** Registered Nurses**

**Labor Market Information Report**

**Chabot College**

Prepared by the San Francisco Bay Center of Excellence

for Labor Market Research

May 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 East Bay sub-region (Alameda and Contra Costa Counties). There is a projected annual gap of about 3,929 students in the Bay region and 1,214 students in the East Bay 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 Chabot College and in the region.

# Introduction

This report profiles Registered Nurses in the 12 county Bay region and in the East Bay sub-region for a proposed new program at Chabot College.

|  |
| --- |
| * **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 East Bay 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 | 20,261 | 21,987 | 1,726  | 9% | 6,952 | 1,390 | $33.43  | $56.21  |

*Source: EMSI 2019.1*

**East Bay Sub-Region** includes Alameda and Contra Costa Counties

### Job Postings in Bay Region and East Bay Sub-Region

**Table 3. Number of Job Postings by Occupation for latest 12 months (May 2018 - April 2019)**

| Occupation | Bay Region | East Bay |
| --- | --- | --- |
|  Registered Nurses (29-1141.00) | 33,445 | 9,859 |
|  Critical Care Nurses (29-1141.03) | 5,236 | 1,541 |
|  Clinical Nurse Specialists (29-1141.04) | 329 | 54 |
|  Advanced Practice Psychiatric Nurses (29-1141.02) | 68 | 21 |
|  Acute Care Nurses (29-1141.01) | 16 | 2 |
|  **Total** |  **39,094**  |  **11,477**  |

*Source: Burning Glass*

**Table 4a. Top Job Titles for Registered Nurses for latest 12 months (May 2018 - April 2019) Bay Region.**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | Bay | Common Title | Bay |
| Registered Nurse | 10,469 | Clinical Nurse | 529 |
| Travel Registered Nurse | 1,835 | Per Diem Nurse | 497 |
| Intensive Care Unit (ICU) Registered Nurse | 1,539 | Nurse Manager | 487 |
| Staff Nurse | 1,391 | Telementry Nurse | 475 |
| Med/Surg Registered Nurse | 1,245 | Oncology Registered Nurse | 457 |
| Operating Room Nurse | 938 | Operating Room Registered Nurse | 451 |
| Nurse Case Manager | 907 | Patient Care Coordinator | 446 |
| Home Health Registered Nurse | 854 | Intensive Care Unit Nurse | 434 |
| Emergency Room Registered Nurse | 852 | Telemetry Registered Nurse | 412 |
| Labor and Delivery Registered Nurse | 844 | Registered Nurse Case Manager | 379 |
| Hands-On Care | 719 | Pediatric Intensive Care Unit Registered Nurse | 364 |
| Case Manager | 701 | Home Health Nurse | 349 |
| Neonatal Intensive Care Registered Nurse | 672 | Clinical Nurse Specialist | 320 |
| Post-Anesthesia Care Unit (PACU) Registered Nurse | 631 | Registered Nurse Supervisor | 303 |

**Table 4.b Top Job Titles for Registered Nurses for latest 12 months (May 2018 - April 2019) East Bay Sub-Region**

|  |  |  |  |
| --- | --- | --- | --- |
| Common Title | East Bay | Common Title | East Bay |
| Registered Nurse | 3,122 | Telementry Nurse | 178 |
| Travel Registered Nurse | 619 | Patient Care Coordinator | 150 |
| Staff Nurse | 459 | Post-Anesthesia Care Unit Registered Nurse | 142 |
| Intensive Care Unit (ICU) Registered Nurse | 427 | Telemetry Registered Nurse | 138 |
| Med/Surg Registered Nurse | 398 | Operating Room Registered Nurse | 117 |
| Emergency Room Registered Nurse | 276 | Home Health Nurse | 111 |
| Hands-On Care | 271 | Intensive Care Unit Nurse | 106 |
| Home Health Registered Nurse | 266 | Oncology Registered Nurse | 105 |
| Labor and Delivery Registered Nurse | 260 | Pediatric Intensive Care Unit Registered Nurse | 99 |
| Nurse Case Manager | 259 | Registered Nurse Case Manager | 99 |
| Operating Room Nurse | 249 | Nurse Manager | 97 |
| Per Diem Nurse | 226 | Labor & Delivery Nurse | 88 |
| Neonatal Intensive Care Registered Nurse | 214 | Registered Nurse Supervisor | 87 |
| Case Manager | 184 | Clinical Nurse | 86 |

*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 (2018) | Jobs in Industry (2022) | % Change (2018-22) | % in Industry (2018) |
| General Medical and Surgical Hospitals (622110) | 25,090 | 25,178 | 0.4% | 37.9% |
| Hospitals (Local Government) (903622) | 8,797 | 9,631 | 9.5% | 13.3% |
| HMO Medical Centers (621491) | 7,447 | 9,439 | 26.7% | 11.2% |
| Offices of Physicians (except Mental Health Specialists) (621111) | 2,877 | 2,922 | 1.6% | 4.3% |
| Hospitals (State Government) (902622) | 2,710 | 3,364 | 24.1% | 4.1% |
| Nursing Care Facilities (Skilled Nursing Facilities) (623110) | 2,523 | 2,609 | 3.4% | 3.8% |
| Home Health Care Services (621610) | 2,457 | 2,906 | 18.3% | 3.7% |
| Freestanding Ambulatory Surgical and Emergency Centers (621493) | 1,084 | 1,455 | 34.2% | 1.6% |
| Federal Government, Civilian, Excluding Postal Service (901199) | 1,065 | 1,048 |  (1.6%) | 1.6% |
| Services for the Elderly and Persons with Disabilities (624120) | 1,024 | 1,291 | 26.1% | 1.5% |
| All Other Outpatient Care Centers (621498) | 909 | 1,171 | 28.8% | 1.4% |
| Local Government, Excluding Education and Hospitals (903999) | 898 | 943 | 5.0% | 1.4% |
| Temporary Help Services (561320) | 837 | 864 | 3.2% | 1.3% |
| Specialty (except Psychiatric and Substance Abuse) Hospitals (622310) | 688 | 970 | 41.0% | 1.0% |
| Elementary and Secondary Schools (Local Government) (903611) | 634 | 676 | 6.6% | 1.0% |

*Source: EMSI 2019.2*

**Table 6. Top Employers Posting Jobs for Registered Nurses in Bay Region and East Bay Sub-Region (May 2018 - April 2019)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employer | Bay | Employer | Bay | Employer | East Bay |
| Kaiser Permanente | 1,491 | Onward Health | 204 | Kaiser Permanente | 605 |
| Sutter Health | 1,220 | Stability Healthcare | 195 | Sutter Health | 372 |
| Onestaff Medical | 673 | Atlas Med | 190 | Uc San Diego | 347 |
| Sutter Health Sacramento Sierra Region | 433 | Davita Inc | 170 | Healthcare Employment Network | 169 |
| Sutter Medical Center | 427 | Alta Bates Summit | 161 | Onestaff Medical | 161 |
| Stanford Health Care | 425 | Star Nursing, Inc | 144 | Alta Bates Summit | 150 |
| Anthem Blue Cross | 399 | Covenant Health | 143 | Anthem Blue Cross | 146 |
| Healthcare Employment Network | 387 | Travelnursing | 137 | Advanced Travel Nursing | 129 |
| Marin General Hospital | 375 | Satellite Healthcare Inc | 130 | Atlas Med | 99 |
| Advanced Travel Nursing | 374 | Fresenius | 124 | Davita Inc | 93 |
| Uc San Diego | 347 | Cariant Health Partners | 122 | Nursefly Travel Nursing | 89 |
| Department of Veterans Affairs | 303 | Next Travel Nursing | 122 | Alameda Health System | 85 |
| Cynet Systems Inc | 295 | University California | 110 | Healthtrust Workforce Solutions | 85 |
| Lucile Packard Childrens Hospital | 291 | Satellite Healthcare | 109 | Sutter Medical Center | 85 |
| Onward | 265 | Alameda Health System | 106 | Onward | 84 |
| Healthtrust Workforce Solutions | 257 | Gentiva Health | 105 | Aya Healthcare | 83 |
| UC San Francisco Medical Center | 251 | US Air Force | 102 | Stability Healthcare | 81 |
| Nursefly Travel Nursing | 247 | American Traveler | 100 | Sutter Health Sacramento Sierra Region | 77 |
| Dignity Health | 239 | Blood Systems | 97 | Marin General Hospital | 74 |
| HCR ManorCare | 233 | Good Samaritan Hospital | 94 | Tenet Health System | 72 |
| Hospital Corp of America | 223 | Covenant Care | 91 | Americanmobile | 66 |
| Americanmobile | 210 | 24/7 Med | 90 | Kaiser Permanente | 605 |
| Aya Healthcare | 210 | Nurse Management | 90 | Sutter Health | 372 |

*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 five colleges in the East Bay Sub-Region issuing 176 awards on average annually (last 3 years) on this TOP code.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| College | Sub-Region | Headcount | Associates | Certificates | Noncredit | 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**  |  **0** | **814** |
| **Total East Bay Sub-Region** |  **1,479**  |  **176**  |  **-**  |  **-**  |  **176**  |

# *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 the Registered Nurses and 814 annual (3-year average) awards for an annual undersupply of 3,929 students. In the East Bay Sub-Region, there is also a gap with 1,390 annual openings and 176 annual (3-year average) awards for an annual undersupply of 1,214 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) | Chabot College (All CTE Programs) | State (1230.10) | Bay (1230.10) | East Bay (1230.10) | Chabot College (1230.10) |
| % Employed Four Quarters After Exit | 74% | 74% | 85% | 85% | 85% | 88% |
| Median Quarterly Earnings Two Quarters After Exit | $10,550 | $9,429 | $15,687 | $15,443 | $11,851 | $11,013 |
| Median % Change in Earnings | 46% | 62% | 158% | 132% | 88% | 114% |
| % of Students Earning a Living Wage | 63% | 60% | 81% | 77% | 73% | 73% |

*Source: Launchboard Pipeline (version available on 5/6/19)*

# Skills, Certifications and Education

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Skill | Postings | Skill | Postings | Skill | Postings |
| Patient Care | 10,779 | Quality Assurance and Control | 2,041 | Staff Development | 1,437 |
| Advanced Cardiac Life Support (ACLS) | 9,131 | Oncology | 2,024 | Interaction with Patients / Medical Personnel | 1,427 |
| Acute Care | 6,285 | Neonatal Intensive Care Unit (NICU) | 1,960 | Budgeting | 1,407 |
| Treatment Planning | 5,424 | Staff Management | 1,945 | Hospital Experience | 1,389 |
| Case Management | 5,115 | Nurse Management | 1,921 | Mental Health | 1,380 |
| Cardiopulmonary Resuscitation (CPR) | 4,410 | Surgery | 1,867 | Trauma | 1,344 |
| Home Health | 3,037 | Post Anesthesia Care Unit (PACU) | 1,852 | Patient Evaluation | 1,318 |
| Life Support | 2,931 | Scheduling | 1,828 | Customer Service | 1,299 |
| Telemetry | 2,909 | Patient Advocacy | 1,745 | Catheterization Laboratory (CATH LAB) | 1,293 |
| Patient/Family Education and Instruction | 2,853 | Infection Control | 1,617 | Anesthesiology | 1,201 |
| Critical Care | 2,755 | Critical Care Nursing | 1,607 | Pediatric Intensive Care Unit (PICU) | 1,153 |
| Teaching | 2,607 | Discharge Planning | 1,602 | Medical Coding | 1,143 |
| Pediatrics | 2,396 | Hospice | 1,509 | Data Collection | 1,090 |
| Clinical Experience | 2,188 | Care Planning | 1,483 | Home Care | 941 |
| Caregiving | 2,064 | Quality Management | 1,477 | Medical Triage | 920 |

*Source: Burning Glass*

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

Note: 22% 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 | 26,926 | Public Health Nurse | 156 |
| Advanced Cardiac Life Support (ACLS) Certification | 9,050 | Home Health Aide | 149 |
| Basic Life Saving (BLS) | 7,622 | Nursing Specialty Certification | 135 |
| First Aid Cpr Aed | 2,722 | Registered Behavior Technician | 121 |
| Basic Cardiac Life Support Certification | 2,717 | Certified Nurse Operating Room (CNOR) | 119 |
| Driver's License | 2,254 | Certified Post Anesthesia Nurse | 112 |
| American Heart Association Certification | 1,642 | Certified Oncology Nurse | 110 |
| Critical Care Registered Nurse (CCRN) | 1,479 | Acute Care Nurse Practitioner | 104 |
| Ca License | 1,002 | Home Care Certificate | 103 |
| Licensed Vocational Nurse (LVN) | 973 | Licensed Clinical Social Worker (LCSW) | 103 |
| Neonatal Resuscitation Program (NRP) | 934 | Medical Surgical Nurse | 97 |
| Pediatric Advanced Life Support (PALS) Certification | 877 | Ceu's Certificate | 90 |
| Certified Case Manager (CCM) | 580 | Certified Medical Assistant | 79 |
| Nurse Practitioner | 360 | Certified Rehab Nurse | 77 |
| Security Clearance | 318 | Certified Outpatient Coding (COC) | 73 |
| Social Work License | 240 | Emergency Medical Technician (EMT) | 66 |
| Licensed Practical Nurse (LPN) | 239 | Registered Dietitian | 66 |
| Certified Nephrology Nurse | 224 | IV (Intravenous) Certification | 65 |
| Certified Dialysis Nurse | 191 | Certified Occupational Health Nurse | 63 |
| Certified Emergency Nurse | 186 | Crisis Intervention Certification | 60 |
| Clinical Nurse Specialist (CNS) License | 178 | Certified Pediatric Nurse | 58 |

*Source: Burning Glass*

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

Note: 27% 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 | 1,511 (5%) |
| Associate Degree | 15,863 (56%) |
| Bachelor’s Degree or Higher | 11,086 (39%) |

*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

For more information, please contact:

* Doreen O’Donovan, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), doreen@baccc.net or (831) 479-6481
* John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, jcarrese@ccsf.edu or (415) 267-6544