

Minnesota's Dental Hygienist Workforce

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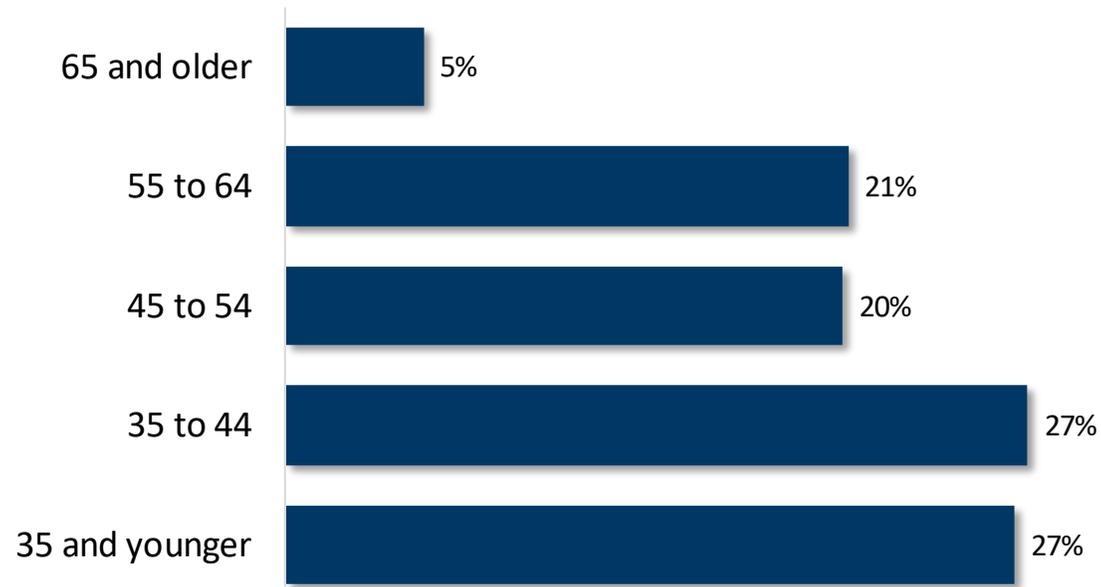
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Summary of Findings

- As of October 2018, there were **5,683** actively licensed dental hygienists in Minnesota, the majority of whom work in the 7-county metro area (see [slide 19](#)).
- The youngest cohort of dental hygienists entering the labor market is just over one quarter of the current workforce. New dental hygienists entering the workforce outnumber those intending to leave the workforce in the next five years. The majority of dental hygienists planning to leave the profession in five years are retiring (see [slides 4](#) and [8](#)).
- Ninety-two percent of Minnesota's dental hygienists are white, and roughly 73 percent speak only English in their practice without the help of an interpreter (see [slides 5](#), and [6](#)).
- Ninety-one percent of dental hygienists are working in a position related to their license. The majority of them work full-time (see [slide 7](#)).
- Sixty-five percent of dental hygienists plan to work in the field for more than 10 years (see [slide 8](#)).
- Collaborative practice agreements allow dental hygienists to work in community settings without the presence of a dentist on site. Only about 11 percent of dental hygienists report having collaborative agreements with their dentist, and nearly 72 percent never use them. Similarly, only four percent of dental hygienists have a restorative procedures credentials, but 73 percent report not performing the functions authorized. (see [slides 12](#) and [13](#)).
- Similar to many healthcare professions, most dental hygienists are satisfied with their work. Dental hygienists report higher levels of satisfaction with their career overall than they do with their work specifically in the last 12 months (see [slide 17](#)).
- Like many other health care provider types, the majority of dental hygienists practice in urban areas. Assuming the same *share* of people need dental services in urban and rural areas, rurally-based dental hygienists are facing a patient load almost two times greater than their urban counterparts (see [slide 20](#)).

Demographics: Age and Sex

Age of Minnesota Dental Hygienists



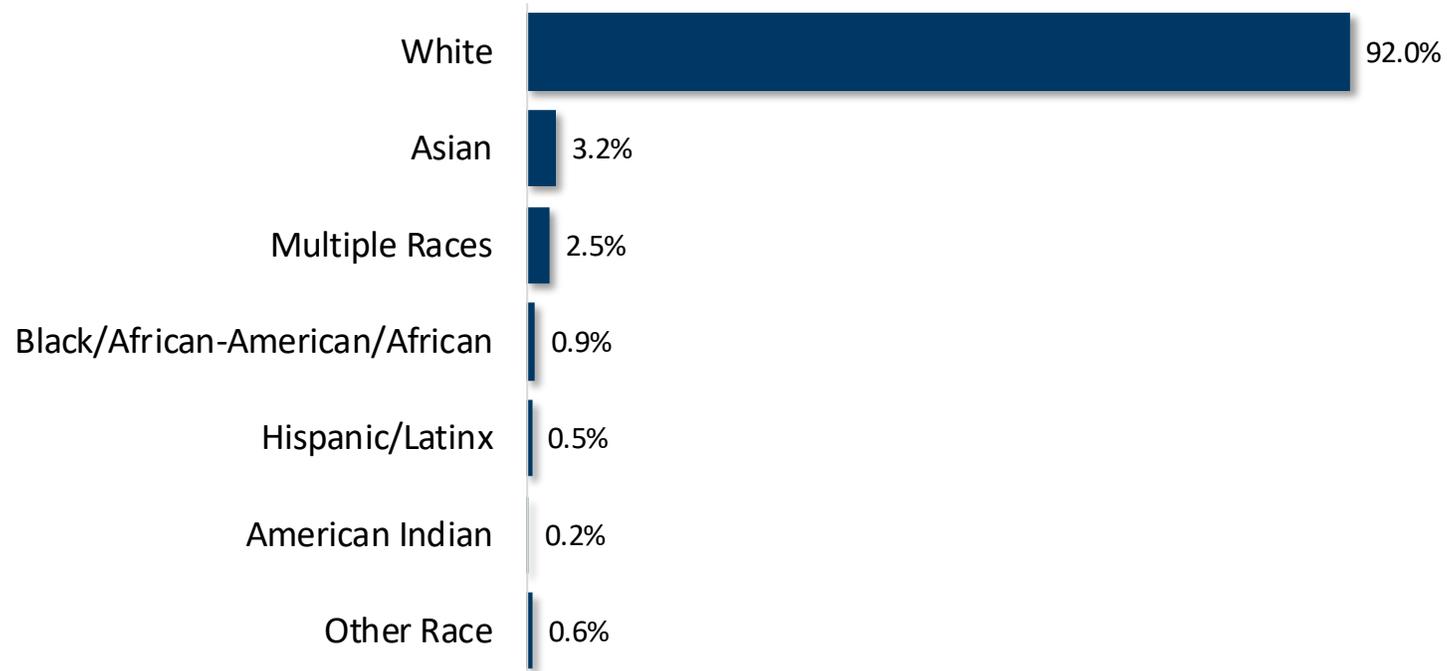
- Minnesota’s dental hygienist workforce has relatively similar shares of providers in the two youngest age cohorts, which account for nearly 54 percent of the workforce. The smallest share—five percent—of actively licensed dental hygienists are 65 and older and at or nearing retirement age. Currently, the median age of dental hygienists is 43.

Additional information not shown above:

- Roughly 98 percent of dental hygienists in Minnesota reported they were female. However, younger dental hygienists include more males than their older counterparts. For example, 31 percent of dental hygienists under 35 reported they were male compared to 10 percent of dental hygienists age 55 to 64.

Demographics: Race and Ethnicity

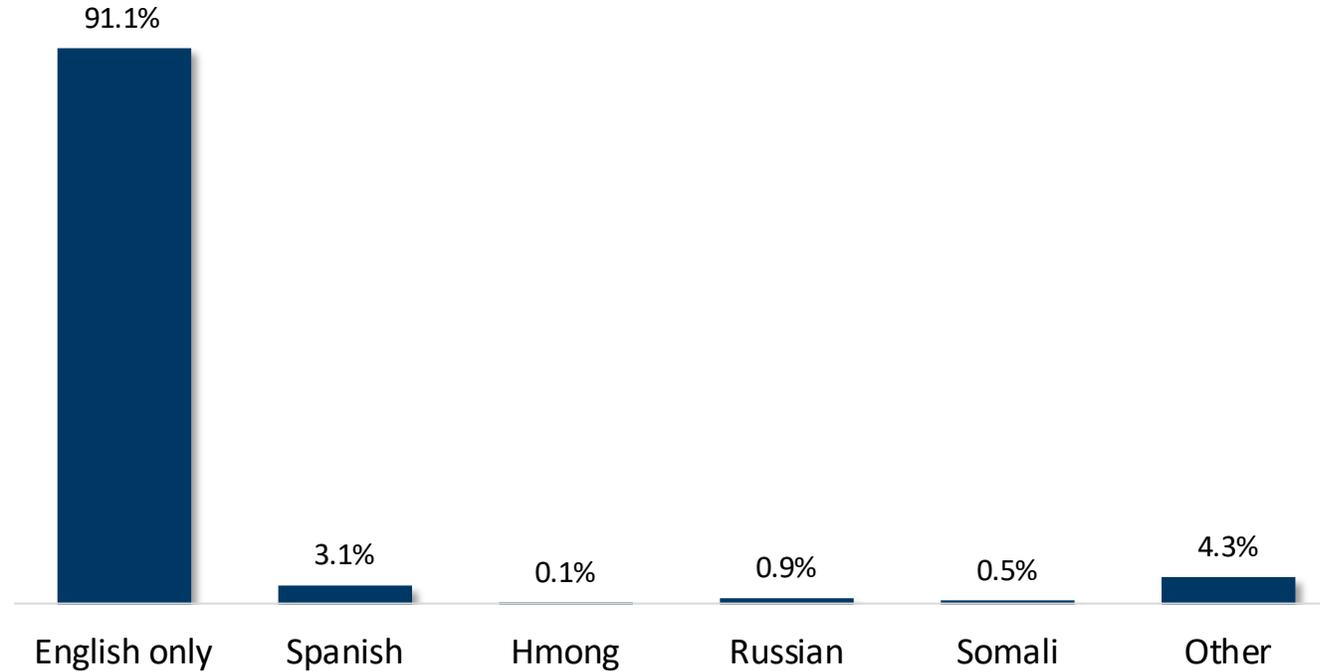
Race of Minnesota Dental Hygienists



- Typical of racial patterns among health care professionals, the majority (92.0 percent) of dental hygienists indicated they were white, with the second highest share (3.2 percent) indicating they were Asian.

Demographics: Languages Spoken in Practice

Languages Spoken by Minnesota Dental Hygienists in their Practices



- Approximately 73 percent of dental hygienists spoke only English in their practice. The second most commonly spoken language was Spanish. Very small shares of dental hygienists spoke other languages such as Hmong, Russian, or Somali with their patients. Just over four percent of dental hygienists reported speaking languages other than those shown above in practice. Common “other” languages mentioned included American Sign Language, Vietnamese, Amharic, and French.

Education: Educational Attainment

“What is the highest degree you have completed?”

Degree Type	Hygienists with this degree
Diploma or Certificate (no college)	0.3%
Some College, No Degree	0.3%
Associate’s Degree	54.0%
Certificate or Other Credential (post-Associate’s)	8.9%
Bachelor’s Degree	31.3%
Certificate or Other Credential (post-Bachelor’s)	1.3%
Master’s Degree	3.3%
Certificate or Other Credential (post-Master’s)	0.1%
Doctorate or Professional Degree	0.5%

- Approximately half of the dental hygienist workforce (54 percent) earned an associate’s degree as their highest degree. The second most popular is a bachelor’s degree, earned by about 31 percent of the workforce.

Education: MN Graduates by Institution

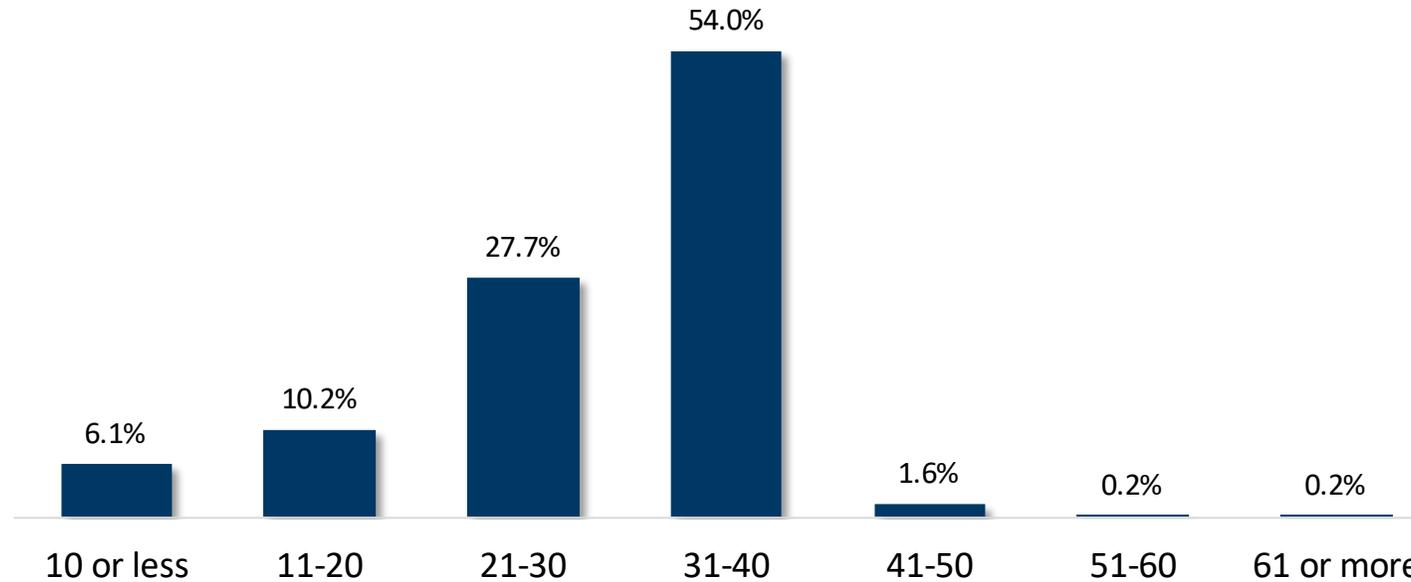
All Degrees Awarded from Minnesota Dental Hygiene Programs, by Year

Region	Institution	2015	2016	2017
Twin Cities	Argosy University	29	38	34
	University of Minnesota – Twin Cities	23	26	27
	Metropolitan State University	13	14	19
	Normandale Community College	20	18	19
	Century College	11	11	12
	Herzing University	42	27	1
Northeast	Lake Superior College	18	19	19
Northwest	Minnesota State Community and Technical College	20	18	20
Southeast	Minnesota State University – Mankato	51	52	58
	Rochester Community and Technical College	15	14	14
Central	St. Cloud Technical and Community College	12	14	13
Minnesota	Total	254	231	236

- Minnesota State University-Mankato produced the most dental hygiene graduates from 2015-2017. Argosy University (closed in 2019) and the University of Minnesota-Twin Cities also had a large number of graduates. From 2015-2017, the graduation rate was relatively steady at each institution. Herzing University is greatly different in this regard, as the number of graduates dropped dramatically over three years.

Employment: Employment & Hours Worked

Hours Worked in a Typical Week



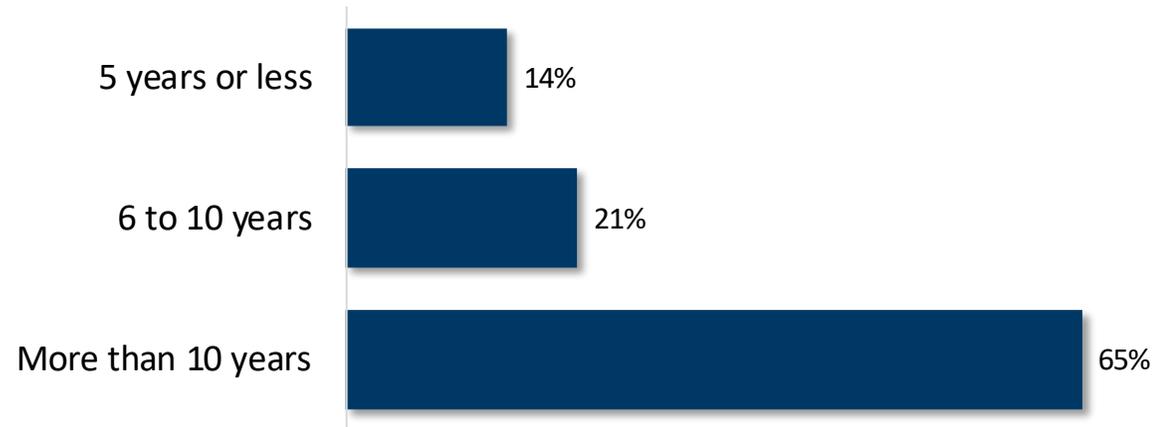
- The median work week for dental hygienists was 32 hours, with the majority (54 percent) of dental hygienists working between 31 and 40 hours per week. Sixty-three percent of dental hygienists consider their work schedule to be full-time.

Additional information not shown above:

- An estimated 91 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 (approximately 52 percent) were not seeking a position using their license.

Employment: Future Plans

“How long do you plan to continue practicing as a Dental Hygienist in Minnesota?”



- Approximately 14 percent of all actively practicing dental hygienists indicated that they plan to leave the field within five years. The majority – 65 percent – plan to practice for more than 10 years.

Additional information not shown above:

- Among the 14 percent of dental hygienists planning to stop working within the next 5 years, most said they planned to retire (74 percent). The remaining dental hygienists said they planned to leave to pursue a different career (8 percent); for family or other reasons (7 percent); because of burnout or dissatisfaction (5 percent) or for some other reason (4 percent).

Dental Hygienists at Work: Work Settings

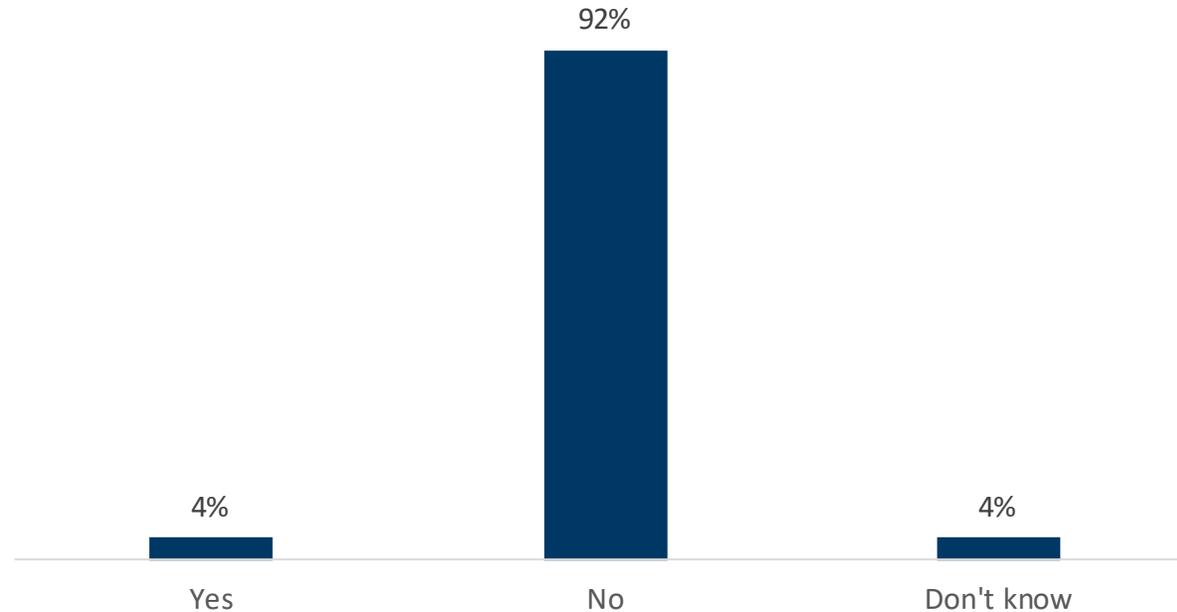
Dental Hygienists' Primary Work Settings

Setting	Share of Dental Hygienists Working in this Setting
Clinic/Professional Office/Health Center/Ambulatory Care	92.1%
Academic (Teaching/Research)	2.6%
Community/Faith-Based Organization	1.9%
Public Health Agency	0.4%
Hospital	0.3%
State, County, or City Agency	0.3%
Correctional Facility	0.2%
Insurance/Benefits Management Organization	0.2%
Long-Term Care Facility	0.1%
Commercial or Private Research Laboratory	0.1%
Other	1.5%

- The vast majority of dental hygienists (92.1 percent) work in a clinic, professional office, health center or in ambulatory/outpatient care setting.

Dental Hygienists at Work: Collaborative Agreements*

Dental Hygienists with Collaborative Agreements

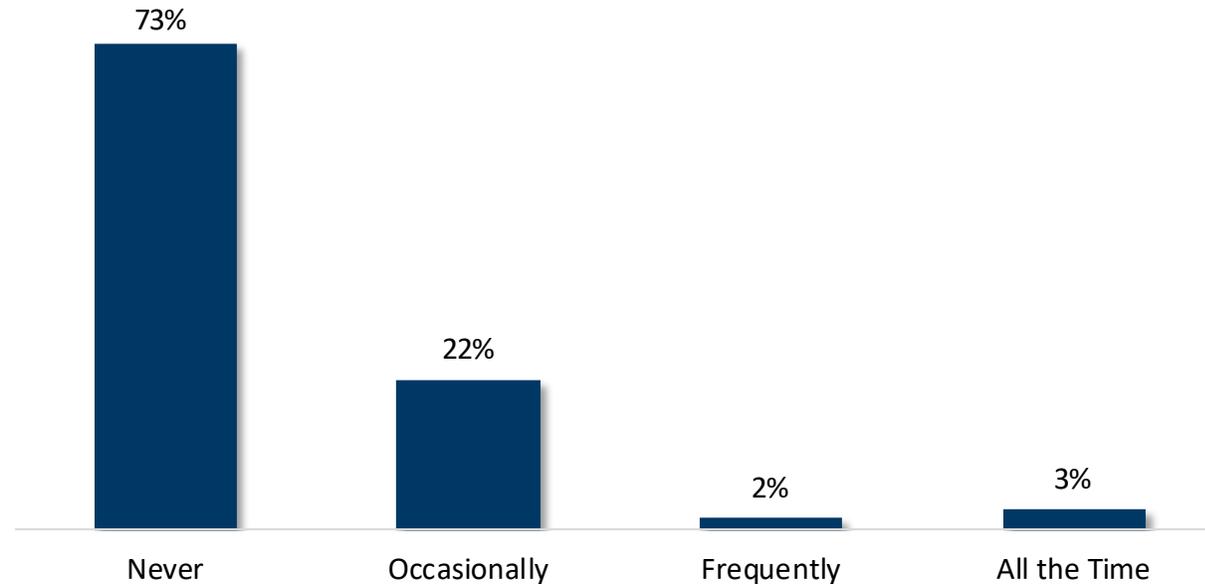


- A collaborative agreement is a signed document between a licensed dentist and a licensed dental hygienist that allows the dental hygienist to work in a non-traditional setting like schools or other community-based setting without the presence of a dentist on site. Providing oral health services in community settings is one way to address access to care challenges.
- Of the four percent who do have a collaborative agreement in place, about 69 percent report practicing under the agreement frequently or all the time while 11 percent never use it (data not shown above).

*Due to a technical issue, incorrect shares of dental hygienists entering into and using collaborative agreements were published. The errors have been corrected.
Revised 9/29/2021.

Dental Hygienists at Work: Restorative Procedures

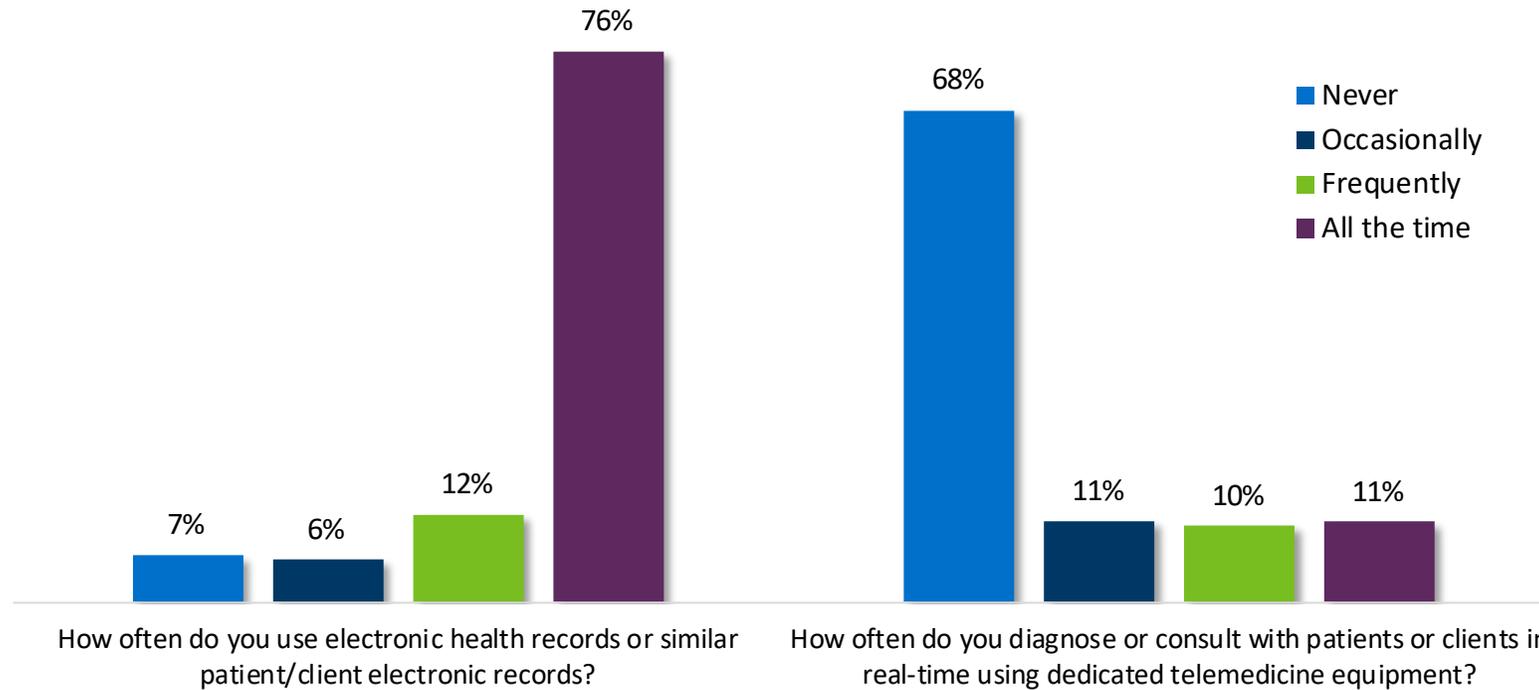
How Often Dental Hygienists Perform Restorative Procedures



- The survey asked dental hygienists if they have a restorative procedures credential. This credential allows dental hygienists to perform “expanded functions” or procedures beyond their typical scope of practice, freeing up the dentist to perform additional procedures. Examples of expanded functions include placing, contouring, and adjusting amalgam restorations, glass ionomers, class I and V supragingival composite restorations, adapting and cementing stainless steel crowns.
- Approximately four percent of dental hygienists report having the credential to perform restorative procedures (data not shown above). Among this group, three percent perform these procedures all the time, while 73 percent report never doing them.

Dental Hygienists at Work: EHRs and Telemedicine

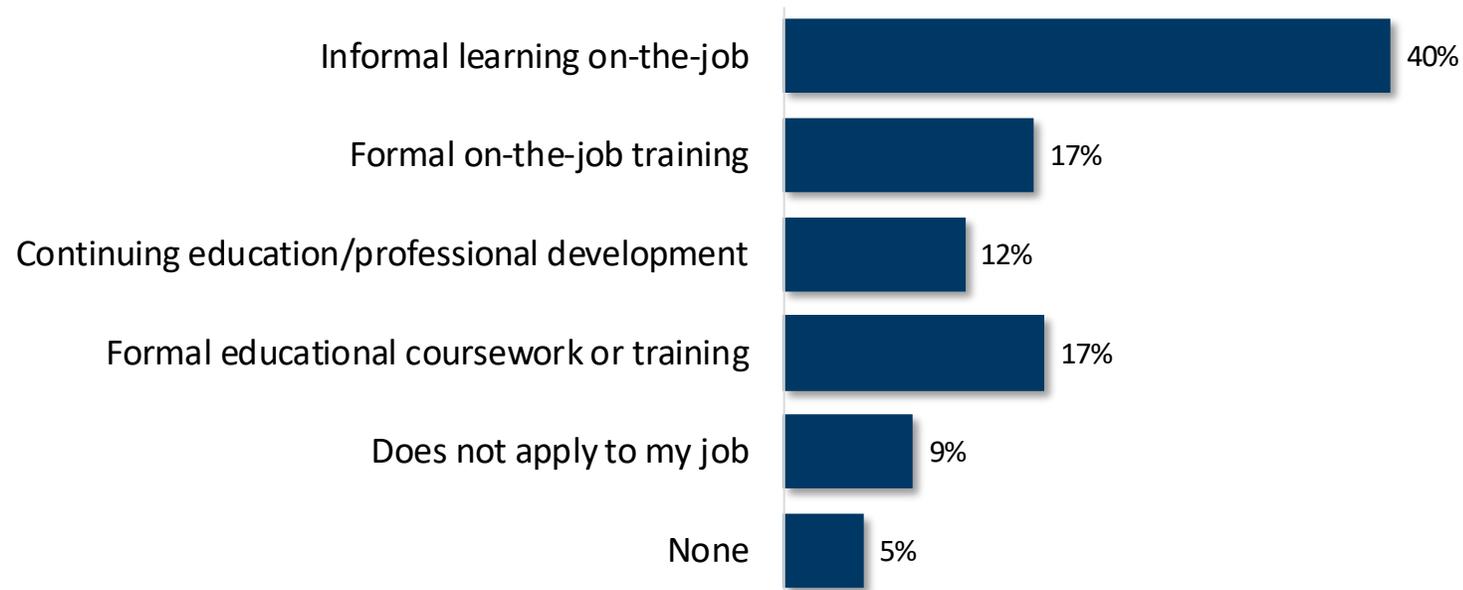
Dental Hygienists' Use of Electronic Health Records and Telemedicine Equipment



- The MDH workforce survey includes questions on the use of technology in health care settings. The results show that three-fourths of dental hygienists use electronic patient records “all the time.”
- Most dental hygienists report never using telemedicine equipment to diagnose or consult with patients. This indicates untapped capacity in the use of telemedicine to deliver oral health services.

Dental Hygienists at Work: Teamwork

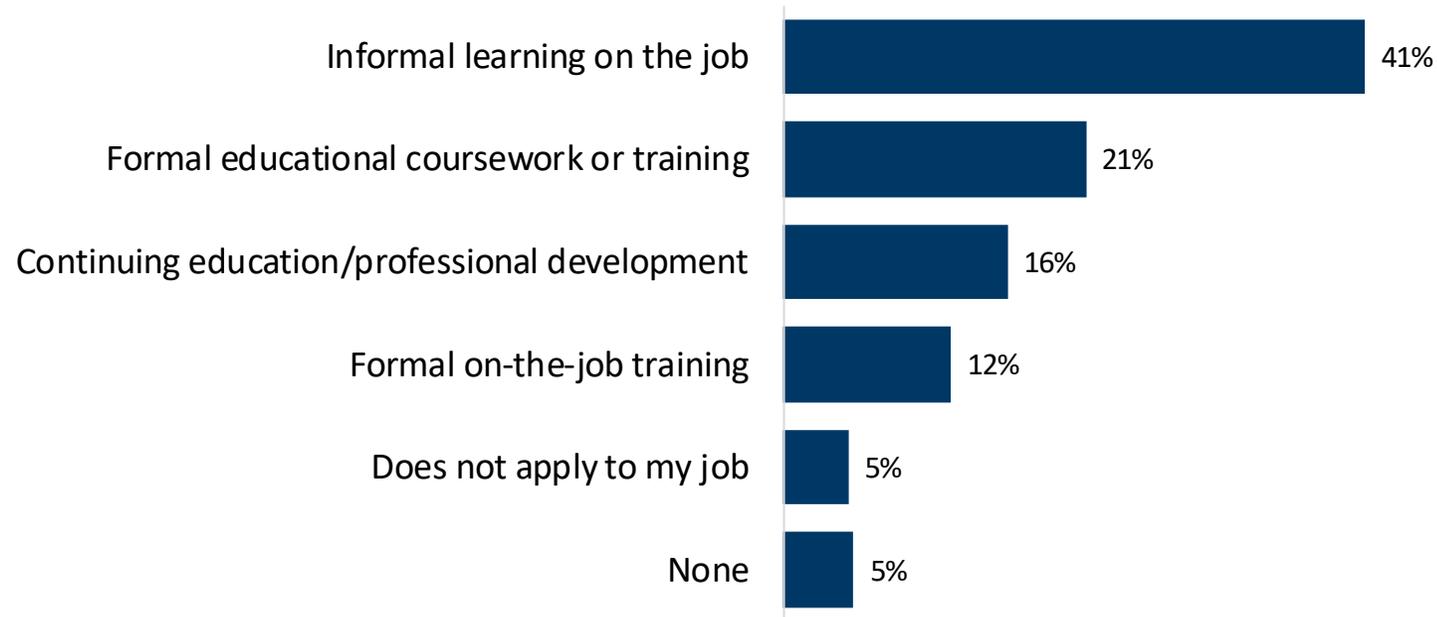
“Which of the following work or educational experiences best prepared you to work in a multidisciplinary team when providing care?”



- Health care providers increasingly work in multidisciplinary teams, prompting educators and health policymakers to ask how best to train providers to communicate and coordinate across professions. MDH included a question on its survey to shed light on these questions. As shown above, over half of dental hygienists reported that on the job training/learning *best* prepared them to work in multidisciplinary teams.

Dental Hygienists at Work: Cultural Competence

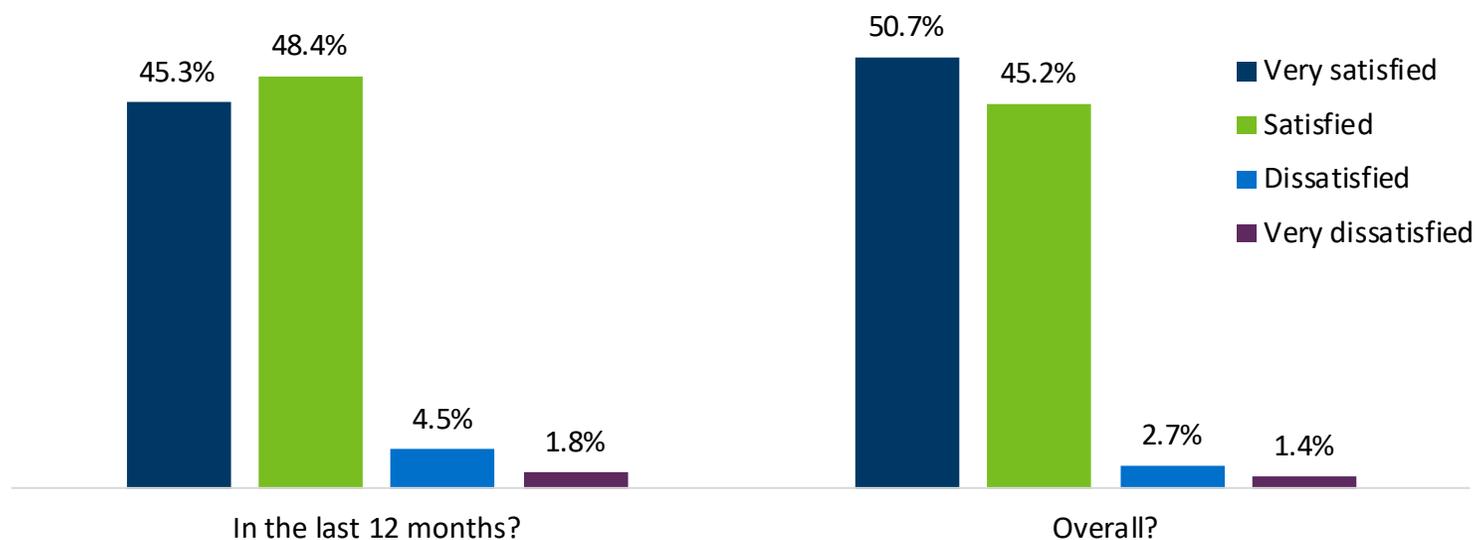
“Which of the following work or educational experiences best prepared you to provide culturally competent care?”



- 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 dental hygienists (just over 40 percent) report that they learn cultural competence *best* through informal, on-the-job learning followed by educational coursework (21 percent) and continuing education or professional development (16 percent).

Dental Hygienists at Work: Career Satisfaction

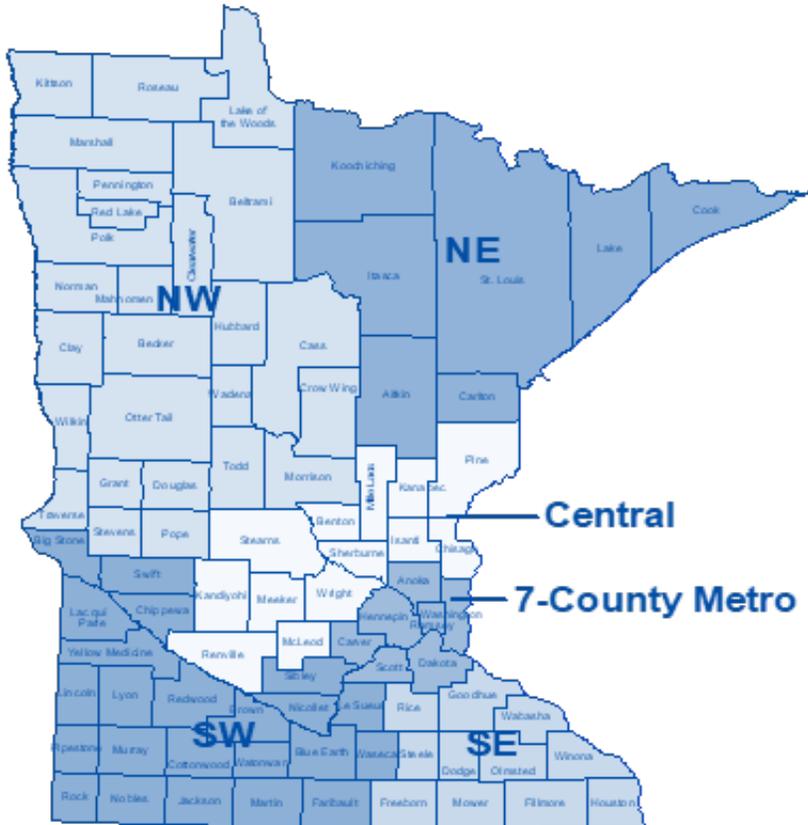
How satisfied have you been with your career....



- The survey included questions on career satisfaction in the past 12 months and overall. Dental hygienists reported being only slightly less satisfied with their career in the last 12 months as compared to their career overall.

Geographic Distribution: Two ways to present geography

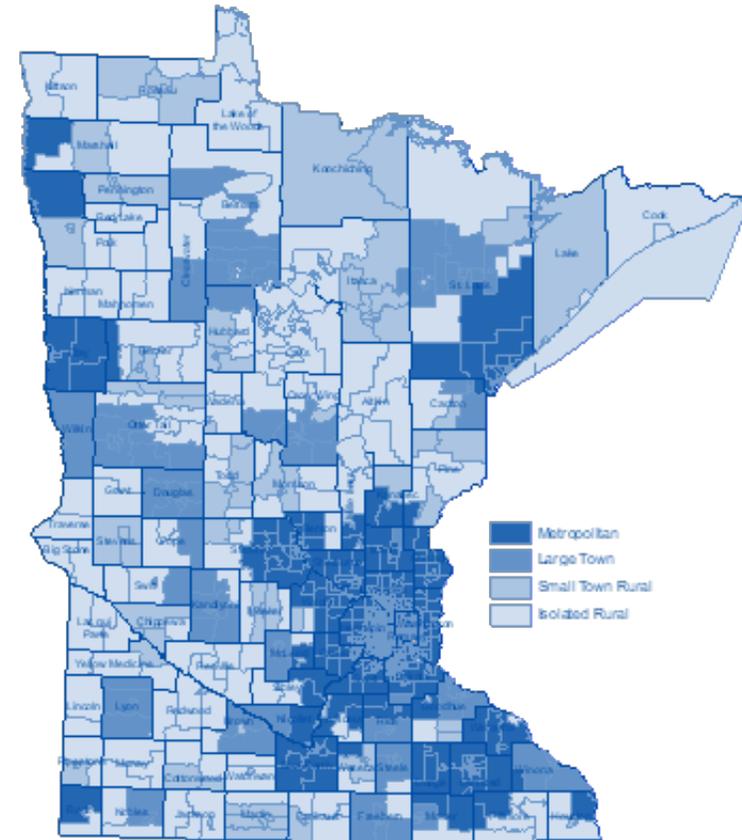
By state planning areas



For more information:

<https://apps.deed.state.mn.us/assets/lmi/areamap/plan.shtml>

By rural-urban commuting regions (RUCAs)



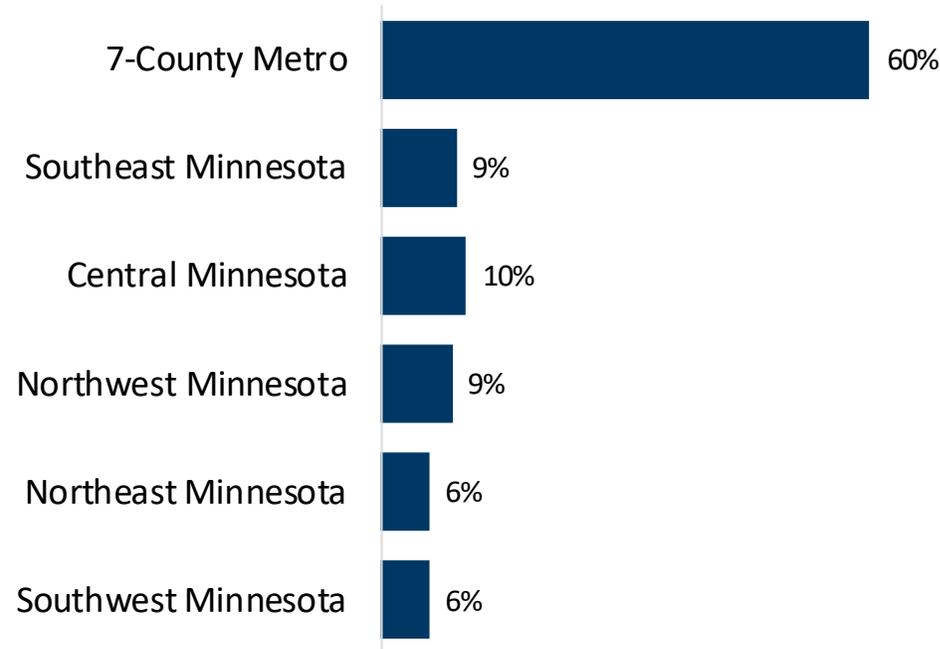
Source: Minnesota Department of Health
Developed by the Health Resources and Services Administration's
United States Department of Agriculture, Economic Research Service and
WVAMI Rural Health Research Center at the University of Washington.

For more information:

<https://www.health.state.mn.us/data/workforce/method.html#ruca>

Geographic Distribution: by Planning Area

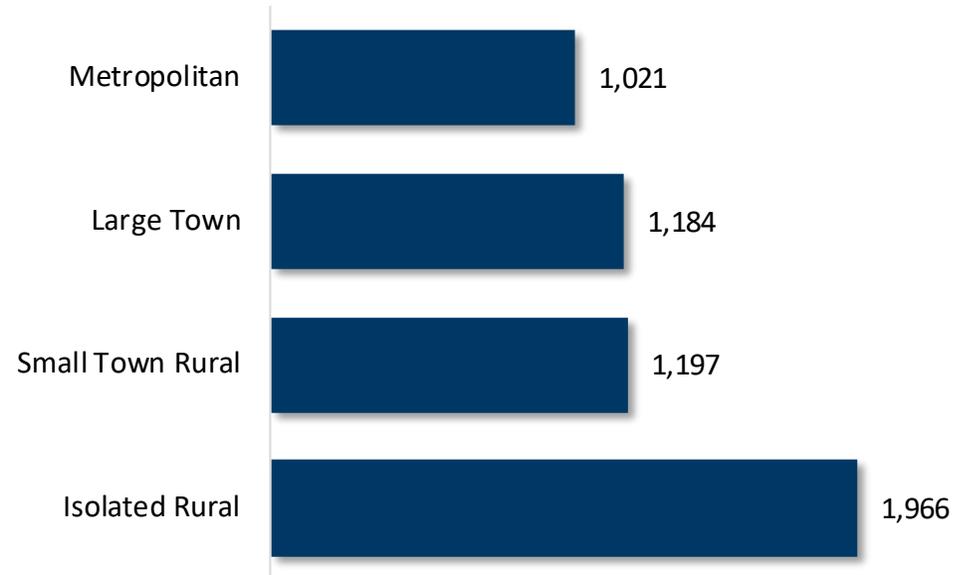
Share of Dental Hygienists by State Planning Area



- Almost two-thirds of all dental hygienists work in the 7-County metro area. Between 9 and 10 percent are located in each of the three regions of the state—the southeast, northeast, and central. Other regions of Minnesota have smaller shares of licensed dental hygienists. This geographic distribution is similar to other health care providers, where the majority are employed in the Twin Cities metropolitan area (home to 55 percent of the state’s population).

Geographic Distribution: by Rurality

Minnesota Population-to-Dental Hygienist Ratio, by level of rurality or RUCA



- Rural-Urban Commuting Areas (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. The graph shows the share of the population for every one dental hygienist in metropolitan, large town, small town rural, and isolated rural areas.
- As shown, there are 1,021 people to every one dental hygienist in metropolitan area. Dental hygienists in large town and small town rural areas each serve about 150-175 more people than those in metropolitan area. Dental hygienists practicing in isolated rural areas serve nearly twice as many people as their metro area counterparts.

Additional information not shown above:

- While the population-to-provider ratio for dental hygienists is highest (worse) in isolated rural areas, this ratio is much lower (better) than that of dentists practicing in the same regions. The population-to-provider ratio for dentists in isolated rural areas is 3,328. With a lower population-to-provider ratio, dental hygienists may be in a position to better extend access to preventive oral health services.

Methodology

The data in this report come from two sources:

- The **Minnesota Board of Dentistry (BOD)** provides data on the entire population of dental hygienists who have active licenses in the state of Minnesota. The BOD 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 **5,683** dental hygienists with active Minnesota licenses, approximately 53 percent of whom indicated that their primary business address was in Minnesota. Analysts at the Minnesota Department of Health Office of Rural Health and Primary Care clean, organize, and geocode addresses that come from the board and the survey, which is how we can 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) Dental Hygienist survey** collects additional demographic and workforce data from dental hygienists. MDH-ORHPC administered the survey to all dental hygienists who renewed their Minnesota license in the 2016 and 2017 calendar years. The response rate for this survey cycle was approximately 47 percent.

Notes

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

<https://www.health.state.mn.us/data/workforce/database/index.html>

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