Dental Therapy Toolkit

ENVIRONMENTAL SCAN

April, 2016







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Environmental Scan

APRIL, 2016

Since its inception, the dental therapy profession has continued to gain momentum and grow throughout the state of Minnesota. While Minnesota and Alaska remain the only states where these alternative primary care oral health clinicians are providing care, there have been proposals and promising trends in other states toward approving and implementing dental therapy. Below is a summary of dental therapy statistics, trends and growth in Minnesota as well as trends in other states interested in adopting this emerging profession as part of oral health teams.

Current Statistics on Dental Therapy Employment

Data was gathered by reviewing the Collaborative Management Agreements (CMA) on file at the Minnesota Board of Dentistry in November 2015, February 2016, and again in April 2016. Other methods used to collect data were emails to employers for current information, both email and phone contact with licensed dental therapists, and communications with the Directors of the two dental therapy educational programs.

As of April 2016, there were 56 Dental Therapists (DT) licensed in the state of Minnesota; 23 of those have been certified as Advanced Dental Therapists (ADT) and 16 of the 56 are dual licensed in dental hygiene and dental therapy (DH/DT). The following describes the employment status of the 58 Minnesota DT graduates:

- 95% of all licensed DTs are currently employed. Of the remaining 5%:
 - One DT is currently not looking for work.
 - Two recent DTs who graduated in December 2015 are not yet employed.
- 2 DT graduates did not renew their DT license:
 - One DT has moved out of state and has chosen not to renew their license.
 - One DT graduate has chosen to pursue further education.
- All of the certified ADTs are currently employed.

Of the 56 currently employed DTs and ADTs, 15 are working for more than one clinic. DTs or ADTs may work at more than one location for a number of reasons. Practices may be looking to

hire the profession part-time while they are integrating the profession into their practice, they may only have enough work for a DT/ADT part-time, or it may fit the business model of the practice better to have part-time mid-level providers. The multiple employment status of these therapists will result in a double count of their employment in different clinic types and locations.

Clinic Types

Dental therapists are currently working in the following clinic settings:

- Private Practice
- Non-profit
- Federally Qualified Health Center (FQHC)
- Large Group Practice
- Education Institution¹
- Hospital

The highest percentage, over 50% of DTs and nearly 32% of ADTs are working in private dental practices. Non-profits clinics hire the second largest group of therapists; 25% of DTs and nearly 32% of ADTs.

TABLE 1: EMPLOYMENT OF DENTAL THERAPISTS BY CLINIC TYPE

	Number of Licensed DTs Employed	Those Who Are Certified as ADT	Those Who Are Dual Licensed as a DH
Private Practice	24	7	0
Non-Profit	17	9	11
FQHC	7	4	3
Large Group Practice	7	3	0
Education Institution	4	3	1
Hospital	2	2	2

Data Source: MN Board of Dentistry, April 2016

¹ The education institutions have hired DT/ADTs to provide a combination of education and clinical services, although the majority of their work is teaching. Both education institutions utilize their DT/ADT faculty and staff to educate professions beyond training dental therapy students including dental students, dental hygiene students and community health workers.

Geographic Locations

Most dental therapists and advanced dental therapists (57%) are currently working in the Twin Cities Metropolitan area. Additionally, the majority, 61%, of clinic locations employing DTs are located in the Metro Twin Cities area compared to 39% of clinic locations employing DTs in greater Minnesota. The statistics for those certified as ADTs show a similar pattern with 33% of clinic locations employing ADTs are located in greater Minnesota.

TABLE 2: GEOGRAPHIC LOCATION OF CLINICS USING DENTAL THERAPISTS

	Number of Licensed DTs Employed	Those Who Are Certified as ADT	Those Who Are Dual Licensed as a DH
Metro Twin Cities	31	16	13
Greater Minnesota	23	8	2

Data Source: MN Board of Dentistry, April 2016

TABLE 3: EMPLOYMENT OF DENTAL THERAPISTS BY LOCATION AND CLINIC TYPE

Clinic Type	Employer	Location	Number of Licensed DTs Employed	Those Who Are Certified as ADT	Those Who Are Dual Licensed as a DH
Private Practice	Access Point Dental	Metro	1	0	0
	ADT Dental	Metro	1	0	0
	Al Shifa Dentistry	Metro	3	1	0
	Carepoint Dental PLLC	Metro	1	0	0
	Dental Associates	Metro	2	0	0
	Dental Health Services	Greater	1	0	0
	Diamond Dental	Metro	1	0	0
	Grand Marais	Greater	1	1	0
	Herman Dental	Greater	1	0	0
	Main Street Dental	Greater	3	1	0
	Modern Dental Professionals Minnesota	Greater	2	1	0
	Northland Smiles	Greater	1	0	0
	Shetak Dental Care	Greater	1	1	0
	Today's Dental	Metro	2	1	0
	Virginia Family Dental PC	Greater	1	0	0

Clinic Type	Employer	Location	Number of Licensed DTs Employed	Those Who Are Certified as ADT	Those Who Are Dual Licensed as a DH
	Woodland Dental	Greater	1	1	0
Non-Profit	Apple Tree Dental Clinic	Greater	4	2	2
	Apple Tree Dental Clinic	Metro	2	1	2
	Children's Dental Services	Metro	5	4	4
	Community Dental Care	Metro	2	2	2
	In House Senior Services	Metro	1	0	0
	Operation Grace	Metro	1	0	1
	Ready Set Smile	Metro	1	0	0
	St. Joseph Hospital Community Clinic	Greater	1	0	0
Federally Qualified Health Center	СИНСС	Metro	1	0	0
	Lake Superior Community Health Center	Greater	1	0	0
	Open Cities Health Center	Metro	2	1	0
	People's Center Health Services	Metro	2	2	2
	West Side Community Health Services	Metro	1	1	1
Large Group Practice	Health Partners	Metro	3	1	0
	Park Dental	Metro	1	1	0
	Southern Heights	Greater	3	1	0
Education Institution	MnSCU	Metro	1	1	1
	University of Minnesota	Metro	3	2	0
Hospital	НСМС	Metro	2	2	2

Data Source: MN Board of Dentistry; April 2016

Map of Geographic Distribution

As more dental therapists enter the workforce, the presence of the profession has continued to grow statewide. While there are more DTs and ADTs practicing in the metropolitan area, they have, and will, continue to grow in numbers in both the metro area and in greater Minnesota. Below is a map of the geographic distribution of DTs and ADTs. While the profession has extended to most areas of the state, there are still opportunities to increase access in additional dental professional shortage areas by employing dental therapists.

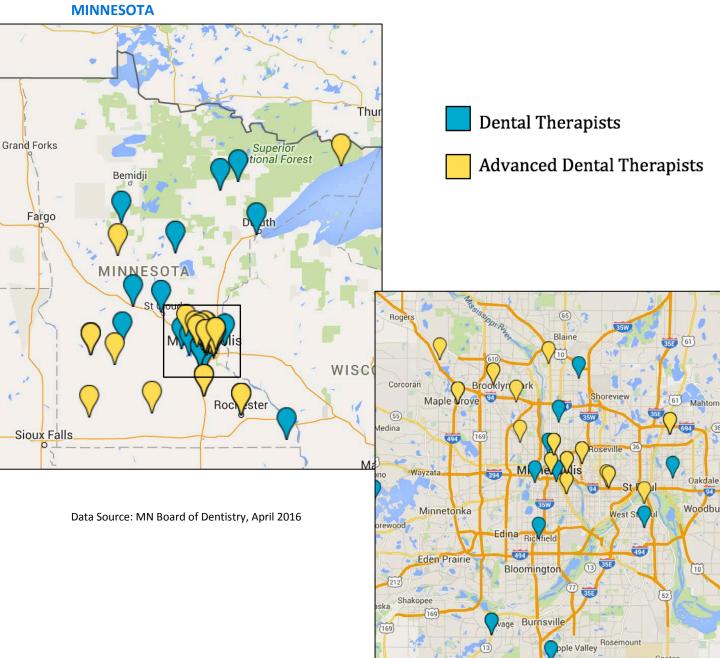


FIGURE 1: MAP OF DENTAL THERAPISTS AND ADVANCED DENTALT THERAPISTS IN

(13)

Prior Lake

Coates

Education Programs and Future Projections

Education Programs and Examination Requirements

There are two dental therapy education programs in Minnesota that have been approved by the Minnesota Board of Dentistry, the University of Minnesota School of Dentistry and a Metropolitan State University program that is administered in partnership with Normandale Community College. Both programs prepare students for both licensure as a dental therapist and certification as an advanced dental therapist. Each educational program's requirements are described below.

- At the University of Minnesota School of Dentistry's Master in Dental Therapy program, eligible applicants are those who have completed a BS or a BA degree along with specific prerequisite courses. In the 28-month program, dental therapists learn along-side of dental and dental hygiene students and complete the same clinical competencies as dental students where the scope of practice of a dental therapist is the same. Starting in the Fall of 2016, the UMN will move to a 32 month, dual degree program where graduates will earn both a Bachelor of Science in Dental Hygiene and a Master in Dental Therapy. This will allow graduates to be eligible to pursue licenses in both dental hygiene and dental therapy. Eligible applicants are students who have completed one year of college prerequisite courses.
- At Metropolitan State University and Normandale Community College's Master of Science in Advanced Dental Therapy program, eligible applicants are Minnesota licensed dental hygienists who have earned a BS or a BA degree, completed a restorative functions course (credit or non-credit), and have a cumulative GPA of 3.0, along with other requirements. In the advanced dental therapy 16-month program, students are taught by dentists and educated to the level of a dentist within their scope of practice.

DT: To be eligible for licensure, a DT must have graduated from a dental therapy education program that has been approved by the Board of Dentistry or is accredited by the Commission on Dental Accreditation (CODA) or another board-approved accreditation body. The education program must be at least a baccalaureate level degree. To be licensed, a DT must pass a comprehensive, competency-based clinical examination that is approved by the Board and administered independently of an institution providing dental therapy education. The DT must also pass an examination testing the applicant's knowledge of the Minnesota laws and rules relating to the practice of dentistry.

ADT: To be eligible to pursue advanced dental therapy certification, a DT must have graduated from a master's level program in advanced dental therapy from an education program that is approved by the Board or accredited by CODA or another Board-approved accreditation body.

In addition, a licensed DT must complete and document 2000 hours of clinical practice as a dental therapist under indirect or general supervision of a dentist. After graduating from an approved master's level dental therapy degree program and completing the 2000 clinical hours, the dental therapist seeking advanced certification will go through the three-part certification process offered by the Minnesota Board of Dentistry. The three components of the exam consist of 1) Patient Records Review; 2) Board written scenario exam; and 3) Interview with the Licensing and Credentials Committee. The DT may then apply for ADT Certification upon successful completion of the three components of the Advanced Dental Therapy Certification Examination.

Future Projections

For the near future, the intended plan for both education programs is to continue to accept and graduate their current number of students. Despite growing interest in the profession, both institutions are limited to their current program sizes by space and faculty resources.

Additionally, employment statistics suggest a good balance of supply and demand for DT/ADTs. Looking longer term, both education programs will be responsive to meeting the evolving needs of incorporating DT/ADTs into the health care delivery system:

- The University of Minnesota School of Dentistry's program will move forward with a target of matriculating 7-8 students every fall. As the dual degree DH/DT program is new, no additional changes are expected in the short therm. Once the dual degree program has been in operation for a while, program growth or additional modification may be considered. The program continues to seek new and innovative ways for DTs to contribute to health care's goal of better health and better health care all at a lower cost. Current and future projects designed to support that effort include:
 - o Intra-professional education of team-based clinical care, which includes dentists, dental hygienists, and dental therapists.
 - Inter-professional care delivery through integrating care provided by an ADT, a
 Nurse Practitioner and Pharmacist in a primary care environment.
 - Creation of a Rural Dentistry Scholars Program, made possible through a recent grant from the Health Resource and Service Administration. The goal of the Minnesota Collaborative Rural Oral Health Program (MN-CROHP) is to improve access to care in rural communities through an increased number of oral health providers (dentists and dental therapists) in rural Minnesota.
- The Metropolitan State University and Normandale Community College's program will continue to accept six students each fall term and the program length is expected to continue to be 16 months. At this time, no changes to the admission policy are anticipated. The current admission requirements for entrance into the Master of Science: Advanced Dental Therapy program include:
 - o Baccalaureate degree
 - Licensed dental hygienist who meets Minnesota Board of Dentistry rules

- o Experience as a dental hygienist
- Grade point average of 3.0 or higher
- Restorative functions course
- o Professional portfolio
- o Interview by invitation

Due to a recent grant from the Health Resource and Service Administration awarded to Normandale Community College, there are plans to add a rural cohort beginning in the Fall of 2019. The clinic and didactic competencies will be taught at this rural location and didactic instruction will be virtual via ITV and an online learning platform.

TABLE 4: EDUCATION PROGRAM DATA AND FUTURE PROJECTIONS

	Metropolitan State University and Normandale Community College	University of Minnesota School of Dentistry		
Graduates	16	42		
Graduates who have achieved ADT certification	13	10		
Current Students	11	15		
Projected future graduate numbers				
2016	11*	8		
2017	6	7		
2018	6	0*		
2019	10	8		

Data Source: Respective education institutions; April, 2016

Utilization of DTs and ADTs

As the number of dental therapists increases throughout the state, the profession has grown in both the metropolitan area and greater Minnesota with dental therapists and advanced dental therapists becoming fully integrated, valuable members of oral health teams. During their

^{*}Due to changes in program structure and length, graduation trends show gaps in both programs. The program at Metropolitan State University and Normandale Community College shortened from 20 to 16 months starting in the Fall of 2015. In 2016 there will be one graduating class of 5 in May and one graduating class of 6 in December. The University of Minnesota has redesigned its program from a 28-month to 32-month program and with these changes there will be no graduates in 2018.

training, dental therapists are taught rules and regulations around the practice which have become valuable tools to integrate the new profession into a practice.

Legal Scope of Practice

Minnesota statutes set forth the scope of practice (services, procedures and treatments) that DTs and ADTs are legally authorized to provide and the level of supervision required for each. As stated previously, however, the supervising dentist may further limit the scope of practice of a DT or ADT he or she supervises to be less than legally authorized under state law.

DT Scope of Practice (MS 105A.105)

General Supervision (dentist need not be present)

- Oral Health instruction and disease prevention education, including nutritional counseling and dietary analysis
- 2 Preliminary charting of the oral cavity
- 3 Making radiographs
- 4 Mechanical polishing
- 5 Application of topical preventive or prophylactic agents, including fluoride varnishes and pit and fissure sealants
- 6 Pulp vitality testing
- 7 Application of desensitizing medication or resin

- 8 Fabrication of athletic mouth guards
- 9 Placement of temporary restorations
- 10 Fabrication of soft occlusal guards
- 11 Tissue conditioning and soft reline
- 12 Atraumatic restorative therapy
- 13 Dressing changes
- 14 Tooth reimplantation
- 15 Administration of local anesthetic
- 16 Administration of nitrous oxide

Indirect Supervision (dentist onsite but need not be present in the room)

- 1 Emergency palliative treatment of dental pain
- 2 The placement and removal of space maintainers
- 3 Cavity preparation
- 4 Restoration of primary and permanent teeth
- 5 Placement of temporary crowns

- 6 Preparations and placement of performed crowns
- 7 Pulpotomies on primary teeth
- 8 Indirect and direct pulp capping on primary and permanent teeth
- 9 Stabilization of reimplanted teeth
- 10 Extractions of primary teeth
- 11 Suture removal

12 Brush biopsies

- 14 Recementing of permanent crowns
- 13 Repair of defective prosthetic devices

Other authorizations and their limitations for licensed dental therapists are:

- Dispense and administer the following drugs within the parameters of the collaborative management agreement: analgesics, anti-inflammatories, and antibiotics. The authority to dispense includes the authority to dispense sample drugs within those categories. Dispensing or administering a narcotic drug is explicitly prohibited.
- 2 Supervise up to but no more than four licensed dental assistants or nonregistered dental assistants in any one practice setting to the extent permitted by the collaborative management agreement.

ADT Scope of Practice (MS 105A.106)

An ADT may perform all DT services listed above and, in addition, the services listed below. All services may be performed under general supervision if authorized by the supervising dentist in the CMA.

Additional ADT scope of practice:

- 1 An oral evaluation and assessment of dental disease and the formulation of an individualized treatment plan authorized by the collaborating dentist;
- 2 All services and procedures authorized for a licensed dental therapist; and
- 3 Nonsurgical extraction of periodontally diseased permanent teeth with tooth mobility of +3 to +4 under general supervision, if authorized in advance by the collaborating dentist. The advanced dental therapist shall not extract a tooth for any patient if the tooth is unerupted, impacted, fractured, or needs to be sectioned for removal.

Other authorizations and limitations for certified advanced dental therapists:

- 1 No service or procedure allowed for an advanced dental therapist may be provided except as authorized by the collaborating dentist.
- 2 The collaborating dentist is responsible for directly providing or arranging for another dentist or specialist to provide any necessary advanced services needed by the patient.
- 3 An advanced dental therapist must refer patients to another qualified dental or health care professional to receive any needed services that exceed the scope or practice of the advanced dental therapist.
- 4 An advanced dental therapist may provide, dispense and administer the following drugs within the parameters of the collaborative management agreement: analgesics, anti

inflammatories, and antibiotics. The authority to dispense includes the authority to dispense sample drugs within those categories if permitted by the collaborative management agreement. Providing, dispensing or administering a narcotic drug is explicitly prohibited.

Collaborative Management Agreement

Prior to performing any services, a dental therapist or an advanced dental therapist must enter into a written Collaborative Management Agreement (CMA) with a Minnesota-licensed dentist. A dentist may have a CMA with no more than five dental therapists or advanced dental therapists at any given time. A DT/ADT may have more than one supervising dentist, in which case a different CMA is needed with each supervising dentist. The Board requires CMAs and amendments to CMAs to be filed with the Board. The format and content of the CMA are subject to state law requirements and regulations established by the Minnesota Board of Dentistry. The CMA may include limitations on services provided or supervision required as determined by the collaborating dentist. Also, the collaborating dentist accepts responsibility for all services authorized and performed by the DT or ADT pursuant to the CMA. Visit the MN Board of Dentistry website for additional information on DT and ADT CMAs: https://mn.gov/boards/dentistry/licensure/processingandapplications/dental-

CMAs: https://mn.gov/boards/dentistry/licensure/processingandapplications/dental-therapists.jsp

Statutory requirements for CMAs. The following are the requirements for what topics must be addressed in the CMA:

DT: The topics that must be included in the CMA for a DT are:

- 1 Practice settings where services may be provided and the populations to be served as outlined in MS Section 150.105, Subdivision 8;
- 2 Any limitations on the services that may be provided by the dental therapist, including the level of supervision required by the collaborating dentist;
- 3 Age and procedure specific practice protocols, including case selection criteria, assessment guidelines and imaging frequency;
- 4 A procedure for creating and maintaining dental records for the patients who are treated by the dental therapist;
- 5 A plan to manage medical emergencies in each practice setting where the dental therapist provides care;
- 6 A quality assurance plan for monitoring care provided by the dental therapist, including patient care review, referral follow-up and a quality assurance chart review;
- 7 Protocols for dispensing and administering medication authorized under Section 150.105, Subdivision 5.

- 8 Criteria relating to the provision of care to patients with specific medical conditions or complex medication histories, including requirements for consultation prior to initiation of care;
- 9 Supervision criteria for dental assistants to the extent permitted in the CMA and according to Section 150A.10, Subdivision 2;
- 10 A plan for the provision of clinical resources and referrals in situations which are beyond the capabilities of the dental therapist.

ADT: In addition to the above, a CMA for an ADT must also include the following:

- 11 A plan to refer patients to another qualified dental or health professional to receive any needed services that exceed the Scope of Practice of the ADT;
- 12 Specific written protocols to govern situations in which the ADT encounters a patient who requires treatment that exceeds the authorized Scope of Practice;
- 13 Protocols for the oral evaluation and assessment of dental disease, and for the formulation of an individualized treatment plan by the ADT and authorized by the collaborating dentist;
- 14 Protocol for the comprehensive oral evaluation by the collaborative dentist;
- 15 A plan for nonsurgical extractions of permanent teeth as limited by the Scope of Practice, under General Supervision, and if authorized in advance by the collaborating dentist.

DT and ADT Scope of Practice under Collaborative Management Agreements

In November 2015, all existing and previous Collaborative Management Agreements (CMAs) filed with the Minnesota Board of Dentistry were reviewed for this document. Based on the review and information collected directly from supervising dentists and employers, almost all Minnesota DTs and ADTs are allowed to practice using the full scope of practice authorized under state law and under their least restrictive levels of dentist supervision. Initially, some dentists required a higher level of supervision with the procedures performed by the new DT graduates. Most often, restrictions included more communication prior to performing a procedure and occasional final checks of restorative procedures along with regular case reviews. According to dentists, the purpose of these restrictions were to help calibrate the care philosophy of the new DT with the existing dentists and to help the two providers develop trust as this was a new model of care delivery. Typically, within 6 months of the new DT being employed, the dentist felt comfortable in lifting all restrictions. At the time of the review, only one active CMA was found to contain any restrictions to a DTs scope of practice or level of supervision; no restrictions were found in any ADT CMAs. The review also found instances of a CMA for the sole purpose of conducting a working interview with a DT. Those one day CMAs often limited the scope of practice to basic restorative procedures.

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Finally, with the profession gaining momentum, new CMAs for the initial hire of a DT/ADT generally allow for the full scope of practice and highest level of supervision and planned case reviews during the 3-month to 6-month onboarding period. The case reviews become less frequent or go away as supervising dentists become more comfortable with the DT/ADT.

Dental Therapy Trends in Other States

While integration and utilization of dental therapy is proving to be a successful model in Minnesota, there are several other states that have started down a path to pass dental therapy legislation. Below is a summary of efforts to pass dental therapy legislation in other states that was compiled through information gathering from national partners like Community Catalyst and the PEW Charitable Trust, as well as gathering information directly from individual state's advocacy campaigns.

TABLE 5: DENTAL THERAPY TRENDS IN OTHER STATES

State	Status	Support
Kansas	 2015 legislation introduced in both the House and Senate and a legislative workgroup was created to draft new language. In 2016 legislation will be filed to establish a Dental Therapist. 	 Within the legislature Public poling shows 74% of Kansas voters support mid-level providers 30 proponents submitted testimony to support 2015 legislation
New Mexico	 In 2015 legislation was passed in the house and did not get a vote in the senate. During the interim DT champions worked to produce a compromised bill to be heard in 2016. 	 Strong grassroots and media support Growing support in the Health Action New Mexico Coalition, leading the campaign for DTs Support from the National Indian Health Board and several local pueblo councils.
Ohio	 A workgroup chaired by the House finance chair to develop DT legislation, which is being drafted for the 2016 session. 	 Broad support including dentists, hygienists, nurses, ministers, consumers and many associations. Local and state media coverage Growing support with local organizations and leaders
Vermont	 Legislation in 2015 passed the senate to establish dental therapists and will continue through the house in 2016 	 Strong grassroots and coalition support Local and media coverage including op-ed from a retired dentist
Washington	 Legislation filed in 2015 but did not move Washington Department of Health has been charged with researching mid-level dental providers impact in AK, MN and MA. The Washington legislature published a favorable health equity assessment concluding DTs would improve the health of underserved communities and reduce disparities. Report DT legislation will be reintroduced in 2016. 	Strong grassroots and media support

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Oregon	 Oregon has pilot project legislation that allows new delivery service models so no specific legislation is needed at this time. Proponents have applied to the state to conduct a pilot project similar to the DHAT model, to be initially tested in two tribes Strong support from tribal communities with strong interest from other dental clinics, health centers and community colleges.
Maine	 Passed legislation in 2014 allowing dental therapy Legislation will be introduced in 2016 to better align the law with CODA education standards, ensure reciprocity among states and revise supervision requirements.
Michigan	Currently drafting legislation to be introduced in 2016
Hawaii	• Introduced legislation in 2015 to be reconsidered during the 2016 session.
North Dakota	 Legislation introduced and passed through one Senate committee in 2015 but not the full Senate. The legislature does not meet in 2016, advocates will continue to pursue DT legislation in 2017
South Carolina	Introduced legislation in 2015
Texas	 Introduced legislation in 2015 with no regular session scheduled for 2016
Connecticut	 Currently working on planning a pilot project for DT practice in Connecticut. Strong support from the Hygienist Association Opposition from the Dental Association
Georgia	 Introduced legislation in 2015 and continues to move through the process in 2016
Massachusetts	 DT legislation was introduced in 2015 and re-drafted by the public health committee. The updated language has passed through the house and awaits a hearing in the senate. Strong support from community health centers and some dental professionals Strong opposition from the dental society

Data Source: Community Catalyst, The PEW Charitable Trust, individual state advocacy campaigns; February, 2016