Minnesota’s Dental Therapist Workforce

September, 2019

Office of Rural Health and Primary Care
Introduction to Minnesota’s Dental Therapist Workforce

• Dental therapists are licensed oral health practitioners and members of oral health care teams. They provide evaluative, preventive, restorative and minor surgical dental care within their scope of practice. Dental therapists work under the direction of a licensed dentist through use of a collaborative management agreement (CMA). A CMA outlines the duties the dental therapist can perform and the locations where they can work. The agreements are filed with the Minnesota Board of Dentistry, and must be updated annually or when a dental therapist gets a new job and. To learn more about dental therapists’ legal scope of practice in Minnesota, see: https://www.revisor.mn.gov/statutes/cite/150A.105.

• According to the Minnesota Board of Dentistry, there were 92 dental therapists (including Advanced Dental Therapists) with active licenses as of December 2018.

• Dental therapy is a relatively new profession. The Minnesota Legislature authorized licensing of dental therapists in 2009, and they began practicing in Minnesota in 2011. Dental therapists are required to practice in settings that primarily serve low-income, uninsured, and underserved patients, or in areas designated as dental Health Professional Shortage areas.

• Currently, two Minnesota schools train dental therapists. Metropolitan State University requires a bachelor’s degree in dental hygiene at entrance. Students graduate with a Master of Science Degree in Advanced dental therapy. The University of Minnesota Dental School educates students in both dental hygiene and dental therapy. When the program first began, students graduated with a bachelor’s or master’s degree in dental therapy, and were not dental hygienists. Starting in 2016, the university began offering a Bachelor of Dental Hygiene and a Master of Dental Therapy degree.
All dental therapist must pass a licensing exam to practice. Dental therapists who have completed an additional 2,000 hours of supervised practice are eligible to take an additional exam to be certified as an Advanced Dental Therapist (ADT) by the Minnesota Board of Dentistry. ADTs can provide additional services, such as oral evaluation and assessment, treatment plan formulation, non-surgical extraction of certain diseased teeth, and more. ADTs must still practice under the supervision of a licensed dentist, but the dentist does not need to see the patient prior to them receiving care, or be on site during a procedure. For more on ADTs' legal scope of practice in Minnesota, see: https://www.revisor.mn.gov/statutes/cite/150A.106.

For the purposes of the information in the chart book, dental therapists were emailed a survey in March of 2019. The survey focused on all dental therapists with a license in 2018, and had a 66 percent response rate.

All references to dental therapists in this report also include ADTs unless otherwise specified.

For additional information on Minnesota’s dental therapists, please see: https://www.health.state.mn.us/data/workforce/oral/docs/2018dtb.pdf
Executive Summary

• According to the Minnesota Board of Dentistry, there were 92 dental therapists (including Advanced Dental Therapists) with active licenses as of December 2018.

• Minnesota dental therapists are mostly young, with a median age of 33, and are predominantly white (85 percent) (slides 6 and 7).

• Most licensed dental therapists are working in their field (95 percent) and 83 percent plan to work more than 10 years as dental therapists (slides 10 and 11). The share of working dental therapists has increased since 2014 from 74 percent to the current level. As a new provider, dental therapists faced some hiring challenges—uncertainties about their role, scope, training, and how best to integrate them into existing oral health teams and practices. Over time, the dental therapists have integrated into the oral health care system—as indicated by the high rates of employment for dental therapists.

• Seventy percent of dental therapists licensed in 2018 were Advanced Dental Therapists (slide 17).

• Forty-two percent of dental therapists have dual licenses as dental hygienists, but 62 percent of those dually licensed dental therapists spend less than 25 percent of their time preforming dental hygiene tasks (slide 19).

• Dental therapists reported high job satisfaction levels are high with 98 percent feeling satisfied or very satisfied with their careers overall (slide 21).
**Demographics: Sex and Age**

Dental therapists are mostly young, with a median age of 33.

Eight-six percent of dental therapists are female and 14 percent are male (data not shown).

Source: Data from the Minnesota Board of Dentistry, 2019. Analysis done by MDH. Percentages are based on all 92 Minnesota dental therapists.
Demographics: Race and Ethnicity

- The majority (82 percent) of dental therapists indicated they were white. Dental therapists, however, reflect more racial diversity than dentists.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Respondents could select as many races as applicable; therefore, totals may not sum to 100 percent. The chart is based on 55 valid responses.
Demographics: Languages Spoken in Practice

- While most dental therapists report only speaking English in their workplace (89 percent), four percent report speaking Spanish and one percent speak Hmong.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Respondents could select as many languages as applicable, but were instructed not to include languages spoken only through an interpreter. The chart is based on 45 valid survey responses.
• The majority of dental therapists’ highest education is a master’s degree. Twenty-four percent have an education credential beyond a master’s degree.

• While both Minnesota educational programs now offer a master’s degree to all students, the degree isn’t required to work as a dental therapist. Dental therapists must graduate from an Minnesota Board of Dentistry or Commission on Dental Accreditation approved program with at least a bachelor’s degree.
As of 2019, nearly all dental therapists reported working in a position related to their license (95 percent). Only one respondent indicated not working and seeking a position. The rate of employment for dental therapists has increased over the past five years.

Ninety-five percent of dental therapists reported working full time, and they average 36 hours per week. This finding is generally consistent in recent years.

Higher rates of dental therapists finding employment indicate that dental therapists are becoming more accepted among oral health care professionals in Minnesota.
Employment: Future Plans

“How long do you plan to continue practicing as a dental therapist in Minnesota?”

- The majority of dental therapists plan to continue to practice in their field for more than 10 years.
- Respondents planning to leave their practice in five years or less indicated it was due to burnout, job instability, or lack of benefits.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 57 valid responses.
Dental Therapists at Work: Work Sites

Just over half (58 percent) of dental therapists choose to work at a single location instead of at multiple work sites, compared to 74 percent of dentists.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 58 valid responses.
### Dental Therapists at Work: Work Settings

<table>
<thead>
<tr>
<th>All Reported Settings</th>
<th>Percentage of settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community / Faith-Based Organization</td>
<td>25%</td>
</tr>
<tr>
<td>Solo private practice</td>
<td>25%</td>
</tr>
<tr>
<td>Small group private practice (2-4 dentists)</td>
<td>16%</td>
</tr>
<tr>
<td>Community Health Center (CHC)/ Federally Qualified Health Center (FQHC)</td>
<td>14%</td>
</tr>
<tr>
<td>Large group private practice (5+ dentists)</td>
<td>12%</td>
</tr>
<tr>
<td>Academic (Teaching / Research)</td>
<td>4%</td>
</tr>
<tr>
<td>School (K-12)</td>
<td>3%</td>
</tr>
<tr>
<td>Hospital</td>
<td>1%</td>
</tr>
<tr>
<td>Mobile dental clinic</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

- About half (53 percent) of dental therapists reported working in private practice including solo, small group, and large practices.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 58 valid responses.
Dental Therapists at Work: Teamwork

Which of the following work or educational experiences best prepared you to work in a multidisciplinary team when providing care?

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal learning on the job</td>
<td>45%</td>
</tr>
<tr>
<td>Formal educational coursework or training</td>
<td>38%</td>
</tr>
<tr>
<td>Formal on-the-job training</td>
<td>16%</td>
</tr>
<tr>
<td>Continuing education/professional development</td>
<td>2%</td>
</tr>
</tbody>
</table>

- Forty-five percent of respondents indicated that informal learning on the job was most helpful in preparing to work in a multidisciplinary team setting when providing care.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 56 valid responses.
Dental Therapists at Work: Cultural Competence

“Which of the following work or educational experiences best prepared you to provide culturally competent care?”

- Informal learning on the job: 49%
- Formal education coursework or training: 35%
- Formal on-the-job training: 11%
- Continuing education/professional development: 4%
- Does not apply to my job: 2%

- Forty-nine percent of the respondents noted that informal learning on the job best prepared them to provide culturally competent care to their patients.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 57 valid responses.
Three out of five dental therapists said they were likely to or are currently pursuing more education.

Respondents who reported being very likely to enroll or were already enrolled in a training or education program most commonly noted an interest in pursuing dental degrees, PhDs, or master’s degrees. Topic areas mentioned included public health, hospital administration, and educational theory. Some were considering ADT certifications.
Advanced Dental Therapists (ADTs)

“In general, what percent of time do you typically spend performing tasks including evaluations and extractions authorized strictly for Advanced Dental Therapists (tasks relating to Advanced Dental Therapists codes D0120, D0140, D0145, and D7140)?”

<table>
<thead>
<tr>
<th>Percentage of Time</th>
<th>Survey Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 25% of my time</td>
<td>35%</td>
</tr>
<tr>
<td>25-49% of my time</td>
<td>38%</td>
</tr>
<tr>
<td>50-74% of my time</td>
<td>13%</td>
</tr>
<tr>
<td>More than 75% of my time</td>
<td>12%</td>
</tr>
<tr>
<td>None</td>
<td>3%</td>
</tr>
</tbody>
</table>

- Seventy percent of Minnesota’s dental therapists were ADTs. Eighteen percent of respondents reported they were in the process of becoming certified as ADTs.

- Seventy-three percent of ADTs reported spending less than half their time on ADT-specific tasks or roles. Spending this amount of time on these tasks was expected, given the ADT scope of practice includes a relatively small number of advanced procedures that only ADTs are allowed to perform. While these tasks are important, they are less commonly needed than the tasks in the dental therapist scope of practice.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 40 valid responses.
Advanced Dental Therapists: General Supervision

“In general, what percentage of time do you work under general supervision when the collaborative dentist is not physically present at your practice location (including clinic and community settings)?”

- ADTs can work under general supervision of a licensed dentist. General supervision allows ADTs to perform services approved by a dentist, but without the dentist present. This enables ADTs to work in clinic or community settings without a dentist present.

- Eighty percent of dental therapists reported working under general supervision for at least some amount of their time. Dental therapists working under general supervision most commonly report spending less than twenty-five percent of their time in this role (35 percent).

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 40 valid responses.
Dually Licensed Dental Therapists

“In general, what percentage of time do you typically spend performing dental hygiene tasks?”

- In Minnesota, many dental therapists are also trained and licensed as dental hygienists. Forty-two percent of dental therapists surveyed are dually licensed as dental hygienists.
- Ninety-two percent of dually licensed dental therapists reported their job requires performing tasks within the dental hygiene scope of practice.
- Most dually licensed dental therapists spend less than 25 percent of their time on dental hygiene tasks.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 21 valid responses.
All respondents reported serving low income or uninsured patients and 92 percent served recipients of Minnesota Health Care programs. This is in keeping with the statutory requirements that dental therapists focus services on underserved populations and areas (https://www.revisor.mn.gov/statutes/cite/150A.105).
Over 95 percent of dental therapists were satisfied with their careers both overall and in the last 12 months. Dental therapists’ satisfaction levels are similar to other licensed providers.

Dental therapists reported higher satisfaction levels in 2018 as compared to 2016. For example, in 2016 88 percent of dental therapists were satisfied or very satisfied with their careers overall.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 53 valid responses.
Dental Therapists Career Satisfaction

The survey also asked dental therapists to describe reasons for their job satisfaction or dissatisfaction.

The reasons for satisfaction included:

• Helping people access oral health care they wouldn’t otherwise receive.

• Mentorship from dentists, effective and enjoyable teams, helping certain patient groups, and providing high quality care.

• A small number of dental therapists also reported satisfaction due to the ability to return to and help in rural areas they had ties to.

The reasons for dissatisfaction included:

• The inability to dispense needed medications, limited scope in general, and low reimbursement.

• Low pay and lack of jobs, either related to desired quality or location.

• Frustration with misinformation and negative views about dental therapists, especially at the national level.

Fewer dental therapists reported dissatisfaction related to difficulties patients have connecting to additional care than in prior surveys.

Source: MDH Dental Therapist Workforce Questionnaire, 2019. Percentages are based on 35 valid responses (satisfaction), and 54 valid responses (dissatisfaction).
Geographic Distribution: Two Ways to Present Geography

By state planning areas

By rural-urban commuting areas (RUCAs)

For additional information regarding geographic distribution and categorization, please visit the Department of Education and Economic Development Planning Areas webpage: https://apps.deed.state.mn.us/assets/lmi/areamap/plan.shtml. For more information about Rural Urban Commuting Regions (RUCAs), please visit the Office of Rural Health and Primary Care’s website: https://www.health.state.mn.us/data/workforce/method.html#ruca.
The majority of dental therapists’ work locations are concentrated in the Twin Cities metro area.

Location data is reported for each setting where a dental therapist works. Some dental therapists work in more than one location. Data comes from Minnesota Board of Dentistry Collaborative Management Agreements. Twenty dental therapists work at more than one location for a total of 111 work settings.

Source: Minnesota Board of Dentistry Collaborative Management Agreements, April 2019. Eighty-five of the 92 licensed dental therapists have a current collaborative management agreement.
Geographic Distribution: by Rurality

• RUCAs define areas of the state based on population density and commuting patterns. Using RUCAs is one way to understand the distribution of professionals around the state.

• Dental therapists were predominantly located in metropolitan areas. Notably, the second most common location was small rural areas.

Dental Therapist Work Location by Level of Rurality or RUCA

- Metropolitan: 73%
- Micropolitan or Large Rural: 8%
- Small Town or Small Rural: 15%
- Rural or Isolated: 4%

Source: Minnesota Board of Dentistry Collaborative Management Agreements, April 2019
Methodology

The data in this report come from two sources:

• The **Minnesota Board of Dentistry** provides data on the entire population of Dental Therapists who have active licenses in the state of Minnesota. The MBD maintains this database and provides the data to the Minnesota Department of Health, Office of Rural Health and Primary Care (MDH ORHPC). This report uses data current as of March 2019. At that time, there were a total of 92 dental therapists with active Minnesota license. The board also collects address data through the collaborative management agreements. This data is current as of April 2019.

• The **2018 MDH ORHPC Dental Therapist Workforce Survey** collects additional demographic and workforce data from dental therapists. MDH ORHPC administered the survey to all licensed Dental Therapists currently practicing in Minnesota. The response rate was 66 percent.

• See the ORHPC website for more details about the methodology (www.health.state.mn.us/data/workforce/method.html) of survey.
Visit our website at
http://www.health.state.mn.us/divs/orhpc/workforce/reports.html
to learn more about the Minnesota health care workforce.

Minnesota Department of Health
Office of Rural Health and Primary Care
85 East 7th Place, Suite 220
Saint Paul, MN 55117
(651) 201-3838
health.orhpc@state.mn.us