) live at a level of 200 percent of poverty or below and are eligible for Medicaid/S-CHIP benefits.[74] Using the New Zealand model, to care for this many children would (hypothetically) require 212 dental therapists. While no direct economic comparisons can be made due to the significantly different circumstances, it is interesting to note that New Zealand spends approximately $34 million (US) caring for *all* enrolled children ages six months through seventeen years[75] and that Kentucky's dental expenditures for children covered by Medicaid/S-CHIP *alone* in 2002-03 were approximately $40 million.[76]

A second potential environment for pediatric oral health therapists could be in the private sector, as exists now in Saskatchewan. In such, therapists could work under the supervision of a dentist and serve as a dentist-extender for children's primary care, in much the same manner that a dental hygienist serves in such a role for adult periodontal care. It does not make economic sense for a dentist to rou-

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tinely perform scaling, root planing, and polishing of teeth, when such can be delegated to a hygienist. Research has documented the economic benefit that dentists gain by employing hygienists.[77] In like manner, it is not reasonable for dentists to perform primary care procedures for children when a pediatric oral health therapist can do so. Adding such an individual to the dental team not only makes sense; it seems unreasonable, in economic terms, not to proceed as rapidly as possible. However, the profession continues to cling to the belief that cutting tooth structure is paradigmatically different than scaling teeth and such is a boundary never to be crossed by allied professionals. It is a cultural tradition, not a justifiable belief. In Saskatchewan, dental therapists are employed in private offices, frequently caring for all the children in a practice. Saskatchewan dentists testify to the significant economic return on their investment in employing dental therapists, apart from the opportunity it provides to care for more patients and a broader range of patients than one would be able to treat without such personnel. That is improved access. It would be in dentistry's economic self-interest to develop pediatric oral health therapists able to practice in dental offices.

Values and a Profession

The *ADA Principles of Ethics and Code of Professional Conduct* has been revised over the past twenty years to include the classic troika of principles of professional ethics: respect for autonomy, beneficence, and justice. Regarding justice, the *Principles* state: "In its broadest sense, this principle expresses the concept that the dental profession should actively seek allies throughout society on specific activities that will help improve access to care for all."[78]

One of the most important and influential books of political philosophy written in the twentieth century was *A Theory of Justice,* by the late Professor John Rawls of Harvard University,[79] in which he carefully explicates the nature of justice. His definition is based on the now famous hypothetical in which he asks one to stand behind a "veil of ignorance" and envision a world into which one will be born, but not knowing into what circumstance he or she will be born, that is, to a rich or poor family, intelligent or dull, male or female. He argues that, given such a condition, people will design a world with some degree of risk aversion, in which the following conditions would exist: 1) each person will have an equal right to the most extensive system of liberties comparable with a system of equal liberties for all; 2) persons with similar skills and abilities will have equal access to offices and positions of society; and 3) (the critical one for our consideration of access and disparities) social and economic institutions will be so arranged as to *maximally benefit the worst off.* Such a design he affirms would be "just."

Given a Rawlsian view of justice, the oral health care delivery system in the United States, if it is to be just, must be structured to maximally benefit the worst off in society. In reality, as has been demonstrated, it is quite the opposite. Poor and minority children, the most vulnerable individuals in society, are the "worst off" and have the poorest access to oral health care and the poorest oral health. Justice would demand they be maximally benefited, in order that they ultimately have "equal opportunity" to do well. Yet our system is so structured as to maximally benefit those who are already "well off."

The time has come for the profession of dentistry to seriously and courageously provide access to oral health care for all of America's children. Access should be provided in such a manner that major barriers are destroyed, and parents, no matter their economic status, ethnicity, or cultural circumstance, can be assured their children will be treated justly by society, in that they have an equal opportunity, with other children, for good oral health. A method that can be effective in helping achieve this goal is the development of pediatric oral health therapists—allied professionals uniquely trained to care for the oral health of children.

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Dental Therapists: A Global Perspective

by

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Dental Therapists: A Global Perspective

ABSTRACT

In 1921, New Zealand began training school dental nurses, subsequently deploying them throughout New Zealand in school-based clinics providing basic dental care for children. The concept of training dental nurses, later to be designated dental therapists, was adopted by other countries as a means of improving access to care, particularly for children. This article profiles six countries that utilize dental therapists, with a description of the training therapists receive in these countries, and the context in which they practice. Based on available demographic information, it also updates the number of dental therapists practicing globally, as well as the countries in which they practice. In several countries, dental therapy is now being integrated with dental hygiene in training and practice to create a new type of professional complementary to a dentist. Increasingly, dental therapists are permitted to treat adults as well as children. The article also describes the status of a current initiative to introduce dental therapy to the United States. It concludes by suggesting that dental therapists can become valued members of the dental team throughout the world, helping to improve access to care and reducing existing disparities in oral health.

Key Words: Dental Therapist, School Dental Nurse, Global Dental Workforce

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INTRODUCTION

Dental caries and periodontal disease, the most prevalent oral diseases, are ubiquitous, preventable, generally progressive, and without effective treatment result in edentulism. Most nations are faced with a shortage of dentists. The introduction of dental therapists to the workforce, then called school dental nurses, began in New Zealand in 1921, following the discovery during World War I of the poor oral health of potential inductees into military service.[1] School dental nurses were trained in a two academic year curriculum to provide basic preventive and restorative dental care for children in a School Dental Service, with general oversight by district dental officers. New Zealand's effectiveness in utilizing school dental nurses/therapists has been well-documented.[2,3,4,5] By 1978, a number of countries had developed and deployed dental nurses to improve access to care.[6] Since the 1980s, dental nurses have generally been referred to as *dental therapists.*. More recently the trend has been to integrate dental therapists and dental hygienists as *oral health therapists.*

The Netherlands serves as an example of how countries are coming to realize the importance of adding dental therapists to the workforce. Dental therapists had not previously been a component of the Dutch oral health care delivery system. Recently, Holland adopted a combined curriculum for dental therapy and dental hygiene to develop an oral health therapist, and are now enrolling 300 a year in their training programs.[7,8] At the same time, the number of dentists educated is being reduced by 20%. The Dutch rationale: in the future, significant aspects of basic preventive and restorative care will be provided by these oral health therapists, with dentists performing more complex procedures and treating medically compromised patients. The new Dutch policy is intended to reduce costs and improve access to care.

This article profiles the utilization of dental therapists in six representative countries to illustrate the diversity of approaches to developing and deploying dental therapists. It also summarizes the recent attempt to introduce dental therapists in the United States. It concludes by suggesting that access to basic dental care will not be available to a major segment of the world's population without the utilization of dental therapists in the workforce.

Table 1 provides a listing of the countries that have been identified— from the literature, various websites, and personal communication with dental health professionals—as employing dental therapists. Currently, 53 countries utilize dental therapists, with over 14,000 existing world-wide. As the table indicates, the utilization of dental therapists occurs in both developed economies and developing countries; and in countries with both high and low dentist to population ratios.

It should be noted that China has an estimated 25,000 "assistant dentists." These "assistant dentists" practice independently in rural areas, and function in a capacity that could be considered analogous to dental therapists, according to Chinese dental educators.[9,10] However, "assistant dentists" are not included in the data as this report focuses on the dental nurse/therapist movement that began in New Zealand.

PROFILES OF DENTAL THERAPY IN SIX NATIONS

Table 2 summarizes information on the six countries profiled including their population, history of dental therapy, dental therapist/population ratio, dentist/population ratio, dental therapy training programs, and dental therapist's scope of practice. In many countries, dental therapists

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provide a full range of preventive services, prepare and place amalgam and composite restorations and preformed stainless steel crowns; perform pulpal therapy, such as pulpotomies; and provide basic periodontal therapy (scaling). Dental therapists in less developed countries, with Tanzania being an example, may be limited to atraumatic restorative treatment (ART) and extractions. In some countries care is provided only to children and in others to children and adults. There is variation among countries and within countries regarding the environment in which dental therapists may practice and the degree of supervision required by a dentist.

New Zealand

As early as the 1890s, the poor state of oral health in the country was recognized. A compulsory School Dental Service was proposed in recognition that oral health is vital to general health, early clinical intervention would minimize loss of teeth, and there should be a focus on prevention.[1] However, it was not until 1923 that the pioneering School Dental Service was established, with small clinics on elementary school grounds, staffed by 30 school dental nurses under the general (indirect) supervision of district public health dentists. Initially, dental nurses were trained to do dental prophylaxis, oral health and dietary instruction, intra-coronal restorations and to extract primary teeth. Now called dental therapists, they provide a full-range of preventive and restorative services, including placement of preformed stainless steel crowns, as well as pulpal therapy on primary teeth

Currently, over 97 % of children under age 13 and 56% of preschoolers participate in the School Dental Service, with the virtual elimination of permanent tooth loss.[11] At the end of a school year there is essentially no untreated dental caries in children enrolled in the School Dental Service.[3] Adolescents, ages 13-18, are also provided government-financed dental care by private dentists.

Until recently, oral health care by dental therapists was limited to children through the School Dental Service. Legislation and registration/licensure now permits dental therapists to provide care for adults, following completion of additional training. They can also now work in private dental practices and may also practice independently, but only with a consultative agreement with a dentist.[12]

Originally trained in three regional dental therapy schools, training of dental therapists was transferred to New Zealand's national School of Dentistry at the University of Otago in 1999. In 2006, the curriculum for dental therapy and dental hygiene merged into a three academic year program, with resultant credentialing in both scopes of practice rather than what had previously been two separate training programs. An additional dental therapy program was established in Auckland in 2002 that has also transitioned to a joint therapy/hygiene curriculum.

Most dental therapists remain salaried employees within the School Dental Service, with a small number in private practice. There are now 660 registered dental therapists, down from a high of 1,350 in the 1970s; a full time equivalency of approximately 510 therapists caring for the country's 850,000 children. New Zealand has 1,836 dentists and 237 dental hygienists serving a population of just over 4 million.[13] With the introduction of fluoridation in the 1950s, and the subsequent decline in dental caries, the need for a full time dental therapist in each elementary school decreased, and many were assigned to multiple school clinics. However, with an increasing population and workforce attrition due to retirement, a shortage in the number of required dental therapists has recently been predicted by the Ministry of Health.[14]

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The quality of care provided by dental therapists in New Zealand has been documented in a number of reports.[2,15,16,17] The extraordinarily high rate of participation, nearly 100% of elementary school students, can only be achieved and maintained by providing access to care on school grounds. The dental therapists have been highly valued by the public for more than eighty years.[18] The oral health of New Zealanders would be considerably less if it were not for the contribution of the dental therapists.

Australia

A School Dental Service, staffed by dentists, began in Australia in 1915. During subsequent decades, school dentists were able to care for only a small percentage (25%) of the children.[19] Despite widespread dental disease and the shortage of dentists, strong opposition from the dental profession prevented adoption of the school dental nurse until 1964, when a number of New Zealand dental nurses, who had been working as dental assistants, were assigned restorative dentistry roles in the School Dental Service.[20,21] The success of the New Zealand School Dental Service, in particular the high participation rate and social acceptance by the population, led to the final approval of school dental nurses practicing in Australia in 1965.[22] The National Health and Medical Research Council recommended that the course of training should be as short as possible in order to maintain the cost-effectiveness of the dental nurse while ensuring competence. Dental nurses were also to be female, and to have their employment restricted to the government service.[22]

Prior to 2000, dental therapists were taught largely in non-university schools in a two academic

year program. However, all programs are now university-based three academic year curricula at the Universities of Adelaide, Melbourne, Sydney, Queensland, Western Australia, La Trobe and Griffith. These schools offer courses that graduate a single practitioner with both traditional dental therapy and dental hygiene skills. This new practitioner is designated an oral health therapist. However, for both registration/licensure and practice, graduates must designate the application of their skills as either a dental therapist or a dental hygienist, or both; as there is currently no registration/licensure specifically for an oral health therapist. Registration/licensure and practice restrictions vary from state to state.

Dental therapists have been permitted to practice in the private sector in Western Australia since 1977, providing services with the prescription of a dentist to patients of all ages. With the exception of New South Wales, dental therapists now are permitted to work in private dental practices, preschool and community health programs, and hospital clinics, although 87% still work in School Dental Service.[23] In 2003, there were an estimated 1,560 registered dental therapists, with 1,242 engaged in practice.[23] In some states, dental therapists can treat adults up to age 25, but generally are restricted to age 18. The overwhelming majority of dental care for children in Australia is provided by dental therapists.[24]

Comparing teeth restored by Australian school dental therapists and dentists, Roder found that 2.6% of the restorations placed by dentists were defective, in contrast to 1.8% of those by dental therapists.[25,26] In 1974, he reported that diagnosis and treatment planning decisions between dental therapists and dentists were comparable.[27] This finding was corroborated in a study

conducted by the Western Australia Health Department in which it was found that radiographic interpretation and treatment decisions were similar between dentists and dental therapists.[28]

Inequalities in oral health and access to dental care are still widespread.[29] Government policy recommendations emphasize the need to develop a sufficient workforce that includes a strong component of associated oral health team members, such as oral health therapists. It is anticipated there will be a continuation and expansion of oral health therapists throughout Australia.[30,31]

Canada

In 1963, the Yukon School Dental Care Experiment employed a New Zealand trained dental nurse living in the community to teach prevention, provide fluoride treatments, and refer children in need of dental care to dentists. The demand for service grew quickly and the project expanded to permit the dental nurse to provide simple restorations and extractions of primary teeth as delegated in writing by a dentist.

Lacking sufficient dentists to care for the general population, much less the native Indian (First Nations) and Inuit (Eskimo) populations, and recognizing the success of school dental nurses in New Zealand and Australia, a program to train dental nurses was established at Fort Smith, Northwest Territories in 1972 under the guidance of the Faculty of Dentistry of the University of Toronto.[32,33]

Also in 1972, the province of Saskatchewan began training school dental nurses at Wascana Institute of Applied Arts and Sciences in Regina to provide services to children under the

Saskatchewan Dental Plan.[34] By the mid-80's, the Saskatchewan Dental Plan employed over 150 school dental therapists. Over 90% of children were enrolled and over 90% of all enrolled children were examined and treated on a yearly basis.[35] Despite this broad acceptance and public support, the school-based program and the dental therapist training program at Wascana were eliminated in 1987, due to pressure from private sector dentists, and in order to focus on funding for training dental hygienists rather than dental therapists. At that time there were 246 licensed dental therapists practicing in Saskatchewan.[36] The school-based program was transferred to private dental practice, where it continued to be publicly funded on a fee-for-service basis. The high rates of enrollment and completion rates of the school-based program were never duplicated in the private practice setting and the entire program was eliminated in 1992.

In 1976, the province of Manitoba developed the Manitoba Children's Dental Program, which was also school-based. The province contracted with Wascana Institute of Arts and Science in Saskatchewan to train school dental therapists for the program. Due to opposition of Manitoba dentists, the program was initially limited to rural areas. In 1978, dental therapists in Manitoba also began to be employed in private offices and by Health Canada in First Nations communities. Continued opposition of private practice dentists resulted in the school-based program being eliminated in 1993 and the program transferred to private practice.

In 1984, the training program for dental therapists moved from Fort Smith to Prince Albert, Saskatchewan, due to an inadequate supply of patients in the Fort Smith area. Today, the National School of Dental Therapy at Prince Albert, a component of First Nations University, is the only training program for dental therapists in Canada. It admits 20 students/year to its two

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academic-year curriculum with the goal of preparing dental therapists to care for First Nations and Inuit populations on First Nations reserves and in the Northern Territories.[33]

At present there are approximately 300 dental therapists practicing in Canada. Two hundred and two practice in the province of Saskatchewan; 37 positions exist in the three northern territories with about 55 dental therapists being distributed throughout the rest of Canada with the exception of the provinces of Ontario and Quebec.[37, 38] There is a vacancy rate exceeding 50% in dental therapy positions in remote communities in the Nunavut and Northwest territories.[39] This is due in part to the social and economic disincentives of practicing in isolated communities without professional collegial support. There are a number of dental therapists also employed in private practice in Manitoba. However, because they are not regulated it is not possible to determine the actual numbers of dental therapists in practice there.

In Saskatchewan, dental therapists have been a self-regulating profession for more than 30 years. They must be licensed by the Saskatchewan Dental Therapists Association, and they may practice in all settings as long as they are employed by or have established a formal referral or consultation process with a dentist. In 2007, 118 of the 202 dental therapists practicing in Saskatchewan were practicing alongside dentists, hygienists, and assistants in the private sector, including in satellite clinics in smaller rural and First Nations communities, providing care on a fee for service basis.[37] These satellite clinics serve communities that otherwise would not have access to care. About 40 dental therapists are employed by Health Canada or First Nations bands or tribal councils in Saskatchewan.

Outside Saskatchewan, dental therapists are either employed directly by the First Nations and Inuit Health Branch of Health Canada (Canada's Ministry of Health), or by the three northern territorial governments providing oral health services to Inuit and First Nations people. In other provinces, therapists are limited to practicing on First Nations/Crown Land and must be directly employed by the federal government or by special agreement. In most regions, dental therapists can examine, diagnose, and develop or modify treatment plans; however, some regions require that initial and some periodic examinations be carried out by dentists. Dental therapists in all regions are able to provide urgent care for patients to alleviate an emergency, without the requirement of a treatment plan by a dentist.

In a 1976 blind-folded study, Ambrose, Hord, and Simpson evaluated restorations placed by Saskatchewan dental therapists. They found the quality of amalgam restorations by dental therapists was better, on average, than those by dentists, and the stainless steel crowns placed were comparable in quality.[40] In1988, Health and Welfare Canada contracted with two past presidents of the Canadian Dental Association to assess the technical quality of dental therapists and dentists using the rating guide developed by Ryge and Synder.[41] The results indicated that the restorations placed by dental therapists were equal to those placed by federal dentists.[42] On further statistical analysis of these same data, Trueblood concluded: "the quality of restorations placed by dental therapists was equal to but more often better than that of those placed by dentists."[43] The cost-effectiveness of Health Canada utilizing dental therapists in providing dental care has also been documented.[44]

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Malaysia

When Malaysia became an independent country in1957, the population of seven million was faced with an acute shortage in the dental workforce, a high caries prevalence, described as "appalling," and a young population, with more than 50% of the population under age 18.[45] There were approximately twenty dentists in government service, with another fifty in private practice who were concentrated in urban areas.[46] There was no school of dentistry.

The Malayan School for Dental Nurses was established in June, 1949. Patterned after the New Zealand model and located in Penang, it was the first training program for dental nurses outside of New Zealand. Dental nurse continues to be the accepted nomenclature in Malaysia.[47] Dental nurses in Malaysia are all females and they are not permitted to practice in the private sector. The School initially trained 50-70 dental nurses each year, and since its founding it has graduated more than 2,000 dental nurses from Malaysia, and dental nurses for 19 other countries who have either been sponsored by the World Health Organization or their respective governments.[45,48]

It was not until 1976 that the first class of 30 dentists graduated from the newly established School of Dentistry at the University of Malaya in Kuala Lumpur. With two new dental schools opened in 2000, approximately 180 dentists are now graduated annually. This still does not produce enough dentists to achieve the government targeted dentist to population ratio of 1:4,000.[48] Students are sent to other countries for training, and dentists are recruited from other countries. In 2006, the government approved the establishment of five additional dental schools.

The present dentist/population ratio varies from 1:8,779 in urban areas to 1:25,108 in remote states.[49] More dentists will not affect the overall pattern of dental care for school children, almost all of which is provided by dental nurses in government service. Malaysian dentists treat children primarily on referral by dental nurses when required care is beyond their competency and scope of practice. Essentially all of a dentist's practice is devoted to treating adults. Economic incentives are resulting in public sector dentists migrating into private practice. In 1970, the majority of dentists (60%) worked in government programs, but by 2004 the majority (56%) were in private practice.[48] In an attempt to reverse this trend, the government, in 2003, made national service for three years compulsory for all new dental graduates. Nonetheless, dental nurses will continue to be the primary provider of oral health care for Malaysia's children.

The Malaysian government supports free oral health care for the three million children in 17,583 elementary schools, and the two million children in 2,111 secondary schools through its network of 1,969 public dental clinics.[49] The public health service is empowered by law to provide dental examinations and treatment to all enrolled school children. However, treatment requires written consent from parents or guardians.

Practicing dental nurses now number 2,090. Implementation of the systematic, incremental dental care system based in the schools, and operated by dental nurses since 1985, has resulted in a sharp decline of decayed teeth and a corresponding increase in restored teeth.[48] The program has been so successful that by 2003 the school dental program reached 96% of elementary and 67% of secondary school children. Only a few parents decline treatment by the dental nurses, primarily because they have private dentists. Of those given care, 97% of elementary and 91% of

secondary school children were rendered orally fit. The major contributing factor to this increase was in the coverage of elementary schools, which rose from 37% in 1984 to 90% in 2003.[50] This could not have been achieved except through the utilization of dental nurses. The services by dental nurses are provided in school dental clinics, mobile dental clinics, and by dental teams using portable dental equipment. The goal is to render all school children orally healthy before they leave the school system. Recently, dental nurses have begun caring for pre-school children as well.

The dental profession initially opposed the utilization of dental nurses, presumably for fear of sub-standard quality of treatment and the possibility of competition. However, there have been no reports of serious injuries or record of litigation or malpractice claims against dental nurses over the 50 years of their existence. Competition with private practicing dentists does not occur as the two treat different segments of society. Dentists are trained primarily to treat adults, while dental nurses constitute the oral health delivery system for children.

Tanzania

Dental therapists in Tanzania date to 1955 when they were known as dental assistants who served as primary providers of dental care in rural areas at the level of a district hospital. Specific training of dental therapists was initiated by the Tanzania-Danish International Development Agency in 1981.[50] Although trained to work for the government in clinics, health centers, and district hospitals, therapists are also able to work in private practices. They are not limited to caring for children and most treat adults due to the pattern of demand for dental services.

Dental therapists train in a three year program, at either the Tanga or Mbeya Dental Therapist School. Twelve students are admitted at each school each year. Currently, there are 150 dental therapists practicing in Tanzania.[51] After gaining experience in practice, two additional years of training are also available to expand practice skills and profile of practice. The basic three year training program emphasizes oral health promotion, clinical examination, preventive dentistry, atraumatic restorative technique (ART), and simple extractions, whereas the two additional years of training enables individuals to perform restorative care for all carious lesions, extractions including impactions, initial periodontal therapy, and fabrication of partial dentures. Historically, society gave priority in training to males; thus, the ratio of male to female dental therapists is approximately 2:1. Current initiatives are attempting to address this gender imbalance.

Tooth extractions comprise most of the dental care because patients fail to seek treatment until dental caries is advanced. Additionally, restorative dental materials are not readily available in government clinics due to their cost. Yet, in countries like Tanzania, with an emerging economy, patient satisfaction can be attained even with therapy such as tooth extraction; and patients are very satisfied with the care they receive from dental therapists.[52]

Great Britain

Great Britain initiated training of dental nurses in 1960 at New Cross Hospital. In 1966, the General Dental Council appointed a group of 28 dentists to assess the quality of dental restorations placed by New Cross "dental auxiliaries." They concluded that 91% of the restorations were satisfactory, which was interpreted as an endorsement of their performance.[53] In 1983, the program was discontinued at New Cross, but was initiated at the London Hospital

Medical College (now Barts & The London Queen Mary's School of Medicine and Dentistry) with a small class of eight students. In the 1990's, the number of dental therapists being trained expanded as a result of the Nuffield Inquiry and the General Dental Council's Auxiliary Review Group report.[54,55] The number increased again in 2003 by 150 positions, in recognition that dental therapists have an important role in the delivery of care. Currently over 200 students are accepted each year in 15 programs, most of which are affiliated or attached to dental schools/dental teaching hospitals. They include: Birmingham Dental Hospital, Bristol Dental Hospital, Cardiff University, Dundee Dental Hospital, Eastman Dental Hospital, Edinburgh Dental Hospital, King's College Dental Hospital, Glasgow Dental Hospital, Greater Manchester School for Professions Complementary to Dentistry, Leeds Dental Institute, Barts & The London St Mary's School of Medicine and Dentistry, Manchester School of Dentistry, Newcastle Dental Hospital, University of Portsmouth School of Professionals Complementary to Dentistry, and Sheffield School of Clinical Dentistry.[56]

In the mid-1990s, a combined dental hygiene and dental therapy curriculum was introduced nationally, through dental schools, covering 24 months, later extended to 27 months. Most training programs now offer the combined program varying in length from 27 to 36 months (two to three academic years), with the length determined by whether a diploma (certificate) is awarded or a degree, the Bachelor of Science (B.Sc.) in Oral Health. The curriculum is governed and monitored by Britain's General Dental Council and is guided by the document *Developing the Dental Team: Curricula Frameworks for Registerable Qualifications for Professionals Complementary to Dentistry*."[57] Along with other basic dental training and training in traditional dental hygiene skills, the curriculum includes instruction in intra-coronal restorative procedures

for primary and permanent teeth, preformed stainless steel crowns for primary teeth, pulp therapy for primary teeth, and extraction of primary teeth.

Currently, 691 dental therapists are practicing in a variety of settings and are considered to be full members of the dental team.[58] They treat children and adults and are capable of independent practice, but must practice with a treatment plan developed by a dentist. However, dental therapists have autonomy in implementation of treatment plans, utilizing their knowledge to make informed decisions regarding priorities and techniques.

In a 1993 survey of 70 general practitioners, 40% indicated they would employ dental therapists in their practices.[59] However, there is little evidence this has happened. Dentists have become even more favorably disposed to dental therapists than they had been previously, probably because they now train together in the same institutions. A survey in 2003 found that 70% of dentists considered a dental therapist to be a valued member of the dental team, and 54% indicated they could accommodate a dental therapist in their practice. Yet only 16% had ever worked with a therapist. However, 52% indicated they were aware that a dental therapist could provide high quality care.[60] It is anticipated that dentists will be employing more dental therapists in their practices in the future. Despite residual opposition from some of the dental profession and uncertainty regarding the role of dental therapists, the outlook for dental therapy practice in Great Britain continues to improve.

INTRODUCING DENTAL THERAPISTS IN THE UNITED STATES

In 2000, the Surgeon General of the United States released a report, *Oral Health in America,* documenting deficiencies in access to dental care in the United States, with the resulting disparities in oral health of large segments of the nation's population.[61] As a consequence, there has been renewed interest in the utilization of dental therapists to address the access and disparities problem.[62,63]

Because of the prevalence of dental disease and the chronic shortage of dentists in Alaska, the Alaska Native Tribal Health Consortium, with the support of the Indian Health Service (IHS), in 2003 sent six Alaskans to be trained in dental therapy at the University of Otago, New Zealand's national dental school.[64,65] They returned to Alaska in 2005 to begin practicing dental therapy in rural villages, only to be met with a lawsuit by the American Dental Association to stop what the Association considered to be the illegal practice of dentistry.[67,68] Although the lawsuit is still pending, the IHS and the state of Alaska support dental therapists practicing in the Alaska Tribal system. The Alaska attorney general's office issued a ruling that dental therapists in the Alaska Tribal health system are not subject to the state dental practice act because they are certified under federal law.[68] An independent assessment of the quality of care provided by the first cohort of Alaskan dental therapists returning from New Zealand concluded that they met every standard of care evaluated and were "competent providers."[69] As of 2007, eleven dental therapists who were trained in New Zealand were practicing in Alaska.

Currently, training of dental therapists has been initiated in Alaska in a program developed by the University of Washington School of Medicine's physician assistant program in cooperation

with the Alaska Tribal health system. Major grants from a number of philanthropic foundations supported the development of the program. Training began in January of 2007, with seven students enrolled in the first year of preclinical training in Anchorage at a new facility developed specifically for the program. The second year of clinical training will be in existing Tribal clinics in Alaska.[70] The American Association of Public Health Dentistry and the American Public Health Association have endorsed the practice of dental therapists in Alaska.[71,72]

Many dentists in the United States, unfamiliar with the development, functioning, and achievements of dental therapists internationally, fear and oppose dental therapists. Ignorance of their role and objection to their use occurred initially in other countries where dental therapists are now accepted and valued.[46,73,74,75,76] It is ironic to note that the development of a dental hygienist was met with similar objections in the United States when first introduced in the early 1900s.[77] After an initial period of resistance, American dentists came to understand the valuable role of dental hygienists as integral members of the dental team.

CONCLUSION

Since their introduction in New Zealand, dental nurses/therapists have improved access to oral health care in increasing numbers of countries. Multiple studies have documented that dental therapists provide quality care comparable to that of a dentist, within the confines of their scope of practice. Acceptance and satisfaction with the care provided by dental therapists is evidenced by widespread public participation. Through providing basic, primary care, a dental therapist permits the dentist to devote more time to complex therapy that only a dentist is trained and qualified to provide.

For most countries of the world, there is need for both more dentists and more dental therapists, if the oral health needs of the global population are to be met. For a significant number of individuals throughout the world, access to basic dental care will not be available without the utilization of dental therapists in the workforce.

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March 8, 2011

Madame Chair and Committee Members,

I would like to introduce myself; my name is Dr. Melinda Miner and I am a general dentist who loves working with children. My husband, Dan Miner DDS and I own a private dental practice in Hays Kansas that serves a clientele which includes a lot of children covered by the state Medicaid and Healthwave programs. Dan grew up in Western Kansas and had always wanted to come back home after graduation. We needed a town that could handle two new dentists. Although Hays had quite a few full time dentists in 2000, not one accepted children on state funded dental insurance programs. There had not been a local provider for about 3 years. Children were not getting routine dental care and their dental disease put them at risk for serious illness. Hays needed at least two dentists to fill that need; we fell in love with Hays and decided to make it our home. We have accepted Medicaid and Healthwave children since we opened our doors in August of 2000. Ten and a half years later we are still the only private practice in Hays that accepts Medicaid and Healthwave. Our little patients frequently come from over 60 miles away to receive care. There are few dentists that enjoy treating children and even fewer that will accept Medicaid and Healthwave. Other dentists frequently refer us the most heartbreaking dental disease cases due to our excellent reputation and ability to help young children in dental need. It is sad that in 2011 there are still children coming to us with terrible dental disease; often at the age of 3 years old. For financial reasons we had to start a waiting list about 3 years ago; although we do still take these new Medicaid and Healthwave patients in at a rate of about 10-15 new children per week, we cannot keep up with the need by ourselves. A couple of years ago a FQHC opened in Hays but even with that we currently have a waiting list of over 150 children with Medicaid and Healthwave that need a dental appointment. As a practice that is approximately 50% Medicaid and Healthwave clientele, we are the people in the trenches.

I am here today in support of senate bill 192, providing for a Registered Dental Practitioner (RDP) or a mid-level provider. This model is ideal for a practice like ours. Properly training a RDP in Kansas, utilizing one of the current RDH schools, and working with the RDP in a team environment would be beneficial to Kansans. In our practice adding just one RDP would help to open up appointments for those children on our waiting list; allowing us to see about 30-40 additional kids per week. It would also open an opportunity of preventive outreach to those towns we currently serve who do not have a dentist; WaKeeney and Ness City.

The main argument I keep hearing against the RDP seems to be a question of public safety due to the training aspect in the proposal. I keep hearing that a dentist has 8 years of dental training. Saying 8

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Attachment 5

years of dental training is misleading; we are talking about 4 years of an undergraduate degree in any discipline and then 4 years of dental school being the traditional and most often taken path toward becoming a dentist. 8 years of postsecondary education is not always the case. I stand before you a licensed dentist; yet I did not have 8 years of dental training. I was a 6-year student at UMKC. I am a 1993 high school graduate; I graduated from UMKC with both a Bachelor of Arts in Biology and a Doctorate of Dental Surgery in May of 1999 at the young age of 23. I was not alone; I and my classmates were allowed the privilege of completing our undergraduate degrees in conjunction with our Doctorate in Dental Surgery. I do not feel that I or my fellow 6-years (as they called us) are any less prepared for our careers than the traditional dental students we walked the stage with. My husband also did not have 8 years of dental training. He entered the DDS program with a Bachleors degree from K-State University, but he only attended 3 years of undergraduate school to achieve his degree before entering the 4 year dental program. We are not unique; we are dentists who did not require 8 years postsecondary education to complete our dental training.

The proposal before you provides for 18 months of intense dental training. This is the equivalent of 2 years in a typical 9 month school year curriculum. A pre-requisite for admission is a Registered Dental Hygiene (RDH) degree, typically a 2 year program. In essence the graduate of this program will have 4 years of dental related training to receive the Registered Dental Practitioner degree. They will not be a dentist; they will not have a doctorate in dentistry (DDS or DMD). The RDP will work with a dentist providing basic care in a team approach. To be licensed in Kansas the bill requires the RDP pass a clinical board examination demonstrating their skills which is administered independent of the teaching institution. To work under general supervision the RDP must complete at least 500 hours of direct supervision with the supervising dentist and a written contract must specifically state the allowed scope of practice and outline when the supervising dentist must be called in to help out.

Any dentist that would employ a RDP would understand that they are ultimately responsible for the successes and the failures of that employee. Any dentist that would agree to supervise, and then fail that RDP by not ensuring quality, would have to face the dental board when the outcome is not good. Just as any other employee there is a responsibility to assure quality in what they do for us. As long as the RDP is held to the same standard of care, continuing education requirements, and they are supported by their supervising dentist, there is no need to worry about the final product. Requiring the RDP pass a clinical board examination will ensure that they can produce a quality product. I would ensure quality from my RDP; they will be helping to treat my patients.

It is clear that the Kansas Dental Association opposes this particular model. Being a KDA member for the last 11 years I was saddened to discover that this was not discussed with the membership before it was opposed without compromise. Although the KDA does not seem to realize it, they have presented you with their version of a mid-level in their Senate Bill 132. They call their provider an Extended Care Permit (ECP) III. Knowing this, one would assume that there is agreement in the need for a mid-level dental provider. The disagreement seems to be in the training and full scope of practice of this mid-level provider. Both models are based off the 2 year RDH degree; allow offsite practice location (general supervision); normal Hygienist duties (prophylaxis, removal of calculus deposits, education, fluoride application, sealant placement), extraction of deciduous (baby) teeth, removal of decay and

placement of temporary fillings, adjustment of a denture or partial denture, and use of local anesthetic. Where do we differ in our plans? (Please see attachment). The first difference is in the extensive schooling, clinical board examination and apprenticeship a RDP must complete. The second is in the scope of practice a RDP will be able to provide that will make a huge difference in preventing dental emergencies.

Many of the dentists that oppose this RDP model are also unwilling to sign up to be Medicaid and/or Healthwave providers. I have heard that only 25% of the dentists in Kansas are providers for the Medicaid program. Even more alarming is that only 10-15% of those provider dentists see more than 100 Medicaid patients per year. The dentist's arguments for not signing up to provide care are many; they are valid and right for their practice. I am not in favor of the government mandating that they sign up or help out in any way. We all have to do what is right for the patients we choose to serve. The reality is that I and my husband are the providers for a lot of the low income children in our broad area in Kansas. I am one of the dental providers that would utilize this model and children in my area would benefit from it greatly. I would be responsible for the outcomes in my office and I require quality care be provided to all patients. I, my husband and any RDP employed by Miner Family Dentistry will always strive to provide the highest standard of care. I support SB 192. I ask the 75% of Kansas dentists whom are not Medicaid and/or Healthwave providers; why are you opposed to something that would help me to serve my low income patients better when you are not willing or able to help? Why don't we ask the families on my waiting list; or the people of the 13 counties without any dentist, the 19 counties without a Medicaid provider, or the 27 counties without a Healthwave provider what they think?

Senators, thank you for your time and consideration. I would be happy to answer any questions you may have.

Melinda Miner DDS

Differences in Mid-level provider Models, both are based off the prerequisite of an RDH degree

Mid-level Title	Registered Dental Practitioner	Extended Care Permit III
Schooling/Training	18 month (2 year) classroom and clinical training Clinical board examination 500 hour apprenticeship	2000 hours work experience as RDH 18 hours (2 days) classroom training
Offsite Dentist Supervision	General with written contract outlining scope and follow up.	General with signed agreement to monitor the ECP III
Scope of Practice	Make and Read Radiographs (x-rays) Diagnose a patients dental condition Formulate a treatment plan Cavity preparation and restoration (Fillings and stainless steel crowns) Pulpotemy on deciduous teeth Placement & Removal of spacemaintainers Emergency palliative treatment of pain Extraction of all deciduous(baby) teeth Extract periodontally involved adult teeth Writing Prescriptions is not in the scope and is left to the supervising dentist Place preventive sealant on teeth that are diagnosed as cavity free to protect them. RDP cannot do treatment that is not in the written contract.	Assessment of the patient's apparent need for further evaluation by a dentist to diagnose the presence of dental caries and other abnormalities Identification and removal of decay using hand instrumentation, place a temporary filling, including glass ionomer and other palliative materials Smoothing of a sharp tooth with a slow speed dental handpiece (drilling on a tooth) Extraction of deciduous (baby) teeth that are partially exfoliated with class 4 mobility Write prescriptions of fluoride, chlorhexidine, antibiotics and antifungal as directed by a standing order from sponsoring dentist other duties as may be delegated verbally or in writing by the sponsoring dentist consistent with this act (sealants fall into this category)

*Radiographs allow you to see decay between teeth which is not seen on a visual exam. Not allowing a midlevel to take and read radiographs causes decay to be missed. Assessing without a radiograph that a patient does not need a dentist exam is not standard of care.

** It is impossible to remove decay, place a temporary filling, seal a tooth, or extract a tooth without a diagnosis first being given. To diagnose properly the patient must be examined by the person who does the diagnosis.