

# Nursing

May 2018

Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

## **Research Summary**

The Los Angeles/Orange County Center of Excellence (COE) compiled this report to provide regional labor market supply and demand data related to **nursing**.

The following list summarizes key findings from this brief for nursing:

- The number of registered nurse jobs is expected to increase by 14% through 2022, resulting in over 6,500 annual job openings.
- The entry-level hourly wage for registered nurses is **above** the MIT Living Wage<sup>1</sup> estimate for the region.
- Nearly half of the industry workforce (42%) has some community college postsecondary coursework experience, making this occupation relevant to community college students.
- The majority of employers in 2017 were looking for a candidate with an Associate degree. Of the 32,577 postings, over half (61%) listed an associate degree as the required education.
- Between 2014 and 2017, community colleges in the county conferred an average of 1,379 awards (associate degrees and certificates).

1

<sup>&</sup>lt;sup>1</sup> MIT Living Wage Calculator. http://livingwage.mit.edu/

## **Occupation Codes and Descriptions**

Currently, there is one occupation in the standard occupational classification (SOC) system and two emerging occupations in the ONET<sup>2</sup> database of occupational information directly related to nursing. The occupation titles and descriptions, as well as reported job titles are included in Exhibit 1.

| Exhibit 1 – Occupations, description, and sample job titles |                         |  |  |  |  |
|---|-------------------------|--|--|--|--|
| SOC Code  | Title                   | Description  | Sample of Reported Job Titles  |  |  |
| 29-1141   | Registered<br>Nurses    | Assess patient health problems and<br>needs, develop and implement<br>nursing care plans, and maintain<br>medical records. Administer nursing<br>care to ill, injured, convalescent, or<br>disabled patients. May advise<br>patients on health maintenance<br>and disease prevention or provide<br>case management. Licensing or<br>registration required. | Charge Nurse, Director of Nursing<br>(DON), Emergency Department RN<br>(Emergency Department Registered<br>Nurse), Oncology RN (Oncology<br>Registered Nurse), Operating<br>Room Registered Nurse (OR RN),<br>Public Health Nurse (PHN),<br>Registered Nurse (RN), School<br>Nurse, Staff Nurse, Staff RN (Staff<br>Registered Nurse)  |  |  |
| 29-1141.01  | Acute Care<br>Nurses    | Provide advanced nursing care for<br>patients with acute conditions such<br>as heart attacks, respiratory<br>distress syndrome, or shock. May<br>care for pre- and post-operative<br>patients or perform advanced,<br>invasive diagnostic or therapeutic<br>procedures.  | Charge Nurse; Charge Nurse,<br>Cardiac Interventional Care;<br>Clinical Educator; Clinical Nurse<br>Educator; Clinical Staff Educator;<br>Nurse Manager; Nursing Director;<br>Preceptor; Progressive Care Unit<br>Registered Nurse; Staff Nurse  |  |  |
| 29-1141.03  | Critical Care<br>Nurses | Provide advanced nursing care for<br>patients in critical or coronary care<br>units.   | Burn Center Nurse; Cardiac<br>Catheterization Laboratory<br>Registered Nurse; Catheterization<br>Laboratory Senior Manager (Cath<br>Lab Senior Manager); Critical<br>Care Registered Nurse (CCRN);<br>Critical Care Unit Manager; ICU<br>Staff Nurse (Intensive Care Unit<br>Staff Nurse); Intensive Care Unit<br>Nurse; Registered Nurse Supervisor<br>(RN Supervisor); Staff Nurse; Staff<br>Nurse, ICU Resource Team (Staff<br>Nurse, Intensive Care Unit Resource<br>Team) |  |  |

## Exhibit 1 – Occupations, description, and sample job titles

Source: O\*NET Online

<sup>&</sup>lt;sup>2</sup> New and emerging occupations (N&E) are incorporated into the O\*NET-SOC classification system based on the evolving nature of workforce requirements stemming from changes in technology, society, law, and business practices. Incorporating N&E occupations into the O\*NET system makes O\*NET information more beneficial and responsive. https://www.onetcenter.org/reports/NewEmerging.html

### **Current and Future Employment**

In Los Angeles County, the number of registered nurse jobs is expected to increase by 14% over the next five years. More than 6,500 job opportunities will be available annually for this occupation through 2022 due to new job growth and replacement need (e.g., retirements). Exhibit 2 contains detailed employment projections data for this occupation.

| Exhibit 2 – Five-year | projections fo | r registered nurses |
|-----------------------|----------------|---------------------|
|-----------------------|----------------|---------------------|

| soc     | Occupation               | 2017<br>Jobs | 2022<br>Jobs | 2017 - 2022<br>Change | 2017 - 2022<br>% Change | Annual<br>Openings |
|---------|--------------------------|--------------|--------------|-----------------------|-------------------------|--------------------|
| 29-1141 | <b>Registered Nurses</b> | 81,665       | 92,804       | 11,139                | 14%                     | 6,569              |

Source: EMSI 2018.2 - QCEW, non-QCEW, Self-Employed.

## Earnings

In Los Angeles County, the entry-level average wage for registered nurses is \$29.51 per hour, which is significantly above the MIT Living Wage estimate of \$13.54 per hour for a single adult. The average annual earnings for registered nurses in the region is \$94,964 per year, assuming full-time employment.

Exhibit 3 contains hourly wages and annual average earnings for the occupation studied in this report. Entry-level hourly earnings is represented by the 10<sup>th</sup> percentile of wages, median hourly earnings is represented by the 50<sup>th</sup> percentile of wages, and experienced hourly earnings is represented by the 90<sup>th</sup> percentile of wages, demonstrating various levels of employment.

## Exhibit 3 – Earnings for registered nurses

| soc     | Occupation               | Entry-Level<br>Hourly<br>Earnings | Median<br>Hourly<br>Earnings | Experienced<br>Hourly<br>Earnings | Average<br>Annual<br>Earnings |
|---------|--------------------------|-----------------------------------|------------------------------|-----------------------------------|-------------------------------|
| 29-1141 | <b>Registered Nurses</b> | \$29.51                           | \$45.86                      | \$62.59                           | \$94,964                      |

Source: EMSI 2018.2 - QCEW, non-QCEW, Self-Employed.

#### **Employer Job Postings**

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing nurses, and what they are looking for in potential candidates. To identify job postings related to nursing, the following codes were used: acute care nurses (29-1141.01) and critical care nurses (29-1141.03) and the SOC code for registered nurses (29-1141).

## **Top Titles**

The most common titles for nurse-related jobs are listed in Exhibit 4. Registered Nurse was mentioned in 36% of all relevant job postings (14,512 out of 40,306 postings).

| Title  | Job Postings,<br>Full Year 2017 |
|--|---------------------------------|
| Registered Nurse                             | 14,512                          |
| Travel Registered Nurse                      | 2,574                           |
| Intensive Care Unit (ICU) Registered Nurse   | 1,813                           |
| Medical/Surgical Registered Nurse            | 1,485                           |
| Emergency Room Registered Nurse              | 1,022                           |
| Operating Room Nurse                         | 874                             |
| Neonatal Intensive Care Registered Nurse     | 785                             |
| Oncology Registered Nurse                    | 770                             |
| Telemetry Registered Nurse                   | 671                             |
| Labor and Delivery Registered Nurse          | 651                             |
| Source, Labor Insight / John (Burning Glass) |                                 |

| Exhibit | 4 –Job | titles | (n=40,306) |  |
|---------|--------|--------|------------|--|
|---------|--------|--------|------------|--|

Source: Labor Insight/Jobs (Burning Glass)

## Top Employers

Exhibit 5 lists the major employers hiring professionals in the field of nursing. Top employers posting job ads included Providence Health & Services, Kaiser Permanente and DaVita Incorporated. The top worksite cities in the region for these occupations were: Los Angeles, Long Beach, Torrance, Glendale and Santa Monica.

| Employer                                     | Job Postings,<br>Full Year 2017 |  |  |
|--|---------------------------------|--|--|
| Providence Health & Services                 | 1,400                           |  |  |
| Kaiser Permanente                            | 691                             |  |  |
| DaVita Incorporated                          | 650                             |  |  |
| City of Hope                                 | 627                             |  |  |
| Cedars-Sinai                                 | 489                             |  |  |
| University of Southern California            | 331                             |  |  |
| Memorial Care Health System                  | 324                             |  |  |
| Dignity Health                               | 311                             |  |  |
| Onward Health                                | 296                             |  |  |
| Citrus Valley Health Partners                | 268                             |  |  |
| Source: Labor Insight / Jobs (Burning Glass) |                                 |  |  |

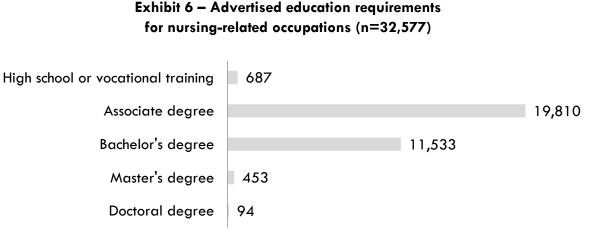
#### Exhibit 5 - Top employers (n=40,306)

Source: Labor Insight/Jobs (Burning Glass)

4

#### Advertised Education Levels

Exhibit 6 displays the education level requested by employers in online job ads. The majority of employers were looking for a candidate with an associate degree. Approximately 19% of job postings did not specify a level of education.



Source: Labor Insight/Jobs (Burning Glass)

## **Education and Training**

Exhibit 7 shows the typical entry-level education requirement for the occupation of interest, along with the typical on-the-job training, and percentage of workers in the field who hold a community college award or have completed some postsecondary courses. About 42% of the workforce has completed some community college education as their highest level of education.

| soc     | Occupation        | Typical entry-<br>level education | Typical on-the-<br>job training | % of Community College<br>Award Holders or Some<br>Postsecondary Coursework |
|---------|-------------------|-----------------------------------|---------------------------------|---|
| 29-1141 | Registered Nurses | Bachelor's<br>degree              | None                            | 42%   |

Source: EMSI, Bureau of Labor Statistics Employment Projections (Educational Attainment)

In Los Angeles County, 17 community colleges have conferred awards in programs that train students for nursing. Between 2014 and 2017, there was an average of 1,379 community college awards conferred annually across one program: Registered Nursing (1230.10). It is important to note that an award is not equivalent to a single person in search of a job opening, since a student may earn more than one award (e.g. an associate degree and a certificate).

| TOP<br>Code | Program            | College        | 2014-15<br>Awards | 2015-16<br>Awards | 2016-2017<br>Awards | 3-Year<br>Award<br>Average |
|-------------|--------------------|----------------|-------------------|-------------------|---------------------|----------------------------|
|             |                    | Cerritos       | 81                | 84                | 84                  | 83                         |
|             |                    | Citrus         | 31                | 29                | 28                  | 29                         |
|             |                    | Compton        | 36                | 45                | 46                  | 42                         |
|             |                    | East LA        | 117               | 115               | 86                  | 106                        |
|             |                    | El Camino      | 95                | 79                | 72                  | 82                         |
|             | Registered Nursing | Glendale       | 71                | 70                | 76                  | 72                         |
|             |                    | LA City        | 81                | 65                | 72                  | 73                         |
|             |                    | LA Harbor      | 63                | 73                | 64                  | 67                         |
| 1230.10     |                    | LA Pierce      | 56                | 67                | 38                  | 54                         |
|             |                    | LA Southwest   | 30                | 38                | 50                  | 39                         |
|             |                    | LA Trade       | 28                | 58                | 49                  | 45                         |
|             |                    | LA Valley      | 76                | 72                | 73                  | 74                         |
|             |                    | Long Beach     | 113               | 166               | 91                  | 123                        |
|             |                    | Mt San Antonio | 116               | 104               | 110                 | 110                        |
|             |                    | Pasadena       | 263               | 275               | 195                 | 244                        |
|             |                    | Rio Hondo      | 80                | 76                | 76                  | 77                         |
|             |                    | Santa Monica   | 65                | 59                | 53                  | 59                         |
|             |                    | Total          | 1,402             | 1,475             | 1,263               | 1,379                      |

## Exhibit 8 - CCC Student Awards (by TOP and College)

Source: California Community Colleges Chancellor's Office MIS Data Mart

#### Student Outcomes

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Registered Nursing Taxonomy of Program (TOP) code (1230.10) in Los Angeles County for the 2015-16 academic year.

- The median earnings in the second fiscal quarter after program completion is \$11,582
- 76% of students are earning a living wage
- 76% of students are employed within six months after completing a program

Source: CTE LaunchBoard

#### Sources

O\*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, and Statewide CTE Outcomes Survey,

#### Notes

Data included in this analysis represents the labor market demand for positions most closely related to nursing. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.