The Origins of Minnesota's Mid-Level Dental Practitioner: Alignment of Problem, Political and Policy Streams

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Abstract

Purpose: Using John Kingdon's agenda-setting model, this paper explores how Minnesota came to legislate a mid-level dental practitioner to its oral health workforce. Using a pluralist framework embracing the existence of various interests and convictions, this analysis highlights the roles of issue formation, agenda setting and politics in policymaking.

Methods: Using Kingdon's agenda-setting model as a theoretical lens, and applying case study methodology, this paper analyzes how Minnesota came to legislate a mid-level dental practitione to its oral health workforce. Data have come from scholarly research, governmental and foundation agency reports, interviews with leaders involved in the mid-level dental practitioner initiative, news articles, and Minnesota statute.

Results: After 2 years of contentious and challenging legislative initiatives, the problem, policy and political streams converged and aligned with the compromise passage of a bill legalizing mid-level dental practitioner practice. The Minnesota Dental Therapist Law was the first-in-the-nation licensing law to develop a new dental professional workforce model to address access to oral health care.

Conclusion: The Minnesota mid-level dental practitioner initiative demonstrates the important convergence and alignment of the access to oral health care problem and the subsequent collaboration between political interest groups and policymakers. Through partnerships and pluralist compromise, mid-level dental practitioner champions were able to open the policy window to move this legislation to law, enhancing the oral health workforce in Minnesota.

Keywords: Kingdon's agenda-setting model, mid-level dental practitioner, access to care, policy, dental therapist, advanced dental therapist, dental health aide therapist

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Introduction

The 2000 Surgeon General's report Oral Health in America states, "Oral health is an integral part of overall health."[1] Yet, due to geographic inaccessibility and high costs of care, nearly one-third of individuals in the U.S. lack access to basic preventive and primary dental care.[2] In addition, the Surgeon General identified that the decline of the dentist-to-population ratio, causing concern about the oral health demands of society being met by the current workforce.[1] In 2003, the National Call to Action to Promote Oral Health identified the need for an expanded oral health workforce.[3]

One proposal to increase access through expanding the workforce in the U.S. was the introduction of a mid-level dental practitioner within the dental profession. Conceptually similar to nurse practitioners and physicians assistants in the broader health care field, mid-level dental practitioners provide basic preventive and restorative care in more than 50 countries around the world. Yet mid-level dental practitioners have been the subject of significant opposition by organized dentistry for decades in the U.S. Currently, only 2 states, Alaska and Minnesota, allow a mid-level dental practitioner to practice with somewhat different scopes of practice (Table I).[4] In Alaska, the mid-level dental practitioner is educated and trained through a federal program and can only practice on federal (tribal) lands.[5] Minnesota is the first state where the mid-level dental practitioner structure was established by legislation. So why was the mid-level dental practitioner model adopted by law in Minnesota? What makes this case unique?

Using John Kingdon's agenda-setting model, this paper explores how Minnesota came to be the first U.S. state to legislate a mid-level dental practitioner to its oral health workforce.[6] Using a pluralist framework acknowledging the existence of multiple interests and convictions, this analysis highlights the roles of issue formation, agenda setting and politics in policymaking.[6] The following questions will be explored:

Table I: Overview of U.S. Mid-Level Dental Practitioners Education, Licensure and Scope

	Alaskan Dental Health Aide Therapist (DHAT)	Minnesota Dental Therapist/ Advanced Dental Therapist (DT/ADT)	Advanced Dental Hygiene Practitioner (ADHA)
Education	Alaska Native Tribal Health Consortium-Community Health Aide Program • Program through University of Washington DENTEX	Metropolitan State University and University of Minnesota School of Dentistry • DT minimum Bachelor's-level degree • ADT-Master's-level degree • Metropolitan State University ADT Program requires applicants to be licensed RDH with bachelor's degree	Developed by the American Dental Hygienists' Association based on Master's level education at accredited institutions; open to currently licensed dental hygienists who have a Bachelor's degree
Licensure	Certified and regulated by Indian Health Service's Community Health Aide Program	State licensed providers	Providers are envisioned to be state licensed
Supervision	Remote/general supervision of a dentist; presence of dentist not required	• DT: On-site or general supervision depending on the service; collaborative management agreement with dentist • ADT: Collaborative management agreement with dentist, presence of a dentist not required for most services	Collaborative arrangement envisioned with referral network; presence of dentist not required
Preventive Scope	• Oral health and nutrition education • Sealant placement • Fluoride application • Supragingival scaling • Coronal polishing	• Oral health and nutrition education • Sealant placement • Fluoride application • Oral cancer screenings • Caries risk assessment • Coronal polishing	• Oral health and nutrition education • Full range of dental hygiene preventive services
Restorative Scope	• Restorations of primary and permanent teeth • Uncomplicated extractions	• Restorations of primary and permanent teeth • Extractions of primary teeth • Nonsurgical extractions of permanent teeth (ADT only) • Pulpotomies • Stainless steel crowns • Atraumatic restorative therapy	• Restorations of primary and permanent teeth • Palliative temporization • Uncomplicated extractions of primary and permanent teeth
Additional Scope	• Local anesthesia and nitrous oxide	• Local anesthesia and nitrous oxide • Dispense analgesics, anti-inflammatories, and antibiotics (DT) • Provide, dispense, administer analgesics, anti-inflammatories, and antibiotics (ADT only) • Assessment and treatment planning as authorized by collaborating dentist (ADT only)	• Local anesthesia and nitrous oxide • Diagnosis within scope of practice • Limited prescriptive authority • Triage and case coordination • Public health programming and advocacy

Adapted from American Dental Hygienists' Association Oral Health Care Workforce-Current and Proposed Providers

- How did dental access and the mid-level dental practitioner model become a part of the political agenda?
- What interest groups were important in determining the issue's fate?
- What factors led to the successful passage of mid-level dental practitioner legislation in Minnesota?

Background

Over one-third of American households report neglecting dental care or dental examinations because of lack of access to care and cost.[1] In 2000, Oral Health in America, Report of the Surgeon General reported on "profound and consequential" oral health disparities, particularly affecting racial and ethnic minority groups, people in rural areas, immigrants, individuals experiencing homelessness, children, the elderly, and people with developmental disabilities and chronic diseases.[1] Furthermore, tooth decay is the most prevalent chronic disease faced by children, and children in poverty are twice as likely to suffer from dental caries.[1] Tooth pain is a primary reason that children miss school and adults miss work.[1]

Oral health is integral to overall health. Research suggests an association between periodontal disease and diabetes, cardiovascular disease, respiratory disease, as well as pre-term and low birthweight.[7,8] The 2003 National Call to Action to Promote Oral Health invited professional organizations and those concerned about the health of Americans to expand oral health promotion and disease prevention plans for vulnerable populations.[3] Included in this report was a call to increase oral health workforce diversity, capacity and flexibility with a focus on health professional shortage areas.[3]

Driving the movement to improve access to oral health care were the deaths of 2 children who died from infections from abscessed teeth in 2007. Twelve year old Deamonte Driver of Maryland died after bacteria from an untreated abscessed tooth spread to his brain.[9] On Medicaid, Deamonte's mother struggled unsuccessfully for months to find a dentist who would see her children and accept the insurance's low reimbursement rates. This became even more complicated as prior to Deamonte's death the family's Medicaid insurance had lapsed during a period of homelessness. In addition, Alexander Callendar, a 6 year old from Mississippi died as a result of infection from recently extracted abscessed teeth.[9]

As this national discussion ensued, oral health professionals as well as associations and advocates representing vulnerable populations weighed in on the debate. Data emerged identifying the maldistribution of the dental workforce, reduction in the number of dentists due to pending retirements and the lack of a representative workforce that mirrors the population in the U.S.[3] The need for a more flexible, efficient workforce pointed to a need for legislative changes to allow for alternative models of delivery. The mid-level dental practitioner became a part of this conversation.

Although the mid-level dental practitioner scope of practice internationally has variations, most often their education and training focuses on oral assessment and basic restorative services, including tooth preparation.[10] The scope of practice may include placement of stainless steel crowns and pulpotomies on primary teeth, and surgical services may include uncomplicated extractions of primary and permanent teeth.[10] Preventive services may include fluoride application and sealant placement in addition to oral health education and care coordination.[10] In the past, restorative and surgical procedures have been within the purview of the dentist. However, Edelstein identifies that between a quarter and a third of services provided by dentists could be delegated to a mid-level dental practitioner.[10] If the mid-level dental practitioner also holds an active dental hygiene license, the number of treatment needs the mid-level dental practitioner can address increases significantly. This expands the preventive scope of care and adds periodontal procedures allowed by the dental hygiene license.

Socially disadvantaged populations suffer disproportionately from untreated dental disease. For these vulnerable populations, mid-level dental practitioners serve to expand the availability of basic restorative services.[10] mid-level dental practitioner's education and training focuses on the provision of a limited range of services. Thus, a mid-level dental practitioner can command a lower salary than a dentist, resulting in cost savings.[10] Recruiting dentists to practice in rural and urban federally funded health centers (safety net clinics) has been a significant challenge.[10] Placement of mid-level dental practitioners in such centers serves to address this need.

Evidence shows the mid-level dental practitioner provides safe and competent care to patients. In a review of all existing studies that evaluate the clinical competency of mid-level dental practitioners, Phillips and Shaefer conclude, "Rarely in the scientific literature, in fact, do we find such an overwhelming consensus based on empirical research."[11] They conclude, "Rather than representing a different standard of care, dental therapists simply rep-

resent a different provider."[11] Despite this evidence, the American Dental Association (ADA) and most state dental associations' oppose this workforce model, most often citing concerns for patient safety and viability in the U.S. market.[12]

One example of this opposition was associated with the creation of the dental health aide therapist (DHAT) program in Alaska. In 2003, the Alaskan Native Tribal Health Consortium began an initiative to train this new practitioner to provide oral health care for Alaska's native population, many of which live in remote areas of the state, under the auspices of the federal Community Health Aide Program. The Community Health Aide Program, an Alaska Native Tribal Health Consortium initiative, worked to create and implement the DHAT program to provide basic restorative and preventive care.[10,13] In 2006, the ADA and the Alaskan Dental Society filed a lawsuit in the state Superior Court in Anchorage, Alaska in an attempt to stop the DHAT program.[14] ADA claimed that the services performed by DHATs were usually done by licensed dentists and that not having the extensive education and training required by dentists put the public at risk.[14] The court confirmed that DHAT practice was legal under federal law and this ruling was also sanctioned by the Alaska Attorney General. The lawsuit eventually ended in a settlement with ADA contributing $537,500 to the Alaska Native Tribe Consortium Foundation and $75,000 to the state of Alaska to cover the legal expenses incurred from the lawsuit.[15]

Despite wide utilization of mid-level dental practitioners around the world, and despite empirical evidence supporting their adoption, no U.S. state had passed legislation adopting and authorizing mid-level dental practitioners until Minnesota in 2009. What happened in Minnesota that made this a reality? In an effort to understand this, John Kingdon's famous agenda-setting model was used to analyze the Minnesota case through problem, political and policy streams.

Methods and Materials

In essence, Kingdon asks a single question, "How does an idea's time come?"[6] To answer this question, Kingdon theorizes that 3 separate but somewhat related streams impact the public agenda, including the problem, political and policy streams.[6] The problem stream addresses how problems arise, who defines them, and how policy decision makers are persuaded to prioritize one problem over others.[6] The political stream focuses on how changes in the political environment, advocacy or voices of opposition can influence the public agenda.[6] Finally, the policy stream deals with how policy proposals are developed, debated, revised and adopted.[6] When these 3 streams converge they can often determine the agendas of formal governmental decision-making bodies.[6] When they align at a critical time, windows may open for policy changes.[6]

Kingdon's model was used as a theoretical lens to analyze the case of mid-level dental practitioner adoption in Minnesota. Kingdon's model is contextualized within the broader theoretical framework of pluralism, which argues that public policy is controlled by groups outside of government who exert influence over those responsible for decisions.[6] Data related to this case came from scholarly research, governmental and foundation agency reports, interviews with leaders involved in the mid-level dental practitioner initiative, news articles, and Minnesota statute. Whenever possible, a variety of sources were utilized to fully understand and confirm the development of the mid-level dental practitioner, relying on government-provided data whenever possible while also cross checking information against a wide range of sources with different potential sources of bias, such as media accounts and interviews and written accounts provided by key stakeholders. This analysis showed that problems were pressing down on the oral health care system, there was a shift in interested parties and a changing political environment. It created the kind of moment that Kindgon talked about, inspiring "an idea whose time has come."[6] The end result was the introduction and passage of mid-level dental practitioner legislation in Minnesota.

Results

Problem Stream

The access to care "problem stream" rose to attention in Minnesota, as well as on a national level, around the time of the landmark Surgeon General's 2000 report, Oral Health in America. Minnesota had documented thousands of people, especially vulnerable populations such as children, underrepresented people of color, elderly, low-income and special needs populations, who could not access dental care.[16,17] Dental care was out of reach for approximately 350,000 low-income Minnesotans, with 80% of tooth decay found in 25% of children, most of them low-income.[16,17] In one year (July 2004 to June 2005) in the Minneapolis-St. Paul area alone, more than 10,000 emergency room visits were for toothaches, abscesses and other dental problems.[18] It was identified that this problem would escalate over the next 15 to 20 years by which time 60% of practicing dentists in Minnesota were projected to retire.[19]

Access issues in Minnesota were prevalent within

rural communities, nursing and group homes, community clinics and health centers, Head Start programs, hospital emergency rooms, and Indian reservations.[20] Past steps to improve access included dental coverage through state programs and higher payment rate for dental providers working in geographically remote (critical access) health care facilities and/or those facilities that serve a significantly disproportionate number of low-income patients.[20] Other initiatives included student loan forgiveness program for dental graduates, grants to safety net providers and utilization of community health workers.[20]

Concurrently, dental hygiene collaborative practice became a law in Minnesota in 2001, allowing registered dental hygienists to provide preventive services to underserved populations without supervision if the dental hygienist was practicing according to a collaborative management agreement entered into with a dentist.[21] Another section of this law allowed dental hygienists and dental assistants who completed additional education to pack and carve restorations and place stainless steel crowns if a dentist was present.[21] In 2003, the law in Minnesota was enhanced by allowing dental hygienists to place sealants in alternative settings without an initial examination by a dentist. In 2005, delivery of local anesthesia and nitrous oxide analgesia by the dental hygienist was added to the scope of collaborative dental hygienists.[21] However, all of these initiatives were still not enough to stem the tied of rising access-to-care problems. Vulnerable populations were not getting care they needed, and the dental workforce was not able to meet those needs.

Policy Stream and its Entrepreneurs

Policy entrepreneurs, as titled by Kingdon, come up with ideas to solve a problem.[6] By 2004, with the DHAT initiative in its infancy, the American Dental Hygienists' Association (ADHA) had developed core competencies for an advanced dental hygiene practitioner (ADHP) (Table I).[4,22] The goal of this practitioner was to provide diagnostic, preventive, restorative and therapeutic services directly to the public.[22,23] Competencies developed would support a standardized curriculum for such a practitioner. A draft version of the competencies was distributed to communities of interest nation-wide. The Minnesota dental hygiene educational community looked at this document with interest. Colleen Brickle, Dean of Health Sciences at Normandale Community College (NCC), began to take steps to propose such a program in Minnesota (Brickle, personal communication, 2013 February 10). A first hurdle was that the ADHP competency framework led to a master's degree, which meant NCC, a community college, would need to partner with Metropolitan State University (MSU), a 4-year institution, to develop an ADHP program (Brickle, personal communication, 2013 February 10). Both NCC and MSU are part of the Minnesota State Colleges and University system (MnSCU), which made such a partnership a realistic possibility. Another hurdle that had to be overcome was the required legislation that would allow this mid-level dental practitioner to practice in Minnesota. This spurred the political stream to take action.

Political Stream

Changes began to occur in the political environment and the public agenda. Kingdon's model works within a pluralist frame assuming all interest groups have tools available to affect governmental decisions regarding issues that affect them.[6] Three organizations were instrumental in embracing the concept of an ADHP as a viable means of addressing access to oral health care and initiating discussions about mid-level dental practitioner legislation: the Minnesota Safety Net Coalition (MN SNC), the MnSCU, and the Minnesota Dental Hygienists' Association (MnDHA) (Brickle, personal communication, 2013 February 10). The MN SNC advocates for policies that make health care more accessible to underserved populations.[24] Michael Scandrett, Staff Director of the MN SNC through LPaC Alliance, a division of Halleland Habicht Consulting, LLC, was a principal leader in the development of and lobbying for the successful passage of the dental therapist law.[23] He organized the 3 major groups who assisted in identifying over 50 health care providers, hospitals and related organizations to support the legislation.[20] In 2007, when access to care and health care reform conversations were happening in multiple venues, the MN SNC made oral health a top priority as members recognized the oral health issues affecting the citizens of Minnesota were alarming.[24] Through financial assistance by the Greater Twin Cities United Way, the MN SNC created an oral health committee to focus on improving oral health access.[20] After studying the issues and discussing it with dentists, dental hygienists, researchers, health care professionals, consumer groups and educational institutions, the Coalition's members developed a set of legislative proposals to improve dental access. This included a proposal to establish a mid-level dental practitioner who could offer treatment where dentists were not available and also reduce the cost of treatment for low-income and uninsured patients (Brickle, personal communication, 2013 February 10). To assist with raising awareness about this issue, MN SNC contracted lobbyist Linda Sandvig, who began her career working for the Minnesota Nurses association 35 years prior during the development of the nurse practitioner.[24]

Another political stream that was critical in the development of a mid-level dental practitioner licensure in Minnesota was a key legislator, Senator Ann Lynch.

In 2007, Lynch began her first and only term as Minnesota State Senator. During 2007 to 2010, the majority of the Minnesota House and Senate were democrats. Lynch was appointed Vice Chair of the Health Finance Division (Lynch, personal communication, 2013 February 26). Lynch had no background in health care service delivery; however, the Mayo Clinic resided in her district so health care in general was very important to her constituents. Early in her tenure, she attended a National Academy for State Health Policy conference in Colorado where oral health and workforce models were discussed. At this time, there were a number of legislative health-related initiatives introduced in Minnesota, but Lynch recognized that little attention was given to oral health. She had obtained information about the Alaska DHAT program and, considering the tribal lands prevalent in northern Minnesota, felt that this type of provider had promise. More importantly, she recognized that the access to oral health crisis in Minnesota went far beyond the Native American Indian population. Lynch also had preliminary discussions about this issue with members of the MN SNC Oral Health Committee. In 2008, Lynch introduced a bill (SF 2895) in the State Senate and Representative Cy Thao did the same in the State House of Representatives (HF 3247), proposing the creation of a licensed mid-level dental practitioner.[9]

Opposed to the legislation were the ADA, the Minnesota Dental Association (MDA) and the University of Minnesota School of Dentistry.[20,25,26] The process was challenging and contentious. The first bill of this type to create a new type of dental provider in Minnesota called for mid-level dental practitioners to perform dental procedures without on-site supervision of a dentist. The MDA enlisted support from the ADA in opposition to this.[9] Their efforts included communicating opposition to their association members and the public via MDA newsletters, town hall meetings and public media campaigns (television, radio, newspaper and telemarketing automated-calls) with increased momentum prior to major legislative hearings. The MDA messages focused on promoting only trained dentists performing surgery without indicating that dental therapists would also receive education and training within a more limited restorative scope.[9,25]

At the same time, members of the MN SNC, the MnDHA grassroots members and MnSCU continued to partner with Lynch and Thao to deliver a consistent message regarding their position on a mid-level dental practitioner, and more broadly the importance of access to oral health care for all citizens of Minnesota to the members of the legislators and their constituents.[27] Scandrett also played an important role in negotiating about this issue, especially with the MDA. In addition, he garnered critical support among a broad spectrum of MN SNC members to include hospitals and their respective emergency departments, who were keenly aware of the dental access issue (Brickle, personal communication, 2013 February 10). MnDHA grassroots supporters of the legislation continued to communicate their support through information sheets (Myths vs. Facts), interviews with several newspapers and numerous visits to legislators in 2008 and 2009 (Lynch, personal communication, 2013 February 26). Administrators, staff and faculty members from both MnSCU campuses, as well as individuals from the System Office, were dedicated to this legislation. They assisted in organizing meetings with groups who became part of the coalition, lobbying throughout the legislative process and testifying as needed. The forging of important relationships in the Senate and House and the commitment to access to care by Lynch and key individuals representing MN SNC, MnDHA and MnSCU came at a critical time.

Returning to the Policy Stream

The problem stream served to demonstrate oral health care need, while the political stream shifted accountability and public opinion, which led to the policy stream and policy changes. This legislation was rolled into the Higher Education Omnibus bill (SF 2942) In a pluralist compromise agreement by the Minnesota Legislature, SF 2942 passed in the Senate with 64 yeas and 0 nays.[28] It also passed in the House of Representatives with 132 yeas and 0 nays.[29] This bill was signed into law by Governor Tim Pawlenty, however, only the mid-level dental practitioner (at that time given the title of "Oral Health Practitioner") scope of practice framework was included.[27] The education and scope of practice parameters of a mid-level dental practitioner was not defined in this bill.[27] To address this, the 2008 legislation created a workgroup to develop recommendations on these to the 2009 Legislature.[27] This oral health practitioner Workgroup consisted of 13 members appointed by 9 organizations (Table II).

To develop the mid-level dental practitioner parameters, between August and December of 2008, the workgroup met regularly in addition to some members visiting dental therapist programs in Canada, New Zealand and the United Kingdom. The members of the workgroup represented both proponents and those opposed to this new law, making completion of its task that much more challenging. The key areas of concern consistently revisited at all the workgroup meetings included: level of dentist supervision required, scope of practice and where the education and training would occur (Brickle, personal communication, 2013 April 29).

In January of 2009, the Minnesota Department of Health and the Board of Dentistry presented the

workgroup's recommendations to the Minnesota Legislature.[30] The 118 page report included an executive summary and recommendations, requirements to practice primarily in underserved areas, educational program requirement, scope of practice and level of supervision, need for assessment of economic impact and quality of care of this practitioner, plus licensure and regulatory requirements.[9] Legislation based on the workgroup's recommendations was introduced in both the House (HF 1226) and Senate (SF 1106) in February 2009.[31]

Returning to the Political Stream

Returning to the political stream, concurrently with the development and release of the oral health practitioner workgroup peport, the MDA developed legislation (SF 641) establishing a dental therapist.[27] By early 2009, the House and Senate had 2 pieces of legislation to consider, one bill further defining the oral health practitioner (from the Oral Health Workgroup Report) and a new bill establishing the dental therapist.[27] The oral health practitioner legislation called for an already licensed dental hygienist whose scope would be expanded to deliver basic restorative services and extractions without on-site dentist supervision.[27] The dental therapist bill offered the delivery of a more limited set of services without the need for a dental hygiene license.[27] Also included in this bill was the need for indirect supervision of the dental therapist, requiring the dentist to be on-site. Both bills included provisions for care provided in practice settings focusing on underserved populations and both required collaborative management agreements with supervising dentists.[27]

With the introduction of this new bill, the contention further escalated, and 2 new, prominent interest groups were brought into the mix: the University of Minnesota School of Dentistry and the MnSCU (Lynch, personal communication, 2013 February 26). Lynch, also a member of the Senate's Higher Education and Workforce Development Committee, determined that supporting one bill over the other could be problematic as the University of Minnesota School of Dentistry supported the MDA's legislation (SF 641) and MnSCU supported the original bill (SF 2895-2008), as well as the report from the Oral Health Workgroup. This had the potential to pit legislators against one or the other of the 2 largest public higher education institutions in the state. The reinstated oral health practitioner bill and the dental therapy bill were both scheduled for a hearing with the Senate's Health and Human Services Budget Committee on the same day. Testimony related to the oral health practitioner bill was heard first. Lynch testified, focusing her message on access to oral health care for all. In an unpredicted move, Lynch ultimately proposed an amendment that added language from the dental therapy bill to the oral health practitioner legislation amalgamating both bills, indicating that there was enough need out there for both mid-level dental practitioner models to serve.

The combined oral health practitioner/dental therapy legislation was again rolled into the Higher Education Omnibus bill (SF 2083) sponsored by Senator Sandra Pappas (Lynch, personal communication, 2013 February 26). As this bill was brought to the Senate floor for a vote, there was an amendment of-

Table II: Oral Health Practitioner Workgroup

Role	Affiliation
Dentist: Patrick Lloyd, DDS, MS	University of Minnesota School of Dentistry
Dental Hygienist: Christine Blue, RDH, MS	University of Minnesota School of Dentistry
Representative: Marilyn Loen, PhD	Minnesota State Colleges and Universities
Dentist: Craig Amundson, DDS	Minnesota State Colleges and Universities
Dentist: Joan Sheppard, DDS	Appointed by Board of Dentistry
Dentist: Mike Perpich, DDS	Minnesota Dental Association
Dentist: Mike Flynn, DDS	Minnesota Dental Association
Dental Hygienist: Colleen Brickle, RDH, RF, EdD	Minnesota Dental Hygienists' Association
Representative: Michael Scandrett	Safety Net Dental Providers
Pediatric Dentist: Pat Tarren, DDS, MS	Safety Net Dental Providers
Pediatric Dentist: Chris Carroll, DMD	Minnesota Academy of Pediatric Dentists
Representative: Karen Rau	Minnesota Department of Health
Representative: Christine Reisdorf	Minnesota Department of Human Services
The following individuals were also involved in the workgroup: • Marshall Shragg – Executive Director of the Minnesota Board of Dentistry • Mark Schoenbaum – Minnesota Department of Health, Office of Rural and Primary Care • Ellen Benavides – hired group facilitator • Kris Gjerde-project support staff from the Minnesota Department of Health, Office of Rural and Primary Care	

fered to eliminate the oral health practitioner. This amendment failed by 1 vote.[32] The Minnesota legislature chose to take a pluralist compromise approach to this situation, taking aspects from both the oral health practitioner and dental therapy bills to create a dental therapist and an advanced dental therapist.[27]

Alignment of Problem, Political and Policy Streams

The problem, political and policy streams finally converged and aligned. The Higher Education Omnibus bill, which included the compromise dental therapy legislation, passed in the Senate with 54 yeas (29 Democrats and 15 Republicans) and 12 nays (9 Democrats and 3 Republicans).[33] This bill was presented to the House; it passed with 103 yeas (88 Democrats and 15 Republicans) and 31 nays (1 Democrat and 30 Republicans).[34] It was signed by Pawlenty on May 16, 2009.[35] The Minnesota Dental Therapist Law was the first-in-the-nation licensing law that developed a new workforce model to address access to oral health care. This was made possible by problems pressing down on the oral health care system, creating both a shift in supporters and a need for policy changes.

Discussion

Leading Minnesota mid-level dental practitioner advocates acknowledged important lessons for those in other states working to increase dental access by creating a new type of dental provider.[9,24] These lessons learned include:

- Clear purpose: State practice act changes were required for the development of a licensed mid-level dental practitioner. The Minnesota legislation was written with a distinct goal of improving oral health care access for all residents of the state.
- Focus on the data: The foundation of the mid-level dental practitioner initiative in Minnesota stemmed from the alarming oral health disparities data. The proponents' message on improving access to legislators, the public, and the media was grounded in data.
- Build a broad coalition: The mid-level dental practitioner legislation was successful because it was supported by a large coalition that included interest groups from both outside and inside of oral health who exerted influence over those responsible for decisions (pluralism).
- Identify unlikely allies: Organized dentistry was the strongest opposition of this legislation. However, there were a significant number of dentists who were supportive of a mid-level dental practitioner and were willing to testify about their quality and safety. The advocates for this legislation actively sought out such dentists.
- Utilize historical successes: The state of Alaska and over 50 countries had mid-level dental practitioners providing care. Utilizing their outcomes data and understanding their education and licensing requirements served as evidence-based support for the Minnesota legislation.
- Work with legislators: Those in position to pass laws are important stakeholders in the process. They understand rules, process, strategy, and the political landscape. However, they have many special interest groups looking for their support. Advocates must commit to fully educating legislators on issues and listen to them in return. Although this takes time and tremendous human resources, the personal contact and willingness to ensure full understanding of the issue was paramount in the successful passage of mid-level dental practitioner legislation. Lynch remained a mid-level dental practitioner champion throughout the legislative process, during the implementation phase and beyond. She was not re-elected in 2010. However, she now works with the ADHA as their Director of Governmental Affairs.
- Create comprehensive legislation: The Minnesota mid-level dental practitioner legislation was very complex yet comprehensive. The advocates were also very attentive to areas of contention and worked towards pluralist compromise.
- Beyond the signing of the bill: Passing the mid-level dental practitioner legislation was monumental. However, the implementation phase has been equally challenging. Advocates must remain steadfast for the "long haul" to see this through all phases and continue vigilance in monitoring regulation and reimbursement policies. Additionally, an evaluation plan should be implemented to gather data on the outcome of this new workforce model.[9,24]

Conclusion

The Minnesota mid-level dental practitioner initiative demonstrates the important convergence and alignment of the access to oral health care problem and the subsequent collaboration between political interest groups and the policymakers. Kingdon identifies the advantages of those in the political advocacy community who can generate an evidence-based message that promotes community consensus on policy proposals. It was through such partnerships and pluralist compromise that mid-level dental practitioner champions were able to open the policy window to move this legislation to law, enhancing the oral health workforce in Minnesota.

Those advocating for mid-level dental practitioner legislation would be well served to consider Kingdon's

model in issue prioritization, agenda setting, and politics in policy development. Dedicated effort given by a coalition of advocates is needed to successfully address problem, policy, and political streams. The lessons learned can also aid states in aligning these streams and moving mid-level dental practitioner licensure forward. Additional research is needed to evaluate strategies used to effectively influence decision makers involved in health care legislation.

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