Minnesota’s Dentist Workforce

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Summary of Findings

• As of October 2018, there were 4,140 actively licensed dentists in Minnesota, the majority of whom worked in the Twin Cities region. [See slide 18]

• The youngest cohort of dentists entering the labor market is only slightly larger than the oldest—nearly equal to the dentists planning to stop practicing in the next five years. Approximately 92 percent of dentists planning to leave the field say they will retire. [See slides 4 and 8]

• The majority of practicing dentists work full-time. [See slide 7]

• A majority of dentists in Minnesota own or co-own an individual or group or private practice. [See slide 11]

• The majority—86 percent—of Minnesota’s dentists are white, and roughly 83 percent speak only English in their practice.

• Most dentists reported that on-the-job learning (as opposed to classroom or formal training) best prepared them to provide culturally competent care. [See slides 5, 6 and 15]

• Similar to many health care professions, most dentists are satisfied with their work. However, dentists reported higher levels of satisfaction with their career overall than they did with their work specifically in the last 12 months. [See slide 16]

• 75 percent of dentists reported “never” using telemedicine equipment to consult with patients. [See slide 12]

• Eighty-percent of dentists reported not having a specialty. The largest two specialties reported were orthodontics (5%), and oral and maxillofacial surgery (4%). [See slide 9]

• The majority of dentists employed dental assistants (88 percent) and hygienists (roughly 76 percent). Very few employed dental therapists (3 percent) and advanced dental therapists (2 percent). Female dentists reported employing dental therapists and advanced dental therapists more frequently compared to male dentists. [See slide 14]
Demographics: Age and Sex

The incoming cohort of dentists (35 years and younger) is similar in share to dentists age 55 and older, indicating replacements for close-to-retiring dentists.

- The current median age of dentists is 48. Dentists are older than other oral health professionals; for example just 5 percent of dental hygienists are age 65 and older.

Additional information not shown above:
- Roughly two of every three dentists in Minnesota identified as male, indicating that the profession is predominantly male. However, the younger cohorts of dentists are increasingly female, with roughly 63 percent of dentists 44 and younger identified as female.

Source: Minnesota Board of Dentistry, August 2019. Analysis done by MDH. Percentages are based on 4,139 actively licensed Dentists who provided valid birth dates to the licensing board.
• Typical of racial patterns among other health care professionals, the majority (86 percent) of dentists indicated they were white, with the second-highest share (8 percent) indicating they were Asian.
The majority of dentists—approximately 83 percent—spoke only English in their practices. The second most commonly spoken language was Spanish. Very small shares of dentists spoke other languages such as Hmong, Russian, or Somali with their patients. Over ten percent of dentists reported speaking languages other than those noted above. Common “other” languages mentioned included Sign Language, Vietnamese, Arabic, and French.

Source: MDH Dentist Questionnaire, 2016-2017. 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 1,840 valid survey responses.
Employment: Employment & Hours Worked

The median work week for dentists was 36 hours, with the majority (59 percent) of dentists working between 31 and 40 hours per week. Eighty-four percent of dentists reported working full-time. The percentage of dentists working more than 40 hours a week has gone up since the 2014-2015 survey when just 11 percent worked more than 40 hours a week. In the most recent survey, 18 percent reported working more than 40 hours per week, as shown above.

Additional information not shown above:
- An estimated 96 percent of Minnesota dentists reported on the MDH questionnaire that they were “working in a paid or unpaid position related to [their] license.”
- Of those not working in a position related to their license, about half (52 percent) were not seeking a position using their license. Eighty percent of those not seeking a position related to their license are males. Additionally, 86 percent are 55 or older.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. Percentages are based on 2,040 valid responses.
The majority of dentists—58 percent—plan to practice dentistry for more than 10 years. Approximately 21 percent of all actively practicing dentists indicated that they plan to leave the field within five years.

Among the 21 percent of dentists planning to leave, 92 percent said they planned to retire. Nearly three percent reported burnout or dissatisfaction as the reason to stop practicing. Only two percent said they planned to pursue a different career or were pursuing training to advance their career. Another approximately three percent of respondents reported leaving the field for family or other reasons.
• The majority of dentists did not report a specialty. Orthodontics and dentofacial orthopedics was the largest specialty reported (4.5 percent) followed by oral and maxillofacial surgery (3.6 percent.)
Dentists at Work: Work Settings

Dentists’ Primary Work Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Share of Dentists Working in this Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic/Professional Office/Health Center/Ambulatory Care</td>
<td>88.9%</td>
</tr>
<tr>
<td>Academic (Teaching/Research)</td>
<td>4.3%</td>
</tr>
<tr>
<td>Community/Faith-Based Organization</td>
<td>2.5%</td>
</tr>
<tr>
<td>Hospital</td>
<td>1.2%</td>
</tr>
<tr>
<td>Correctional Facility</td>
<td>0.6%</td>
</tr>
<tr>
<td>Insurance/Benefits Management Organization</td>
<td>0.3%</td>
</tr>
<tr>
<td>State, County, or City Agency</td>
<td>0.2%</td>
</tr>
<tr>
<td>Public Health Agency</td>
<td>0.2%</td>
</tr>
<tr>
<td>Long-Term Care Facility</td>
<td>0.1%</td>
</tr>
<tr>
<td>Home Health Care</td>
<td>0.1%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

• Dentists can work in a variety of settings. However, the vast majority – 88.9 percent – work in a clinic, professional office, health center or in ambulatory care. The second most popular setting for dentists is an academic setting (4.3 percent) or community or faith-based organizations (2.5 percent). Other settings host much smaller shares of Minnesota’s dentists.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. The survey includes questions on both the “primary” and “secondary” settings in which providers work. For the purposes of the analysis in this section, we present data only on the setting Dentists reported as their “primary” setting. The chart above is based on 1,922 valid responses.
Dentists at Work: Practice Ownership and Gender

Own or co-own an individual or group or private practice

- Sixty-four percent of dentists in Minnesota own or co-own an individual or group or private practice. A higher percentage of males own their own practice compared to females.

Additional information not shown above
- Despite having the largest number of dentists in the region, fewer dentists in the Twin Cities own or co-own a practice than in any other region in the state (62 percent). Dentists in areas outside the Twin Cities area report higher rates of practice ownership with 85 percent of dentists in the southwest area owning or co-owning a practice followed by 76 percent in the northwest area.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. Percentages are based on 1,874 valid responses.
**Dentists at Work: EHRs and Telemedicine**

Dentists’ Use of Electronic Health Records and Telemedicine Equipment

- **How often do you use electronic health records or similar patient/client electronic records?**
  - **Never:** 7%
  - **Occasionally:** 9%
  - **Frequently:** 11%
  - **All the time:** 73%

- **How often do you diagnose or consult with patients or clients in real-time using dedicated telemedicine equipment?**
  - **Never:** 75%
  - **Occasionally:** 13%
  - **Frequently:** 6%
  - **All the time:** 6%

- The MDH workforce survey includes questions on the use of technology in health care settings. Here, we show responses to questions about how often dentists use electronic health records (EHRs) and/or equipment that is dedicated to telemedicine. The results show that almost three-fourths of dentists use EHRs “all the time.”

- Most dentists aren’t using telemedicine equipment. There is room to grow in the use of telemedicine equipment by the dental profession to reach more patients in need of services.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. Percentages are based on 1,926 valid responses.
Dentists at Work: Teamwork

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

- Informal learning on the job: 38%
- Formal educational coursework or training: 20%
- Continuing education/professional development: 19%
- Formal on-the-job training: 13%
- None: 6%
- Does not apply to my job: 4%

- Health care providers increasingly work in multidisciplinary teams, prompting educators and health policymakers to ask how best to train providers to communicate and coordinate care across professions. MDH included a question on its survey to shed light on these questions. As shown above, 52 percent of dentists reported that a formal training option best prepared them to work in multidisciplinary teams. Another one-third of dentists reported informal learning on the job to be most beneficial.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. Percentages are based on 1,974 valid responses.
According to the 2018 MDH survey, most dentists reported employing both dental assistants (88.2 percent) and dental hygienists (75.7 percent), and a fairly small share employed dental therapists (3.2 percent) or advanced dental therapists (2.2 percent). However, a small share of dentists were exploring hiring dental therapists (1.4 percent) and/or advanced dental therapists (1.8 percent).

Additional information not shown above:
- Ten and a half percent of dentists report dental assistants perform restorative procedures and 4.1 percent of dentist reported their dental hygienists can do the same. Another 3.3 percent of dentists reported their dental hygienists have collaborative agreements to practice outside of the office or in a non-traditional setting.
- Nearly equal shares of male and female dentists employ dental assistants and hygienists, but the same is not true for employing dental therapists. A higher rate of female dentists reported employing dental therapists (4.3 percent) and advanced dental therapists (3.6 percent) than male dentists. Just 2.6 percent of male dentists employed dental therapists and 1.6 percent employed advanced dental therapists.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. Percentages are based on 1,673 valid responses.
Stakeholders are increasingly concerned about the extent to which providers deliver care that is culturally sensitive to all communities. The MDH survey includes a question to understand which experiences best prepare health care providers to provide culturally competent care. As shown above, the largest share of dentists (just under one half) reported that they learn cultural competence best through informal, on-the-job learning.
The 2018 workforce survey included questions on career satisfaction in the past 12 months and overall. As shown above, the vast majority of dentists indicated that they were either “satisfied” or “very satisfied,” both in the past 12 months and overall. Dentists were more likely to report being very satisfied with their career overall compared to the last 12 months—a trend typical among health care professionals for which work satisfaction data is available. This is consistent with national findings which suggest that the increase in administrative work has dampened work satisfaction among health care providers.

Respondents were also asked about the reasons for their satisfaction and dissatisfaction. Many elaborated that they were most dissatisfied because of current government policies surrounding oral care, insurance, and medical assistance reimbursement issues. However, many also listed that their greatest satisfaction came from being able to help others and making a difference in the patients’ lives.

Source: MDH Dentist Workforce Questionnaire, 2016-2017. Percentages are based on 1,857 valid responses.
Geographic Distribution

By state planning areas

For more information:
https://apps.deed.state.mn.us/assets/lmi/areamap/plan.shtml
Nearly two-thirds of all dentists worked in the Twin Cities metro area. Another nine percent were located in the central and southeast regions of the state. The other regions of Minnesota have smaller shares of Minnesota’s licensed dentists. This distribution is common among other Minnesota health care providers, with the majority being employed in the heavily populated urban 7-county metro area.

Source: Minnesota Board of Dentistry and MDH Dentist Survey 2016-2017. MDH cleans and geocodes all addresses to identify location of practice. The chart above is based on 3,508 valid addresses; 7 percent of licensees have missing addresses or addresses that could not be geocoded. Missing addresses are assumed to be randomly distributed throughout the state and should not affect regional percentages.
Methodology

The data in this report come from two sources:

- The Minnesota Board of Dentistry (BOD) provides data on the entire population of dentists who have active licenses in the state of Minnesota. The BD maintains this database primarily for administrative and legal purposes. BOD 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 October, 2018. At that time, there were a total of 4,140 dentists with active Minnesota licenses, approximately 84.7 percent of whom indicated that their primary business address was in Minnesota. Analysts at MDH-ORHPC organize, clean, and geocode addresses that come from the board and the survey to identify practice locations (shown in Slides 19 and 20).

- The 2016-2017 Minnesota Department of Health-Office of Rural Health and Primary Care (MDH-ORHPC) Dentist survey collects additional demographic and workforce data from dentists. MDH-ORHPC administered the survey to all dentists who renewed their Minnesota license in calendar years 2016 and 2017. The response rate for this survey cycle was approximately 47 percent.
Visit our website at
https://www.health.state.mn.us/data/workforce/index.html
to learn more about the Minnesota health care workforce.

County-level data for this profession is available at the Health Care Workforce Data and Analysis page at the Minnesota Department of Health website at
https://www.health.state.mn.us/data/workforce/database/index.html

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