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**CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH**

# Health Care Workforce Needs Assessment

for Sierra College, Nevada  
County Campus and Truckee-  
Tahoe Campus

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Prepared by Center of Excellence, Greater Sacramento (North) region  
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California  
Community  
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- Spring Hill Manor Assisted Living
- Tahoe Forest Health Services
- Tahoe Forest Hospital
- Tahoe Truckee Unified School District
- Western Sierra Medical Clinic
- Yuba Docs Urgent Care



# EXECUTIVE SUMMARY



Sierra College, Nevada County and Truckee-Tahoe campuses, worked with local and regional hospitals, major health providers, private doctor's offices, assisted living facilities, and discipline-area faculty in the community colleges and high schools to identify potential areas for program development in allied health. The COE analyzed nine industries and four key occupational areas on the basis of employer messages about in-demand positions. The research included industry and occupational trends, jobs postings data, and workforce education and training program assets in health care industries and occupations, resulting in the following findings and recommendations:

- Nevada County possesses a wealth of health care industry resources—hospitals, offices of major health care providers, doctor's offices, and skilled nursing facilities. With the exception of industries that serve the elderly and aging, many key industries have shed jobs. Earnings data indicates local employers in Nevada County will face stiff competition from regional employers for talent.
- The occupational data indicates program development opportunities for licensed vocational nurses and certified nursing assistants. There are few nearby program awards in these areas and significant local and regional demand. Local employers and the regional director for employer engagement have specifically noted the need for programs in these areas.
- Data and partner engagement also indicate the need for medical assistants and for several administrative roles. The research supports efforts to combine workforce training that addresses that need at Sierra College, Nevada County campus. The region hosts numerous medical assisting programs that continue to support employer demand.
- There is limited need to provide training for occupations whose sole function is phlebotomy. However, phlebotomy is a key function in identified opportunity occupations.
- Companies that serve the elderly and aging comprise key opportunity industries in western Nevada County and elsewhere in the Greater Sacramento region. Related industries have leading job numbers and growth rates.
- The Nevada County campus of Sierra College has long served local and regional allied health needs with pre-allied health programs that bridge to programs at the main campus in Rocklin. Continuing these programs is important.



# INTRODUCTION & METHODOLOGY



Nevada County is home to two major hospitals—Sierra Nevada Memorial Hospital in Grass Valley and Tahoe Forest Hospital in Truckee—as well as to assisted living facilities, skilled nursing services, and services for the elderly and disabled. Unsurprisingly, health care is one of eight priority industry sectors identified in an environmental scan of Nevada County that was completed in early 2020 through a partnership of Sierra College, the Nevada County Economic Resource Council (ERC), and the Center of Excellence, Greater Sacramento (North) region. This study drills down on workforce demand and education and training assets for allied health in the service territory surrounding Sierra College’s Grass Valley and Truckee-Tahoe campuses. In particular, it seeks to verify employer engagement feedback that called for development of pipelines for licensed vocational nurses, nursing assistants, medical assistants, and phlebotomists.

The study presents industry and occupational analysis, jobs postings research, and an overview of community college program awards in relevant fields.

## ***Industries***

The analysis compares the size and historical performance of nine key health care industries in four geographies: western Nevada county, western Placer County, the seven-county Greater Sacramento region, and California. Appendix B includes industry data from eastern Nevada County and eastern Placer County. The data analysis indicates the industrial composition and characteristics of the labor markets in which Sierra College students will compete. It also includes the average annual earnings for the industries in each of the four studied geographies.

## ***Occupations***

Staffing patterns are used to examine top occupations and projected annual openings in the nine industries of interest. A skill-level overlay indicates the existing workforce’s typical experience and educational attainment. The occupational analysis seeks to verify employer messages regarding hard-to-fill middle-skill jobs, which typically require experience and education beyond high school but less than that attained with a bachelor’s degree. Occupational data include median wages according to government employer surveys.

## ***Jobs postings***

Jobs postings analysis is based on examination of staffing patterns during the 12-month period between February 2020 and January 2021. Data include top employers and job titles as well as posting intensity by employer for four focus occupations, highlighted by community college partners.

## ***Program awards***

The analysis inventories awards in related allied health programs in the service territory by program and community college. It compares the number of awards to the projected annual openings in related occupations and draws conclusions about the prospects for students in relevant programs.

## ***Note on analysis by geography***

The geography analyzed in the occupational data does not exactly correspond to the service area examined in the awards data. Occupational demand is shown in the Greater Sacramento region, for which the research does not reflect a full accounting of allied health programs. Similarly, program awards are shown for Butte County and Washoe and Douglas counties, for which occupational demand is not included. The research sought a balance between providing an accounting for neighboring colleges among which students typically move (and sources for the commute shed) and the labor market where students are likely to find jobs.



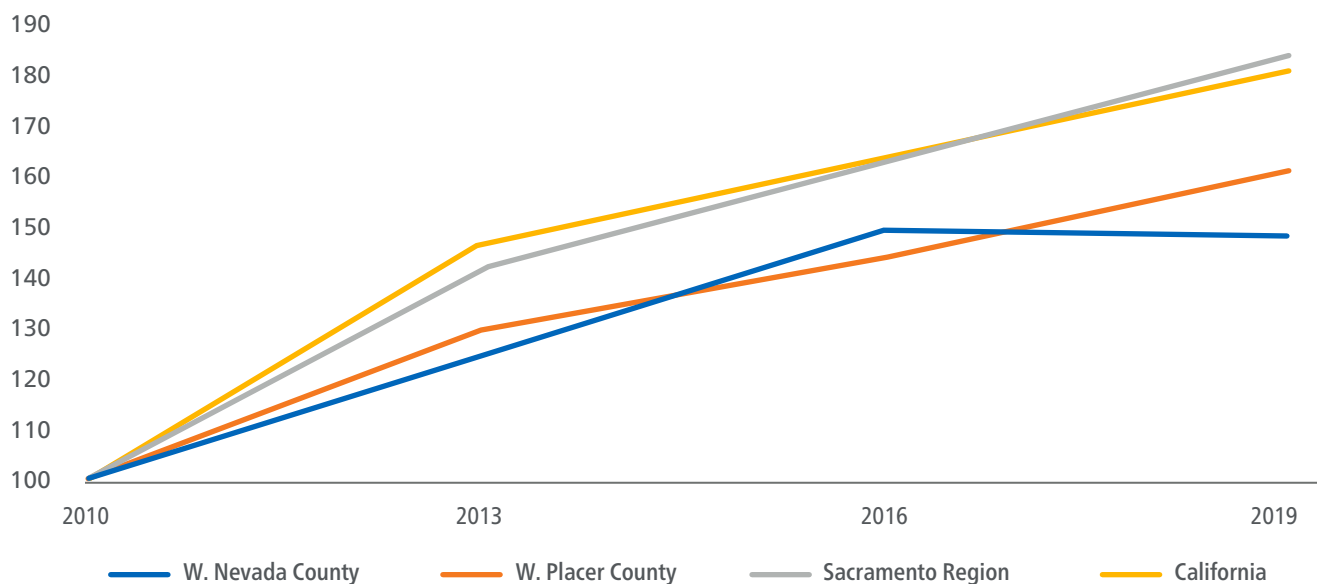
# INDUSTRIES



Industry analysis offers insight into jobs numbers, historical trends, and earnings. In addition, the analysis measures the share of top health care industry jobs in the overall economy. The research compares these measures in four geographies—western Nevada County, western Placer County, the Greater Sacramento (North) region, and California. (Appendix B includes data on eastern Nevada County and eastern Placer County.)

As in the scan conducted in 2020, the analysis finds that growth rates for the nine health care industries are strong in all the geographies of interest. These rates range from 50% to 80% between 2010 and 2019 (Exhibit 1). The Greater Sacramento (North) region’s health care industries grew 82% compared with 60% in western Placer County and 47% in western Nevada County.<sup>1</sup> The Greater Sacramento (North) region’s health care industries grew at a rate comparable to the state’s health care industries.

**Exhibit 1. Growth rates in four regions, 2010–2019, indexed to 2010**



Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.

1. The zip codes included in the measures for western Nevada County include 95959, 95986, 95945, 95949, 95946, and 95977. The zip codes used in the analysis of western Placer County include 95715, 95701, 95714, 95717, 95631, 95713, 95603, 95602, 95603, 95658, 95650, 95746, 95661, 95678, 95677, 95663, 95681, 95648, 95747, and 95765.

The share of health care industry jobs as a percentage of all jobs in the economy in each of the four geographies of interest is about 10.5% (Exhibit 2). At the state level, the share of health care industry jobs is 8.7% of the total economy, or about 2% less than the share in the regions studied.

The data show that the share of jobs in services for the elderly and persons with disabilities is generally higher than in other industries. Western Placer County and the Sacramento region have high shares of jobs in HMO medical centers and general medical and surgical hospitals. Placer County and Nevada County have higher shares of jobs in nursing care facilities and offices of physicians than do the region or the state.

### Exhibit 2. Employment share of total regional employment, four geographies, 2019

Industry: 6-digit NAICS	West Nevada County (%)	West Placer County (%)	Sacramento Region (%)	California (%)
All Other Outpatient Care Centers	0.8	0.2	0.2	0.2
Assisted Living Facilities for the Elderly	0.9	0.5	0.5	0.3
Freestanding Ambulatory Surgical and Emergency Centers	0.2	0.1	0.1	0.1
General Medical and Surgical Hospitals	1.6	2.7	2.3	1.9
HMO Medical Centers	0.0	2.7	1.2	0.6
Home Health Care Services	0.4	0.5	0.6	0.5
Nursing Care Facilities (Skilled Nursing Facilities)	1.8	0.8	0.7	0.7
Offices of Physicians (except Mental Health Specialists)	1.6	1.3	1.2	1.2
Services for the Elderly and Persons with Disabilities	3.5	1.8	3.7	3.2
<b>Total Percent of Total Employment</b>	<b>10.7</b>	<b>10.5</b>	<b>10.5</b>	<b>8.7</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.

In western Nevada County, there are 2,800 jobs in the nine health care industries included in the study (Exhibit 3). Jobs in these industries grew 47% between 2010 and 2019. Most of the growth came from services for the elderly and persons with disabilities, the industry with the most jobs. Skilled nursing facilities also saw modest growth (8%). Offices of physicians (-14%), home health care services (-28%), and general medical and surgical hospitals (-7%) gained jobs in neighboring counties but lost jobs in western Nevada County.

### Exhibit 3. Employment trends, nine key industries, Western Nevada County, 2010–2019

Industry: 6-digit NAICS	2010	2013	2016	2019	% Change 2010-2019
All Other Outpatient Care Centers	20	24	122	207	910
Assisted Living Facilities for the Elderly	218	273	245	227	4
Freestanding Ambulatory Surgical and Emergency Centers	30	15	12	42	40
General Medical and Surgical Hospitals	445	387	439	413	-7
HMO Medical Centers	25	68	39	10	-60
Home Health Care Services	133	154	124	95	-28
Nursing Care Facilities (Skilled Nursing Facilities)	438	460	504	471	8
Offices of Physicians (except Mental Health Specialists)	487	431	525	421	-14
Services for the Elderly and Persons with Disabilities	113	552	828	925	720
<b>Total Top Health Care Industry Job Count</b>	<b>1,910</b>	<b>2,363</b>	<b>2,838</b>	<b>2,811</b>	<b>47</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.

In western Placer County, there are 19,400 jobs in the nine health care industries included in the study (Exhibit 4). Jobs in these industries grew 60% between 2010 and 2019. Western Placer County has large numbers of jobs in general and in medical surgical hospitals (4,900) and HMO medical centers (4,900). All nine industries added large numbers of jobs. Growth rates and job increases were remarkable in services for the elderly and persons with disabilities (515%), outpatient care services (203%), home health care services (100%), and assisted living facilities for the elderly (96%). None of the nine health care industries reduced employment between 2010 and 2019.

**Exhibit 4. Employment trends, nine key industries, Western Placer County, 2010–2019**

Industry: 6-digit NAICS	2010	2013	2016	2019	% Change 2010–2019
All Other Outpatient Care Centers	141	159	216	427	203
Assisted Living Facilities for the Elderly	460	781	868	903	96
Freestanding Ambulatory Surgical and Emergency Centers	71	76	127	129	82
General Medical and Surgical Hospitals	4,287	4,902	4,497	4,912	15
HMO Medical Centers	2,890	3,265	4,317	4,904	70
Home Health Care Services	504	694	924	1,008	100
Nursing Care Facilities (Skilled Nursing Facilities)	1,269	1,487	1,495	1,397	10
Offices of Physicians (except Mental Health Specialists)	1,937	2,083	2,053	2,318	20
Services for the Elderly and Persons with Disabilities	548	2,248	2,855	3,370	515
<b>Total Top Health Care Industry Job Count</b>	<b>12,108</b>	<b>15,695</b>	<b>17,354</b>	<b>19,366</b>	<b>60</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.



The research compares the sub-county data to the seven-county Greater Sacramento (North) region data (Exhibit 5). The seven-county region, which includes all of Placer and Nevada counties, has 120,600 jobs in the nine health care industries. Jobs in these industries grew 82% between 2010 and 2019. The largest industries in terms of number of jobs are services for the elderly and persons with disabilities (42,300), general and medical surgical hospitals (26,600), and HMO medical centers (14,200). Nearly all of the nine industries added large numbers of jobs. Growth rates and job increases were remarkable in services for the elderly and persons with disabilities (940%), other outpatient care centers (200%), home health care services (105%), assisted living facilities for the elderly (45%), and HMO medical centers (45%).

### Exhibit 5. Employment trends, nine key industries, Greater Sacramento (North) region, 2010–2019

Industry: 6-digit NAICS	2010	2013	2016	2019	% Change 2010–2019
All Other Outpatient Care Centers	584	834	1,439	1,738	198
Assisted Living Facilities for the Elderly	3,877	4,677	5,233	5,689	47
Freestanding Ambulatory Surgical and Emergency Centers	504	611	756	1,008	100
General Medical and Surgical Hospitals	23,779	25,288	25,136	26,599	12
HMO Medical Centers	9,821	10,713	12,386	14,235	45
Home Health Care Services	3,504	4,026	5,214	7,187	105
Nursing Care Facilities (Skilled Nursing Facilities)	8,303	8,417	8,763	8,533	3
Offices of Physicians (except Mental Health Specialists)	11,930	12,694	12,864	13,307	12
Services for the Elderly and Persons with Disabilities	4,052	26,609	34,963	42,291	944
<b>Total Top Health Care Industry Job Count</b>	<b>66,354</b>	<b>93,869</b>	<b>106,754</b>	<b>120,587</b>	<b>82</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.

Exhibit 6 displays data at the state level. California has 1,760,000 jobs in the nine health care industries. Jobs in these industries grew 79% between 2010 and 2019. The largest industries in terms of number of jobs are services for the elderly and persons with disabilities (641,000), general and medical surgical hospitals (384,000), offices of physicians (243,600), skilled nursing facilities (142,600), and HMO medical centers (128,000). All but one industry (offices of physicians) had positive growth, and several industries experienced massive growth. Standout industries included services for the elderly and persons with disabilities (1019%), HMO medical centers (158%), outpatient care centers (148%), and ambulatory surgical and emergency centers (118%).

### Exhibit 6. Employment trends, top industries, California, 2010–2019

Industry: 6-digit NAICS	2010	2013	2016	2019	% Change 2010–2019
All Other Outpatient Care Centers	13,330	16,457	23,567	33,068	148
Assisted Living Facilities for the Elderly	44,820	52,270	57,122	62,144	39
Freestanding Ambulatory Surgical and Emergency Centers	8,719	9,765	15,629	18,979	118
General Medical and Surgical Hospitals	358,080	355,012	370,939	384,408	7
HMO Medical Centers	49,578	54,660	114,658	127,916	158
Home Health Care Services	73,030	83,847	86,988	104,965	44
Nursing Care Facilities (Skilled Nursing Facilities)	122,227	128,024	139,929	142,621	17
Offices of Physicians (except Mental Health Specialists)	253,951	269,945	238,554	243,634	-4
Services for the Elderly and Persons with Disabilities	57,280	458,628	552,183	640,821	1019
<b>Total Top Health Care Industry Job Count</b>	<b>981,016</b>	<b>1,428,609</b>	<b>1,599,569</b>	<b>1,758,555</b>	<b>79</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.





The research covers average annual earnings for the nine health industries analyzed (Exhibit 7). Earnings data reflect cost of living, regional workforce pulls from neighboring employers competing for talent, and the general strength of the industries in a local area.

Annual earnings in western Nevada County are on average more than \$20,000 per year lower than those in the Greater Sacramento region. Compared with earnings in the Greater Sacramento region, earnings in western Nevada County are markedly lower in ambulatory surgical and emergency centers (-\$25,000), general medical and surgical hospitals (-\$17,000), and offices of physicians (-\$36,000).

When comparing western Placer County to western Nevada County, the deltas are significant. The overall average annual earnings are \$50,000 lower in western Nevada County than in western Placer County. The largest deltas include ambulatory surgical and emergency centers (-\$20,000), general medical and surgical hospitals (\$22,500), home health care (-\$22,000), and offices of physicians (-\$62,000).

Industries in western Nevada County with earnings comparable to those in the other geographies include outpatient care centers, assisted living facilities for the elderly, nursing care facilities, and services for the elderly and persons with disabilities.

### Exhibit 7. Average annual earnings, top industries, four regions, 2019

Industry: 6-digit NAICS	W. Nevada County	W. Placer County	Sacramento Region	California
All Other Outpatient Care Centers	\$71,938	\$68,001	\$73,458	\$75,218
Assisted Living Facilities for the Elderly	\$36,262	\$36,646	\$35,597	\$40,553
Freestanding Ambulatory Surgical and Emergency Centers	\$57,136	\$77,053	\$82,106	\$81,351
General Medical and Surgical Hospitals	\$101,755	\$123,070	\$118,856	\$106,245
HMO Medical Centers	\$87,737	\$163,422	\$165,342	\$149,062
Home Health Care Services	\$46,359	\$68,414	\$65,125	\$49,030
Nursing Care Facilities (Skilled Nursing Facilities)	\$50,181	\$49,723	\$51,380	\$52,351
Offices of Physicians (except Mental Health Specialists)	\$108,360	\$170,008	\$144,763	\$118,761
Services for the Elderly and Persons with Disabilities	\$21,926	\$23,720	\$21,527	\$22,255
<b>Weighted Average Earnings for Health Care Industry</b>	<b>\$57,056</b>	<b>\$107,550</b>	<b>\$79,466</b>	<b>\$69,194</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.

# OCCUPATIONS



Occupational analysis derives from staffing patterns in the top nine industries employing allied health workers in the study's geographies. Staffing patterns reflect the occupational workforce employed in these geographies' health care organizations. The exhibits below present labor market size and demand in the local service area (Nevada and Placer counties) and the Greater Sacramento region.

The research set out to verify messages about hard-to-fill positions: medical assistants, licensed vocational nurses, nursing assistants, and phlebotomists. The data indicate the first three positions are in high demand in the Greater Sacramento region. Licensed vocational nurses are in lower, but still significant, demand, in Nevada and Placer counties. Phlebotomists, expressed as a whole occupation, are in low demand in both subregions.

Licensed vocational nurses earn middle-wage levels, about \$29 per hour in both subregions. Nursing assistants and medical assistants make lower wages, \$17 per hour to \$20 per hour. The wage data indicate these lower-paying occupations represent upskilling opportunities.

Nursing is a consistently in-demand occupation. Both annual openings and wages (more than \$60 per hour) are high for registered nurses.

Office and administrative roles and medical records specialists are also in high demand. Their wage levels range from \$15 per hour (for front-line supervisory roles such as receptionists and information clerks) to \$26 per hour (for administrative positions that may include imaging technologists, dosimetrists, medical records specialists, and health technologists).

Home health aides have the largest number of jobs and annual openings, but they make low wages. The home health workforce should be a target for upskilling and retraining for higher-paying positions.

Health service manager is a high-demand and high-wage bachelor's-level occupation for business students and other students.

## How to read the occupation tables:

- ▶ **Share of top industries** is the percent of the workforce in the occupation in the nine top industries studied.
- ▶ **Jobs** are different than workers because the data reflect the number of positions, not individuals, in organizations. The number of positions represents the size of the labor market.
- ▶ **Annual openings** is an economics projection based on historical job growth and turnover due to retirements or career changes. The number is used to estimate workforce demand.
- ▶ **Median hourly earnings** are estimates based on employer surveys.
- ▶ **Skill level** refers to the education level typical of the workforce. Middle-skill jobs refers to those jobs requiring more than a high school diploma but less than a bachelor's degree.



**Exhibit 8. Top occupations in Western Nevada and Western Placer counties, by number of jobs (n = 22,000 jobs in top nine industries)**

SOC	Occupation	Skill Level	Jobs	Share Top Industries	Annual Openings, 2019–2023	Median Hourly Wage
31-1128	Home Health and Personal Care Aides	Below Middle Skill	4,080	18.4%	775	\$13.72
29-1141	Registered Nurses	Middle Skill	3,244	14.6%	225	\$61.78
31-9092	Medical Assistants	Middle Skill	1,394	6.3%	189	\$20.10
43-6013	Medical Secretaries and Administrative Assistants	Middle Skill	1,026	4.6%	126	\$22.42
31-1131	Nursing Assistants	Middle Skill	1,012	4.6%	124	\$17.27
29-2061	Licensed Practical and Licensed Vocational Nurses	Middle Skill	644	2.9%	61	\$28.59
29-2098	Medical Dosimetrists, Medical Records Special., Health Techs	Middle Skill	613	2.8%	64	\$25.84
43-9061	Office Clerks, General	Below Middle Skill	405	1.8%	48	\$18.07
43-4171	Receptionists and Information Clerks	Below Middle Skill	393	1.8%	54	\$15.34
11-9111	Medical and Health Services Managers	Above Middle Skill	348	1.6%	43	\$58.22
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	Above Middle Skill	304	1.4%	14	\$132.28
29-2018	Clinical Laboratory Technologists and Technicians	Middle Skill	242	1.1%	19	\$30.44
43-1011	First-Line Supervisors Office, Administrative Support Workers	Middle Skill	237	1.1%	25	\$28.91
29-2034	Radiologic Technologists and Technicians	Middle Skill	235	1.1%	17	\$48.00
31-9097	Phlebotomists	Middle Skill	68	0.3%	8	\$22.19

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.



The data from the Greater Sacramento (North) region largely reflect the findings from western Nevada and western Placer counties (Exhibit 9). The size of the labor market and number of annual openings in the region is several times the size of the labor market and number of annual openings of the two sub-county regions. Because Placer County extends into the urban core, its wage data do not markedly differ from the wage data of the Greater Sacramento (North) region. Given the size of the labor market in the Greater Sacramento (North) region, it is reasonable to expect that many students will find employment in the wider region.

**Exhibit 9. Top occupations in Greater Sacramento (North), by projected annual openings, 2019–2023  
(n = 120,600 jobs in top nine industries)**

SOC	Occupation	Skill Level	Jobs	Share Top Industries	Annual Openings, 2019–2023	Median Hourly Wage
31-1128	Home Health and Personal Care Aides	Below Middle Skill	36,544	30.3%	7,493	\$13.28
29-1141	Registered Nurses	Middle Skill	14,687	12.2%	954	\$62.01
31-9092	Medical Assistants	Middle Skill	5,834	4.8%	735	\$18.99
31-1131	Nursing Assistants	Middle Skill	5,036	4.2%	645	\$17.23
43-6013	Medical Secretaries and Administrative Assistants	Middle Skill	4,217	3.5%	488	\$21.95
29-2061	Licensed Practical and Licensed Vocational Nurses	Middle Skill	2,838	2.4%	267	\$28.23
43-9061	Office Clerks, General	Below Middle Skill	2,278	1.9%	253	\$18.01
29-2098	Medical Dosimetrists, Medical Records Special., Health Techs	Middle Skill	2,244	1.9%	209	\$25.62
43-4171	Receptionists and Information Clerks	Below Middle Skill	1,684	1.4%	221	\$15.07
11-9111	Medical and Health Services Managers	Above Middle Skill	1,483	1.2%	172	\$58.32
29-1228	Physicians, All Other; and Ophthalmologists, Except Pediatric	Above Middle Skill	1,426	1.2%	56	\$125.09
21-1093	Social and Human Service Assistants	Middle Skill	1,127	0.9%	156	\$22.09
43-1011	First-Line Supervisors Office, Administrative Support Workers	Middle Skill	1,069	0.9%	103	\$28.90
43-6014	Secretaries, Administrative Assistants, Except Legal, Medical, Exec.	Middle Skill	1,047	0.9%	108	\$19.59
31-9097	Phlebotomists	Middle Skill	289	0.2%	34	\$23.37

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.



# JOBS POSTINGS



The research employs jobs postings analysis to identify the top-posting employers and jobs titles in four key occupational areas. These areas were identified by employer partners on the basis of their hiring challenges.

Exhibit 10 presents the number of jobs postings over a 12-month period between February 2020 and January 2021 by occupation and employer in Nevada and Placer counties. Jobs postings volumes are highest for medical assistants and nursing assistants. There are also a significant number of postings for licensed vocational nurses. Postings for phlebotomists, when examined as a unique occupational category, are few.

Major health care providers like Sutter Health and Dignity Health, along with hospitals (Tahoe Forest Hospital District and Western Sierra Medical Clinic), dominate the postings. In-home senior care and senior assisted living facilities (Careinhomes, Brookdale Senior Living, and Interim Healthcare) also register a large number of postings. Wellpath is an addiction and mental and behavioral health facility. Pine Creek Care Center is a skilled nursing facility. Fresenius is a facility for kidney disease patients. Quest Diagnostics Incorporated is the only employer that registers a sizeable number of postings for phlebotomists.

**Exhibit 10. Top employers in jobs postings for middle-skill health care occupations in Nevada and Placer counties, February 2020–January 2021**

Employer	Medical Assistants	Nursing Assistants	LPN/LVN	Phlebotomists
Sutter Health	71	37	24	0
Careinhomes	0	80	0	0
Dignity Health	26	10	0	6
Sutter Medical Center	18	14	9	0
Tahoe Forest Hospital District	21	9	0	0
Brookdale Senior Living	0	10	16	0
Quest Diagnostics Incorporated	0	0	0	20
Wellpath	9	0	9	0
Pine Creek Care Center	0	10	6	0
The Mentor Network	0	0	11	0
Western Sierra Medical Clinic	11	0	0	0
Fresenius	0	9	0	0
Sacramento Ear Nose Throat	9	0	0	0
Gateway Learning Corporation	0	8	0	0
Interim Healthcare	0	0	8	0

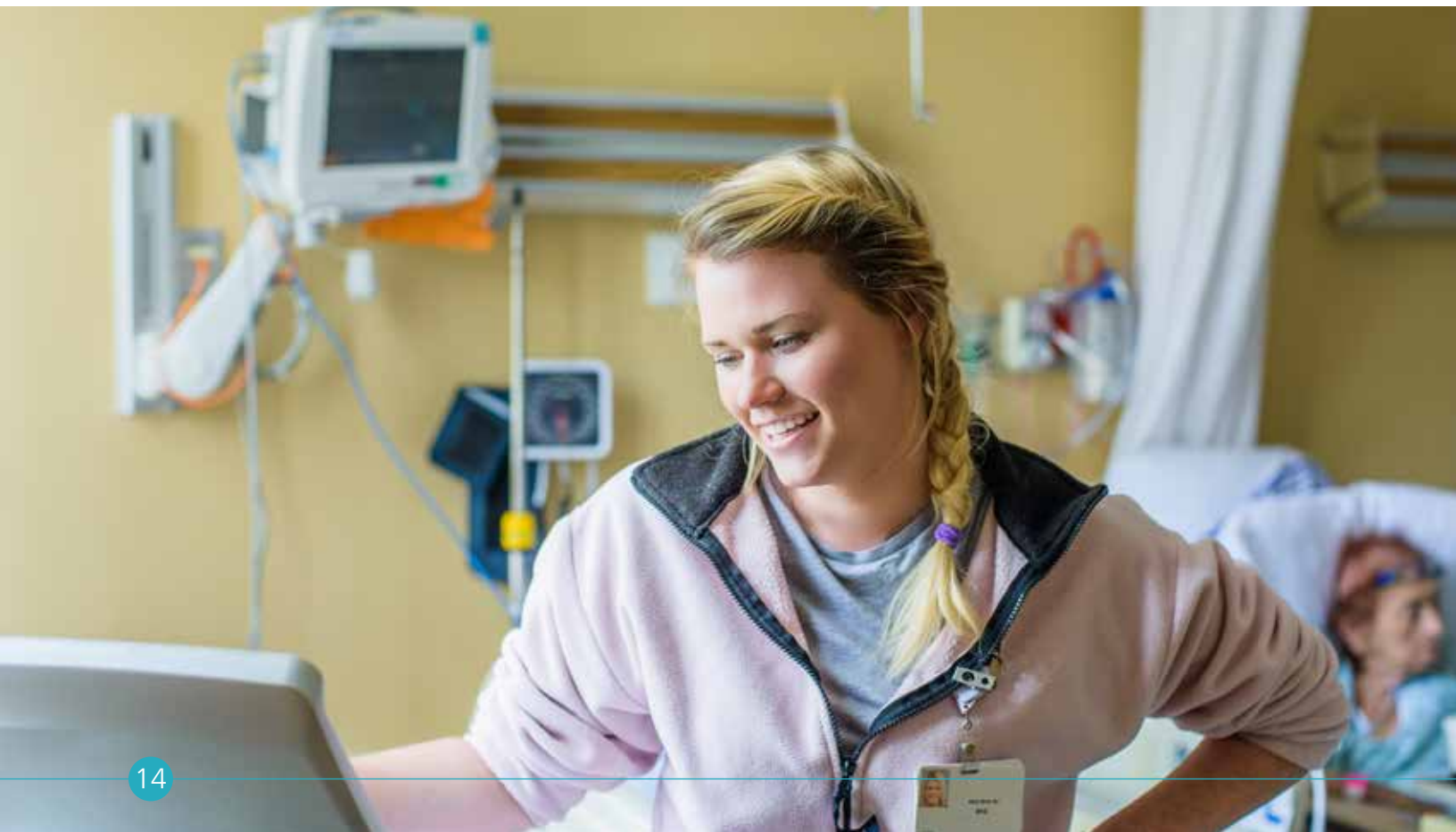
Source: Burning Glass, Labor Insight.

The research broadened the jobs postings analysis to the Greater Sacramento region to discover other key employers (Exhibit 11). Many of the same employers show up—senior care, major health providers, and mental and behavioral health providers. UC Davis is another major hospital in the Sacramento area that registers a large number of postings. Elica Health Centers is a full-service health provider in the Sacramento area.

**Exhibit 11. Top employers in jobs postings for middle-skill health care occupations in the Greater Sacramento (North) region, February 2020–January 2021**

Employer	Medical Assistants	Nursing Assistants	LPN/LVN	Phlebotomists
Sutter Health	212	91	68	0
Dignity Health	117	25	86	6
Careinhomes	0	221	0	0
UC Davis Health	116	0	79	16
Quest Diagnostics Incorporated	0	0	0	131
Sutter Medical Center	55	33	0	0
Brookdale Senior Living	0	37	38	0
Aveanna Healthcare	0	0	41	0
Interim Healthcare	0	35	0	0
Wellpath	0	0	34	0
Elica Health Centers	33	0	0	0
24/7 Med	0	0	33	0
Davita Incorporated	0	32	0	0
Humana	31	0	0	0

Source: Burning Glass, Labor Insight.



# PROGRAM AWARDS



The analysis covers average annual awards data from community colleges in and adjacent to the service territory of Sierra College’s Nevada County and Truckee campuses. These colleges include Butte College, Folsom Lake College, Lake Tahoe Community College, the Sierra College main campus in Rocklin, Yuba College, and Truckee Meadows Community College.

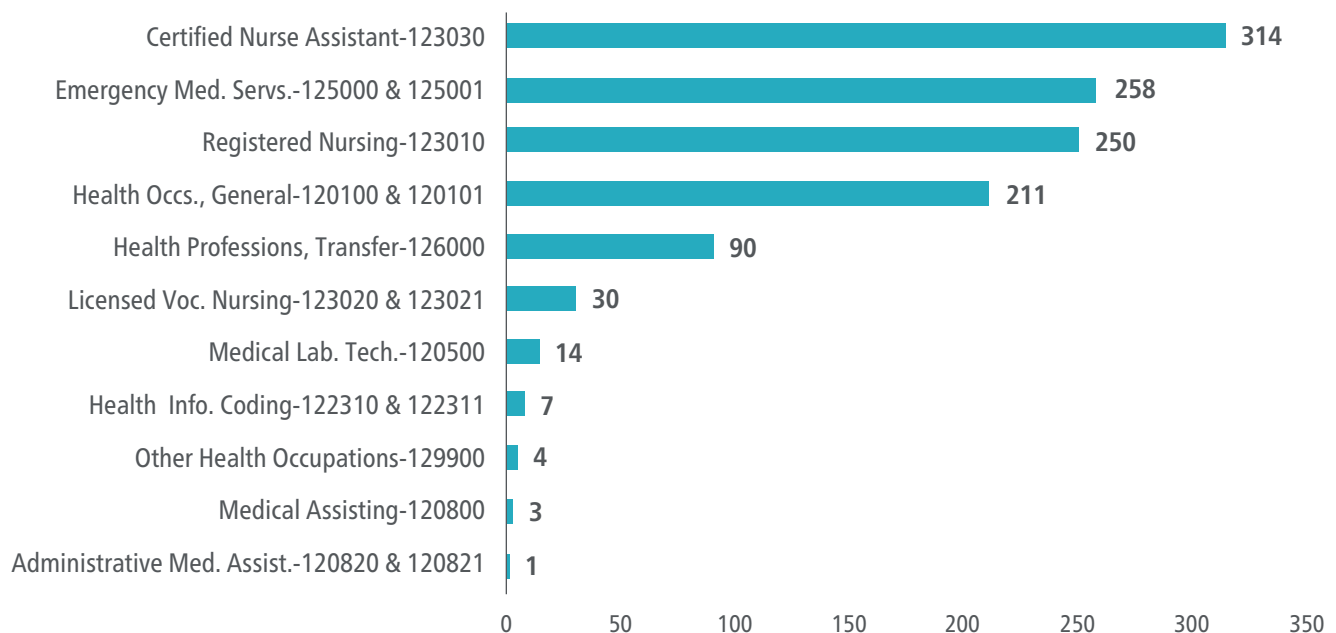
Exhibit 12 displays the programs that produce the largest number of awards in the service territory and the top-producing community colleges. Appendix A provides details by college.

Certified nursing assistant (more than 300 awards), emergency medical services (260 awards), registered nursing (250 awards), and general and transfer programs are among the programs with the largest number of awards.

With regard to occupational demand, it is notable that the service area registers few awards in the following key areas:

- Licensed vocational nursing
- Medical assisting
- Programs related to medical coding and administrative roles

**Exhibit 12. Average annual awards by program area, Sierra College campuses and neighboring community colleges, 2017-2020**



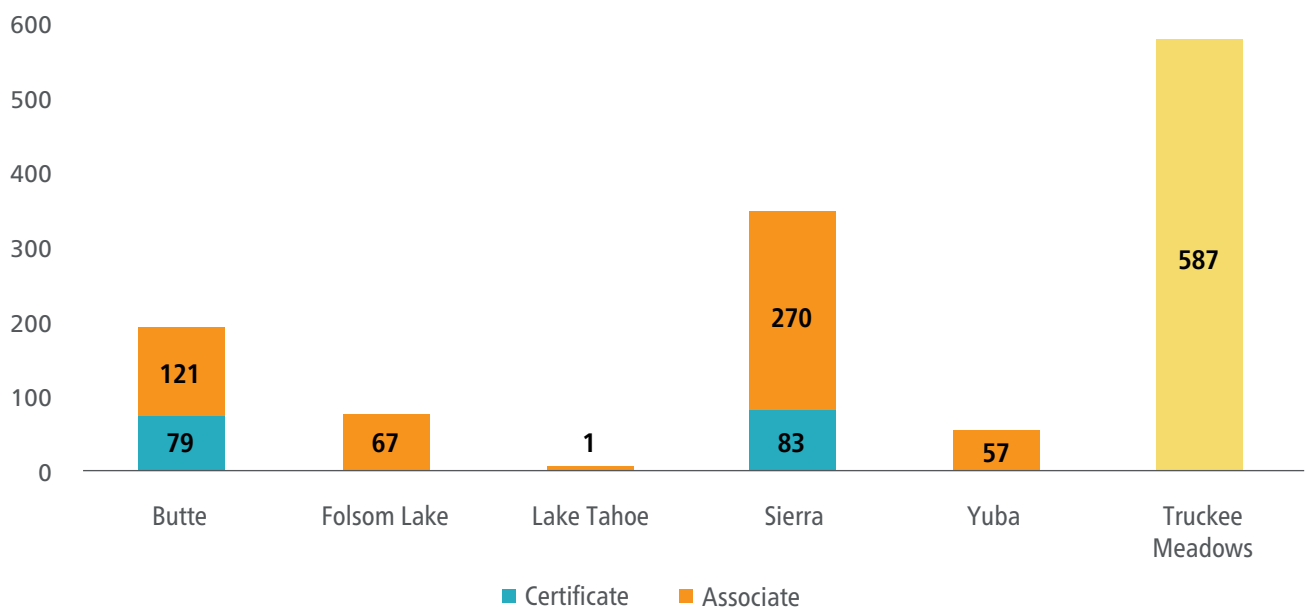
Source: California Community Colleges DataMart.

Note: The analysis is for three-year average annual program awards during academic years ending 2018 through 2020. Just two years of data were available from Truckee Meadows Community College in the Reno area through the academic year ending 2019; that data is coded by CIP code. A crosswalk to the California TOP code system was used to streamline data analysis.



The research also examines the average annual number of certificates and degrees by institution for allied health programs (Exhibit 13). Truckee Meadows Community College is the largest awards-producing institution in the service territory, with nearly 600 awards annually. Sierra College, including the main campus in Rocklin, has the next largest number of awards (350 annually). Butte College also produces a significant number of awards (200 annually). Folsom Lake College (67 annual awards) and Yuba College (57 annual awards) have smaller, but significant, numbers of awards. Lake Tahoe Community College registers few awards.

**Exhibit 13. Average annual awards by institution, community colleges neighboring Sierra College, Nevada County campus, 2017–2020**



Source: California Community Colleges DataMart.

Note: The analysis is for three-year average annual program awards during academic years ending 2018 through 2020. \*Just two academic years of data (2018 and 2019) were available from Truckee Meadows Community College in the Reno area; that data is coded by CIP code. A crosswalk to the California TOP code system was used to streamline data analysis.



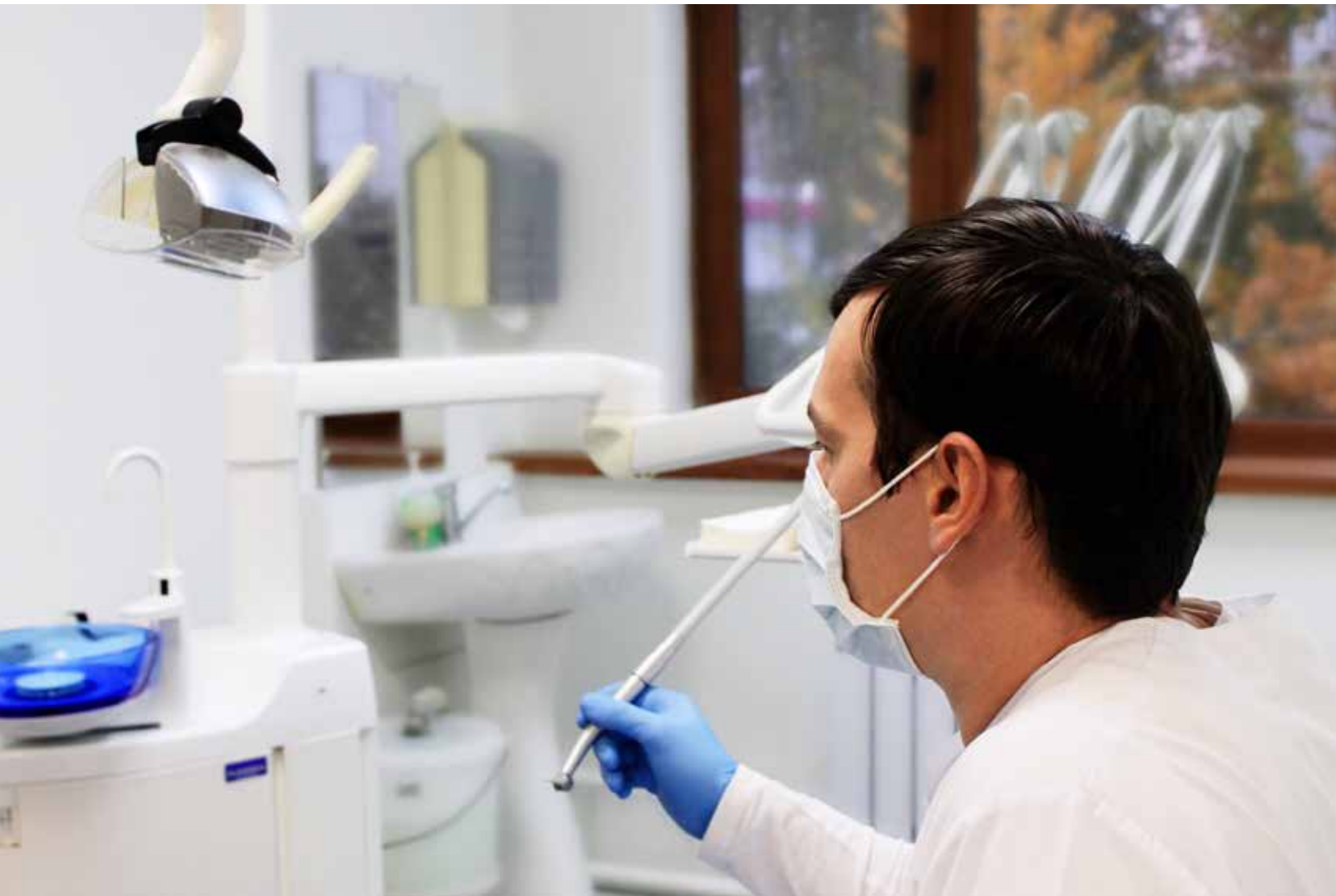
# FINDINGS



Sierra College, Nevada County campus, worked with local employers and discipline-area faculty to identify potential areas for program development. The COE analyzed industry and occupational trends, jobs postings data, and workforce education and training program assets in health care industries and occupations. The main findings include the following:

- Industry growth rates in western Nevada County are strong (47%) between 2010 and 2019, but the rates are generally half or less the rates of western Placer County (60%), the Greater Sacramento region (82%), and California (79%).
- The strongest health care industries in western Nevada County in terms of comparative earnings and growth rates include industries that are associated with an aging population. These industries include assisted living facilities for the elderly, skilled nursing, and services for the elderly and persons with disabilities.
- Nevada County's hospitals include Sierra Nevada Memorial Hospital in Grass Valley and Tahoe Forest Hospital in Truckee. Sutter Health and Dignity Health also have offices in Nevada County. Chapa-De Indian Health is another key employer, along with numerous private practice offices. The industry data show hospitals have reduced their workforce by 7% and offices of physicians by 14% over the last decade in the county. For students in current and future programs, opportunity abounds. Hospitals and offices of physicians are experiencing massive growth in western Placer County, the Greater Sacramento region, and the state.
- Earnings data indicates that wage deltas among western Nevada County, western Placer County, and the Greater Sacramento region could contribute to local talent-attraction challenges for Nevada County employers.
- The occupational data substantiate three of the four occupational areas identified by employers and Sierra College as training opportunity areas. Significant numbers of annual openings in Nevada County and Placer County are projected for medical assistants (189 openings), licensed vocational nurses (60 openings), and nursing assistants (125 openings). The data for the Greater Sacramento (North) region shows many hundreds of annual openings in these occupations.
- The data and college feedback indicate that phlebotomy is seldom a stand-alone occupation, though there is some demand from Quest Diagnostics, a clinical laboratory. Instead, partners suggest phlebotomy is a skill embedded in many other key allied health positions, including laboratory technology and medical assistant positions.
- There is significant demand for secretarial and administrative occupations in the nine industries of interest, though wages are generally low, just \$15 per hour to \$20 per hour. Sierra College, Nevada County campus, has explored creation of a medical assisting program that includes medical records, billing, and coding, along with other office and administrative skills targeted to health care.
- Jobs postings data also reinforce findings for medical assistants, licensed vocational nurses, and nursing assistants. Major regional employers recruit for these positions in Nevada and Placer counties and throughout the region. These employers include Sutter Health, Dignity Health, Careinhomes, Tahoe Forest District Hospital, UC Davis Health, and Brookdale Senior Living.
- The awards data show that colleges in the service territory surrounding the Sierra College campuses in Grass Valley and Truckee produce hundreds of annual awards in allied health programs, ranging from certified nursing assistant, emergency medical services, and registered nursing to licensed vocational nursing and in degrees for transfer into professional positions.
- Comparing program awards data to annual openings reveals areas of opportunity for the Sierra College campuses. Demand generally far outweighs the number of awards in the service territory and the wider region. In addition, a large share of award production uncovered in the research takes place far from Sierra College's Nevada County campuses. Truckee Meadows Community College is in the Reno area, 90 miles from the Nevada County campus in Grass Valley and 40 miles from the Truckee-Tahoe campus. Butte College is 70 miles north of the Grass Valley campus and 120 miles northwest of the Truckee campus. This proximity suggests the demand gap is even more significant than the supply-and-demand data comparison may indicate. (As noted in the methodology, the geography analyzed in the occupational data is smaller than the service area examined in the awards data.)

- Together, the colleges make just more than 300 average annual awards for certified nursing assistants. Truckee Meadows Community College produces more than 250 awards annually for certified nursing assistants. Butte College, which is not in the immediate commute shed, produces 60 awards for certified nursing assistants. No other nearby certified nursing assistant program is offered by the community colleges. There are 124 projected annual openings in western Nevada and western Placer counties for nursing assistants. There are 645 projected annual openings for nursing assistants in the Greater Sacramento region.
- Few awards are issued for medical assistants by the community colleges included in the study, though Sierra College's main campus in Rocklin has a new program that has begun graduating students. Local demand for these assistants is significant: 190 annual openings in western Nevada and western Placer counties and 735 annual openings in the Greater Sacramento region.
- Similarly, few awards (just 30) are made for licensed vocational nurses by the community colleges studied, yet local demand is high: 61 annual openings for vocational nurses in western Nevada and western Placer counties and 267 annual openings in Sacramento County.
- There are few awards for programs specifically related to medical office and administrative support. Similarly, there are few awards in health information coding and administrative medical assisting.
- The demand for home health aides is massive, but no awards programs target these occupations, the wages for which are between \$13 per hour and \$14 per hour.
- Nursing has the highest earnings of the middle-skill jobs studied. There is significant demand for nurses at the local county level and throughout the region. The main Sierra College campus has a nursing program. A pre-allied health program at the Nevada County campus provides one pathway to the program.



# RECOMMENDATIONS



The research and data analysis support many of the findings and recommendations of a previous environmental scan conducted for Sierra College and the Nevada County Economic Resource Council (ERC) as well as messages from local health care employers.

- The data validate employer engagement efforts and encourage program development for certified nursing assistants and licensed vocational nurses in particular. Awards data generally indicate that local and regional demand dwarfs the number of program graduates. The regional director of employer engagement for health, Julie Holt, affirms both the demand and the need for program development for certified nursing assistants and licensed vocational nurses.
- Allied health programs that include skills for medical office and administrative duties and skills make sense as an entry point to the health care industry. Despite significant demand for various administrative and medical office occupations, few programs specifically target them. The pay rates for these occupations are an important consideration—wages are typically just \$15 per hour to \$20 per hour. The Nevada County campus of Sierra College should continue its development of a program that combines training for medical assisting with office and administrative skills like medical billing and coding.
- Demand for medical assistants is high, but there are few medical assisting programs in the area. They are most common in the Greater Sacramento region, including at area high schools and in the private sector. Sierra College’s efforts to connect curriculum in medical assisting and administrative skills like billing and coding appear warranted by labor market demand and local employer calls.
- The environmental scan noted the value of the pre-allied health program at the Nevada County campus to help students attain allied health credentials at the main campus or in programs throughout the region. Given the scale of occupational demand in areas related to the allied health programs at the Sierra College Rocklin campus (e.g., nursing), the present report supports continuing pathway programs. Allied health programs are generally a very good investment due to the massive demand for health care workers throughout the Greater Sacramento region and the potential for these workers to earn middle-income wages.
- The data indicate that labor market opportunities for workers whose entire role is phlebotomy are quite limited. However, the qualitative findings from employer engagement and faculty knowledge of standards of care confirm that medical assistants, nursing assistants, and other allied health workers perform phlebotomy as part of their practice. Training allied health workers who only perform phlebotomy duties may be proscribed, but phlebotomy curriculum will form a key feature of the programs under consideration.
- In developing allied health programs, Sierra College should engage employers that serve the elderly and aging, a main demographic target for the local service area and a focal point of industry concentration and growth. Home health aide and other entry-point positions will offer low pay rates, but there may be supervisory or management positions that offer opportunities for students and for new awards programs. Some local community colleges have relevant programs—like Folsom Lake College’s gerontology program—that are ripe for employer engagement. On behalf of community colleges and workforce providers in the Sacramento region, Valley Vision and regional directors of employer engagement conducted a planning engagement with regional employers who work with the elderly and aging in April 2021.

# APPENDIX A: PROGRAM AWARDS DETAIL



Community colleges in the service territory for Sierra College’s satellite campuses in Nevada County and Truckee account for nearly 1,200 allied health program awards annually. Exhibit A1 details the average annual certificates and associate degrees by institution for the program years ending 2018 through 2020. With respect to Truckee Meadows Community College, data are available only for the program years ending 2018 and 2019, and certificate and degree data are not available.

**Exhibit A1. Average annual awards by program and institution, 2018–2020**

		Certificate	Associate	All Awards
Butte	Certified Nurse Assistant-123030	57	0	57
Butte	Health Information Coding-122310 & 122311	7	0	7
Butte	Health Occupations, General-120100 & 120101	0	1	1
Butte	Licensed Vocational Nursing-123020 & 123021	15	15	30
Butte	Registered Nursing-123010	0	105	105
Butte	Subtotal Butte	79	121	200
Folsom Lake	Health Occupations, General-120100 & 120101	0	32	32
Folsom Lake	Health Professions, Transfer Core-126000	0	21	21
Folsom Lake	Medical Laboratory Technology-120500	0	14	14
Folsom Lake	Subtotal Folsom Lake	0	67	67
Lake Tahoe	Administrative Medical Assisting-120820 & 120821	0	1	1
Lake Tahoe	Subtotal Lake Tahoe	0	1	1
Sierra	Emergency Medical Services-125000 & 125001	4	0	4
Sierra	Health Occupations, General-120100 & 120101	72	83	155
Sierra	Health Professions, Transfer Core-126000	0	69	69
Sierra	Medical Assisting-120800	3	0	3
Sierra	Other Health Occupations-129900	4	0	4
Sierra	Registered Nursing-123010	0	35	35
Sierra	Subtotal Sierra	83	187	270
Yuba	Registered Nursing-123010	0	57	57
Yuba	Subtotal Yuba	0	57	57
Truckee Meadows	Health Occupations, General-120100 & 120101	0	0	23
Truckee Meadows	Emergency Medical Services-125000 & 125001	0	0	254
Truckee Meadows	Registered Nursing-123010	0	0	54
Truckee Meadows	Certified Nurse Assistant-123030	0	0	257
Truckee Meadows	Subtotal Truckee Meadows	0	0	587
<b>Total Awards</b>		<b>162</b>	<b>433</b>	<b>1,181</b>

Source: California Community Colleges DataMart.

Note: The analysis is for three-year average annual program awards from academic years ending 2018 through 2020. Just two academic years of data (2018 and 2019) were available from Truckee Meadows Community College in the Reno area; that data is coded by CIP code. A crosswalk to the California TOP code system was used to streamline data analysis.



# APPENDIX B: INDUSTRY EMPLOYMENT, EASTERN NEVADA COUNTY AND EASTERN PLACER COUNTY



The industry data show that, together, eastern Nevada County and eastern Placer County (east of the Sierra crest and north of Lake Tahoe) have a comparatively small labor market in health care, just under 600 jobs, though they are home to important hospital and doctor's office resources. As in western Nevada County, hospitals and offices of physicians, two major sources of health care employment, have slightly reduced their employment levels over the 10-year study period. Other studied industry areas have virtually no employment in the geography.

**Exhibit B1. Employment trends, nine key industries, eastern Nevada County and eastern Placer County, 2010–2019**

Top Health Care Industry Job Count	East Nevada and East Placer Counties				
Industry: 6-digit NAICS	2010	2013	2016	2019	% Change 2010–2019
All Other Outpatient Care Centers	0	0	0	0	-
Assisted Living Facilities for the Elderly	0	0	0	0	-
Freestanding Ambulatory Surgical and Emergency Centers	5	5	5	5	0
General Medical and Surgical Hospitals	445	387	439	413	-7
HMO Medical Centers	5	5	5	5	0
Home Health Care Services	0	0	0	0	-
Nursing Care Facilities (Skilled Nursing Facilities)	0	0	0	0	-
Offices of Physicians (except Mental Health Specialists)	172	153	185	150	-12
Services for the Elderly and Persons with Disabilities	5	12	16	19	277
<b>Total Top Health Care Industry Job Count</b>	<b>632</b>	<b>562</b>	<b>650</b>	<b>592</b>	<b>-6</b>

Source: Emsi, 2021.1 QCEW, Non-QCEW, Self-employed.

Note: The geography includes zip codes 95728, 96161, 96145, 96146, 96140, and 96143.





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