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Labor Market Analysis

Registered Nurse



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Community
Colleges



Prepared by the Central Valley/Mother Lode Center of Excellence

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COVID-19 Statement: This report includes employment projection data by Lightcast. Lightcast’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 1 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 Registered Nurse. This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations. One occupation related to Registered Nurse was identified for Porterville College:

- 29-1141, Registered Nurses

Key findings:

- **Occupational demand** — There were 19,145 workers employed for registered nurses in 2021 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. Registered nurses have a projected growth rate of 9% over the next five years, and 1,400 annual openings.
- **Wages** — Registered nurses earn the highest entry-level wage, \$44.46/hour in the subregion.
- **Employers** — Employers with the most job postings in the subregion are Adventist Health, Community Health System, and Stability Healthcare.
- **Occupational titles** — The most common occupational title in job postings in the subregion is Registered Nurses. The most common job title is Registered Nurse.
- **Skills and certifications** — The top baseline skill is planning, the top specialized skill is patient care, and the top software skill is Microsoft Excel. The most in-demand certification is a registered nurse.
- **Education** — A bachelor's degree is typically required for registered nurses.
- **Supply** — Analysis of postsecondary completions shows that on average 872 awards were conferred in the Central Valley/Mother Lode region each year.

Recommendation:

Based on a comparison of occupational demand and supply, there is an undersupply of 796 trained workers in the subregion and 1,266 workers in the region. The Center of Excellence recommends that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Registered Nurse workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Porterville College to provide labor market information for Registered Nurse. 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 \$11.91/hour.¹ Analysis of the program and occupational data related to Registered Nurse resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 29-1141, Registered Nurses

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.

Registered Nurses

Job Description: Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.

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

Skills: Social Perceptiveness, Active Listening, Coordination, Critical Thinking, Service Orientation

Occupational Demand

The SCV/SML subregion employed 19,145 registered nurses in 2021 (Exhibit 1). Registered nurses are projected to grow by 9% over the next five years and has projected annual openings of 1,400.

Exhibit 1. Registered Nurse employment and occupational projections in the SCV/SML subregion

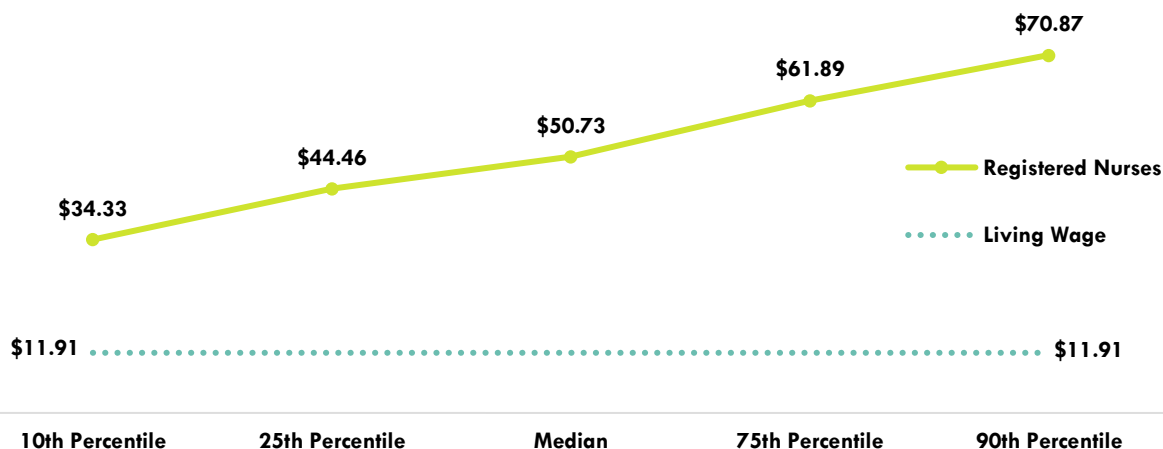
Occupation	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings
Registered Nurses	19,145	20,921	1,775	9%	1,400
TOTAL	19,145	20,921	1,775	9%	1,400

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://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

Wages

Exhibit 2 shows the hourly wages for registered nurses. Registered nurses earn the entry-level wage, \$44.46/hour in the subregion.² Please note 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, either by gained by long term employment, received extra training, etc.

Exhibit 2. Registered Nurses hourly wages in the SCV/SML subregion



Job Postings

There were 10,924 job postings for the one occupation in the SCV/SML subregion from May 2022 to October 2022.³ The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of Registered Nurse by number of job postings

Employer	Job Postings	% Job Postings
Adventist Health	418	6%
Community Health System	363	6%
Stability Healthcare	260	4%
Health Carousel Travel Nursing	182	3%
Aya Healthcare	181	3%
Community Regional Medical	179	3%
Trusted Health	139	2%
Saint Agnes Medical Center	107	2%
Trinity Health	91	1%
Davita Incorporated	89	1%

² Entry-level wages are derived from the 25th percentile.

³ Other than occupation titles and job titles, the categories in Exhibit 3 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 4 shows how job postings for the targeted occupations in the SCV/SML subregion are associated with two O*NET OnLine occupations. The occupational title Registered Nurses is listed in 9,361 job postings. Note how this occupational title dominates the job posting results. Common job titles in postings include Registered Nurse in 760 job postings, Case Manager in 65 job postings, and Pacu Registered Nurse in 63 job postings.

Exhibit 4. Top occupational titles in job postings for Registered Nurse

Occupational Title	Job Postings	% of Job Postings
Registered Nurses	9,361	86%
Critical Care Nurses	1,514	14%
Clinical Nurse Specialists	33	0%
Acute Care Nurses	11	0%
Advanced Practice Psychiatric Nurses	5	0%

Salaries

Exhibit 5 shows the “Market Salaries” for Registered Nurse occupations. These are calculated by Burning Glass using a machine learning model built off of millions of job postings every year. This accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables.

Exhibit 5. Salaries for Registered Nurse occupations

Market Salary Percentile	Salary Amount
10th Percentile	\$55,167
25th Percentile	\$66,383
50th Percentile	\$76,099
75th Percentile	\$85,368
90th Percentile	\$94,451

Education

Of the 10,924 job postings, 8,894 listed an education level preferred for the positions being filled. Among those, 65% requested an associate degree, 49% requested a bachelor’s degree, and 6% requested a master’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%.

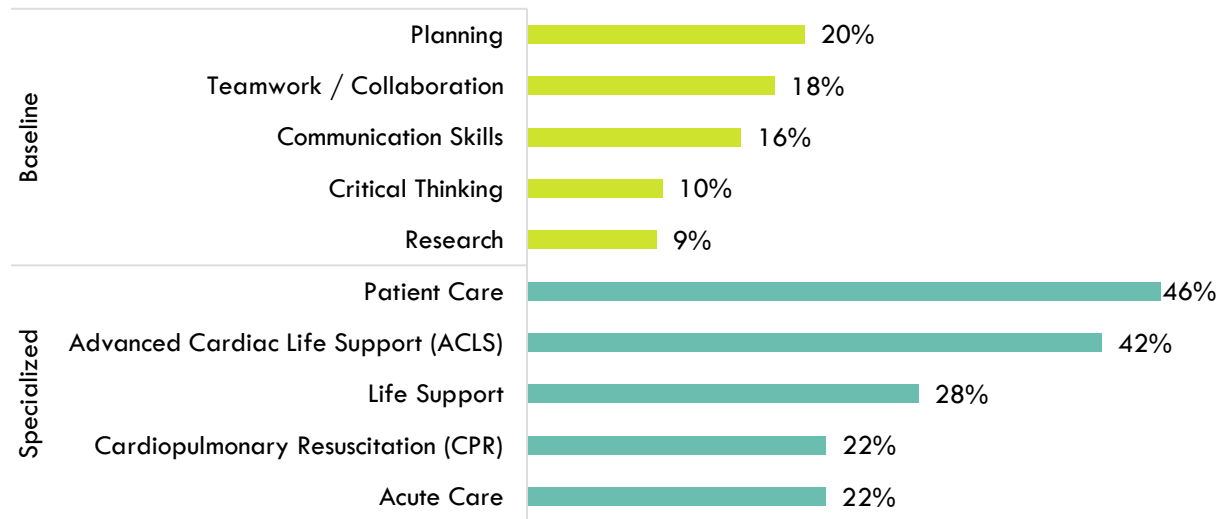
Exhibit 6. Education levels requested in job postings for Registered Nurse

Education Level	Job Postings	% of Job Postings
Associate’s degree	5,747	65%
Bachelor’s degree	4,326	49%
Master’s degree	503	6%
High school or vocational training	485	5%
Doctoral degree	82	1%

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupation. The three most important baseline skills are planning, 20% of job postings, teamwork/ collaboration, 18%, and communication skills, 16%. The top three specialized skills are patient care, 46% of job postings, Advanced Cardiac Life Support (ACLS), 42%, and life support, 28%.

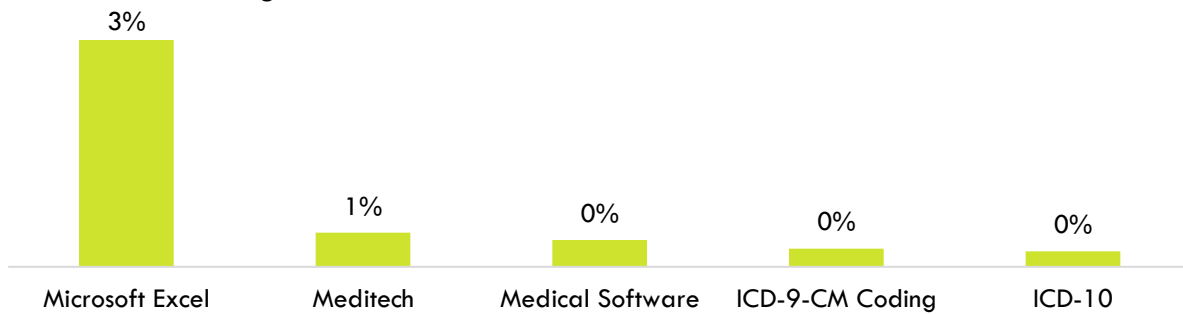
Exhibit 7. In-demand Registered Nurse baseline and specialized skills



Software Skills

Analysis also included the software skills most in demand by employers. Microsoft Excel and Meditech were the top two software skills identified in job postings (Exhibit 8).

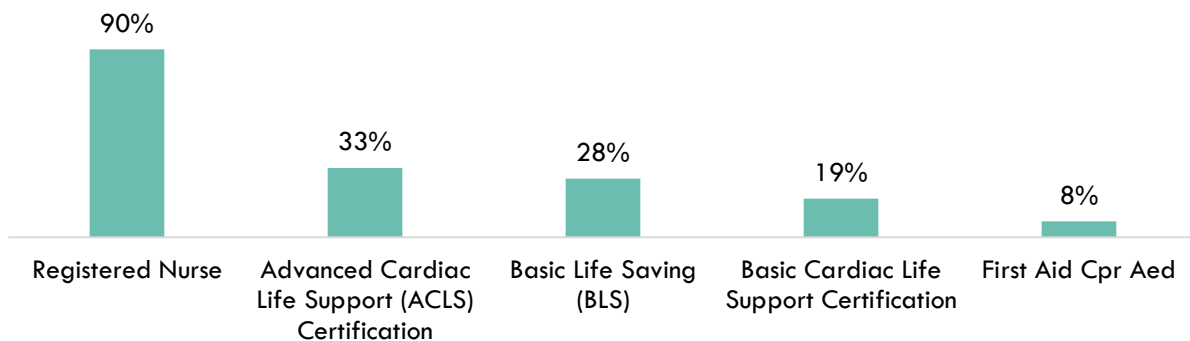
Exhibit 8. In-demand Registered Nurse software skills



Certifications

Of the 10,924 job postings, 9,051 contained certification data. Among those, 90% indicated a need for a registered nurse. The next top certifications are a Advanced Cardiac Life Support (ACLS) Certification and Basic Life Saving (BLS) (Exhibit 9).

Exhibit 9. Top Registered Nurse certifications requested in job postings



Education, Work Experience & Training

A bachelor's degree is typically required for registered nurses (Exhibit 10).

Exhibit 10. Education, work experience, training, and Current Population Survey results for Registered Nurse occupations⁴

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Registered Nurses	Bachelor's degree	None	None	33.3%

Supply

Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP and CIP codes and titles: 123010 - Registered Nursing and 51.3801 - Registered Nursing/Registered Nurse. Analysis of the last three years of data shows that, on average, 874 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

Exhibit 11. Postsecondary supply for Registered Nurse occupations in the region

TOP/ CIP Code- Titles	College	Associate Degree	Certificate 18 < 30 Semester Units	Certificate 30 < 60 Semester Units	Subtotal
123010 - Registered Nursing	Bakersfield	118			118
	Fresno City	197		34	231
	Merced	56			56
	Modesto	110			110
	Porterville	19			19
	Reedley College	11	4		15
	San Joaquin Delta	103			103
	Sequoias	85			85
	West Hills Lemoore	31			31
51.3801 - Registered Nursing/Registered Nurse	San Joaquin Valley College-Visalia	104			104
TOTAL		834	4	34	872

⁴ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, <https://www.bls.gov/cps/>.

There is an undersupply of 796 Registered Nurse workers in the SCV/SML subregion and 1,266 workers in the region (Exhibit 12).

Exhibit 12. Registered Nurse workforce demand (annual job openings), postsecondary supply of students (awards), and additional students needed to fill gap in the SCV/SML subregion and region

Region	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
SCV/SML	1,400	604	796
CVML	2,138	872	1,266

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 Registered Nurse. Of note, 498 registered nursing students received a degree or certificate or attained apprenticeship journey status; 180 students transferred; 94% of students obtained a job closely related to their field of study; 116% had a median change in earnings; and 89% of students attained a living wage.

Exhibit 13. Regional metrics for the TOP code related to Registered Nurse

Metric	Registered Nursing 123010
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	498
Number of Students Who Transferred	180
Job Closely Related to Field of Study	94%
Median Change in Earnings	116%
Attained a Living Wage	89%
* denotes data not available.	

Conclusion

The entry-level wages of registered nurses exceed the SCV/SML subregion's average living wage. There were 10,924 job postings in the past six months for occupations related to registered nurses in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is planning, and the top specialized skill is patient care.
- The top software skill is Microsoft Excel.
- The top certification is a Registered Nurse.

There is an undersupply of trained workers, a shortage of 796 in the SCV/SML subregion and 1,266 in the region.

Recommendation

Based on these findings, it is recommended that Porterville College work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Registered Nurse workers in the region.

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. (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 .
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: ononline.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.

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.