December 2020

Labor Market

Analysis

Medical Assistants

California Community Colleges

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CENTERS OF EXCELLENCE
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Prepared by the Central Valley/Mother Lode Center of Excellence

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COVID-19 Statement: 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.

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Summary

This study conducted by the Central Valley/Mother Lode Center of Excellence examines labor market demand, wages, skills, and postsecondary supply for medical assistants. Four occupations related to medical assistants were identified for Cerro Coso Community College: 31-9092, Medical Assistants; 43-6013, Medical Secretaries and Administrative Assistants; 29-2098, Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other; and 31-9094, Medical Transcriptionists.

Key findings:

- **Occupational demand —** Nearly 15,310 workers were employed in jobs related to medical assistants in 2019 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. The largest occupation is medical assistants with 7,374 workers in 2019, a projected growth rate of 10% over the next five years, and 995 annual openings.

- **Wages —** Medical dosimetrists, medical records specialists, and health technologists and technicians (all other) earn the highest entry-level wages, $15.54/hour in the subregion and $16.24/hour in the region.

- **Employers —** Employers with the most job postings in the subregion are Adventist Health, Dignity Health, and Family Healthcare Network.

- **Occupational titles —** The most common occupational title in job postings in the subregion is medical assistants. The most common job title is medical assistant.

- **Skills and certifications —** The top baseline skill is communication, the top specialized skill is scheduling, and the top software skill is Microsoft Excel. The most in-demand certification is a Certified Medical Assistant.

- **Education —** A postsecondary nondegree award is the typical entry-level education required for three of the four occupations. A high school diploma or equivalent is typically required for medical secretaries and administrative assistants.

- **Supply —** Analysis of postsecondary completions in the region shows that on average 2,140 awards were conferred in the Central Valley/Mother Lode region each year.

Based on a comparison of occupational demand and supply, there is an undersupply of 131 trained workers in the subregion and 959 workers in the region. The Center of Excellence recommends that Cerro Coso Community College work with the Healthcare Regional Director, the college's advisory board, and local industry in the expansion of programs to address the shortage of medical assistant workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Cerro Coso Community College to provide labor market information for medical assistants. 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 South Central Valley/Southern Mother Lode (SCV/SML) subregion is $10.30/hour.[1] Analysis of the program and occupational data related to medical assistant resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 31-9092, Medical Assistants
- 43-6013, Medical Secretaries and Administrative Assistants
- 29-2098, Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other
- 31-9094, Medical Transcriptionists

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. O*NET data was not available for 29-2098, Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other.

Medical Assistants
Job Description: Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.
Knowledge: Customer and Personal Service, Medicine and Dentistry, English Language, Clerical, Computers and Electronics
Skills: Speaking, Active Listening, Reading Comprehension, Social Perceptiveness, Monitoring

Medical Secretaries and Administrative Assistants
Job Description: Perform secretarial duties using specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties may include scheduling appointments, billing patients, and compiling and recording medical charts, reports, and correspondence.
Knowledge: Customer and Personal Service, English Language, Clerical, Computers and Electronics, Administration and Management
Skills: Speaking, Active Listening, Service Orientation, Reading Comprehension, Coordination

Medical Transcriptionists
Job Description: Transcribe medical reports recorded by physicians and other healthcare practitioners using various electronic devices, covering office visits, emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe dictated reports and translate abbreviations into fully understandable form. Edit as necessary and return reports in either printed or electronic form for review and signature, or correction.
Knowledge: Clerical, English Language, Computers and Electronics, Medicine and Dentistry
Skills: Active Listening, Reading Comprehension, Writing, Time Management, Critical Thinking

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[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/.

Occupational Demand

The South Central Valley/Southern Mother Lode subregion employed 15,307 workers in medical assistant occupations in 2019 (Exhibit 1). The largest occupation is medical assistants with 7,374 workers in 2019. This occupation is projected to grow by 10% over the next five years and has the greatest number of projected annual openings, 995.
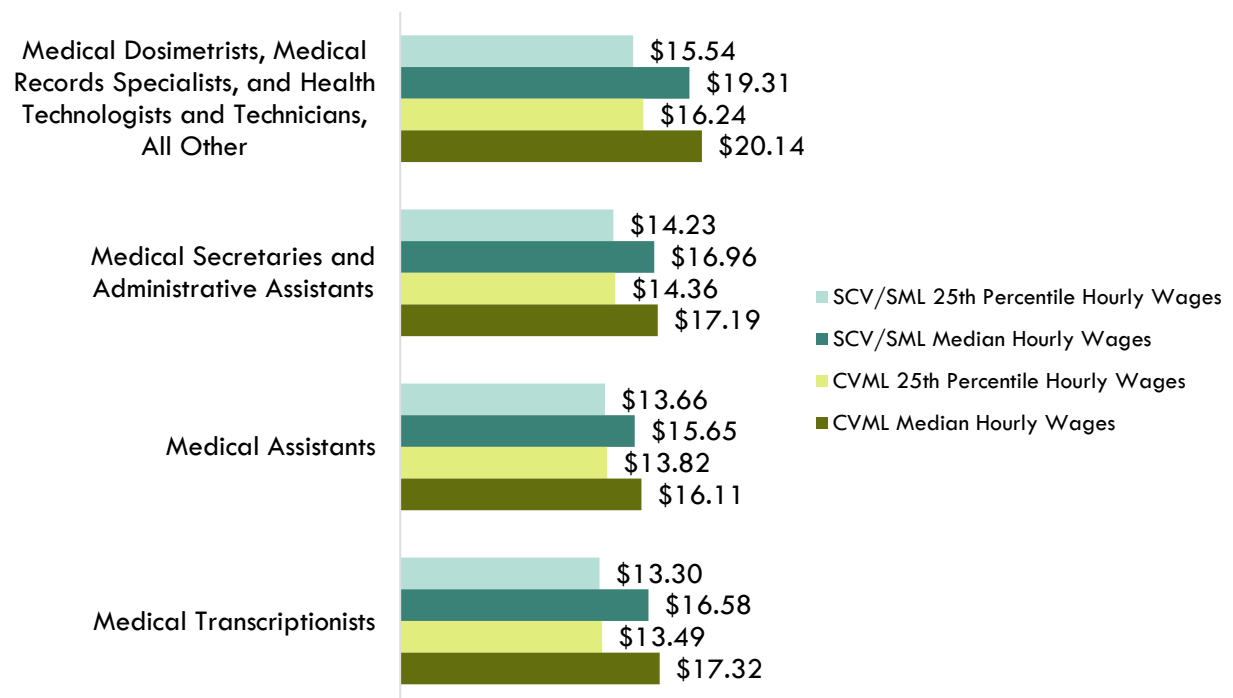
Exhibit 1. Medical assistant employment and occupational projections in the SCV/SML subregion

Occupation	2019 Jobs	2024 Jobs	5-Year Change	5-Year % Change	Annual Openings
Medical Assistants	7,374	8,098	724	10%	995
Medical Secretaries and Administrative Assistants	4,947	5,451	503	10%	683
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	2,773	3,119	346	12%	271
Medical Transcriptionists	213	226	13	6%	34
TOTAL	**15,307**	**16,894**	**1,587**	**10%**	**1,983**

Wages

Exhibit 2 compares the entry-level and experienced wages of the medical assistant occupations. Medical dosimetrists, medical records specialists, and health technologists and technicians (all other) earn the highest entry-level wages, $15.54/hour in the subregion and $16.24/hour in the region.

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

Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other
- $15.54
- $19.31
- $16.24
- $20.14

Medical Secretaries and Administrative Assistants
- $14.23
- $16.96
- $14.36
- $17.19

Medical Assistants
- $13.66
- $15.65
- $13.82
- $16.11

Medical Transcriptionists
- $13.30
- $16.58
- $13.49
- $17.32

Legend:
- SCV/SML 25th Percentile Hourly Wages
- SCV/SML Median Hourly Wages
- CVML 25th Percentile Hourly Wages
- CVML Median Hourly Wages

Job Postings

There were 2,060 job postings for the four occupations in the SCV/SML subregion from May to October 2020.[2] The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of medical assistants by number of job postings

Employer	Job Postings	% Job Postings
Adventist Health	127	8%
Dignity Health	53	3%
Family Healthcare Network	43	3%
United Health Centers Of The San Joaquin Valley	30	2%
Community Medical Centers Incorporated	24	2%
Kaweah Delta Health Care Dst	24	2%
Trinity Health	24	2%
Valley Children's Healthcare	24	2%
Anthem Blue Cross	23	1%
Wellpath	19	1%

Exhibit 4 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across four O*NET OnLine occupation. The occupational title medical assistants is listed in 1,049 job postings. Note how a higher proportion of job postings are for this occupational title. Common job titles in postings include medical assistant in 440 job postings, medical biller in 42 job postings, and medical receptionist in 40 job postings.

Exhibit 4. Top occupational titles in job postings for medical assistants

Occupational Title	Job Postings
Medical Assistants	1,049
Medical Secretaries	536
Medical Records and Health Information Technicians	472
Medical Assistants	1,049

Salaries

Exhibit 5 shows the "Market Salaries" for medical assistant occupations that are calculated by Burning Glass which uses a machine learning model built off of millions of job postings every year, and accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables.

Exhibit 5. Salaries for medical assistants

Market Salary Percentile	Salary Amount
10th Percentile	$26,241
25th Percentile	$28,025
50th Percentile	$30,553
75th Percentile	$33,949
90th Percentile	$40,088

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[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.

Education

Of the 2,060 job postings, 2,060 listed an education level preferred for the positions being filled. Of those, 53% requested high school or vocational training, 8% requested an associate degree, and 4% 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 total more than 100%.
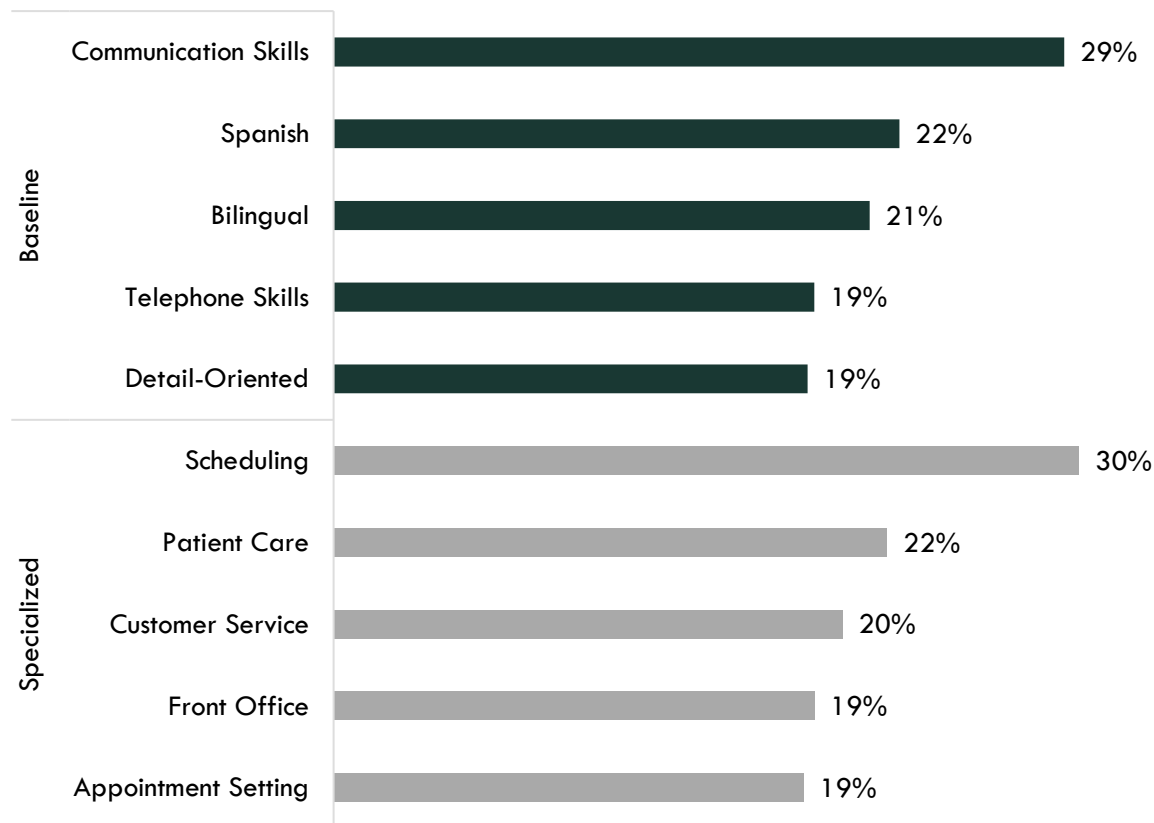
Exhibit 6. Education levels requested in job postings for medical assistants

Education level	Job Postings	% of Job Postings
High school or vocational training	1,086	53%
Associate degree	160	8%
Bachelor's degree	81	4%
Master's degree	4	0%
Doctoral degree	2	0%

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, 29% of job postings, Spanish, 22%, and bilingual, 21%. The top three specialized skills are scheduling, 30% of job postings, patient care, 22%, and customer service, 20%.

Exhibit 7. In-demand medical assistant baseline and specialized skills

Baseline:
- Communication Skills 29%
- Spanish 22%
- Bilingual 21%
- Telephone Skills 19%
- Detail-Oriented 19%

Specialized:
- Scheduling 30%
- Patient Care 22%
- Customer Service 20%
- Front Office 19%
- Appointment Setting 19%

Software Skills

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

Exhibit 8. In-demand medical assistant software skills

Microsoft Excel	Microsoft Office	Microsoft Word	ICD-10	Word Processing
8%	7%	4%	4%	2%
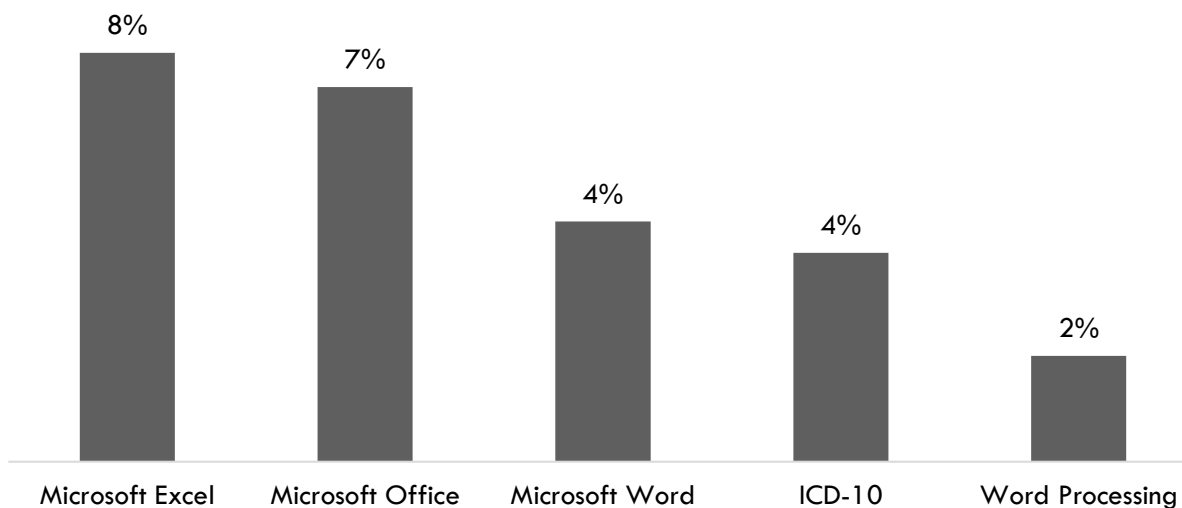
Certifications

Of the 2,060 job postings, 1,000 contained certification data. Among those, 41% indicated a need for a Certified Medical Assistant certification. The next top certifications are basic life saving and driver's license (Exhibit 9). (Due to the low number of job postings with certifications listed, the chart below may not be representative of the full sample.)

Exhibit 9. Top medical assistant certifications requested in job postings

Certified Medical Assistant	Basic Life Saving (BLS)	Driver's License	First Aid Cpr Aed	Clinical Medical Assistant (CCMA)
41%	26%	17%	17%	16%
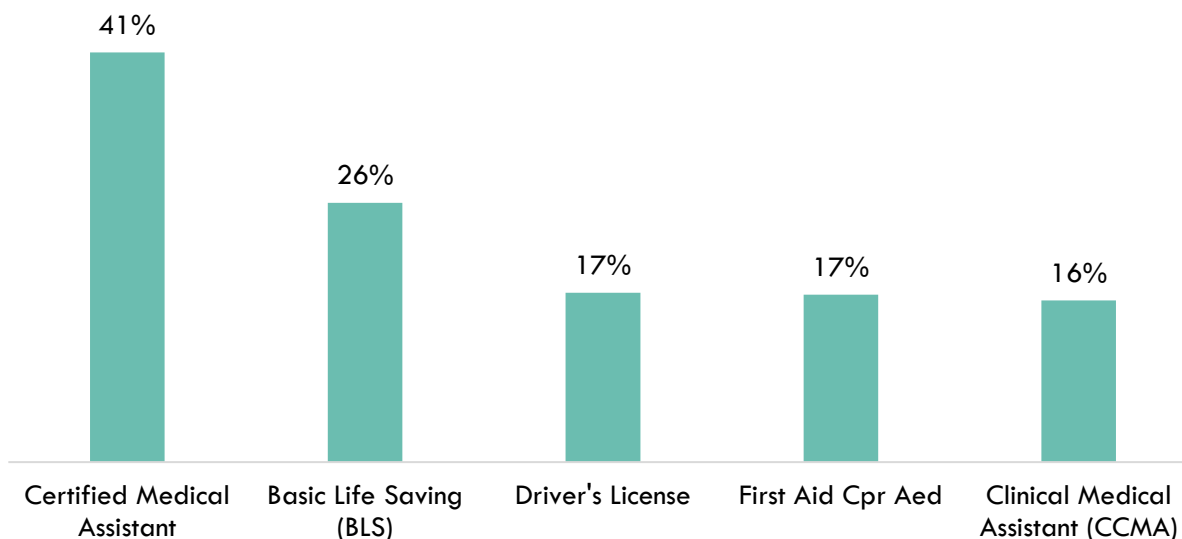
Education, Work Experience & Training

A postsecondary nondegree award is the typical entry-level education required for three of the four occupations (Exhibit 10). A high school diploma or equivalent is typically required for medical secretaries and administrative assistants.

Exhibit 10. Education, work experience, training, and Current Population Survey results for medical assistant occupations[3]

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Medical Assistants	Postsecondary nondegree award	None	None	64.6%
Medical Secretaries and Administrative Assistants	High school diploma or equivalent	None	Moderate-term	46.7%
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other	Postsecondary nondegree award	None	None	56.6%
Medical Transcriptionists	Postsecondary nondegree award	None	None	57.1%

Supply

Analysis of program data from the California Community Colleges Chancellor's Office Data Mart and Integrated Postsecondary Education System Data (IPEDS) included the TOP and CIP codes: 120800 - Medical Assisting, 120820 - Administrative Medical Assisting, 51.0710 - Medical Office Assistant/Specialist, and 51.0801 - Medical/Clinical Assistant. Analysis of the last three years of data shows that, on average, 2,140 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

Exhibit 11. Postsecondary supply for medical assistant occupations in the region

TOP or CIP Code-Title	College	Associate Degree	Award < 1 academic years	Award 1 < 2 academic years	Certificate 30 < 60 semester units	Subtotal
120800 - Medical Assisting	Cerro Coso	4				4
	Modesto	24			50	75
120820 - Administrative Medical Assisting	Cerro Coso				8	8
51.0710 - Medical Office Assistant/Specialist.	Clovis Adult Education		19	11		30
	San Joaquin Valley College-Visalia	104		131		235
	Santa Barbara Business College-Bakersfield			1		1
	United Education Institute-UEI College Stockton			23		23
	Clovis Adult Education		22			22

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

TOP or CIP Code-Title	College	Associate Degree	Award < 1 academic years	Award 1 < 2 academic years	Certificate 30 < 60 semester units	Subtotal
51.0801 - Medical/Clinical Assistant	Milan Institute-Merced		92			92
	San Joaquin Valley College-Visalia	515		593		1,108
	Santa Barbara Business College-Bakersfield	34				34
	UEI College-Bakersfield			222		222
	UEI College-Fresno			189		189
	United Education Institute-UEI College Stockton			98		98
TOTAL		**681**	**134**	**1,267**	**59**	**2,140**

There is an undersupply of 131 medical assistant workers in the SCV/SML subregion and 959 workers in the region (Exhibit 12).

Exhibit 12. Medical assistant workforce annual demand and supply in the SCV/SML subregion and region
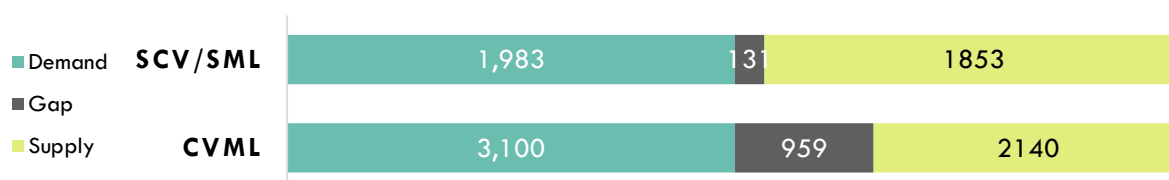
Student Outcomes

Exhibit 13 summarizes employment and wage outcomes from the California Community College Chancellor's Cal-PASS Plus LaunchBoard for the TOP codes related to medical assistants. There were 180 medical assisting students and 74 administrative medical assisting students who received a degree, certificate, or attained apprenticeship journey status, and 115 medical assisting students transferred. A higher percentage of administrative medical assisting students reported attaining a job closely related to their field of study and a median change in earnings. A higher percentage of medical assisting students attained a living wage.

Exhibit 13. Regional metrics for the TOP codes related to medical assistants

Metric	Medical Assisting 120800	Administrative Medical Assisting 120820
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	180	74
Number of Students Who Transferred	115	*
Job Closely Related to Field of Study	76%	83%
Median Change in Earnings	42%	55%
Attained a Living Wage	35%	21%
* denotes data not available.		

Conclusion

The entry-level wages of the four occupations exceed the SCV/SML subregion's average living wage. There were 2,060 job postings in the past six months for occupations related to medical assistants 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 scheduling.
- The top software skill is Microsoft Excel.
- The top certification is a Certified Medical Assistant.

There is an undersupply of trained workers, a shortage of 131 in the SCV/SML subregion and 959 in the region.

Recommendation

Based on these findings, it is recommended that Cerro Coso Community College work with the Healthcare Regional Director, the college's advisory board, and local industry in the expansion of programs to address the shortage of medical assistant 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. (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: 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. (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.