

**Program Endorsement Brief: 1223.00/Health Information Technology  
Health Information Technician; Medical Coding**  
Orange County Center of Excellence, April 2021

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**Summary Analysis**

<b>Program Endorsement:</b>	<b>Endorsed: All Criteria Met</b> <input type="checkbox"/>	<b>Endorsed: Some Criteria Met</b> <input checked="" type="checkbox"/>	<b>Not Endorsed</b> <input type="checkbox"/>
<b>Program Endorsement Criteria</b>			
<b>Supply Gap:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Living Wage: (Entry-Level, 25<sup>th</sup>)</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Education:</b>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>Emerging Occupation(s)</b>			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to three middle-skill occupations: *medical records specialists (29-2072)*, *health information technologists and medical registrars (29-9021)*, and *medical transcriptionists (31-9094)*. Middle-skill occupations typically require some postsecondary education, but less than a bachelor’s degree.<sup>1</sup> 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.

Based on the available data, there appears to be a supply gap for these health information technology and medical coding occupations in the region. While the Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for each of the occupations in this report, the majority of annual openings have entry-level wages that are lower than the living wage in Orange County. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

**Demand:**

- **Supply Gap Criteria** – Over the next five years, there is projected to be **1,872 jobs available annually** in the region due to new job growth and replacements, **which is more than the 1,352 awards conferred annually** by educational institutions in the region.
  - It is important to note that Emsi uses aggregate codes that combine similar occupations, and this is the case for two occupations in this report: medical

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<sup>1</sup> The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor’s degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

records specialists (29-2072) is included under the medical dosimetrists, medical records specialists, and health technologists and technicians, all other (29-2098) SOC code, and health information technologists and medical registrars (29-9021) is included under the health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other (29-9021) SOC code. Since other miscellaneous and emerging occupations are combined within these datasets, **it is likely that the demand data for medical records specialists and health information technologists and medical registrars is overstated.**

- **Living Wage Criteria** – Within Orange County, **the majority (93%) of annual job openings** for these health information technology and medical coding occupations **have entry-level wages below the county's living wage** (\$17.36/hour).<sup>2</sup>
- **Educational Criteria** – The Bureau of Labor Statistics (BLS) lists a **postsecondary non-degree award as the typical entry-level education** for these occupations.
  - While the national-level educational attainment data indicates **between 44.7% and 50.2% of medical dosimetrists, medical records specialists, and health technologists and technicians, all other and medical transcriptionists in the field have completed some college or an associate degree**, only **20.6% of health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other have completed some college or an associate degree as their highest level of education.**

#### **Supply:**

- There are **8 community colleges** in the LA/OC region that issue awards related to health information technology and/or medical coding, conferring an average of **173 awards annually** between 2016 and 2019.
- Between 2014 and 2017, there was an average of **1,179 awards conferred annually** in related training programs by non-community college institutions throughout the region.

#### **Occupational Demand**

Exhibit 1 shows the five-year occupational demand projections for these occupations related to health information technology and medical coding. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 6% through 2024. There will be nearly 1,900 job openings per year through 2024 due to job growth and replacements. It is important to note that Emsi uses aggregate SOC codes to combine similar occupations, and this is the case for two of the occupations in this report:

- *Medical records specialists (29-2072) is included under medical dosimetrists, medical records specialists, and health technologists and technicians, all other (29-2098) SOC code.*

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<sup>2</sup> Living wage data was pulled from California Family Needs Calculator on 4/19/2021. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

- *Health information technologists and medical registrars (29-9021)* is included under the *health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other (29-9021)* SOC code.

Since these two aggregate SOC codes include miscellaneous and/or emerging occupations not necessarily related to health information technology or medical coding, it is likely that the demand and wage data for *medical records specialists* and *health information technologists* is overstated.

*This report includes employment projection data by Emsi which uses EDD information. 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. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it 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. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.*

**Exhibit 1: Occupational demand in Los Angeles and Orange Counties<sup>3</sup>**

<b>Geography</b>	<b>2019 Jobs</b>	<b>2024 Jobs</b>	<b>2019-2024 Change</b>	<b>2019-2024 % Change</b>	<b>Annual Openings</b>
Los Angeles	15,261	16,159	898	6%	1,407
Orange	4,987	5,254	267	5%	465
<b>Total</b>	<b>20,248</b>	<b>21,413</b>	<b>1,165</b>	<b>6%</b>	<b>1,872</b>

### **Wages**

The labor market endorsement in this report considers the entry-level hourly wages for these occupations related to health information technology and medical coding in Orange County as they relate to the county's living wage. Los Angeles County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

**Orange County**—The majority (93%) of annual openings for these occupations have entry-level wages below the living wage for one adult (\$17.36 in Orange County).<sup>4</sup> Typical entry-level hourly wages are in a range between \$12.52 and \$18.82. While *medical transcriptionists* and *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* have typical entry-level wages that are below the county's living wage (\$12.52 and \$16.91, respectively), *health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other* have typical entry-level wages that exceed the living wage (\$18.82). Experienced workers can expect to earn wages between \$21.20 and \$43.79, which are higher than the living wage estimate. Orange County's average wages are below the average statewide wage of \$25.67 for these occupations.

<sup>3</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

<sup>4</sup> Living wage data was pulled from California Family Needs Calculator on 4/21/2021. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

**Los Angeles County**—The majority (79%) of annual openings for these occupations have entry-level wages above the living wage for one adult (\$15.04 in Los Angeles County).<sup>5</sup> Typical entry-level hourly wages are in a range between \$12.46 and \$19.43. While *medical transcriptionists* have typical entry-level wages that are below the county's living wage (\$12.46), *medical dosimetrists, medical records specialists, and health technologists and technicians, all other and health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other* have typical entry-level wages that exceed the living wage (\$17.55 and \$19.43, respectively). Experienced workers can expect to earn wages between \$20.84 and \$44.59, which are higher than the living wage estimate. Los Angeles County's average wages are below the average statewide wage of \$25.67 for these occupations.

### **Job Postings**

There were 6,472 online job postings related to health information technology and medical coding listed in the past 12 months. The highest number of job postings were for medical billers, medical scribes, medical coders, medical records clerks, and dental billers. The top skills were: medical coding, customer/medical billing, ICD-10, customer service, and medical records. The top three employers, by number of job postings, in the region were: Anthem Blue Cross, Providence Health & Services, and PIH Health.

*It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.*

### **Educational Attainment**

The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for each of these occupations related to health information technology and medical coding. While the national-level educational attainment data indicates between 44.7% and 50.2% of *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* and *medical transcriptionists* in the field have completed some college or an associate degree, only 20.6% of *health information technologists, medical registrars, surgical assistants, and healthcare practitioners and technical workers, all other* as their highest level of education. Of the 63% of health information technology and medical coding job postings listing a minimum education requirement in Los Angeles/Orange County, 66% (2,678) requested a high school diploma, 27% (1,091) requested a bachelor's degree, and 8% (312) requested an associate degree.

### **Educational Supply**

**Community College Supply**—Exhibit 2 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Medical Office Technology (0514.20), Health Information Technology (1223.00), and Health Information Coding (1223.10). The colleges with the most completions in the region are: East LA, Cypress, and Saddleback. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

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<sup>5</sup> Living wage data was pulled from California Family Needs Calculator on 4/19/2021. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

**Exhibit 2: Regional community college awards (certificates and degrees), 2016-2019**

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
0514.20	Medical Office Technology	East LA	1	-	-	0
		Glendale	9	10	11	10
		LA City	40	-	3	14
		LA Harbor	4	1	1	2
		LA Trade	11	16	1	9
		Santa Monica	8	14	14	12
		<b>LA Subtotal</b>	<b>73</b>	<b>41</b>	<b>30</b>	<b>48</b>
<b>Supply Subtotal/Average</b>			<b>73</b>	<b>41</b>	<b>30</b>	<b>48</b>
1223.00	Health Information Technology	East LA	48	23	62	44
		<b>LA Subtotal</b>	<b>48</b>	<b>23</b>	<b>62</b>	<b>44</b>
		Cypress	21	20	19	20
		Saddleback	16	13	15	15
		<b>OC Subtotal</b>	<b>37</b>	<b>33</b>	<b>34</b>	<b>35</b>
<b>Supply Subtotal/Average</b>			<b>85</b>	<b>56</b>	<b>96</b>	<b>79</b>
1223.10	Health Information Coding	East LA	53	23	54	43
		Glendale	-	3	4	2
		<b>LA Subtotal</b>	<b>53</b>	<b>26</b>	<b>58</b>	<b>46</b>
		Saddleback	-	-	1	0
		<b>OC Subtotal</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>Supply Subtotal/Average</b>			<b>53</b>	<b>26</b>	<b>59</b>	<b>46</b>
<b>Supply Total/Average</b>			<b>211</b>	<b>123</b>	<b>185</b>	<b>173</b>

**Non-Community College Supply**—For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for health information technology and medical coding occupations. Exhibit 3 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Codes: Health Information/Medical Records Administration/Administrator (51.0706), Health Information/Medical Records Technology/Technician (51.0707), Medical Insurance Coding Specialist/Coder (51.0713), Medical Insurance Specialist/Medical Biller (51.0714), and Medical Administrative/Executive Assistant and Medical Secretary (51.0716). Due to different data collection periods, the most recent three-year period of available data is from 2014 to 2017. Between 2014 and 2017, four-year colleges in the region conferred an average of 1,179 awards annually in related training programs.

**Exhibit 3: Regional non-community college awards, 2014-2017**

<b>CIP Code</b>	<b>Program</b>	<b>College</b>	<b>2014-2015 Awards</b>	<b>2015-2016 Awards</b>	<b>2016-2017 Awards</b>	<b>3-Year Award Average</b>
51.0706	Health Information/ Medical Records Administration/ Administrator	University of Phoenix-California	16	27	13	19
		American Career College-Anaheim	9	15	10	11
		Charles R Drew University of Medicine and Science	5	-	-	2
51.0707	Health Information/ Medical Records Technology/ Technician	DeVry University-California	46	21	33	33
		ITT Technical Institute-Orange	6	-	-	2
		ITT Technical Institute-Sylmar	21	-	-	7
		National Career College	20	22	22	21
		Palladium Technical Academy	7	1	-	3
		Virginia Sewing Machines and School Center	8	6	33	16
		Westchester College of Nursing & Allied Health	11	6	16	11
		American Career College-Anaheim	99	96	110	102
		American Career College-Long Beach	89	66	79	78
		American Career College-Los Angeles	124	125	109	119
51.0713	Medical Insurance Coding Specialist/ Coder	American Career College-Lynwood	11	62	44	39
		California Healing Arts College	9	11	12	11
		Eagle Rock College	57	55	-	37
		Fremont College	1	6	9	5
		InterCoast Colleges-Anaheim	8	7	1	5
		PCI College	2	3	1	2
		Pomona USD Adult and Career Education	-	11	19	10
		Southern California Health Institute	-	21	56	26
		UEI College-Gardena	68	63	53	61
		United Education Institute-Anaheim	79	60	53	64
		United Education Institute-Encino	68	43	56	56
		United Education Institute-West Covina	41	44	29	38

CIP Code	Program	College	2014-2015 Awards	2015-2016 Awards	2016-2017 Awards	3-Year Award Average
51.0714	Medical Insurance Specialist/ Medical Biller	Advanced College	2	3	-	2
		American College of Healthcare	12	17	18	16
		Carrington College-Pomona	11	16	11	13
		Concorde Career College-Garden Grove	31	14	-	15
		Downey Adult School	162	97	78	112
		Eagle Rock College	-	-	40	13
		Galaxy Medical College	6	-	-	2
		Glendale Career College	-	9	4	4
		Hacienda La Puente Adult Education	57	60	74	64
		Healthcare Career College	14	7	7	9
		North-West College-Glendale	11	6	4	7
		North-West College-Long Beach	18	9	3	10
		North-West College-Pasadena	6	10	10	9
		North-West College-Pomona	7	8	12	9
		North-West College-Santa Ana	1	9	33	14
		North-West College-West Covina	23	13	73	36
		Palladium Technical Academy	16	11	8	12
Valley College of Medical Careers	17	20	15	17		
51.0716	Medical Administrative/ Executive Assistant and Medical Secretary	Advanced College	1	-	-	0
		American College of Healthcare	2	1	-	1
		Galaxy Medical College	-	6	19	8
		North-West College-Glendale	12	5	2	6
		North-West College-Long Beach	-	1	1	1
		North-West College-Pasadena	4	2	3	3
		North-West College-Pomona	4	3	5	4
		North-West College-West Covina	17	12	9	13
<b>Supply Total/Average</b>			<b>1,239</b>	<b>1,110</b>	<b>1,187</b>	<b>1,179</b>

Appendix A: Occupational demand and wage data by county

Exhibit 4. Orange County

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 <sup>th</sup> Percentile)
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)	3,430	3,690	260	8%	303	\$16.91	\$21.59	\$28.88
Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers, All Other (29-9098)	492	527	35	7%	33	\$18.82	\$26.67	\$43.79
Medical Transcriptionists (31-9094)	1,065	1,037	(28)	(3%)	129	\$12.52	\$14.68	\$21.20
<b>Total</b>	<b>4,987</b>	<b>5,254</b>	<b>267</b>	<b>5%</b>	<b>465</b>			



**Exhibit 5. Los Angeles County**

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)	11,179	12,143	964	9%	1,006	\$17.55	\$22.40	\$29.94
Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers, All Other (29-9098)	1,486	1,600	114	8%	101	\$19.43	\$27.29	\$44.59
Medical Transcriptionists (31-9094)	2,595	2,415	(180)	(7%)	300	\$12.46	\$14.56	\$20.84
<b>Total</b>	<b>15,261</b>	<b>16,159</b>	<b>898</b>	<b>6%</b>	<b>1,407</b>			

**Exhibit 6. Los Angeles and Orange Counties**

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)	14,610	15,833	1,223	8%	1,308
Health Information Technologists, Medical Registrars, Surgical Assistants, and Healthcare Practitioners and Technical Workers, All Other (29-9098)	1,978	2,127	149	8%	135
Medical Transcriptionists (31-9094)	3,660	3,453	(208)	(6%)	429
<b>Total</b>	<b>20,248</b>	<b>21,413</b>	<b>1,165</b>	<b>6%</b>	<b>1,872</b>

## Appendix B: Sources

- O\*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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