

Dental Hygienists in Minnesota: A Snapshot of the Employment Market, 2011-2012

The Minnesota Department of Health (MDH), with grant support from the U.S. Health Resources and Services Administration (HRSA),ⁱ conducted a study to understand the employment market for dental hygienists in Minnesota. The study employed three methods to assess supply and demand: interviews with dental hygiene education program directors (2011-2012), a survey of dental hygienists (2012) and a survey of dental clinics (2011-2012). Key findings are summarized below. A more detailed report is available on request.

Introduction

Dental hygienists provide preventive, educational and therapeutic oral hygiene services to reduce the incidence and severity of periodontal disease and caries. The number of actively licensed dental hygienists in Minnesota has grown steadily over the years, but limited data has been available on the profession’s supply and demand in the state.

Recent reports from the Bureau of Labor Statistics (BLS) indicate that the dental hygiene profession is projected to grow by 38 percent by 2020, a much faster rate than the average growth rate for a profession.ⁱⁱ The unemployment rate for dental hygienists in Minnesota was lower than the state’s general unemployment rate in 2012 (3.3 percent for dental hygienists versus 5.8 percent overall).ⁱⁱⁱ However, anecdotes from Minnesota suggest that new dental hygiene graduates are currently unable to find jobs in the field, and employed hygienists report wage and hour reductions, indicating a possible surplus of dental hygienists in the state. This study sought to shed light on those supply and demand issues.

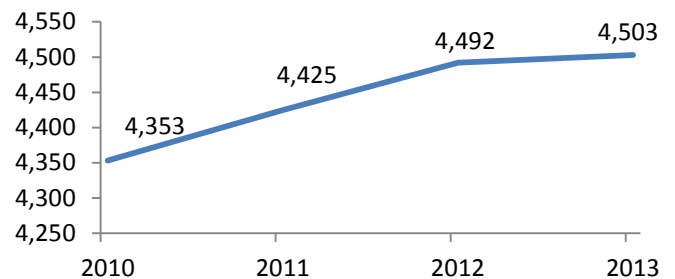
Dental hygienist survey

Between March and May 2012, MDH sent surveys to 1,108 dental hygienists. The response rate was 76 percent. MDH also analyzed licensing data from the Minnesota Board of Dentistry (BOD).

Number and location of dental hygienists

The number of active dental hygienists in Minnesota has steadily increased. Between October 2010 and March 2013, the total number of dental hygienists actively licensed and residing in the state increased 3.4 percent (Figure 1).^{iv}

Figure 1. Number of licensed dental hygienists in Minnesota, 2010-2013



Source: Minnesota Board of Dentistry. Note: These totals refer specifically to individuals with mailing addresses in Minnesota.

The great majority (88 percent) of licensed dental hygienists reside in urban and large rural areas of the state, though only 68 percent of the Minnesota population resides there.^v

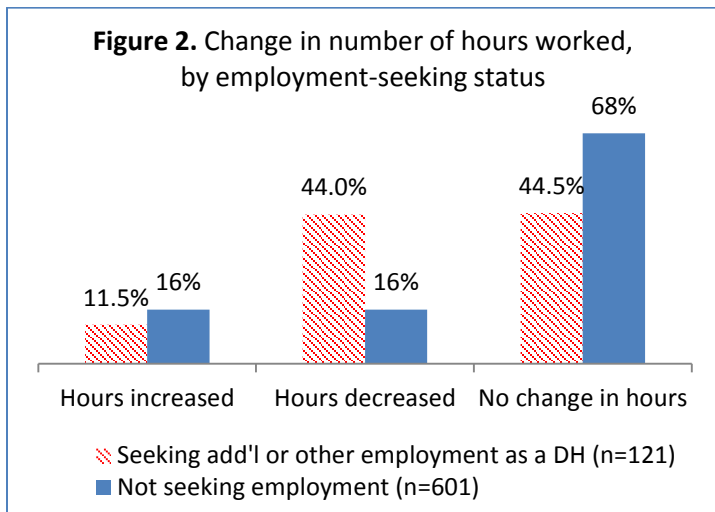
Employment status and compensation

An estimated 20 percent of the dental hygienists surveyed said they were currently seeking employment: 3 percent were unemployed and seeking employment and 17 percent were employed and seeking additional work. Of those employed and seeking employment, 33.5 percent reported a desire for more hours as their primary motivation.

The median pay rate for dental hygienists has remained fairly consistent over the past four to five years. National studies reported the average pay in 2007 at \$32.86 per hour and \$33.47 in 2008.^{vi} This study found the mean rate of pay statewide to be \$33.14, with higher average rates in urban and large rural areas compared to small rural and isolated rural areas.

Half of the dental hygienists reported an increase in pay over the previous two years, while 44 percent reported no change in pay rate. Over half (64 percent) said their weekly hours had stayed the same over the past two years, while 14 percent reported an increase in hours and 21 percent a decrease.

Those dental hygienists employed and currently seeking employment were more likely to report lower hourly pay, a decrease in pay and/or a decrease in hours compared to those who were currently employed (Figure 2).



Source: ORHPC dental hygienists survey, 2011. Note: Survey asked about any changes in hours over the past two years of employment as a dental hygienist (DH).

Education Program Survey

Between November 2011 and February 2012, MDH conducted structured telephone and in-person interviews with the directors of Minnesota’s 10 dental hygiene education programs.

Program types and location

Most of Minnesota’s 10 dental hygiene training programs are offered by public institutions; only two are in private colleges. Half are located in the Twin Cities metro area and half in Greater Minnesota. Minnesota has slightly more programs than neighboring states: Wisconsin has seven, Iowa five and South Dakota and North Dakota each have one.

Students

Approximately 210 dental hygiene students graduated from Minnesota’s dental hygiene training programs in 2012, a decline from recent years. The great majority of students were female; only 13 (6 percent) of the 228 students entering the programs in 2011 were male.

Post-graduation employment

On average, 60 percent of the current graduates have found jobs in Minnesota, although many were only able to find part-time employment. Employment placement rates varied considerably by program, ranging from 29 to 95 percent. Of those graduates who stayed in the state, 30 percent (on average) found jobs in rural areas.

Dental Clinic Survey

In late 2011, MDH conducted a survey via mail and phone of 1,285 of Minnesota’s approximately 2,368 dental clinics. The total response rate was 89 percent. Most of the clinics surveyed (82 percent) were general, non-specialty clinics and the great majority (94 percent) were private practices.

Use of dental hygienists

Approximately 76 percent of all dental clinics surveyed employed dental hygienists. Compared to general clinics, specialty clinics were less likely to employ hygienists, with the exception of periodontics clinics (94 percent of which employed hygienists compared to 89 percent of general practices).

Recruitment

Just over half (52 percent) of dental clinics reported that the correct number of dental hygienists was available in the community, but nearly a third (27 percent) said there were too many. Only a small number (5 percent) said there were too few dental hygienists available, and 16 percent said they did not know if the supply was adequate.

Overall, 4 percent of clinics reported currently recruiting at least one dental hygienist. This compares to 9 percent of clinics that were recruiting for dentists. Among the clinics surveyed, an

estimated 94 dental hygiene jobs were open in Minnesota as of December 2011. This representative survey sample comprised about half of Minnesota’s dental clinics, so the statewide total of job openings at the time was likely higher.

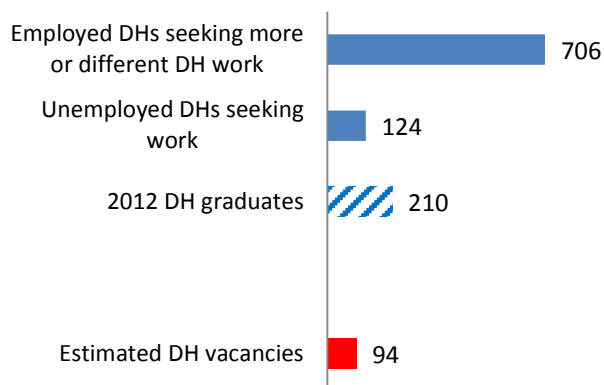
Clinics located in small rural areas and isolated rural areas were more likely to be recruiting compared to those in urban and large rural areas, though more jobs overall were available in these larger areas. An estimated 16 percent of the dental hygiene jobs open statewide were located in small rural and isolated rural areas.

Larger clinics are more likely to be recruiting dental hygienists, as were general, non-specialty clinics compared to specialty clinics.

Conclusion

Taken together, the three parts of the study suggest a possible imbalance in the supply of dental hygienists in Minnesota compared to the number of jobs available. Even as the number of licensed dental hygienists in the state continues to rise (Figure 1), estimates based on this study’s survey and graduate data suggest there may have been as many as 11 applicants per reported clinic vacancy at the time of the study (based on approximately 1,040 job seekers competing for an estimated 94 job openings at the time of the study) (Figure 3).^{vii}

Figure 3. A snapshot of Minnesota's dental hygienist (DH) market, 2011-2012



Source: MDH 2011 dental hygienist survey; 2011 dental clinic survey; and 2011 dental hygienist education program survey. See note vii for further explanation of estimates.

This imbalance appears to be reflected in other aspects of the study as well, including the relatively high percentage of dental hygienists seeking any or additional work in their profession (20 percent total of those surveyed) and the 44 percent of those job seekers who reported a decrease in hours in their past two years of employment as a dental hygienist (Figure 2).^{viii} The small number (4 percent) of clinics recruiting for hygienists further suggests the tight job market faced by this profession (Figure 3).

It is important to note that this is a snapshot in time, and the data do not account for several factors. No data were collected on plans to retire, or the full-time or part-time status of the surveyed hygienists or the open positions. Dental hygienists were not surveyed on their intentions to continue to practice in the field; it is possible that some may plan to leave the profession entirely to up-skill and seek advanced credentials as dental therapists (a new mid-level oral healthcare provider) or as dentists. Finally, the study did not account for job seekers from outside the state.

Notes

ⁱ Funding for the studies was made possible in part by a grant from the Health Resources and Services Administration Grants to States to Support Oral Health Workforce Activities, Award Number T12Hp14659, to the Minnesota Department of Health.

ⁱⁱ Bureau of Labor Statistics, U.S. Department of Labor. “Occupational Employment Statistics May 2008.” Accessed December, 2012.

http://www.bls.gov/oes/2008/may/oes_MN.htm

ⁱⁱⁱ Bureau of Labor Statistics, U.S. Department of Labor. “Occupational Outlook Handbook, 2012-13 Edition: Dental Hygienists.” Accessed August 24, 2012.

<http://www.bls.gov/ooh/healthcare/dental-hygienists.htm>

^{iv} Board of Dentistry licensing data, 2010-2013. Since 1993, the Minnesota Department of Health’s Workforce Analysis and Planning Program has maintained a cooperative data-sharing relationship with several state licensing boards overseeing health care professions as directed in Minnesota Statutes 144.051 – 144.052, 144.1485, including the Board of Dentistry.

^v Licensing data from the Minnesota Board of Dentistry. Population data from U.S. Census and Minnesota Department of Health, Office of Rural Health and Primary Care, *Health Status of Rural Minnesotans*. 2011. The rural-urban categories used are based on Rural-Urban Commuting Areas (RUCAs). For more information on this methodology, see [Defining Rural, Urban and Underserved Areas in Minnesota](#).

^{vi} American Dental Hygienists' Association. "Survey of dental hygienists in the United States: 2007." American Dental Hygienists' Association: 2009. Bureau of Labor Statistics, U.S. Department of Labor. "Occupational Employment Statistics May 2008." Accessed December, 2012.

http://www.bls.gov/oes/2008/may/oes_MN.htm.

^{vii} The survey of dental hygienists found that up to 830 of the respondents were currently looking for work as a dental hygienist (706 were employed and looking for additional work and 124 were unemployed and looking). In addition, the survey of educational programs found that 210 students graduated from Minnesota's dental hygiene programs in 2012. Combining these graduates with the currently licensed job seekers, a total of 1,040 dental hygienists were potentially looking for additional or any work in Minnesota. Based on the dental clinic survey, which found that 4 percent of clinics were recruiting for at least one dental hygienist, the state had an estimated 94 dental hygienist jobs available at that time (applying the 4 percent vacancy rate to the state's 2,368 dental clinics).

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