** Health Information Coding Specialist Occupations Labor Market Information Report**

**City College of San Francisco**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

January 2019

# Recommendation

Based on all available data, there appears to be an undersupply of Health Information Coding Specialist workers compared to the demand for this cluster of occupations in the Bay region and in the Mid-Peninsula sub-region (San Francisco and San Mateo Counties). The gap is about 2,185 students annually in the Bay region and 649 students annually in the Mid-Peninsula Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 1223.10 - Health Information Coding in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at City College of San Francisco and in the region.

# Introduction

This report profiles Health Information Coding Specialist Occupations in the 12 county Bay region and in the Mid-Peninsula sub-region for the revision to an existing program at City College of San Francisco. It should be noted that the educational requirement for the Statistician occupation (one of the five occupations selected by CCSF) is a Bachelor’s degree or higher and might not be an occupation that students would be qualified for, after completing the Health Information Coding Specialist program. The demand for Statisticians has been included in Tables 1 and 2 below. If it were excluded from the demand calculation, it would not significantly change the gap analysis that indicates there is an undersupply in the region and sub-region for Health Information Coding Specialist workers.

|  |
| --- |
| * **Medical Records and Health Information Technicians (SOC 29-2071):** Compile, process, andmaintain 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. Excludes “File Clerks” (43-4071).
 |
| *Entry-Level Educational Requirement: Postsecondary nondegree award* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 56%* |
|  |
| * **Information and Record Clerks, All** **Other (SOC 43-4199):** All information and record clerks not listed separately.
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 44%* |
|  |
| * **Medical and Health Services Managers** **(SOC 11-9111):** Plan, direct, or coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.
 |
| *Entry-Level Educational Requirement: Bachelor's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 28%* |
|  |
| * **Statisticians (SOC 15-2041):** Develop or apply mathematical or statistical theory and methods to collect, organize, interpret, and summarize numerical data to provide usable information. May specialize in fields such as bio-statistics, agricultural statistics, business statistics, or economic statistics. Includes mathematical and survey statisticians. Excludes “Survey Researchers” (19-3022).
 |
| *Entry-Level Educational Requirement: Master's degree* |
| *Training Requirement: None* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 6%* |
|  |
| * **File Clerks (SOC 43-4071)**: File correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order or according to the filing system used. Locate and remove material from file when requested.
 |
| *Entry-Level Educational Requirement: High school diploma or equivalent* |
| *Training Requirement: Short-term on-the-job training* |
| *Percentage of Community College Award Holders or Some Postsecondary Coursework: 44%* |

# Occupational Demand

**Table 1. Employment Outlook for Health Information Coding Specialist Occupations in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Medical Records and Health Information Technicians | 4,838 | 5,276 | 438  | 9% | 383 | 295 | $15.84  | $25.28  |
| Information and Record Clerks, All Other | 5,374 | 5,683 | 309  | 6% | 673 | 609 | $13.20  | $21.88  |
| Medical and Health Services Managers | 9,639 | 10,945 | 1,306  | 14% | 1,032 | 769 | $29.05  | $60.33  |
| Statisticians | 1,531 | 1,873 | 342  | 22% | 190 | 122 | $29.44  | $51.65  |
| File Clerks | 3,404 | 3,361 | (44) |  (1%) | 418 | 412 | $10.75  | $15.55  |
| **Total** | **24,787** | **27,139** | **2,352** | **9%** | **2,696** | **2,207** | **$20.55**  | **$38.47**  |

*Source: EMSI 2018.4*

**Bay Region** includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

**Table 2. Employment Outlook for Health Information Coding Specialist Occupations in Mid-Peninsula Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation  | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Medical Records and Health Information Technicians | 1,124 | 1,262 | 138  | 12% | 97 | 69 | $16.49  | $25.03  |
| Information and Record Clerks, All Other | 1,932 | 2,052 | 120  | 6% | 244 | 219 | $11.70  | $16.95  |
| Medical and Health Services Managers | 2,316 | 2,616 | 301  | 13% | 245 | 185 | $31.77  | $68.45  |
| Statisticians | 815 | 1,014 | 199  | 24% | 105 | 65 | $34.77  | $57.53  |
| File Clerks | 1,085 | 1,088 | 3  | 0% | 136 | 132 | $10.83  | $14.80  |
| **TOTAL** | **7,271** | **8,031** | **760**  | **10%** | **827** | **671** | **$21.29**  | **$38.83**  |

*Source: EMSI 2018.4*

**Mid-Peninsula Sub-Region** includes San Francisco and San Mateo Counties

### Job Postings in Bay Region and Mid-Peninsula Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (Jan 2018 - Dec 2018)**

| Occupation | Bay Region | Mid-Peninsula |
| --- | --- | --- |
| Medical and Health Services Managers (11-9111.00) | 13,175 | 4,970 |
| Medical Records and Health Information Technicians (29-2071.00) | 3,417 | 1,144 |
| Clinical Data Managers (15-2041.02) | 693 | 409 |
| Biostatisticians (15-2041.01) | 692 | 405 |
| File Clerks (43-4071.00) | 594 | 251 |
| **Total** | **18,571** | **7,179** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Health Information Coding Specialist Occupations for latest 12 months (Jan 2018 - Dec 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Mid-Peninsula | Common Title | Bay | Mid-Peninsula |
| Clinical Manager | 791 | 415 | Medical Coder | 140 | 79 |
| Medical Director | 615 | 317 | Senior Director | 137 | 71 |
| Director | 516 | 243 | Biostatistician | 134 | 58 |
| Clinical Data Manager | 353 | 260 | Health Manager | 122 | 29 |
| Coordinator | 325 | 132 | Medical Billing Specialist | 114 | 45 |
| File Clerk | 291 | 129 | Medical Records Clerk | 104 | 27 |
| Registered Nurse | 274 | 84 | Clinic Manager | 101 | 34 |
| Director of Nursing | 230 | 37 | Clinical Director | 101 | 32 |
| Clinical Supervisor | 213 | 38 | Clinical Systems Analyst | 100 | 13 |
| Medical Biller | 204 | 61 | Director of Rehabilitation | 100 | 25 |
| Laboratory Manager | 181 | 60 | Services Coordinator | 96 | 38 |
| Health Director | 173 | 52 | Medical Affairs Director | 87 | 58 |
| Associate Medical Director | 154 | 106 | Manager | 81 | 25 |
| Assistant Manager | 151 | 24 | Director, Demand | 79 | 49 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Health Information Coding Specialist Workers in Bay Region**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Industry – 6 Digit NAICS (No. American Industry Classification) Codes | Jobs in Industry (2017) | Jobs in Industry (2022) | % Change (2017-22) | % in Industry (2017) |
| General Medical and Surgical Hospitals (622110) | 3,099 | 3,092 |  (2%) | 12.4% |
| HMO Medical Centers (621491) | 1,847 | 1,894 | 36% | 7.6% |
| Federal Government, Civilian, Excluding Postal Service (901199) | 1,693 | 1,684 |  (1%) | 6.7% |
| Offices of Physicians (except Mental Health Specialists) (621111) | 1,511 | 1,524 | 5% | 6.1% |
| Hospitals (Local Government) (903622) | 1,421 | 1,439 | 9% | 5.8% |
| Local Government, Excluding Education and Hospitals (903999) | 1,253 | 1,254 | 3% | 5.0% |
| Colleges, Universities, and Professional Schools (611310) | 873 | 888 | 9% | 3.6% |
| Corporate, Subsidiary, and Regional Managing Offices (551114) | 718 | 738 | 7% | 3.0% |
| Nursing Care Facilities (Skilled Nursing Facilities) (623110) | 631 | 627 | 3% | 2.5% |
| Colleges, Universities, and Professional Schools (State Government) (902612) | 546 | 561 | 8% | 2.2% |
| Home Health Care Services (621610) | 447 | 449 | 16% | 1.8% |
| Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) (541715) | 427 | 444 | 0% | 1.8% |
| Offices of Lawyers (541110) | 401 | 396 |  (6%) | 1.6% |
| Hospitals (State Government) (902622) | 390 | 389 | 23% | 1.6% |
| Office Administrative Services (561110) | 393 | 375 |  (4%) | 1.5% |

*Source: EMSI 2018.4*

**Table 6. Top Employers Posting Health Information Coding Specialist Occupations in Bay Region and Mid-Peninsula Sub-Region (Jan 2018 - Dec 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Mid-Peninsula |
| Kaiser Permanente | 446 | University Of California Berkeley | 53 | Genentech | 188 |
| Stanford Health Care | 248 | Biomarin Pharmaceutical Incorporated | 52 | University California | 108 |
| Sutter Health | 215 | Blue Cross Blue Shield of California | 49 | UC San Francisco Medical Center | 107 |
| Genentech | 188 | John Muir Health | 49 | Gilead Sciences | 105 |
| University California | 173 | County Santa Clara | 48 | Sutter Health | 79 |
| Uc San Diego | 168 | University Of California San Francisco | 45 | Nektar Therapeutics | 73 |
| Sunrise Senior Living, Inc. | 144 | AbbVie | 43 | Sunrise Senior Living, Inc. | 71 |
| Sutter Medical Center | 143 | Jazz Pharma | 42 | Dignity Health | 65 |
| Lucile Packard Childrens Hospital | 135 | Northbay Healthcare Group | 42 | Kaiser Permanente | 61 |
| Stanford University | 116 | Capital Markets Placement | 41 | Blue Cross Blue Shield of California | 49 |
| UC San Francisco Medical Center | 111 | Aces | 40 | UnitedHealth Group | 48 |
| Hospital Corporation of America | 108 | Brookdale Senior Living | 40 | Sutter Medical Center | 45 |
| Gilead Sciences | 107 | Mdstaffers | 39 | IBM | 43 |
| Sutter Health Sacramento Sierra Region | 106 | Lifelong Medical Care | 38 | University Of California San Francisco | 43 |
| Alameda Health System | 105 | Prime Therapeutics | 38 | Prime Therapeutics | 38 |
| Telecare Corporation | 104 | Seneca Center | 38 | Sutter Health Sacramento Sierra Region | 37 |
| Dignity Health | 94 | Alta Bates Summit | 37 | Healthcare It Leaders | 34 |
| IBM | 91 | Healthcare It Leaders | 37 | Gap Inc. | 32 |
| Anthem Blue Cross | 74 | Securitas | 37 | Nektar | 30 |
| Nektar Therapeutics | 73 | Cep America | 36 | County San Mateo | 29 |
| Department of Veterans Affairs | 68 | PricewaterhouseCoopers | 35 | Nurse Management | 28 |
| UnitedHealth Group | 64 | state of california | 33 | Salesforce | 28 |
| HCR ManorCare | 62 | Gap Inc. | 32 | UC San Francisco | 28 |
| Pharmacyclics Incorporated | 59 | KPMG | 32 | Visa | 28 |
| Google Inc. | 57 | Nurse Management | 32 | Sfmta | 27 |

*Source: Burning Glass*

# Educational Supply

There are two community colleges in the Bay Region issuing 22 awards annually on TOP 1223.10 - Health Information Coding. Both colleges are in the Mid-Peninsula Sub-Region.

**Table 7. Awards on TOP 1223.10 - Health Information Coding in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Total |
| **Canada** | Mid-Peninsula | n/a |  | 8 | 8 |
| **San Francisco** | Mid-Peninsula | 43 |  | 14 | 14 |
| **San Jose City College** | Silicon Valley | 24 |  |  |  |
| **Total Bay Region** | **67** |  | **24** | **22** |
| **Total Mid-Peninsula Sub-Region** | **43** |  | **24** | **22** |

# *Source: IPEDS, Data Mart and Launchboard*

NOTE: Headcount of students who took one or more courses is for 2016-17. The annual average for awards is 2014-17 unless there are only awards in 2016-17. The annual average for other postsecondary is for 2013-16.

# Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,207 annual openings for the Health Information Coding Specialist occupational cluster and 22 annual awards for an annual undersupply of 2,185 students. In the Mid-Peninsula Sub-Region, there is also a gap with 671 annual openings and 22 annual awards for an annual undersupply of 649 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1223.10 - Health Information Coding**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay (All CTE Programs) | City College of San Francisco (All CTE Programs) | State (1223.10) | Bay (1223.10) | Mid-Peninsula (1223.10) | City College of San Francisco (1223.10) |
| % Employed Four Quarters After Exit | 74% | 73% | 74% | 83% | 83% | 80% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $22,070 | $28,377 | $19,450 | $19,450 | $20,141 |
| Median % Change in Earnings | 46% | 50% | 28% | 50% | 50% | 37% |
| % of Students Earning a Living Wage | 63% | 20% | 59% | 63% | 55% | 55% |

*Source: Launchboard Pipeline (version available on 1/9/19)*

# Skills, Certifications and Education

**Table 9. Top Skills for Health Information Coding Specialist Occupations in Bay Region (Jan 2018 - Dec 2018)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Budgeting | 3,830 | Mental Health | 968 | Cardiopulmonary Resuscitation (CPR) | 672 |
| Staff Management | 2,961 | Oncology | 937 | Health Insurance Portability and Accountability Act  | 663 |
| Patient Care | 2,631 | Data Entry | 924 | Teaching | 659 |
| Scheduling | 2,391 | Clinical Development | 919 | Treatment Planning | 658 |
| Project Management | 2,128 | Process Improvement | 915 | Drug Development | 633 |
| Quality Assurance and Control | 2,112 | Case Management | 902 | Acute Care | 622 |
| Customer Service | 1,745 | Clinical Research | 879 | Statistical Analysis | 619 |
| Customer Billing | 1,664 | Business Development | 876 | Behavioral Health | 597 |
| Medical Coding | 1,386 | Biostatistics | 837 | Administrative Support | 591 |
| Quality Management | 1,327 | SAS | 799 | Python | 588 |
| Biotechnology | 1,252 | Strategic Planning | 782 | Performance Management | 576 |
| Clinical Trials | 1,205 | Data Collection | 740 | Spreadsheets | 575 |
| Data Analysis | 1,133 | Statistics | 696 | Psychology | 572 |
| Data Management | 1,110 | SQL | 687 | Customer Contact | 570 |
| Supervisory Skills | 1,015 | Good Clinical Practices (GCP) | 684 | Product Development | 557 |

*Source: Burning Glass*

**Table 10. Certifications for Health Information Coding Specialist Occupations in the Bay Region (Jan 2018 - Dec 2018)**

Note: 71% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

|  |  |  |  |
| --- | --- | --- | --- |
| Certification | Postings | Certification | Postings |
| Registered Nurse | 1,645 | American Heart Association Certification | 120 |
| Driver's License | 1,104 | Board Certified Behavior Analyst (BCBA) | 113 |
| First Aid Cpr Aed | 486 | Licensed Clinical Social Worker (LCSW) | 99 |
| Basic Life Saving (BLS) | 450 | Licensed Vocational Nurse (LVN) | 99 |
| Basic Cardiac Life Support Certification | 334 | Board Certified/Board Eligible | 95 |
| Epic Certification | 321 | Security Clearance | 93 |
| Registered Health Information Technician | 273 | Certified Outpatient Coding (COC) | 89 |
| Social Work License | 264 | Certified Medical Assistant | 83 |
| Certified Professional Coder | 251 | Licensed Marriage and Family Therapist | 79 |
| Registered Health Information Administrator | 242 | Six Sigma Certification | 76 |
| Advanced Cardiac Life Support (ACLS) Certification | 168 | Project Management Professional (PMP) | 75 |
| Certified Coding Specialist | 163 | Clinical Laboratory Scientist (ClS) | 74 |
| Nurse Practitioner | 145 | Psychologist License | 73 |
| Project Management Certification | 142 | Pediatric Advanced Life Support (PALS) Certification | 69 |
| Medical Billing and Coding Certification | 128 | Lean Certification | 62 |

*Source: Burning Glass*

**Table 11. Education Requirements for Health Information Coding Specialist Occupations in Bay Region**

Note: 39% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

|  |  |
| --- | --- |
| Education (minimum advertised) | Latest 12 Mos. Postings |
| High school or vocational training | 962 (8%) |
| Associate Degree | 984 (9%) |
| Bachelor’s Degree or Higher | 9,599 (83%) |

*Source: Burning Glass*

# Methodology

Occupations for this report were identified by use of skills listed in O\*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCO Data Mart.

# Sources

O\*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard [www.calpassplus.org/Launchboard/](http://www.calpassplus.org/Launchboard/)

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor’s Office MIS system

# Contacts

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