

## **Wisconsin Dental Hygienist Workforce Briefing**

### Statewide workforce demographics and characteristics

In 2023, the Wisconsin Department of Health Services' Oral Health Program (OHP) partnered with the Department of Safety and Professional Services to survey the Registered Dental Hygienist (RDH) workforce as part of their licensure renewal process. The tables and figures that follow outline the results of the survey.

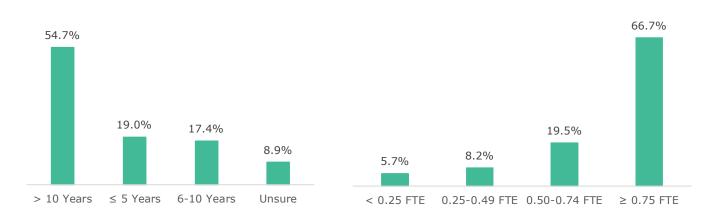
The survey response rate among RDHs was 72.1% (3,964). Demographic results (Table 1) show a workforce that predominantly identifies as female (98.7%) and non-Hispanic white (94.6%), while age of the workforce is more evenly distributed. Of respondents, 81.7% indicated that they worked in a direct care position, and of these providers, 54.7% indicated they planned on working more than ten years, followed by 19.0% and 17.4% noting they planned on remaining in the workforce for five years or less, or six to ten years, respectively (Figure 1). Additionally, just 9.6% of these respondents were identified as being a Full Time Equivalent (FTE) employee across practices and clinics located in Wisconsin. The top three reasons given by those that indicated that they do not work in a direct care position (17.8%), or being retired (16.1%) (Figure 3). Most survey respondents reported being an employee of clinics located in Wisconsin. In fact, 94.6% of the time respondents noted that they were permanent employees as opposed to an owner, temp, or independent contractor. Furthermore, of those that listed a practice located in Wisconsin, 53.0% and 33.3% were group or solo practices, respectively (Figure 4).

Table 1: Workforce Demographics		
	n	%
Completed Survey	3,964	72.1
Age		
20-34	1,021	25.8
35-49	1,481	37.4
50-64	1,243	31.4
65+	219	5.5
Race and Ethnicity		
White alone	3,540	94.6
Black alone	30	0.8
Asian alone	70	1.9
Hispanic	81	2.2
American Indian or Alaska Native alone	15	0.4
People identifying as other or multiple races and/or ethnicities	7	0.2
Gender		
Woman	3,786	98.7
Man	48	1.3
People identifying as another gender	3	0.1

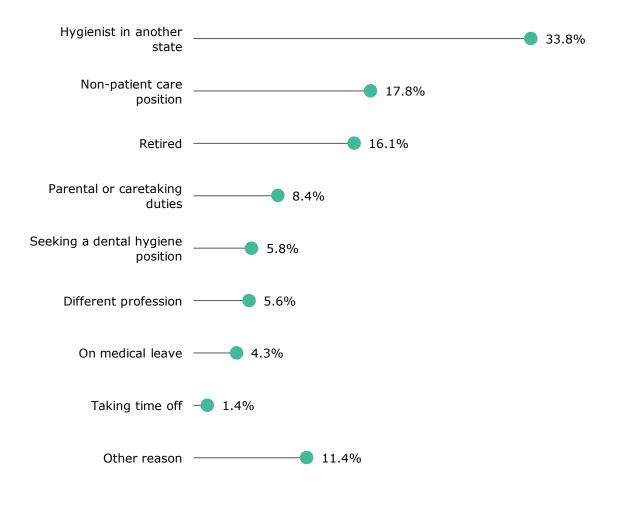
Workforce demographics among those that submitted a survey. Individual counts may not equal the total count of completed surveys due to some respondents not declining to answer demographic questions.

## Figure 1: Number of years remaining as a hygienist in Wisconsin.

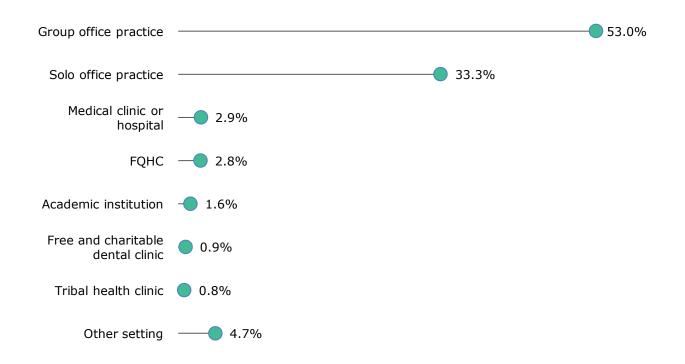
Figure 2: FTE status among respondents working at practices located in Wisconsin.



# Figure 3: Current work status among those currently licensed to practice in Wisconsin but are not providing direct patient care.



#### Figure 4: Practice settings among respondents working at a practice located in Wisconsin.



## **County-level workforce characteristics**

To identify areas of the state where potential RDH shortages may exist, the FTE status of RDHs and a ratio of population per FTE were mapped to specific counties using the addresses of clinics and practices listed by respondents. If a provider listed a clinic located in another state, the number of hours worked at that clinic were excluded from FTE calculations. Intervals were determined using Health Resources and Services Administration's (HRSA) Shortage Designation Management System guidelines to generate the results shown in *Figure 5*. To demonstrate the impact of the population per FTE ratios, circles with varying degrees of size are used, with the smaller the circle the more ideal the ratio. Total FTE by county was variable across the state, with a high of 273.5 total FTE in Dane County, and a low of 1.2 total FTE in Adams County. Like total FTE, population per FTE ratios were also variable, with a low of 1,614:1 in Menominee County, and high of 17,932:1 in Adams County. Further, the number of FTE lost within the next five years provides insight into areas of the state that may encounter a greater burden of population to provider ratios in the future. Figure 6 maps expected FTE losses and population to provider ratio intervals by county. These estimates assume that incoming workforce will not replace the expected FTE losses, which is not true in practice as workforce changes over time. However, given the workforce challenges in rural areas, these estimates may help identify priority areas. The highest FTE losses are expected to occur in the counties with large urban areas (Dane, Milwaukee, Waukesha, and Brown) which is anticipated given the number of providers localized in those areas. The greatest workforce needs paints a different picture as four of the top five counties with the greatest impact to population to FTE ratios are designated as rural counties (Iron, Dodge, Jackson, and Buffalo).

## Workforce Characteristics: FTE and Population per FTE Ratio by County

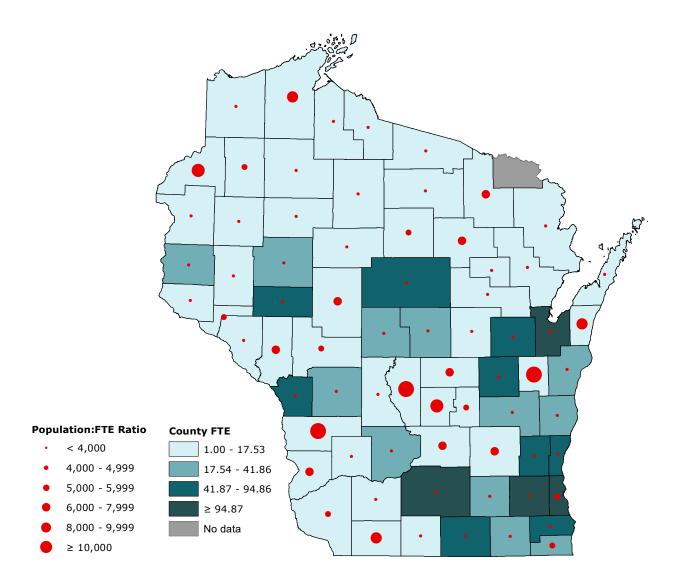


Figure 5: The smaller the circle the more ideal the population per provider ratio. Each successive interval indicates a greater burden on the dental care providers in a particular county.

\*Population:FTE ratio intervals are defined using HRSA's Manual for Policies and Procedures: Shortage Designation Management System. Health Resources and Services Administration, Manual for Policies and Procedures (hrsa.gov), accessed 03/01/2024.

### Workforce Characteristics: Expected FTE Lost with the Next 5-Years

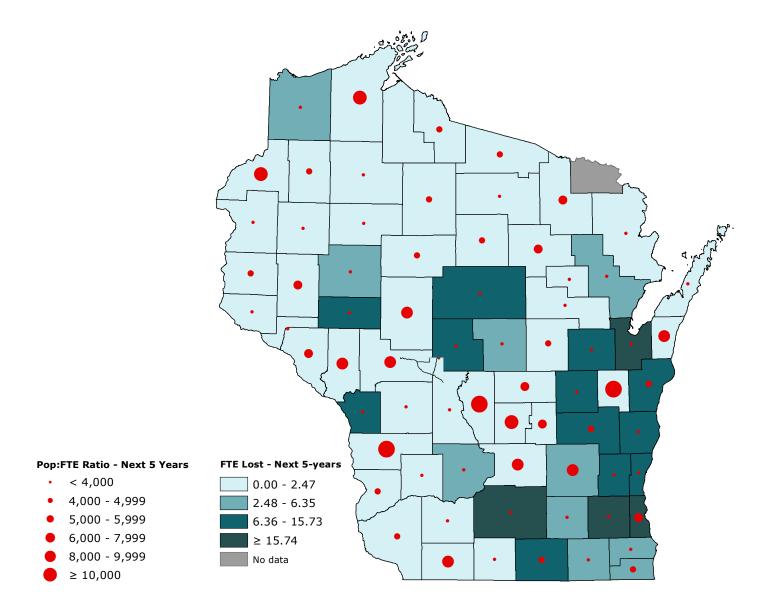


Figure 6: FTE Estimates do not account inflow and outflow of workforce at the county-level nor those entering the workforce. Population per FTE ratios were determined using 2030 population projections.

\*Population:FTE ratio intervals are defined using HRSA's Manual for Policies and Procedures: Shortage Designation Management System. Health Resources and Services Administration, Manual for Policies and Procedures. (hrsa.gov), accessed 03/01/2024.

\*\*Population:FTE Ratio Methodology: County level population projections for 2028 were used to determine ratios. These estimates were determined by calculating the yearly population growth factor for each county for years 2010-2019.The decade average growth factor per county was then calculated using these yearly growth factors. The decade average growth factor was then used to project populations through 2028. This was done using the following equation:

- (Population County X in 20XX \* Decade Average County-level Growth Rate) + Population County X in 20XX = Population County X in 20XY.
  - Example: Population of Dane County in 2025 = 300,000; Average Decade Growth Factor = 0.012
    - (300,000 x 0.012) + 300,000 = 303,600 → 2026 population

## Limitations

There are number of limitations to note, most of which occur at the county-level. Roughly 11.2% of practicing hygienists had incomplete address information for at least one of their listed clinics. This made it impossible to ascertain the county of service associated with these clinics. Additionally, the map highlighting FTE losses only accounts for population changes and assumes no workforce will replace those planning on exiting the workforce with the next 5-years. The statewide data assumes those with incomplete practice address information work in Wisconsin if they indicated that they provide direct care in the state. The impact of this assumption is likely to have a minimal impact on the statewide data outside of those that may work in counties that border state lines.