Labor Market Analysis

Dental Hygienists







Prepared by the Central Valley/Mother Lode Center of Excellence

Table of Contents

| Summary | |
|---|-------------|
| Introduction3 | |
| Occupational Demand3 | |
| Wages4 | |
| Job Postings4 | |
| Education | 5 6 6 |
| Supply7 | |
| Student Outcomes8 | |
| Conclusion9 | |
| Recommendation9 | |
| Appendix A: Methodology & Data Sources1 | 0 |

<u>COVID-19 Statement:</u> This report includes employment projection data by Emsi. Emsi's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version. To make a request, contact Nora Seronello by phone at (209) 575-6894 or by email seronellon@mjc.edu.

Summary

Please note the COVID-19 statement on page 2 when considering this report's findings.

This study conducted by the Central Valley/Mother Lode Center of Excellence examines labor market demand, wages, skills, and postsecondary supply for dental hygienists. One occupation related to dental hygienists was identified for Taft College: 29-1292, Dental Hygienists.

Key findings:

- Occupational demand Nearly 980 workers were employed in jobs related to dental
 hygienists in 2019 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. The
 largest and only related occupation is dental hygienists with 975 workers in 2019, a projected
 rate of employment decline by 3% over the next five years, and 64 annual openings.
- **Wages** Dental hygienists earn an entry-level wage of \$41.35/hour in the subregion and \$41.10/hour in the region.
- **Employers** Employers with the most job postings in the subregion are Stynt, Wellpath, and Western Dental Services.
- Occupational titles The most common occupational title in job postings in the subregion is dental hygienists. The most common job title is dental hygienist.
- **Skills and certifications** The top baseline skill is communication, the top specialized skill is dental hygiene, and the top software skill is practice management software. The most in-demand certification is a dental hygienist certification.
- Education An associate degree is the typical education level required for dental hygienists.
- **Supply** Analysis of postsecondary completions in the region shows that on average 122 awards were conferred in the Central Valley/Mother Lode region each year.

Based on a comparison of occupational demand and supply, there is an <u>oversupply</u> of 58 trained workers in the subregion and an <u>oversupply</u> of eight workers in the region.

As a result of these findings, the addition or expansion of a dental hygienist program is not recommended. Based on the college-level success metrics from LaunchBoard, it is recommended that Taft College be allowed to make adjustments to its existing program as all counted students obtained employment in their field of work and far exceeded common outcomes in terms of median change of earnings and obtaining a living wage.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Taft College to provide labor market information for dental hygienists. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. The average living wage for a single adult in the SCV/SML subregion is \$10.30/hour.¹ Analysis of the program and occupational data related to dental hygienists resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System code and title used in this report are:

• 29-1292, Dental Hygienists

The occupational titles, job descriptions, sample job titles, and knowledge and skills from the Bureau of Labor Statistics and O*NET OnLine are shown below.

Dental Hygienists

Job Description: Administer oral hygiene care to patients. Assess patient oral hygiene problems or needs and maintain health records. Advise patients on oral health maintenance and disease prevention. May provide advanced care such as providing fluoride treatment or administering topical anesthesia.

Knowledge: Medicine and Dentistry, Customer and Personal Service, English Language, Psychology, Biology

Skills: Speaking, Active Listening, Critical Thinking, Judgement and Decision Making, Monitoring

Occupational Demand

The South Central Valley/Southern Mother Lode subregion employed 975 workers in dental hygienist occupations in 2019 (Exhibit 1). The largest and only related occupation identified by the analysis is dental hygienists with 975 workers in 2019. This occupation is projected to decline by 3% over the next five years but is projected to have 64 annual openings.

Exhibit 1. Dental hygienist employment and occupational projections in the SCV/SML subregion

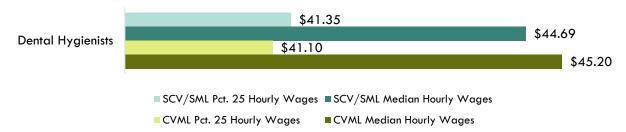
| Occupation | | | | | Annual Openings |
|-------------------|-----|-----|------|------|--------------------|
| Dental Hygienists | 975 | 948 | (26) | (3%) | 64 |

¹ The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: https://insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california/.

Wages

Exhibit 2 compares the entry-level and experienced wages of dental hygienists. Dental hygienists earn an entry-level wage of 41.35/hour in the subregion and 41.10/hour in the region.

Exhibit 2. Entry-level and experienced wage comparison in the SCV/SML subregion and region



Median salary data from Emsi shows that dental hygienists earn a median salary of more than \$92,950 annually in the subregion.

Exhibit 3. Median salaries for dental hygienists occupations

| Occupation | Median Salary |
|-------------------|---------------|
| Dental Hygienists | \$92,950.97 |

Job Postings

There were 68 job postings for the one occupation in the SCV/SML subregion from September 2020 to February 2021.² The employers with the most job postings are listed in Exhibit 4.

Exhibit 4. Top employers of dental hygienists by number of job postings

| Employer | Job Postings | % Job Postings |
|--------------------------------------|--------------|----------------|
| Stynt | 7 | 12% |
| Wellpath | 6 | 11% |
| Western Dental Services | 5 | 9% |
| Advantage Dental | 4 | 7% |
| Pacific Dental Services Incorporated | 4 | 7% |
| Western Dental | 4 | 7% |
| Alluvial Dental Center | 2 | 4% |
| Dental | 2 | 4% |
| Fresno Smile Makeovers | 2 | 4% |
| Interdent | 2 | 4% |

Exhibit 4 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across one O*NET OnLine occupation. The occupational title dental hygienists is listed in 68 job postings. Common job titles in postings include dental hygienist in 20 job postings, registered dental hygienist in 17 job postings, and hygienist in five job postings.

² Other than occupation titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

Exhibit 5. Top occupational titles in job postings for dental hygienists

| Occupational Title | Job Postings | % of Job Postings |
|--------------------|-----------------|----------------------|
| Dental Hygienists | 68 | 100% |

Education

Of the 68 job postings, 25 listed an education level preferred for the positions being filled. Of those, 52% requested an associate degree, 32% requested a master's degree, and 20% requested a bachelor's degree (Exhibit 6). A job posting can indicate more than one education level. Hence, the percentages shown in the chart below may total more than 100%.

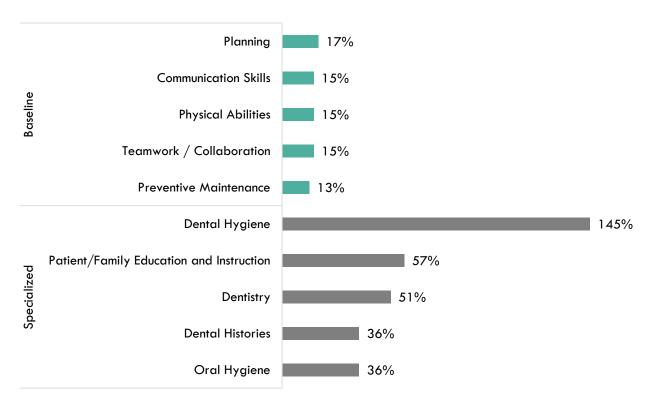
Exhibit 6. Education levels requested in job postings for dental hygienists

| Education Level | Job Postings | % of Job Postings |
|-------------------|-----------------|----------------------|
| Associate degree | 13 | 52% |
| Master's degree | 8 | 32% |
| Bachelor's degree | 5 | 20% |

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are communication, 17% of job postings, communication, 15%, and physical abilities, 15%. The top three specialized skills are dental hygiene, 145% of job postings, patient/family education and instruction, 57%, and dentistry, 51%.

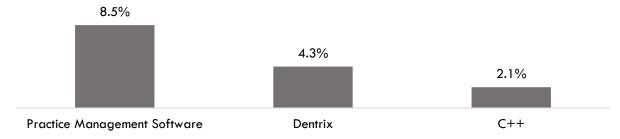
Exhibit 7. In-demand dental hygienist baseline and specialized skills



Software Skills

Analysis also included the software skills most in demand by employers. Practice management software and Dentrix were the top two software skills identified in job postings (Exhibit 8).

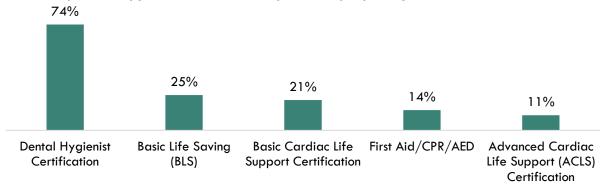
Exhibit 8. In-demand dental hygienist software skills



Certifications

Of the 68 job postings, 57 contained certification data. Among those, 74% indicated a need for a dental hygienist certification. The next top certifications are basic life saving and basic cardiac life support (Exhibit 9).

Exhibit 9. Top dental hygienist certifications requested in job postings



Education, Work Experience & Training

An associate degree is the typical education level required for dental hygienists (Exhibit 10).

Exhibit 10. Education, work experience, training, and Current Population Survey results for dental hygienists³

| Occupation | Typical Entry-level Education | Work Experience Required | Typical On-The-Job Training | CPS |
|-------------------|----------------------------------|--------------------------------|-----------------------------------|-------|
| Dental Hygienists | Associate degree | None | None | 59.2% |

Supply

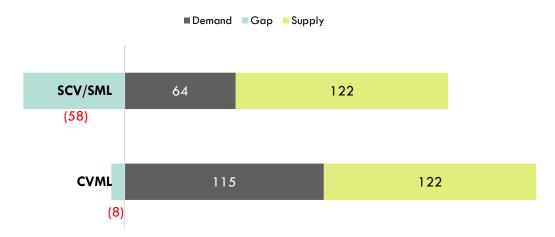
Analysis of program data from the California Community Colleges Chancellor's Office Data Mart included the TOP and CIP codes and titles: 124020 - Dental Hygienist and 51.0602 - Dental Hygiene/Hygienist. Analysis of the last three years of data shows that, on average, 122 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

Exhibit 11. Postsecondary supply for dental hygienists in the region

| TOP Code - Title | Colleges | Associate Degree | Award < 1 Academic Year | Award 1 < 2 Academic Years | Certificate 30 < 60 Semester Units | Subtotal |
|------------------------------------|------------------------------------|---------------------|----------------------------------|-------------------------------------|---|----------|
| 124020 Dantal Harriania | Fresno City | 26 | | | | 26 |
| 124020 - Dental Hygienist | Taft | 19 | | | 7 | 26 |
| 51.0602 - Dental Hygiene/Hygienist | San Joaquin Valley College-Visalia | 70 | | | | 70 |
| TOTAL | | 123 | 47 | 555 | 32 | 122 |

There is an oversupply of 58 dental hygienists workers in the SCV/SML subregion and an oversupply of eight workers in the region (Exhibit 12).

Exhibit 12. Dental hygienist workforce annual demand and supply in the SCV/SML subregion and region



Student Outcomes

Exhibit 13 summarizes employment and wage outcomes from the California Community College Chancellor's Cal-PASS Plus LaunchBoard for the TOP code related to dental hygienists. In the region, 45 dental hygienist students received a degree or certificate or attained apprenticeship journey status; 100% of students obtained a job closely related to their field of study; 340% reported a median change in earnings; and 97% attained a living wage.

Exhibit 13. Regional metrics for the TOP codes related to dental hygienists

| Metric | Dental Hygienist (Subregion) 124020 | Dental Hygienist (Taft College) 124020 |
|---|--|---|
| Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status | 45 | 16 |
| Number of Students Who Transferred | * | * |
| Job Closely Related to Field of Study | 100% | 100% |
| Median Change in Earnings | 340% | 231% |
| Attained a Living Wage | 97% | 93% |
| * denotes data not available. | | |

Conclusion

The entry-level wages of the one occupation exceed the SCV/SML subregion's average living wage. There were 68 job postings in the past six months for occupations related to dental hygienists in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is communication, and the top specialized skill is dental hygiene.
- The top software skill is practice management software.
- The top certification is a dental hygienist certification.

Based on a comparison of occupational demand and supply, there is an oversupply of 58 trained workers in the subregion and an oversupply of eight workers in the region.

Recommendation

As a result of these findings regarding the current oversupply of dental hygienists in the subregion and region, the addition or expansion of a dental hygienist program is not recommended. Based on the college-level success metrics from LaunchBoard, it is recommended that Taft College be allowed to make adjustments to its existing program as all counted students obtained employment in their field of work and far exceeded common outcomes in terms of median change of earnings and obtaining a living wage.

Appendix A: Methodology & Data Sources

Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

| Data Type | Source |
|--|--|
| Labor Market Information/Population Estimates and Projections/Educational Attainment | Economic Modeling Specialists, Intl. (EMSI). EMSI occupational employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry: economicmodeling.com. |
| Typical Education Level and On-the-job Training | Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: https://www.bls.gov/emp/tables/educational-attainment.htm. |
| Labor Force, Employment and Unemployment Estimates | California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov. |
| Job Posting and Skills Data | Burning Glass: burning-glass.com/. |
| Additional Education Requirements/ Employer Preferences | The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: one tonline.org. |

Key Terms and Concepts

Annual Job Openings: Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

Employment Projections: Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (EMSI) formula that includes historical employment and economic indicators along with national, state and local trends.

Living Wage: The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

Occupation: An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

Percent Change: Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

Replacements: Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

Total Job Openings (New + Replacements): Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

Typical Education Requirement: represents the typical education level most workers need to enter an occupation.

Typical On-The-Job Training: indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.

© 2021 California Community Colleges Chancellor's Office, Centers of Excellence, Economic and Workforce Development Program