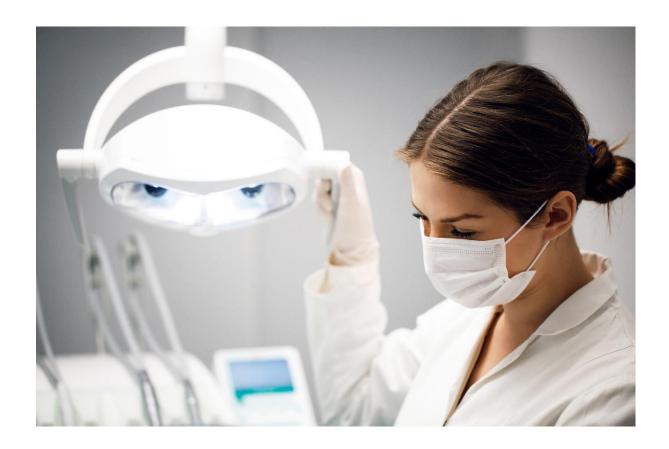
Labor Market Analysis

Dental Hygiene



Prepared by Central Valley/Mother Lode Center of Excellence





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Summary

The Central Valley/Mother Lode Center of Excellence developed this report for Fresno City College to determine whether there is demand in the local labor market that is not being met by the supply from postsecondary programs. This report also serves a secondary purpose, which is to aid in making a data-informed decision regarding the utility of a Dental Hygiene Bachelor's degree program offered at Fresno City College. This report summarizes labor market demand, wages, skills, and postsecondary supply for:

Dental Hygienists (SOC 29-1292)

Key Findings

- Occupational Demand Dental Hygienists have a labor market demand of 119 annual job openings in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Between 2021 and 2026, the number of jobs for Dental Hygienists is projected to increase by 18%.
- **Wages** The entry-level hourly wage for *Dental Hygienists* is \$40.83/hour, which is above the living wage in the SCV/SML subregion, which is \$11.91/hour for a single adult.¹
- **Employers and Job Titles** Employers in the SCV/SML subregion include Western Dental Orthodontics, GPAC, and Pacific Dental Services.
- **Skills and Certifications** The top baseline skill is an Apple iPad; the top specialized skill is dental hygiene; and the top software skill is Dentrix. The most in-demand certification is a Basic Life Support (BLS) Certification.
- Education An associate degree is typically required for Dental Hygienists.
- Supply and Demand Analysis Based on 119 annual openings (i.e., demand) and 43 postsecondary degrees awarded (i.e., supply), an analysis of supply and demand suggests there is an undersupply of 76 workers in the SCV/SML subregion. In the CVML region, 43 awards were conferred suggesting an undersupply of 171 workers (based on 214 annual openings in the CVML region).

Recommendation

Based on a comparison of demand and supply, there is an undersupply of trained workers in the SCV/SML subregion and the CVML region. The Center of Excellence recommends that Fresno City College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of *Dental Hygienists*.

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/.

Introduction

The Central Valley/Mother Lode Center of Excellence developed this report to provide Fresno City College with 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. Analysis of the program and occupational data related to *Dental Hygienists* is included in the report. The Standard Occupational Classification (SOC) System code and occupational title used in this report are from the Bureau of Labor Statistics and O*NET OnLine:

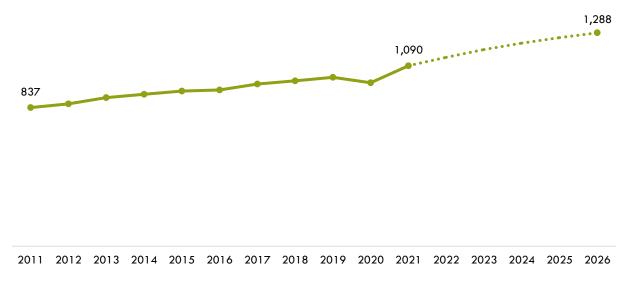
Dental Hygienists (SOC 29-1292)

- 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, Psychology
- Skills: Active Listening, Critical Thinking, Speaking, Monitoring, Service Orientation

Employment

Exhibit 1a shows employment trends for *Dental Hygienists* in the SCV/SML subregion. Between 2021 to 2026, the number of jobs for *Dental Hygienists* is projected to increase by 198, growing by 18%.

Exhibit 1a. Historical employment and projected occupational demand for *Dental Hygienists* in the SCV/SML subregion, 2011-2026



In 2021, there were 1,090 Dental Hygienists in the SCV/SML subregion (Exhibit 1b). The occupation, Dental Hygienists, is projected to have 119 annual openings.

Exhibit 1b. Current employment and projected occupational demand for *Dental Hygienists* in the SCV/SML subregion, 2021-2026

| Occupation | 2021 | 2026 | 5-Year | 5-Year % | Annual |
|-------------------|-------|-------|--------|----------|----------|
| | Jobs | Jobs | Change | Change | Openings |
| Dental Hygienists | 1,090 | 1,288 | 198 | 18% | 119 |

Wages

The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.² Exhibit 2 shows that *Dental Hygienists* have an entry-level wage of \$40.83/hour,³ which is above the living wage in the subregion.

Exhibit 2. Hourly wages for Dental Hygienists in the SCV/SML subregion

| Occupation | 25 th Percentile | Median Hourly | 75 th Percentile |
|-------------------|-----------------------------|---------------|-----------------------------|
| | Hourly Earnings | Earnings | Hourly Earnings |
| Dental Hygienists | \$40.83 | \$46.44 | \$48.49 |

Job Postings

There were 107 unique job postings for *Dental Hygienists* in the SCV/SML subregion from March 2023 to August 2023.⁴

Top Employers

The employers with the most job postings are listed in Exhibit 3. The top employers in online job postings were Western Dental Orthodontics, GPAC, and Pacific Dental Services.

Exhibit 3. Top employers of Dental Hygienists

| , , , |
|------------------------------|
| Employer |
| Western Dental Orthodontics |
| GPAC |
| Pacific Dental Services |
| Sweet Tooth Family Dentistry |
| Gentle Dental |
| Village Dental Care |
| Dr. Paul Mallouk, DDS |
| Superior Smiles Dentistry |
| Family Dentistry |
| Midtown Family Dentistry |

² 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/.

³ Note: 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, which may be obtained through long-term employment or extra training, etc.

⁴ Other than occupational 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.

Salaries

Exhibit 4 shows the "Market Salaries" for *Dental Hygienists*. These are calculated by Lightcast using a machine learning model built from millions of job postings every year. This accounts for adjustments based on location, industry, skills, experience, education, among other variables.

Exhibit 4. Market salaries for Dental Hygienists

| | 7.5 |
|---------------------|--------------|
| Market Salary | Job Postings |
| \$90,000-\$99,999 | 26 |
| \$100,000-\$109,999 | 20 |
| \$80,000-\$89,999 | 5 |
| \$110,000-\$119,999 | 3 |
| \$130,000-\$139,999 | 2 |

Education

Of the 107 unique job postings, 22 listed a preferred or minimum educational requirement for the position being filled. Among those, 45% requested an associate degree and 27% requested a bachelor's degree (Exhibit 5).

Exhibit 5. Education levels requested in job postings for Dental Hygienists

| Education Level | Job Postings | % of Job Postings |
|------------------------------|--------------|----------------------|
| Associate degree | 10 | 45% |
| Bachelor's degree | 6 | 27% |
| Ph.D. or professional degree | 4 | 18% |
| High school or GED | 2 | 9% |

Baseline, Specialized, and Software Skills

Exhibit 6 depicts the top baseline, specialized, and software skills in job postings. The most common baseline skill is an Apple iPad. The most common specialized skill is dental hygiene. The most important software skill is Dentrix.

Exhibit 6. In-demand baseline, specialized, and software skills for Dental Hygienists in job postings

| Baseline Skills | Specialized Skills | Software Skills |
|------------------|----------------------------------|-----------------|
| Apple iPad | Dental Hygiene | Dentrix |
| Communications | Oral Hygiene | Open Dental |
| Customer Service | Patient Education and Counseling | |
| Detail Oriented | Dental Procedures | |
| Spanish Language | Billing | |

Certifications

Of the job postings listing a desired certification, 70% indicated a need for Basic Life Support (BLS) certification, followed by Cardiopulmonary Resuscitation (CPR) Certification (Exhibit 7).

Exhibit 7. Top Dental Hygienists certifications requested in job postings

| Certifications | % of Job Postings |
|---|----------------------|
| Basic Life Support (BLS) Certification | 70% |
| Cardiopulmonary Resuscitation (CPR) Certification | 13% |
| Advanced Cardiovascular Life Support (ACLS) Certification | 7% |
| Certified Dental Assistant | 3% |
| Registered Dental Assistant | 3% |

Education, Work Experience, & Training

An associate degree is typically required for Dental Hygienists (Exhibit 8).

Exhibit 8. Education, work experience, training, and Current Population Survey results for Dental Hygienists⁵

| Occupation | Typical Entry-level Education | Work Experience Required | Typical On-The-Job Training | CPS |
|-------------------|-------------------------------------|-----------------------------|-----------------------------------|-----|
| Dental Hygienists | Associate degree | None | None | 59% |

⁵ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, https://www.bls.gov/cps/.

Supply

An analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) for the last three program years shows that, on average, 43 awards were conferred in the SCV/SML subregion (Exhibits 9 and 10).

Exhibit 9. TOP and CIP codes for Dental Hygienist

| TOP Titles | CIP Titles |
|----------------------------|------------------------------------|
| 1240.20 - Dental Hygienist | 51.0602 - Dental Hygiene/Hygienist |

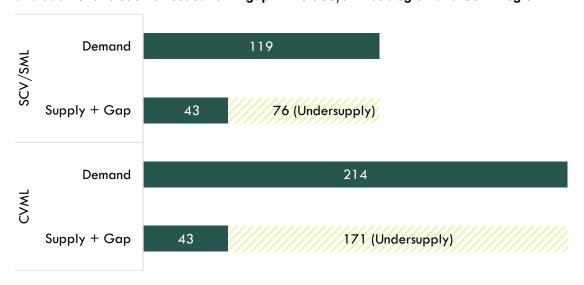
Exhibit 10. Postsecondary supply for Dental Hygienist for Program Years 2019-20 through 2021-22

| TOP/ CIP Code- Title | College | Associate Degree | Total |
|----------------------------|--------------|---------------------|-------|
| 1240.20 - Dental Hygienist | Fresno City* | 25 | 25* |
| | Taft* | 18 | 18* |
| SCV/SML TOTAL | | 43 | 43 |
| CVML TOTAL | | 43 | 43 |

*SCV/SML awards

There is an undersupply of 76 Dental Hygienists in the SCV/SML subregion and an undersupply of 171 workers in the CVML region (Exhibit 11).

Exhibit 11. Dental Hygienist workforce demand (annual job openings), postsecondary awards (supply), and additional students needed to fill gap in the SCV/SML subregion and CVML region



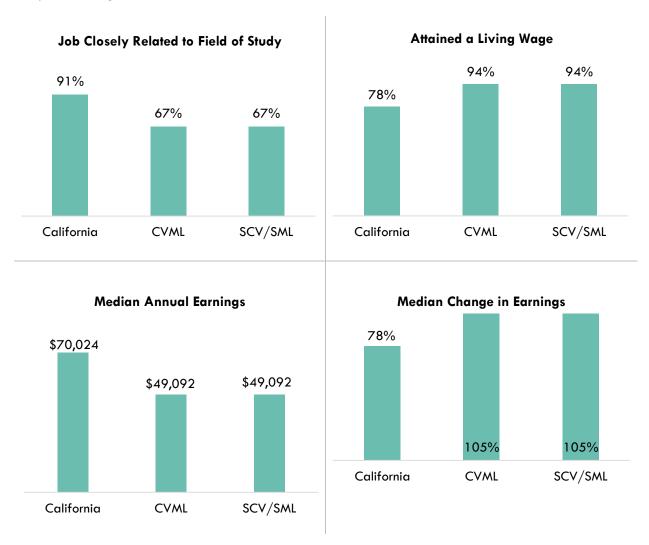
Student Outcomes

Exhibits 12a-12b summarize outcomes from California Community College Chancellor's LaunchBoard for TOP 1240.20 – Dental Hygienist.

Exhibit 12a. LaunchBoard Metrics for TOP 1240.20 - Dental Hygienist in the SCV/SML subregion

| Metric | |
|--|----|
| Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status | 36 |

Exhibit 12b. LaunchBoard Metrics for TOP 1240.20 - Dental Hygienist in California, CVML region, and SCV/SML subregion



Recommendation

This report suggests there is a shortage of 76 workers in the SCV/SML subregion and a shortage of 171 workers in the CVML region for *Dental Hygienists*. Based on these findings, it is recommended that Fresno City College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of *Dental Hygienists* in the region.

Appendix: 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. (Lightcast). Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast 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 Lightcast 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. |
| LaunchBoard | Chancellor's LaunchBoard. https://www.calpassplus.org/LaunchBoard/SWP.aspx |
| Labor Force, Employment and Unemployment Estimates | California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov. |
| Job Posting and Skills Data | Lightcast: https://lightcast.io/. |
| Additional Education Requirements/ Employer Preferences | The O*NET Job Zone database includes over 900 as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: onetonline.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. (LIGHTCAST) formula that includes historical employment and economic indicators along with national, state and local trends.

LaunchBoard (Attained the Living Wage): Among SWP students who exited college and did not transfer to any postsecondary institution, the proportion who attained the district county living wage for a single adult measured immediately following academic year of exit.

LaunchBoard (Median Annual Earnings): Among SWP students who exited the community college system and who did not transfer to any postsecondary institution, median earnings following the academic year of exit.

LaunchBoard (Median Change in Earnings): Among SWP students who exited and who did not transfer to any postsecondary institution, median change in earnings between the second quarter prior to the beginning of the academic year of entry and the second quarter after the end of the academic year of exit from the last college attended.

LaunchBoard (Job Closely Related to Field of Study): Among SWP students who responded to the CTE Outcomes Survey and did not transfer to any postsecondary institution, the proportion who reported that they are working in a job very closely or closely related to their field of study.

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.

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