Research

A Qualitative Case Study of the Legislative Process of the Hygienist-Therapist Bill in a Large Midwestern State

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Introduction

The burden of dental disease in America is disproportionately distributed - 75% of dental disease in the U.S. is found in 25% of the population. In addition, the number of Americans without dental insurance exceeds the number of those without medical insurance by 3 to 1.2 Approximately 44% of adults in the U.S. have no dental insurance, and although children have been reported to take precedence through programs like Medicaid, pediatric dental coverage is not considerably better.3 The economic impact of lack of access to dental care includes a reported loss of 164 million work hours and 51 million school hours in a single year in the U.S.4

The public's lack of access to oral health care services is impacting not only dentistry, but also the entire medical community. Less than 50% of dentists participate in public health insurance programs, and of those who do, many restrict the number of patients they are willing to serve.^{5,6} Because of this, many patients who are unable to find a dentist flock instead to the emergency medical setting, where they are guaranteed treatment with insurance coverage or at no cost.7 Pettinato et al found that providing emergency room (ER) care to children on Medicaid for dental related issues is 10-times more costly than the estimated cost of preventive oral health care.8 Of particular interest to the current study is a study conducted by Davis et al evaluating

dental-related emergency room visits in 5 metropolitan hospital systems in a Midwestern state over the period of 1 year.⁵ The state studied by Davis is the same state in which this case study was conducted. Results showed that in the 5 hospital systems there was, in the span of 1 year, a total of 10,325 dental-

Abstract

Purpose: Inequitable access to dental care contributes to oral health disparities. Midlevel dental provider models are utilized across the globe as a way to bridge the gap between preventive and restorative dental professionals and increase access to dental care. The purpose of this study was threefold: to examine lessons learned from the state legislative process related to creation of the hygienist-therapist in a Midwestern state, to improve understanding of the relationship between alternative oral health delivery models and public policy and to inform the development and passage of future policies aimed at addressing the unmet dental needs of the public.

Methods: This research investigation utilized a qualitative research methodology to examine the process of legislation relating to an alternative oral health delivery model (hygienist-therapist) through the eyes of key stakeholders. Interview data was analyzed and then triangulated with 3 data sources: interviews with key stakeholders, documents and researcher participant field notes.

Results: Data analysis resulted in consensus on 3 emergent themes with accompanying categories. The themes that emerged included social justice, partnerships and coalitions, and the legislative process.

Conclusion: This qualitative case study suggests that the creation of a new oral health workforce model was a long and arduous process involving multiple stakeholders and negotiation between the parties involved. The creation of this new workforce model was recognized as a necessary step to increasing access to dental care at the state and national level. The research in this case study may serve to inform advocates of access to oral health care as other states pursue their own workforce models.

Keywords: health care disparities, delivery of health care, dental hygienists, health promotion, public policy

This study supports the NDHRA priority area, **Health Promotion/ Disease Prevention:** Identify, describe and explain mechanisms that promote access to oral health care, e.g., financial, physical, transportation.

related ER visits resulting in a cost of \$4,743,519 (a median cost of \$525 per visit). Approximately 20% of patients seen for ER visits returned 2 to 11 times throughout the year for additional dental pain. A recently released study completed by PEW discusses the costs and inconvenience to both patients and providers of the use of ERs as a substitute for the treatment

of dental pain.⁹ This research expressed that the average cost (nearly \$6,500) for dental problems treated in-hospital is nearly 10-times the cost of the preventive care that could be completed in a dentist's office to prevent it, and out of these emergency rooms visits 80% still need the subsequent care of a dentist.^{8,10}

Repeated ER use for oral pain underscores a pressing need to develop increased access for preventive and non-emergent oral health care. U.S. hospitals saw a 16% increase in dental related ER visits from 2006 to 2009, effecting an already burdened emergency room system. According to the American College of Emergency Physicians:

"[Emergency rooms] are increasingly crowded, over capacity, and overwhelmed [leading to] increasing delays in care, even when [patients] are in pain or experiencing a heart attack."¹²

These statistics illustrate the high cost to the individual, the medical profession, the state and ultimately to society when access to oral health care services are not effectively addressed.

Ease of access to oral health care providers directly correlates with the frequency and quality of oral health care received by the public. Furthermore, it may be noted that fewer oral health care providers means less overall access to oral health care. Unfortunately, the past 2 decades have seen a decrease in the number of practicing dentists throughout the U.S.¹³ Nationwide, 2 dentists will retire for every dental graduate replacing them over the next decade.¹⁴ These workforce trends contribute to workforce shortage areas (particularly in rural communities). Additionally, a lack of insurance and/or low Medicaid reimbursement rates result in un-served or underserved populations, even in urban communities.

The more than 100 million Americans who lack dental insurance and are unable to pay for services provided in the predominantly private, fee-for-service dental practice setting call into question the effectiveness of our current oral health care delivery model in the U.S.¹⁵ For adults and children who are able to obtain dental coverage under Medicaid, PEW found that only one-third to one-half of dentists are even treating Medicaid patients.¹⁶ This is assumed to be due to the perceived high-cost and low-reimbursement rates when treating these patients. As a result, dental needs become more severe as less treatment is performed.

Alternative workforce models have been proposed as one means of addressing mal-distributions of health care providers. The medical community has utilized alternative workforce models as a way to extend the practice of physicians. Since the mid-1960s, the

use of nurse practitioners and physician's assistants has provided greater access for a greater number of people seeking medical care. 9-11 Not only have these professionals been utilized to increase access to primary care for many populations, they have also been instrumental in increasing health care awareness and disease prevention.

Research has begun to emerge in the U.S. exploring how other countries have turned to alternative workforce models by using allied dental professions as a strategy for increasing access to oral health care services. Some of the countries studied include New Zealand, Canada and the United Kingdom (U.K.), as well as the state of Alaska.¹⁷ Nash describes the dental therapist/oral health therapist model as the "best practice" solution used in over 53 countries around the globe. 18 He goes on to explain that this new provider model is meant to "prevent oral disease in our children, and to care for it when preventive efforts fail." The therapy model suggested by Nash is based on utilizing an undergraduate-level therapy-only model that does not include the hygiene-based therapist model discussed in this case study.

Of all the practitioner models studied, the one most closely aligned to the hygienist-therapist model that has been proposed in specific states in the U.S. is the U.K.'s dental therapist. This model builds off the already existing workforce of dental hygienists by expanding the educational programming to include therapist services. The dental therapist has been in existence since 1916, but was expanded in the U.K. in 2002 to have the therapist education program combined with dental hygiene education programs. 19-21 In addition to the dental hygiene scope of practice, dental therapists also provide primary dental restorative services to public health and private practice patients throughout the nation. Dr. Pamela Ward, a U.K. dentist, mentions that with the materialization of the therapist, and its ability to treat the primary dental needs of the patient, "the highly developed skills in which dentists have been trained can be more effectively deployed... Consequently, the patient will be placed in the hands of the dental professional who is most appropriately qualified to carry out the job."22

Given the current research on alternative workforce models in other countries, and the current lack of access to oral health care services in the state in which this study was conducted, the logic behind the hygienist-therapist model in this Midwestern state was two-fold: tap into an existing workforce with a long history of demonstrated effectiveness and expand on their education, and expand their scope of practice (as a result of their advanced education) to provide much-needed oral health care services to citizens who otherwise lack access. Many states have already de-

veloped advanced and collaborative practice acts that allow dental hygienists decreased dentist supervision (or even independent practice), increased scope of practice to include limited therapeutic and restorative procedures, and treatment of patients outside the traditional dental setting.²³⁻²⁵ Although many provider models may be necessary to adequately increase access to dental care, the hygienist-therapist model is aimed directly at elevating the skill of a current profession, thus allowing for an accredited educational curriculum that builds upon existing knowledge rather than starting with a new, entry-level provider. While 27 states have passed legislation to allow dental hygienists to perform some sort of restorative services, the lack of increased scope of practice within these models to provide restorative care that includes the removal of decay has been detrimental and is an ongoing problem. The lack of access to dentists, who hold the primary responsibility of removing decay, continues to be a significant barrier to access to comprehensive dental care and adequate oral health. Through the legislative efforts that have resulted in the hygienist-therapist in the state in which this case study was conducted, the U.S. dental care team is expanding as a significant number of states pursue this and the hygienist-therapist model in their practice act. These providers will be used to expand access to care; they will collaborate with dentists and refer patients needing services beyond their scope of practice (e.g., oral surgery, endodontic). A recent study's simulation of the impact of adding 1 "hygienist-therapist" model provider, called the Advanced Dental Therapist (ADT), to a solo general dentist practice showed a 28% increase in office profits in a setting serving 20% Medicaid patients (the profit margin increased 52% with practices seeing less than 20% Medicaid patients).²⁶

Limited research exists on the newly developed hygienist-therapist in the U.S., despite interest in expanding the dental workforce to allow for increased access to dental care. The purpose of this study was to examine lessons learned from the state legislative process related to creation of the hygienist-therapist in a Midwestern state, to improve understanding of the relationship between alternative oral health delivery models and public policy, and to inform the development of future policies and procedures aimed at addressing the unmet dental needs of the public.

Methods and Materials

A qualitative case study design was conducted in a large, Midwestern state from August 2007 to May 2009. This timeframe allowed the researchers to capture data in the early stages of legislation, including the identification of stakeholders involved in access to oral health care, up to the point of the final legislation that approved the addition of a new workforce model. Consistent with

case study design, 3 sources of data were used for the purpose of triangulation: interviews with key stakeholders, documents and researcher participant field notes.

Using a semi-structured interview protocol, 4 questions were developed for the interviews:

- 1. What was the process that lead up to the act of pursuing legislation regarding the dental therapist and advanced dental therapist?
- 2. What groups or stakeholders were most involved or influential in the process, what portions of the process were they most involved in and how did they work together?
- 3. What was the level of stakeholder influence on the workgroup that was assigned the role of scrutinizing the details of the bill and how did it fit in to the process?
- 4. How was the adoption process handled in the end? Who were the primary influential members and how were the final decisions negotiated between parties prior to being presented to the legislature for a vote?

Research started with 1 initial informant who was very involved in the legislative process. The primary researcher then utilized the snowball technique to interview 4 additional interviews of stakeholders in locations convenient for the participant. The snowballing technique helps identify cases from people familiar with the topic and who can identify other people who have information-rich knowledge on the same issue or topic.²⁷ A total of 5 transcribed interviews were completed that included 2 dentists, a dental educator, a lobbyist and a state legislative official. Using the constant comparative method outlined by Lincoln and Guba, the principle investigator and 2 faculty researchers separately analyzed and unitized the data by identifying key themes.²⁷ The next step involved the process of achieving consensus.

For the purposes of this study, the American Dental Hygienists' Association's (ADHA) Advanced Dental Hygiene Practitioner (ADHP) and the hygienist-therapist approved for the Midwestern state being studied will be defined as "advanced providers" due to their characteristics which mirror the medical model's advanced providers (in medicine, the advanced providers are educated at a graduate or doctoral level). It must also be recognized that the legislation passed in the Midwestern state in which this study occurred included 2 levels of providers that resulted in the initiation of 2 separate educational programs. One level of provider includes the hygienist-therapist model that mirrors the ADHP model culminating in a graduate level degree. The other model is based on a therapy-only model which does not include dental hygiene education and culminates in either an undergraduate or graduate level degree.

Results

In qualitative research "words" comprise the data. Analysis of participant interviews resulted in consensus on three emergent themes with accompanying categories (Table I). The themes that emerged include: Social Justice, Partnerships and Coalitions, and Legislative Process. Table II is a schematic representation of the emergent themes, along with the data used for triangulation, member checking and creating an audit trail.²⁷ Validity of the emergent themes was achieved through the process of triangulation, including the use of case documents and researcher observations. All 3 themes were individually emphasized by all stakeholders interviewed. Categories were coded and assigned under the associated theme and utilized for triangulation purposes with the researcher-observer's field notes and supportive data.

Themes

Social Justice: Within the social justice theme the categories of advocacy, awareness, personal experiences, passion, workforce models and funding sources are brought to life through the stakeholder interviews, documents and the researcher's observations. As one legislator proponent recalled:

"...I said in every committee...why it was that we were there. I would ...say, 'thank you for coming. This is not about you.' And then I would say to the dentists and dental students. 'Thank you for coming. This is not about you.' And on down the list. To the dental school dean, to our Higher Ed institutions... '...It's about people like Deamonte Driver. It's about people that aren't here tonight.'... it's an emotional issue, and if you can sort of keep everyone focused on why it is that we're here I think that's helpful..."

While oral health disparities are a national issue, this case study focused on disparities at the state level and proposed legislation for alternative dental workforce models to address issues surrounding the state's access to oral health care. The theme of social justice is best described by Ozar and Sokol, who speak of social justice in terms of the social nature of dentistry plus the issue of justice.²⁸ They advocate that while dentistry involves one-to-one relationships, it is, by its very nature, a social enterprise that works within the context of social structures. These social structures determine how to distribute a society's resources and govern their exchange. In terms of justice, Ozar and Sokol state, "... when a society's structures for distributing resources are ethically sound, a common adjective used to describe such a society is just. When a society's structures are ethically deficient, one proper term is unjust."28

The connection between social justice and legislation was made by other proponents. As one dental educator

Table I: Emergent Themes from Data Analysis – Number of Total Responses by Theme

– Number of Total Responses by Theme	
Emergent Theme	Number of Reponses
Social Justice	44
 Advocacy Awareness Personal Experiences Passion Workforce Models Funding Sources 	
Partnerships & Coalitions	35
Stakeholders (risk takers and leaders)CollaborationBroaden the FieldCommunication	
Legislative Process	93
 Formal Compromise Lobbying Informal Toll Intimidation Controversy Semantics 	

Table II: Interview, Documents, Personal Experience Reviewed for the Study

Interviews	Documents
2 Dentist Proponents	Field Notes
1 Dental Educator Proponent	Legislative bills, amendments, committee meeting agendas & expert testimony from bill propo- nents and opponents
1 Proponent Lobbyist	Proponents Position Papers, Let- ters and Handouts, Opponents Position Papers
1 State Legislator Proponent	

proponent stated:

Mentors Rookies

"In 2000 and in 2003 were...Surgeon General Satcher's 'Oral Health in America' and then Surgeon General Carbona's 'National Call to Action' [that] really put to the forefront the [oral health] disparities that certain...population groups have."

And the same conclusion, from a lobbyist proponent:

"Lobbying groups identified from the start that the focus needed to be on access." Despite the different backgrounds of each of the stakeholders, each and every one noted the definite connection the legislation had to social justice as proponent groups rallied with one another to support the increase in access to dental care through expanding the dental workforce. Advocating for this type of legislation was emphasized as an important means for achieving social justice as it relates to access to oral health care.

It was recognized early on in the process that the level of awareness of oral health care access and disparity within the dental community itself, as well as the level of awareness within the overall public, was minimal, therefore, documents were created at varying levels of detail to best educate all individuals working or residing in the state. Educational materials used to advance advocacy and an awareness of the access-to-care issue were created, some independently and others jointly, by dental hygienists' associations at both the state and national level, by the state safety net coalition, and by the university developing the educational guidelines. These documents were used widely, from the state capitol, health care clinics and dental education institutions, to coffee house informational sessions and email campaigns. These educational documents and FAOs were developed prior to the timeframe in which this study took place, and were used for 2 years prior to legislative action as an avenue to increase awareness of the access to oral health care disparities existing in the state.

Throughout the 2 years of advocacy prior to legislative action, many personal experiences about lack of access to needed oral health care services were shared, not only by people within the profession, but also by the general public. As one dental educator proponent noted:

"...I have siblings and a father who need dental care... it became a personal cause as well as professional."

A university official shared his own experience as a young adult of finding it difficult to access necessary dental care and be seen by a dentist. It was clear during the advocacy and education process that the lack of oral health care access cut across all ages, races and socioeconomic statuses. As a result, many stakeholders came to the proponents' discussion table as passionate advocates before they even became actively involved in creating legislation.

While for some it was personal experience that got them involved, for others it was the sudden comprehension of the scope of the problem that existed in the state. One state legislator proponent commented on his/ her new-found awareness:

"I came in to office in 2007...[legislator proponent mentor] directed me to go to this health policy conference...I had no passion at the time for oral health... I

went to a session on dental therapy... I wasn't thinking of my own district, but in [a specific state district] we have a large Native American population... and from that I guess I got my fire... she [legislative mentor] said, "You go. You go and see what you can do.""

As the legislative process started moving, the awareness of the overall proponent group translated into action, and its member organizations, in turn, became passionate advocates to educate those within their spheres of influence about the access crisis in the state. As one dental educator proponent put it:

"We didn't have the money, but we had the work power [doers] and the people and the passion...I really think it boils down to it was the right thing to do. Legislators were tired of hearing about it. It was all about access. It wasn't about the hygiene association, or the proponent university or the safety net. It was about the patient."

Documents, newspaper articles and listening sessions educated individuals and groups on how access to oral health care was a significant barrier for many state residents. Naturally, following education, the question was: How should the state address this issue? The solution proposed within the proponent groups associated with the safety net coalition was to consider a new dental workforce model. Through talking with various groups, it became clear that this provider level needed to be able to provide preventive services in combination with restorative services in order create a permanent fix in the system of care. As an example of the barriers that exist in access to dental care, a dental hygienist working as a Collaborative Practice Dental Hygienist (CPDH) through a dentist described patients she was treating in a rural school district. She related how many of her elementaryaged patients would come back 2, 6 or even 18 months after an initial evaluation revealing incipient decay because they had had no success in finding transportation to the referred dentist after the initial visit (and therefore delayed treatment), their decay had often worsened significantly. One 8-year-old child's decay had deteriorated into 4 significantly compromised permanent first molars that were clearly decayed and infected. These teeth appeared to be in need of endodontic treatment, or even extraction. Although the CPDH was able to go to the location where the patient was and create some limited access to care, she still could not give her patient increased access to a dentist - the only one able to diagnose and treat the decay. Safety Net members and proponent groups identified a parallel concept that had been developed by the ADHA which addressed these issues and agreed that this would be the avenue through which the proponent group would pursue a hygienist-therapist workforce model. Many avenues were researched, but in the end a state university received a proposal for a dental hygiene-based master's level provider. The new

provider would take on the mid-level provider model that had been utilized in the medical field for the nurse practitioner and physician assistant since the 1960s.²⁹

Past efforts to increase access to care had brought funding questions to light as the legislative process began and the cost of the new endeavors had started to unfold. One of the dental educator proponents interviewed for this study was involved in starting within their educational facility a public program community clinic with a sliding fee scale. The clinic was made possible through a state grant that allowed for the opening of the clinic; it was met with an overwhelming response that resulted in a wait list or the need to find other avenues of care in additional facilities. This dilemma caused the clinic's representatives to understand that the funding was not only a key source in this clinic, but could guite possibly be the determining factor to any progress made at the legislature in expanding avenues to increase access to care.

The financial hurdle of funding proponent legislative effort, as well as that of enacting legislation, had to be addressed, and legislators began to voice concern over where the funding would come from in a period of economic decline where the state was considering severe budget cuts to health care funding. As one lobbyist proponent recalled:

"Initially we were underfunded and everyone was doing a lot of pro bono work... Later [national proponent group] found out about our efforts and helped [monetarily] with the final year of work."

That final year of legislative efforts is what created an opening for those legislators who saw the need for the new workforce model, but felt they could not support it due to budget cuts. According to one dental educator proponent:

"...the one hearing that really swayed some legislators, which was instrumental, was when we ...[received].. funding from [national stakeholder group], and we had [proponents] from Canada come. This truly, truly was a turning point for many people at that hearing..."

Partnerships and Coalitions: Within the partnerships and coalitions theme, the categories of stakeholders (including risk takers and leaders), collaboration, broaden the field and communication are brought to life through the stakeholder interviews, documents and the researcher's observations. As one lobbyist proponent recalled:

"So eventually we had a group of over 50 organizations that were listed as supporters...[many of these organizations were] both a provider and a health plan providing dental services to low income populations... [as

well as] legislators... who helped make it happen. And a number of dentists who were actively involved and were vital to the success of the legislation."

As may be expected, it was the relational aspect (partnerships and coalitions built between proponent groups throughout the legislative process) that ultimately helped to pass legislation for the advanced dental therapist. As stated by a dental educator proponent:

"...there were 59 organizations at the end that signed on. Of those 59 organizations maybe just one would write a letter, one might have their lobbyists [help], and another might make calls, but I really think everybody had a part..."

The individuals interviewed for this case study all mentioned that there were 3 main groups that spearheaded the legislative efforts: the safety net coalition, the state dental hygienists' association and the proponent university. However, the group of stakeholders as a whole was broad, and those stakeholders involved varied greatly in size of organization, level of influence on legislation, type of connection they had to dentistry and reasons for supporting the role of the new dental provider. As one dental educator proponent recalled:

"...Safety net couldn't have done it alone. [State dental hygienists' association] couldn't have done it alone, without the support of [national association]... none of us could have. I think we need to keep remembering that because it really was a group effort. It really, really was."

Ultimately, the group of stakeholders which stepped forward included national foundations and organizations, state level associations, and special interest groups, as well as individuals who represented others that had something at stake (e.g., mental health facilities, disability groups, nursing associations, Head Start, elder care organizations, insurance companies, public school districts, hospital systems, community action groups and the United Way). According tone legislator proponent:

"The disability community was brought in to a larger extent... and then I started thinking about all of my colleagues, and the great thing about this issue is that every single senator has dentists and hygienists in his or her district... as we gained some momentum, we started to hear from people across the country, and we heard from people all across [the state]...I tell you this story because of the power that it has, and I think that other states could do great, great work here."

A second legislator proponent echoed those remarks:

"...As we're working through the process, one of the very deliberate things that we did... we did spend some

time thinking about...these are the obvious stakeholders right here, but then I wanted to branch out beyond that because we needed many more hands..."

The collaborative efforts that were found in data analysis to have occurred between proponent groups, both the obvious and the less-likely or less-expected instances, appeared to be key to the successful passing of legislation. Especially those proponents that came from areas outside the dental profession that attested to the great need for the new provider in the underserved locations and populations throughout the state. For those working directly within the dental community, the outside perspective and feedback of proponents outside dentistry (e.g., legislators, legislative staff and health care professionals) helped them to remove personal bias from their legislative argument and to identify a strong group of outlying proponents and supporting organizations that have direct experience with the oral health disparities of underserved populations. As observed by a lobbyist proponent:

"We tried to maintain good communication and good relationships with [bill opponents], and that was important although our relationships were probably stretched to their limits. It's important on all of these things to try not to get personal and to keep communicating because in the end what was key when it was time to compromise was the ability to recognize that and come together and in the end... [we] sat down and worked through that compromise..."

Data analysis showed that proponents focused their communication efforts on being open, honest and uplifting so as to maintain clear, accurate and non-emotion based dialogue throughout the process. Stakeholder interviews also brought to light the impact of those opposing the legislation and confusion that it brought to the issues, as one lobbyist proponent shared:

"...after that happened [a supporting dentist became an unexpected opponent] we got all of the community health center dentists together and did a briefing on what it [the bill and workforce model proposal] was... they were just getting only one side of the story and we hadn't paid attention... that made a big difference and people understood better, because through the whole process there was a lot of misinformation... about the bill...It took a lot of work to correct the inaccurate information. But that worked to our advantage because the [opposing state organization] continued to do this...and it doesn't take people long to get burned by that to stop listening to them."

Field notes of the researcher observer reflect that this miscommunication of the facts could have easily diverted the bill long and far enough that the momentum cold have been lost and the heroic, and sometimes risky, efforts of proponent stakeholders would have been for nothing. Keeping communications honest, accurate and simple was the key to progress.

Legislative Process: Within the legislative process theme, the categories of compromise, lobbying, toll, intimidation, controversy, semantics, mentors and rookies are brought to life through the stakeholder interviews, documents and the researcher's observations. According to one educator proponent:

"It is interesting when you look back on [the last 6 years], all these events aligned. If there is a message I could deliver to anybody initiating legislation, this is not a quick process...I've been dealing with [the] issue since October 2005 on almost a daily basis."

The legislative process of promoting, debating and negotiating the issues related to the legislation for the advanced dental therapist was a long, detailed process. It took place over the period of 2 legislative sessions, as well as 2 to 3 years of advocacy and education prior to setting the stage for legislators to understand the proposal once it was introduced as a bill. Discussion of both the positive and negative experiences related to the proponents group follows.

All stakeholders interview participants agreed that year 1 of the legislative process was filled with education and advocacy for the access to oral care issue in order to gain momentum and support for the new provider being proposed. As a result, it was important to have one or more legislators to "champion" the cause. A dentist proponent recalled:

"...I do not know how they got [legislator proponents] to champion the cause, but I do know that [senator] frequented those listening sessions they'd done around the state and that the number one complaint...was the lack of dental care...that's where her interests lay..."

After gaining legislators willing to author a bill for the proponents group, a strategy was developed that would help the bill gain momentum, according to one lobbyist proponent:

"...In developing the strategy for the legislation we thought it was very important to keep the focus on access and on the safety net system of programs and health care providers that serves low income and the disadvantaged populations... So the safety net took a lead in the public visibility so it wouldn't be a particular stakeholder group... but rather a broader coalition of many different stakeholder groups..."

Members of the proponents group visited senator and representative district hearings and health care forums to testify on the oral health disparities present in the state and the need for increased access to oral health care. As the researcher observer's field notes describe, opposition was immediately met as the state dental association sent a letter to dentists and state legislators that positioned the new dental provider model as unsafe and self-serving for dental hygiene. Many grassroots efforts were formed and implemented as a way of clarifying the facts from fiction. In field notes, the researcher-observer notes that mailings were sent to dental hygienists licensed in the state and residing in key legislative districts, and all dental education programs in the state received a DVD on dental lobbying, pointers on contacting legislators and Q&A sheets on the hygienist-therapist model and the dental needs of Minnesotans.³⁰ According to one dental educator proponent:

"I think it was constantly, on a daily basis, just informing..., addressing issues, ...myths versus facts, but I think that was key. If one myth would surface we'd come up with the facts for that, then another myth would surface. And I think that was very key that we stay focused and on message."

Once the bill was officially read (first reading), at the start of the legislative session, committee hearings took place to hear the bill and allow for testimony from both the proponent and opponent groups. By the end of the first legislative session, the bill was heard in approximately 10 different committee meetings. As one lobby-ist proponent recalled:

"Throughout the process there were 3 or 4 times when we were at a point at which we could have lost the bill or kept the bill, and managed to find a way through all those things."

In April 2008, the hygienist-therapist proponents' bill was accepted in to the Omnibus Higher Education bill (SF 2942) and was established with language as the Oral Health Practitioner (OHP). Changing the name from the ADHP to the OHP was a compromise in order to move forward with the legislation with less opposition as the name did not include the direct relation to dental hygiene. Opponents did not want the name dental hygiene to be part of the new provider's title. In fact, stakeholders interviewed for this study mentioned repeatedly that throughout the legislative process, any use of the phrase "dental hygiene" became very inflammatory. A legislator proponent stated that:

"I didn't really have a lot of preconceived notions...I was new to this... whether it was called the ... or ... I suggest we just leave a blank because that was seemingly a stumbling block...we could have gotten derailed with a detail like that...no matter what we called it I wasn't going to get the dental association on board."

The above statement not only highlights the political

climate that surrounded this perceived "threat to dentistry," but also emphasizes the fact that many times legislators get involved in legislation that is not their area of expertise, but an area that involves a committee they serve on or an issue that impacts the district they represent. From the perspective of someone outside dentistry, the name of the new dental provider was not what was important - it was the oral health disparity that needed to be addressed. And for that reason, having a "rookie" legislator involved aided in the need to keep perspective. As stated by a legislator proponent:

"...The first bill in the first year was the end result...I would say, generally speaking in year one we had your basic stakeholders."

The governor signed the hygienist-therapist bill in to law with a few requirements still to be met. The key points highlighted in the law included:

- Limiting oral health practitioners to practice in safety net settings and serving low-income, uninsured and underserved populations
- The state department of health would be required to convene a work group to develop recommendations and report back to the legislature the following year on the topics of scope of practice, licensure and regulatory requirements, education programs and curricula, dentist supervision requirements and other issues
- The new provider would be required to have a written collaborative management agreement and be supervised by a state-licensed dentist currently practicing in the state

Several observations were made by various proponents:

- Legislator proponent "First of all, the workgroup was defined in law, and I would highly recommend that...it's the most prescriptive piece of legislation that I have ever worked on. Very prescriptive."
- Dental educator proponent "The workgroup was mandated by the legislature to meet from August through December. Our charge was to bring recommendations back in January 2009...to the legislature..."
- Legislator proponent "The charge of the workgroup was to figure out how this was going to happen...not if. And I went to the workgroup on more than one occasion to remind them of that...they were not all on the same page, even though it was statutorily defined they were still having conversations about could or should we do this...they didn't have purview or jurisdiction over that discussion..."
- Dental educator proponent "The key was [in the workgroup]...it ended a lot of times with votes 7 to 6...it was a good process in some ways, though con-

sensus wasn't met on every issue...it really defined the issues and we knew what we were going to be fighting for in 2009- supervision and scope of practice were going to be huge..."

 Lobbyist proponent - "[The workgroup] did a lot of hard work on the details of how you would create a licensing system, what scope, what services...so the work needed to be done..."

The workgroup concluded their work after its 13 members met a total of 8 times to develop recommendations to report back to the legislature. Through field notes of the researcher observer, the workgroup sessions were described as heated conversations with both the opponent and proponent opinions being shared openly and sometimes with great debate. Mediators were frequently required to cut off discussion as it easily continued on without consensus. While the focus of the workgroup was meant to be on the new legislation's hygienist-therapist, the opponents in the workgroup began to discuss movement toward a different, or additional, workforce model. Many assumed this new development would result in 2 different provider proposals to legislators in the following legislative session: The dental therapy (DT) model as utilized in over 50 other countries as an entry-level dental provider, and the dental hygienist-based OHP (later renamed the ADT) with the same basic education of the dental therapist, but with additional education requirements and with an expanded scope of practice and less restricted supervision (similar to the dual licensed dental hygienist/dental therapist in the U.K.).²¹

The final workgroup report was submitted to the legislature before the start of the next year's legislative session with recommendations for further review. As described above, these recommendations were not made unanimously by the enter committee, but with very close voting records. Due to the lack of unanimity, and subsequent stalemate of conversation within the workgroup, a dental educator proponent reported:

"...I remember the last meeting...we cancelled...we did it all by e-mail because [the moderator] said "I want to release you from this hell." And it truly was. It truly was."

As one legislator proponent recalled:

"[The first legislative session] answered the question of whether to establish a new oral health practitioner... it did not answer the how, and that's why we had the workgroup [to recommend] the how, but it really didn't end the controversy. So in January [of the second year] we introduced the bill, but [later] there were actually two bills that came forth..."

Things began to move very quickly at the start of the second legislative session. The OHP bill was introduced

with the recommendations made by the workgroup, and field notes from the researcher-observer include letters from the state dental association that shared their position as being committed to see the legislation fail. During this time, many dentists voiced their opinions on the topic and the fact that not all dentists' opinion aligned with the position of their professional association. As one dentist proponent stated:

"And we get drowned out because we're not the ones with the big money, giving money to the legislators...To me it was so disheartening when my fellow [specialty] dentists could not even understand the concept of children with unmet needs..."

However, other dentists had to decide whether the cause they were representing was worth the controversy they might stir up within their own professional roles. As one lobbyist proponent recalled:

"We had a disappointment in [dentist and educator] ...he was part of the oral health committee that recommended doing this, and he was an advocate for it, testified on our behalf at the first couple of hearings, and then we had a legislative committee hearing...[and] he said, 'I have to tell you that I've decided to move to the opponents' side. I'm going to be testifying against the bill...it's just become too divisive and I don't think the dentists are ready yet...It's not that I don't believe this is a worthwhile thing to do, it's just that this is creating so much dissention in the dental community and people are getting heated up about it.' He couldn't support it and so he began testifying against the bill at that point. ...It was very disappointing. I have the greatest respect for him and I know how much pressure he was under. I also believe he thought he was doing the right thing... but regardless the pressure from the dentists led him to switch sides and that was very disappointing... I think that it illustrates what was happening."

These dentists were described in interviews as one of many groups that took a lot of heat and harassment throughout the legislative process.

Soon after, the second bill was introduced by the state dental association and another state university with an existing dental education program as well. Advocates began to voice their interests and/or concerns about the bills and additional stakeholders began to emerge. According to one dentist proponent:

"...The other stakeholder was the university. But what was interesting when we first started to push this forward is that they were against it. Then within a very short amount of time there was a complete turnaround... once they realized that the tide of support was going the way of the ADHP, the OHP,...all of the sudden it was, 'Wait a minute. Wait a minute. It's going to happen and we're

not going to be a part of it. So we need to be part of it."

Another dentist proponent commented on the inclusion of the university as a stakeholder:

"...Certainly the university coming on board gave it more strength. Even though they were looking at a different model, it... created the situation where, okay, this major academic university [is interested]...how can we do this and compromise with the dental association...?"

The opponents' bill had both similar and differing aspects in its scope of practice, level of supervision, and education requirements. As noted by two legislator proponents:

- "...There were a lot of different names, a lot of the bill was similar, but really the devil was in the details and clearly the [state dentist association] proposal was not friendly to... general supervision"
- "... In committee the night that the two bills were presented for the first time, I accepted an amendment to put the [opponents'] bill onto my bill. Okay? ...I had it, with my name on it. And never in their wildest imagination did they ever think that I would accept that...or ask for it...that was great that we did that. I had everything... it's all a process. And so, by accepting that amendment, to my colleagues that were supporting the [opponents'] position...I had them... And to the colleagues that were supporting the hygienists' position... I had them. I had everybody arguably. So that was a pivotal moment."

At this point, both provider models moved forward under one bill. For the second legislative session, the bill was heard in many committee meetings. As one lobbyist proponent recalled:

"And then they went to conference committee, so that's where the final negotiations occurred. Everybody was lobbying heavily and [legislator] was the chair of the higher ed committee...and the turning point was when we were able to persuade [him] to support our position... He likes [Proponent University] a lot, they were pretty influential on that [decision]...he just also came from a rural area. He's seen all the access issues..."

Once the committee's intent was clear, the opponents group quickly agreed to achieve a level of compromise. As recalled by three lobbyist proponents:

"After that announcement [conference committee accepting conference report] I walked out in to the hall and [opponent lobbyist] came up and said 'You know, I think the time has come. We need to go and figure out how to do this.""

"Much of the compromise was about details and ter-

minology, because the legislators had made it pretty clear that they were supporting primarily the Senate proposal which was what the Proponents Alliance wanted. So some of the changes were... take the word diagnosis out and put in oral evaluation and assessment... Provide medication rather than prescribe. Affirming the two levels of dental therapists ... Affirming dentist supervision and making it clearer that extractions of permanent teeth could not be done without prior authorization of a dentist..."

"And by this time the [state-level dental association] had put a spin on it that it was a positive thing and they'd won big in the compromise ...and they'll never live it down because we still have the press announcement where they said... 'We're very happy with the compromise. We know patients will be protected.""

This coming together of lobbyists, representing the proponents and opponents groups, was the final negotiation that allowed the bills to settle and for both parties to agree to move forward and wait on a vote from the legislature. However, the negotiations were a key factor to legislators agreeing to back the bill once they saw consensus between parties. All stakeholders interviewed for the case study agreed that one great asset to the lobbying process included the fact that because many organizations were involved, there were also many lobbyists that represented these groups who were willing to help carry the load. As one educator proponent said:

"...I really think it boils down to it was the right thing to do. Legislators were tired of hearing about it. It was all about access...it was about the patient."

A few topics, yet to be discussed, centered on the categories of controversy, intimidation and battles over semantics. Through data analysis these categories emerged and were emphasized by those interviewed to have left a personal toll on many who participated in the legislative process. One legislator proponent shared their thoughts:

"I was very pleased at the progress that we had made in that first legislative session, but I felt... like I don't know if I can carry this again. I didn't think about giving up the bill. I was thinking ... I am tired and I was heavy, so let's think about who can help us."

Not only was this process wearing, but it also carried a professional toll, one that did not just affect the primary individual involved. A stakeholder interviewed stated that the proponents group also had members receiving varying levels of pressure from others in their profession, which caused the proponents group to step back and make sure every member was comfortable with each step as they moved forward. According to one legislator proponent:

"I had a Republican coauthor, who bailed on us in the second year...And I was shocked...I went to my colleague and I asked why? I thought there was a mistake because I knew this senator believed in the legislation. And the fact was simply that [legislator] said it got too hot. The heat was too hot... I said, 'The heat was too hot from what? From those twelve dentists in your district? You have 67,000 constituents...' I think that there is that kind of influence out there as well, and again I think that it's a testament to again making sure that you really have a champion. And that to other states, that they are supporting their champion through the process, every step along the way. And... in their home district because they need it."

Intimidation also played a role that contributed to the toll experienced by proponents of the bill, as one dentist proponent recalled:

"And the professional groups such as [dental specialty] were vociferous in terms of email and telephone calls, but they didn't show up at the table. They were like the paper tiger. They were outraged, and I advised the group at one of the meetings that...they should tone down the rhetoric because... just being rude wasn't painting us in a very good light...that negativity from the dental profession turned the legislators against dentists."

An educator proponent echoed those remarks:

"I had received over 7,000 emails during 2008 and 2009...It was like, 'I'm doing the very best that I can...' And I did that morning, noon and night. Besides working."

The toll and intimidation issue reached beyond just dental professionals, it affected those politically aligning themselves with the issue as lobbyists and legislators, and even their families, despite their feelings of it being "the right thing to do." Several proponents recalled their experiences:

Educator proponent - "How tough was he [proponent lobbyist] to put up with a lot of pleasing all parties...it got personal for a lot of people. There were a lot of negative phone calls... there was a lot of pressure being put on them...there [were] people and families...and jobs on the line."

Legislator proponent - "The [national association opponent] took out a huge ad campaign, and they had print ads... and radio ads, and they were all over my home district...it was a full page ad in the paper...So I got home, walk in, and [my son] has the newspaper with the full page ad, 'Call [legislator proponent]...'

"[The] full page ad's out on the kitchen table and he's standing there looking at it and he goes, 'Oh mom,...

What are you going to do?'... I hadn't seen the ad..., but I looked at it and I said, 'You know ...don't you worry... we're fighting for people who aren't at the capitol every day.' And that's how I answered [him] and then I told my husband we wouldn't have the radio on at all that weekend because the waves were just full of 'call Senator...' and I didn't want my kids to hear that."

Despite the accusations and intimidation, the proponents group rallied together to support the cause and the people involved. According to one lobbyist proponent:

"In fact, there was sort of a phenomenon going on that people really sort of got in to this personally, you know? It was like, David and Goliath. Even though it might have been a small issue for their organization they took it on as a personal campaign, so we probably had a dozen lobbyists that were all working on this at different times..."

Discussion

The National Call to Action, published in 2003, identified the need for an enhanced oral health workforce to address the underserved and unmet oral health needs of epidemic proportions in the U.S.¹³ This case study has attempted to examine the complex phenomenon that is outlined by one state's unique approach to introducing new workforce models and the legislative process surrounding the enactment. The unique adoption of 2 oral health care workforce models in the legislation, one that allows for entry in to the profession at a baccalaureate level and a second model that builds on an existing oral workforce model, (baccalaureate dental hygiene) to develop a graduate level provider with expanded duties and general supervision. These new workforce models are intended to expand access to oral health care services by allowing providers to work in non-traditional settings, therefore reaching individuals with oral health disparities. As previously discussed by Nash, the therapy model has been introduced around the globe as both an entry-point and end-point to the needs of the many people who lack access to dental care in a broken system. 18 These findings have been confirmed through a recent Kellogg report that explored the impact of the DHAT in Alaska and indicate the increase in access to quality dental care created by this new provider.31

There are numerous states currently pursuing legislation that would expand access to dental care. The results of this qualitative study may serve to inform proponents of the ebb and flow of the legislative process when introducing legislation and to illuminate lessons learned. When broadly considering the results of the study, there are "Lessons Learned" that clearly arise for readers to consider:

- Legislation involving new workforce models is not a quick process
- Find a champion in the legislature and support them in their home district
- Educate and involve the public

Do not assume a colleague is a proponent/opponent just because of what they do or where they work. Find professional proponents in each legislative district to connect to legislators and share their personal passion. An additional lesson learned was the importance of watching and learning from other emerging workforce models. There is much to be learned from what initiatives have already occurred or are currently developing in other states.

In this qualitative case study, stakeholders interviewed described perceptions of the future impact of the advanced dental therapist. These perceptions are consistent with the recent PEW study which showed up to a 52% increase in office productivity and profit when adding a hygienist-therapist to the practice of a solo dental provider. The enacted legislation requires that a report be submitted to the legislature on the success of the workforce model after the initial workforce has been practicing for 2 years. A lesson to be applied to this study is that it takes many years or even decades for the significance of a new workforce model's impact to be documented and that this new workforce model will be no different. 31,32

A phenomenon identified while conducting this case study was the passion that developed across proponent individuals and groups to rally around the oral health disparities existing in their state. This passion has been shown in similar expanded practice enactments as a significant source of momentum to initiate and sustain access to care efforts in state legislation. Similar studies looking at alternative workforce models have shown passion as one of the driving forces to move people to action. ^{32,33} Concomitantly, the funding from national organizations has provided the support needed to allow proponent groups to pursue this issue in additional states.

The limitations of the study should be mentioned prior to conclusion. The role of the researcher as a participant is credibly accepted within the qualitative method. However, this lends itself to the potential for bias as the opinions and experience of the researcher come as part of their perspective on the case study. Conversely, one of the greatest strengths of this qualitative case study approach is the richness and the depth of exploration and descriptions of the phenomenon from which much can be learned. Additionally, while the qualitative research method allows for understanding about individual cases and subjects, is not intended for broader generalizations.

Conclusion

The results of this qualitative case study serve to inform professional practice and decision making in both clinical and policy realms. The legislative process shared here should provide other advocates of access to oral health care an example to be applied and tailored to similar efforts across the country. Passion leads to advocacy and the future elimination of the oral health care crisis in the U.S. When it is the right thing to do, and the right issue to support, people will come together to speak for those who don't have a voice.

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