**Registered Nurses**

**Labor Market Information Report**

**City College of San Francisco**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

March 2019

# Recommendation

Based on all available data, there appears to be a significant undersupply of Registered Nurses compared to the demand for this occupation in the Bay region and in the Mid-Peninsula sub-region (San Francisco and San Mateo Counties.) There is a projected annual gap of about 3,929 students in the Bay region and 968 students in the Mid-Peninsula Sub-Region.

This report also provides student outcomes data on employment and earnings for programs on TOP 1230.10 - Registered Nursing 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 (CCSF) and in the region.

# Introduction

This report profiles Registered Nurses in the 12 county Bay region and in the Mid-Peninsula sub-region for City College of San Francisco.

|  |
| --- |
| * **Registered Nurses (SOC 29-1141):** Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Includes Clinical Nurse Specialists. Excludes “Nurse Anesthetists” (29-1151), “Nurse Midwives” (29-1161), and “Nurse Practitioners” (29-1171). |
| Entry-Level Educational Requirement: Bachelor's degree |
| Training Requirement: None |
| Percentage of Community College Award Holders or Some Postsecondary Coursework: 38% |

# Occupational Demand

**Table 1. Employment Outlook for Registered Nurses in Bay Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Registered Nurses | 65,352 | 72,083 | 6,731 | 10% | 23,717 | 4,743 | $36.34 | $62.13 |

*Source: EMSI 2019.1*

**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 Registered Nurses in Mid-Peninsula Sub-Region**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Occupation | 2017 Jobs | 2022 Jobs | 5-Yr Change | 5-Yr % Change | 5-Yr Open-ings | Average Annual Open-ings | 10% Hourly Wage | Median Hourly Wage |
| Registered Nurses | 14,719 | 16,327 | 1,608 | 11% | 5,441 | 1,088 | $45.72 | $69.37 |

*Source: EMSI 2019.1*

**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 (March 2018 - Feb 2019)**

| Occupation | Bay Region | Mid-Peninsula |
| --- | --- | --- |
| Registered Nurses (29-1141.00) | 32,091 | 8,780 |
| Critical Care Nurses (29-1141.03) | 5,039 | 1,105 |
| Clinical Nurse Specialists (29-1141.04) | 360 | 119 |
| Advanced Practice Psychiatric Nurses (29-1141.02) | 66 | 20 |
| Acute Care Nurses (29-1141.01) | 17 | 4 |
| **Total** | **37,573** | **10,028** |

*Source: Burning Glass*

**Table 4. Top Job Titles for Registered Nurses for latest 12 months (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Common Title | Bay | Mid-Peninsula | Common Title | Bay | Mid-Peninsula |
| Registered Nurse | 10,099 | 2,407 | Telementry Nurse | 517 | 125 |
| Travel Registered Nurse | 1,755 | 455 | Clinical Nurse | 515 | 81 |
| Intensive Care Unit (ICU) Registered Nurse | 1,445 | 365 | Nurse Manager | 495 | 211 |
| Staff Nurse | 1,356 | 494 | Per Diem Nurse | 487 | 123 |
| Med/Surg Registered Nurse | 1,132 | 353 | Intensive Care Unit Nurse | 461 | 109 |
| Nurse Case Manager | 874 | 271 | Operating Room Registered Nurse | 441 | 135 |
| Home Health Registered Nurse | 841 | 142 | Oncology Registered Nurse | 424 | 129 |
| Labor and Delivery Registered Nurse | 815 | 137 | Patient Care Coordinator | 413 | 116 |
| Operating Room Nurse | 814 | 135 | Telemetry Registered Nurse | 401 | 95 |
| Emergency Room Registered Nurse | 793 | 194 | Home Health Nurse | 393 | 81 |
| Case Manager | 668 | 246 | Registered Nurse Case Manager | 361 | 88 |
| Hands-On Care | 624 | 122 | Clinical Nurse Specialist | 352 | 117 |
| Neonatal Intensive Care Registered Nurse | 609 | 117 | Labor & Delivery Nurse | 317 | 55 |
| Post-Anesthesia Care Unit (PACU) Registered Nurse | 570 | 170 | Pediatric Intensive Care Unit Registered Nurse | 312 | 70 |

*Source: Burning Glass*

# Industry Concentration

**Table 5. Industries hiring Registered Nurses 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) | 25,008 | 25,103 | 1% | 38.0% |
| Hospitals (Local Government) (903622) | 8,573 | 8,733 | 11% | 13.2% |
| HMO Medical Centers (621491) | 7,249 | 7,377 | 29% | 11.2% |
| Offices of Physicians (except Mental Health Specialists) (621111) | 2,856 | 2,864 | 2% | 4.3% |
| Hospitals (State Government) (902622) | 2,689 | 2,665 | 23% | 4.0% |
| Nursing Care Facilities (Skilled Nursing Facilities) (623110) | 2,553 | 2,528 | 3% | 3.8% |
| Home Health Care Services (621610) | 2,392 | 2,443 | 21% | 3.7% |
| Freestanding Ambulatory Surgical and Emergency Centers (621493) | 1,091 | 1,085 | 34% | 1.6% |
| Federal Government, Civilian, Excluding Postal Service (901199) | 1,084 | 1,072 | (2%) | 1.6% |
| Services for the Elderly and Persons with Disabilities (624120) | 996 | 1,017 | 29% | 1.5% |
| Local Government, Excluding Education and Hospitals (903999) | 884 | 890 | 6% | 1.3% |
| All Other Outpatient Care Centers (621498) | 771 | 864 | 42% | 1.3% |
| Temporary Help Services (561320) | 845 | 831 | 1% | 1.3% |
| Specialty (except Psychiatric and Substance Abuse) Hospitals (622310) | 576 | 647 | 57% | 1.0% |

*Source: EMSI 2019.1*

**Table 6. Top Employers Posting Jobs for Registered Nurses in Bay Region and Mid-Peninsula Sub-Region (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | Mid-Peninsula |
| Kaiser Permanente | 1,384 | Aya Healthcare | 222 | Sutter Health | 519 |
| Sutter Health | 1,221 | Hospital Corporation of America | 222 | Kaiser Permanente | 243 |
| Onestaff Medical | 650 | UC San Francisco Medical Center | 209 | Sutter Health Sacramento Sierra Region | 212 |
| Healthtrust Workforce Solutions | 491 | Star Nursing, Inc | 195 | Sutter Medical Center | 210 |
| Marin General Hospital | 462 | Atlas Med | 165 | UC San Francisco Medical Center | 208 |
| Sutter Medical Center | 434 | Davita Incorporated | 159 | Onestaff Medical | 170 |
| Sutter Health Sacramento Sierra Region | 432 | Alta Bates Summit | 158 | Dignity Health | 109 |
| Stanford Health Care | 348 | Stability Healthcare | 148 | Department of Veterans Affairs | 101 |
| Advanced Travel Nursing | 344 | Travelnursing | 145 | Marin General Hospital | 96 |
| Uc San Diego | 339 | Blood Systems | 136 | Advanced Travel Nursing | 91 |
| Healthcare Employment Network | 312 | Gentiva Health | 130 | Healthcare Employment Network | 88 |
| Anthem Blue Cross | 310 | Good Samaritan Hospital | 128 | Healthtrust Workforce Solutions | 73 |
| Onward Health | 310 | Satellite Healthcare Incorporated | 124 | Aya Healthcare | 70 |
| Department of Veterans Affairs | 296 | Fresenius | 121 | Anthem Blue Cross | 67 |
| Onward | 290 | Next Travel Nursing | 121 | Onward Health | 64 |
| Lucile Packard Childrens Hospital | 263 | Regional Medical Center San Jose | 119 | Onward | 63 |
| Dignity Health | 240 | John Muir Health | 116 | Blood Systems | 62 |
| HCR ManorCare | 228 | Clinical Nurse Specialist | 110 | Nurse Management | 62 |
| Americanmobile | 224 | American Traveler | 106 | Seton Medical Center | 53 |

*Source: Burning Glass*

# Educational Supply

There are 18 community colleges in the Bay Region issuing 814 awards on average annually (last 3 years) on TOP 1230.10 - Registered Nursing. There are two colleges in the Mid-Peninsula Sub-Region issuing 120 awards on average annually (last 3 years) on this TOP code.

**Table 7. Awards on TOP 1230.10 - Registered Nursing in the Bay Region**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Total |
| Cabrillo | Santa Cruz & Monterey | 149 | 56 |  | 56 |
| Chabot Hayward | East Bay | 86 | 33 |  | 33 |
| Contra Costa | East Bay | 429 | 37 |  | 37 |
| Deanza | Silicon Valley | 168 | 53 |  | 53 |
| Evergreen Valley | Silicon Valley | 252 | 59 |  | 59 |
| Gavilan | Silicon Valley | 86 | 21 | 20 | 41 |
| Hartnell | Santa Cruz & Monterey | 98 | 35 |  | 35 |
| Los Medanos | East Bay | 309 | 41 |  | 41 |
| Marin | North Bay | 277 | 39 |  | 39 |
| Merritt | East Bay | 67 | 31 |  | 31 |
| Mission | Silicon Valley | 35 | 22 |  | 22 |
| Monterey | Santa Cruz & Monterey | 155 | 28 |  | 28 |
| Napa | North Bay | 80 | 30 |  | 30 |
| Ohlone | East Bay | 99 | 34 |  | 34 |
| San Francisco | Mid-Peninsula | 218 | 76 |  | 76 |
| San Mateo | Mid-Peninsula | 271 | 44 |  | 44 |
| Santa Rosa | North Bay | 297 | 111 | 1 | 112 |
| Solano | North Bay | 508 | 44 |  | 44 |
| **Total Bay Region** | | **3,584** | **793** | **21** | **814** |
| **Total Mid-Peninsula Sub-Region** | | **489** | **120** | **0** | **120** |

# *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 4,743 annual openings for Registered Nurses and 814 annual (3-year average) awards for an annual undersupply of 3,929 students. In the Mid-Peninsula Sub-Region, there is also a gap with 1,088 annual openings and 120 annual (3-year average) awards for an annual undersupply of 968 students.

# Student Outcomes

**Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1230.10 - Registered Nursing**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2015-16 | Bay  (All CTE Programs) | City College of San Francisco (All CTE Programs) | State (1230.10) | Bay (1230.10) | Mid-Peninsula (1230.10) | City College of San Francisco (1230.10) |
| % Employed Four Quarters After Exit | 74% | 73% | 85% | 85% | 90% | 91% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $10,170 | $15,687 | $15,443 | $14,871 | $18,079 |
| Median % Change in Earnings | 46% | 50% | 158% | 132% | 170% | 216% |
| % of Students Earning a Living Wage | 63% | 55% | 81% | 77% | 78% | 75% |

*Source: Launchboard Pipeline (version available on 3/25/19)*

# Skills, Certifications and Education

**Table 9. Top Skills for Registered Nurses in Bay Region (March 2018 - Feb 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Patient Care | 10,575 | Oncology | 1,939 | Hospice | 1,358 |
| Advanced Cardiac Life Support (ACLS) | 9,039 | Neonatal Intensive Care Unit (NICU) | 1,938 | Budgeting | 1,353 |
| Acute Care | 6,473 | Caregiving | 1,931 | Mental Health | 1,327 |
| Treatment Planning | 5,156 | Staff Management | 1,916 | Patient Evaluation | 1,317 |
| Case Management | 4,894 | Nurse Management | 1,866 | Staff Development | 1,298 |
| Cardiopulmonary Resuscitation (CPR) | 4,172 | Hospital Experience | 1,861 | Trauma | 1,278 |
| Home Health | 3,047 | Surgery | 1,855 | Customer Service | 1,274 |
| Life Support | 2,837 | Post Anesthesia Care Unit (PACU) | 1,839 | Interaction with Patients / Medical Personnel | 1,231 |
| Telemetry | 2,806 | Scheduling | 1,775 | Catheterization Laboratory (CATH LAB) | 1,183 |
| Critical Care | 2,772 | Patient Advocacy | 1,771 | Medical Coding | 1,102 |
| Patient/Family Education and Instruction | 2,734 | Critical Care Nursing | 1,700 | Pediatric Intensive Care Unit (PICU) | 1,098 |
| Teaching | 2,495 | Care Planning | 1,529 | Anesthesiology | 1,095 |
| Pediatrics | 2,308 | Infection Control | 1,523 | Data Collection | 969 |
| Clinical Experience | 2,080 | Discharge Planning | 1,475 | Home Care | 929 |
| Quality Assurance and Control | 1,948 | Quality Management | 1,422 | Vital Signs Measurement | 879 |

*Source: Burning Glass*

**Table 10. Certifications for Registered Nurses in the Bay Region (March 2018 - Feb 2019)**

Note: 21% 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 | 26,358 | Certified Dialysis Nurse | 179 |
| Advanced Cardiac Life Support (ACLS) Certification | 8,964 | Clinical Nurse Specialist (CNS) License | 173 |
| Basic Life Saving (BLS) | 7,282 | Certified Emergency Nurse | 166 |
| First Aid CPR AED | 2,611 | Public Health Nurse | 142 |
| Basic Cardiac Life Support Certification | 2,553 | Nursing Specialty Certification | 125 |
| Driver's License | 2,098 | Home Health Aide | 116 |
| American Heart Association Certification | 1,541 | Acute Care Nurse Practitioner | 110 |
| Critical Care Registered Nurse (CCRN) | 1,537 | Certified Post Anesthesia Nurse | 104 |
| Ca License | 969 | Certified Nurse Operating Room (CNOR) | 99 |
| Licensed Vocational Nurse (LVN) | 932 | Certified Oncology Nurse | 96 |
| Neonatal Resuscitation Program (NRP) | 931 | Ceu's Certificate | 90 |
| Pediatric Advanced Life Support (PALS) Certification | 810 | Medical Surgical Nurse | 88 |
| Certified Case Manager (CCM) | 544 | Home Care Certificate | 86 |
| Nurse Practitioner | 359 | Certified Rehab Nurse | 85 |
| Security Clearance | 297 | Certified Outpatient Coding (COC) | 81 |
| Social Work License | 232 | Licensed Clinical Social Worker (LCSW) | 78 |
| Certified Nephrology Nurse | 213 | Registered Behavior Technician | 70 |
| Licensed Practical Nurse (LPN) | 193 | Certified Occupational Health Nurse | 69 |

*Source: Burning Glass*

**Table 11. Education Requirements for Registered Nurses in Bay Region**

Note: 26% 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 | 1,490 (5%) |
| Associate Degree | 15,734 (57%) |
| Bachelor’s Degree or Higher | 10,518 (38%) |

*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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