

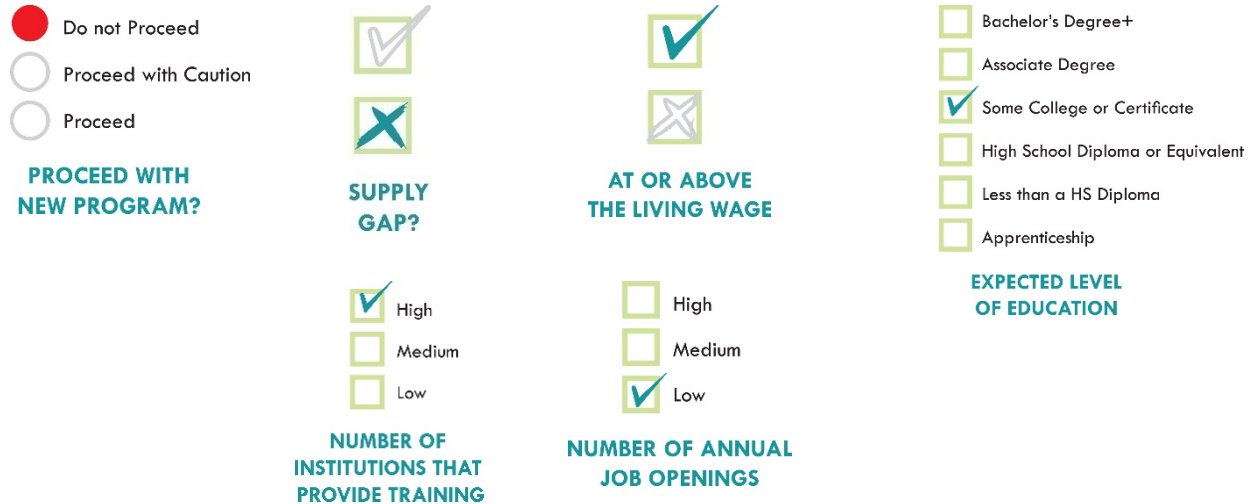
# Health Information Technology Occupations

## Labor Market Analysis: San Diego County

November 2020

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### Summary



The San Diego-Imperial Center of Excellence for Labor Market Research (COE) completed this labor market brief for *Health Information Technology Occupations* to assist the San Diego and Imperial Counties Community Colleges with program development and strategic planning. *Health Information Technology (IT) Occupations* include “Medical Records and Health Information Technicians” and “Medical Transcriptionists.” According to available labor market information (LMI), *Health IT Occupations* in San Diego County have a labor market demand of 250 annual job openings (while average demand for a single occupation in San Diego County is 277 annual job openings), and eight educational institutions in San Diego County supply 247 awards for these occupations, suggesting that there is a small supply gap in the labor market or that demand can be met with existing programs. Entry-level and median wages for all occupations are above the living wage. **The San Diego-Imperial COE does not recommend developing a new program** because 1) LMI suggests that labor market demand is met with existing programs; 2) a high number of programs exist in the region; and 3) the percentage of students who obtained a job related to their field of study and earned a living wage after completing related programs is below the state average for students who complete Career Education programs in general. **However, the San Diego-Imperial COE supports a program modification** because the majority of awards for these occupations are supplied by non-community-college institutions in the region.

## Introduction

This report provides labor market information in San Diego County for the following occupational codes in the Standard Occupational Classification (SOC)<sup>1</sup> system:

- **Medical Records and Health Information Technicians (SOC 29-2071):** Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards in a manner consistent with the healthcare industry's numerical coding system.
- **Medical Transcriptionists (SOC 31-9094):** 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.

For the purpose of this report, these occupations are referred to as *Health Information Technology Occupations*.

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<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc).

## Projected Occupational Demand

Between 2019 and 2024, *Health Information Technology Occupations* are projected to increase by 216 net jobs or eight percent (Exhibit 1a). During this period, employers in San Diego County are projected to hire 250 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

**Exhibit 1a: Number of Jobs for Health Information Technology Occupations (2009-2024)<sup>2</sup>**

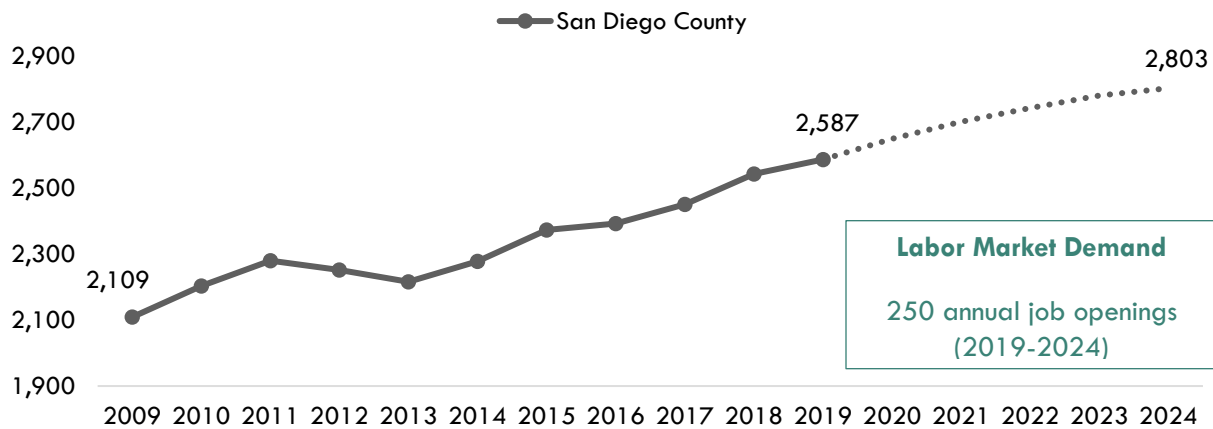


Exhibit 1b breaks down the projected number of jobs change by occupation more specifically: *Medical Records and Health Information Technicians* are projected to increase the most by 205 total jobs between 2019 and 2024.

**Exhibit 1b: Number of Jobs for Health Information Technology Occupations in San Diego County (2019-2024)<sup>3</sup>**

Occupational Title	2019 Jobs	2024 Jobs	2019 - 2024 Net Jobs Change	2019-2024 % Net Jobs Change	Annual Job Openings (Demand)
Medical Records and Health Information Technicians	2,148	2,353	205	10%	185
Medical Transcriptionists	439	450	11	3%	65
<b>Total</b>	<b>2,587</b>	<b>2,803</b>	<b>216</b>	<b>8%</b>	<b>250</b>

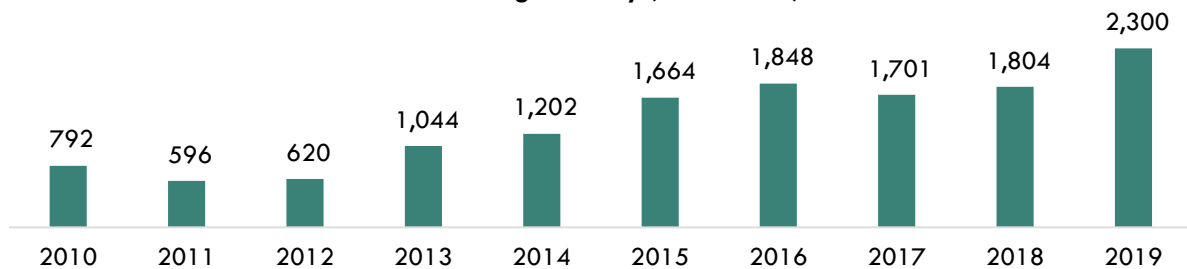
<sup>2</sup> EMSI 2020.02; QCEW, Non-QCEW, Self-Employed.

<sup>3</sup> EMSI 2020.02; QCEW, Non-QCEW, Self-Employed.

## Online Job Postings

This report analyzes not only historical and projected data (traditional labor market information or LMI), but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2010 and 2019, there was an average of 1,357 online job postings per year in San Diego County for *Health Information Technology Occupations* (Exhibit 2). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (Exhibit 1b). Employers may post a position multiple times for various reasons, such as increasing the pool of applicants, for example.

**Exhibit 2: Number of Online Job Postings for Health Information Technology Occupations in San Diego County (2010-2019)<sup>4</sup>**



## Earnings

The entry-level hourly earnings for *Health Information Technology Occupations* range from \$16.54 to \$18.07 (Exhibit 3a).

**Exhibit 3a: Hourly Earnings for Health Information Technology Occupations in San Diego County<sup>5</sup>**

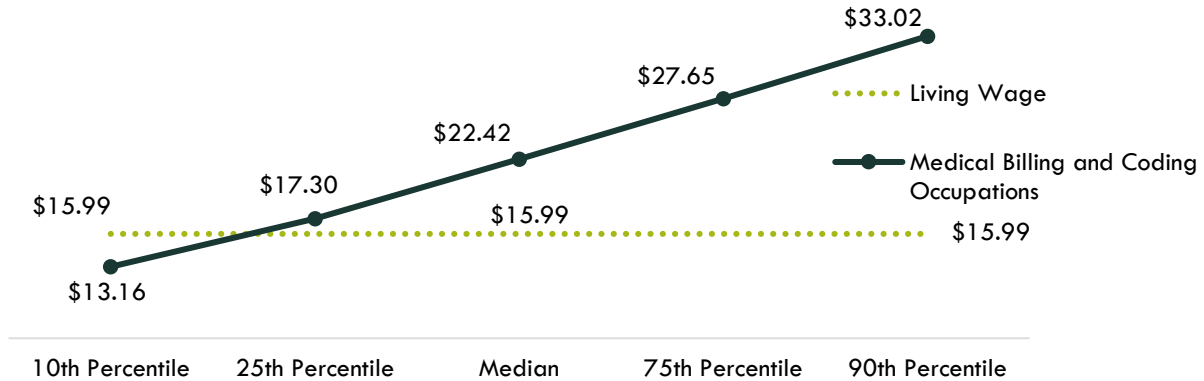
Occupational Title	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Medical Records and Health Information Technicians	\$18.07	\$22.52	\$27.71
Medical Transcriptionists	\$16.54	\$22.33	\$27.58

<sup>4</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2010-2019.

<sup>5</sup> EMSI 2020.02; QCEW, Non-QCEW, Self-Employed.

On average, the entry-level hourly earnings for *Health Information Technology Occupations* is **\$17.30**; this is more than the living wage for a single adult in San Diego County, which is **\$15.99** per hour (Exhibit 3b).<sup>6</sup>

**Exhibit 3b: Average Hourly Earnings<sup>7</sup> for *Health Information Technology Occupations* in San Diego County<sup>8</sup>**



## Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes.<sup>9</sup> There are **four** TOP codes and **seven** CIP codes related to *Health Information Technology Occupations* (Exhibit 4).

**Exhibit 4: Related TOP and CIP Codes for *Health Information Technology Occupations***

<i>Health Information Technology Occupations</i>
TOP 051420: Medical Office Technology
TOP 120200: Hospital and Health Care Administration
TOP 122300: Health Information Technology
TOP 122310: Health Information Coding
CIP 51.0706: Health Information/Medical Records Administration/Administrator
CIP 51.0707: Health Information/Medical Records Technology/Technician

<sup>6</sup> "California Family Needs Calculator (formerly the Self-Sufficiency Standard)," Insight: Center for Community Economic Development, last updated 2018. [insightccd.org/2018-self-sufficiency-standard](https://insightccd.org/2018-self-sufficiency-standard).

<sup>7</sup> 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

<sup>8</sup> EMSI 2020.02; QCEW, Non-QCEW, Self-Employed.

<sup>9</sup> TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart ([datamart.cccco.edu](https://datamart.cccco.edu)) and CIP data comes from the Integrated Postsecondary Education Data System ([nces.ed.gov/ipeds/use-the-data](https://nces.ed.gov/ipeds/use-the-data)).

**Health Information Technology Occupations**

CIP 51.0708: Medical Transcription/Transcriptionist

CIP 51.0709: Medical Office Computer Specialist/Assistant

CIP 51.0712: Medical Reception/Receptionist

CIP 51.0713: Medical Insurance Coding Specialist/Coder

CIP 51.0714: Medical Insurance Specialist/Medical Biller

According to TOP data, **three** community colleges supply the region with awards for these occupations: **Palomar College, San Diego Mesa College, and Southwestern College**. According to CIP data, **five** non-community colleges supply the region with awards: **Ashford University, Brightwood College-Chula Vista, Brightwood College-San Diego, Brightwood College-Vista and Concorde Career College-San Diego** (Exhibit 5).

**Exhibit 5: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2014-15 through PY2018-19 Average)**

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY16-17 to PY18-19)	Other Educational Institutions 3-Yr Annual Average Awards (PY14-15 to PY16-17)	3-Yr Total Average Supply (PY14-15 to PY18-19)
051420	Medical Office Technology	<b>12</b>	<b>0</b>	<b>12</b>
	• Palomar	12	0	
122300	Health Information Technology	<b>39</b>	<b>0</b>	<b>39</b>
	• San Diego Mesa	39	0	
122310	Health Information Coding	<b>4</b>	<b>0</b>	<b>4</b>
	• Southwestern	4	0	
51.0706	Health Information/Medical Records Administration/Administrator	<b>0</b>	<b>33</b>	<b>33</b>
	• Ashford University	0	33	
51.0707	Health Information/Medical Records Technology/Technician	<b>0</b>	<b>58</b>	<b>58</b>
	• Brightwood College-San Diego	0	16	
	• Concorde Career College-San Diego	0	42	

TOP6 or CIP	TOP6 or CIP Title	3-Yr Annual Average CC Awards (PY16-17 to PY18-19)	Other Educational Institutions 3-Yr Annual Average Awards (PY14-15 to PY16-17)	3-Yr Total Average Supply (PY14-15 to PY18-19)
51.0713	Medical Insurance Coding Specialist/Coder	0	101	101
	• Brightwood College-Chula Vista	0	41	
	• Brightwood College-San Diego	0	30	
	• Brightwood College-Vista	0	30	
			<b>Total</b>	<b>247</b>

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>10</sup> suggests that there is a **supply gap** for these occupations in San Diego County, with 250 annual openings and 247 awards. Comparatively, there are 2,891 annual openings in California and 3,473 awards, demonstrating that there is an oversupply across the state<sup>11</sup> (Exhibit 6).

### Exhibit 6: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

Community Colleges and Other Postsecondary Educational Institutions	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or <b>Oversupply</b>
San Diego	250	247	3
California	2,891	3,473	582

**Please note:** This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

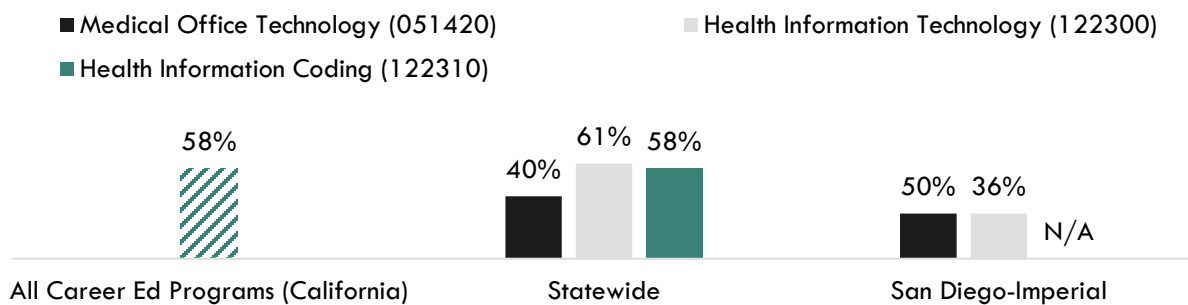
<sup>10</sup> Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

<sup>11</sup> "Supply and Demand," Centers of Excellence Student Outcomes, [coecc.net/Supply-and-Demand.aspx](http://coecc.net/Supply-and-Demand.aspx).

## Student Outcomes and Regional Comparisons

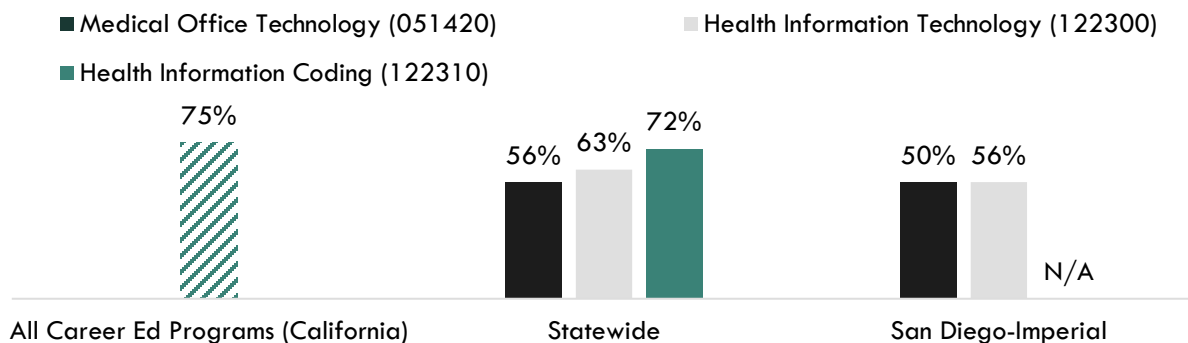
According to the California Community Colleges LaunchBoard, between 36 to 50 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to *Health Information Technology Occupations*, compared to 40 to 61 percent statewide and 52 percent of students in Career Education programs in general across the state (Exhibit 7a).<sup>12</sup>

**Exhibit 7a: Proportion of Students Who Earned a Living Wage, PY2016-17<sup>13</sup>**



According to the California Community Colleges LaunchBoard, between 50 to 56 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a related program, compared to 56 to 72 percent statewide and 75 percent of students in Career Education programs in general across the state (Exhibit 7b).<sup>14</sup>

**Exhibit 7b: Percentage of Students in a Job Closely Related to Field of Study, PY2015-16<sup>15</sup>**



<sup>12</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>13</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

<sup>14</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, [calpassplus.org/LaunchBoard/SWP.aspx](http://calpassplus.org/LaunchBoard/SWP.aspx).

<sup>15</sup> Most recent year with available data is Program Year 2014-15. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.



## Top Employers

Between January 1, 2017 and December 31, 2019, the top five employers in San Diego County for these occupations were [Scripps Health](#), [Sharp Healthcare](#), [University of California San Diego](#), [Rady Children's Hospital](#) and [Medical Professionals](#) (Exhibit 8).

### Exhibit 8: Top Employers in San Diego County for Health Information Technology Occupations<sup>16</sup>

Top Employers	
<ul style="list-style-type: none"> <li>• Scripps Health</li> <li>• Sharp Healthcare</li> <li>• University of California San Diego</li> <li>• Rady Children's Hospital</li> <li>• Medical Professionals</li> </ul>	<ul style="list-style-type: none"> <li>• Anthem Blue Cross</li> <li>• Tri City Medical Center</li> <li>• UnitedHealth Group</li> <li>• San Ysidro Health</li> <li>• Navigant Consulting Incorporated</li> </ul>

## Education, Skills and Certifications

*Health Information Technology Occupations* have a national educational requirement of [postsecondary non-degree award](#) (Exhibit 9a).

### Exhibit 9a: National Educational Attainment for Health Information Technology Occupations<sup>17</sup>

Occupational Title	Typical Entry-Level Education
Medical Records and Health Information Technicians	Postsecondary non-degree award
Medical Transcriptionists	Postsecondary non-degree award

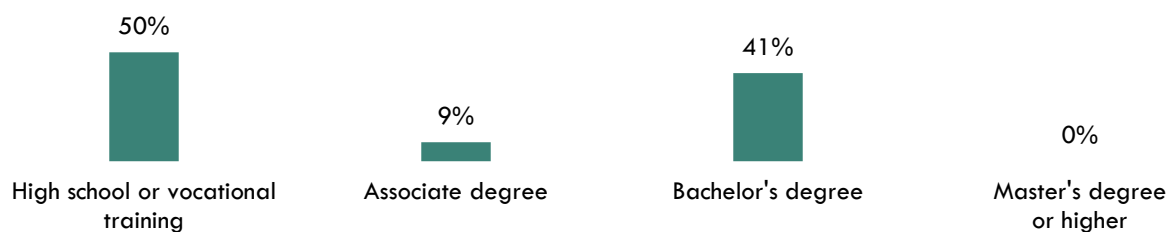
Based on online job postings between January 1, 2017 and December 31, 2019 in San Diego County, the top listed educational requirement for *Health Information Technology Occupations* is a [high school or vocational training](#) (Exhibit 9b).<sup>18</sup>

<sup>16</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

<sup>17</sup> EMSI 2020.02; QCEW, Non-QCEW, Self-Employed.

<sup>18</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

**Exhibit 9b: Educational Requirements for Health Information Technology Occupations in San Diego County<sup>19</sup>**



\*May not add to 100% due to rounding

Exhibit 10 lists the top specialized, soft and software skills that appeared in online job postings between January 1, 2017 and December 31, 2019.

**Exhibit 10: Top Skills for Health Information Technology Occupations in San Diego County<sup>20</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"> <li>• Medical Coding</li> <li>• Customer Billing</li> <li>• Medical Billing</li> <li>• Billing</li> <li>• Customer Service</li> </ul>	<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• Computer Literacy</li> <li>• Research</li> <li>• Detail-Oriented</li> <li>• Writing</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Excel</li> <li>• Epic Systems</li> <li>• ICD-10</li> <li>• ICD-9-CM Coding</li> <li>• Microsoft Word</li> </ul>

<sup>19</sup> "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 4, 2019. [bls.gov/emp/tables/educational-attainment.htm](https://www.bls.gov/emp/tables/educational-attainment.htm).

<sup>20</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool." 2017-2019.

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### **Important Disclaimers**

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.