

Pharmaceutical Sales

Inland Empire/Desert Region (Riverside and San Bernardino counties combined)

Introduction

Pharmaceutical sales representatives, employed by pharmaceutical manufacturers and distributors, have a technical understanding of pharmaceutical products. Their job is to educate doctors about potentially life-saving medications and persuade the doctors to prescribe these drugs to their patients (National Association of Pharmaceutical Sales Representatives, 2018). The Standard Occupational Classification (SOC) system does not currently provide an occupation that directly quantifies pharmaceutical sales representatives. However, the verbosely titled occupation, sales representatives, wholesale and manufacturing, technical and scientific products, does include pharmaceutical sales representatives job title. It is important to note that this occupation also includes all other types of sales representatives involved in the sale of technical and scientific products as well.

Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)

Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry, and electronics, normally obtained from at least two years of post-secondary education.

Sample job titles related to pharmaceutical sales: Pharmaceutical Representative, Pharmaceutical Sales Representative, Pharmaceutical Sales Specialist, Pharmaceutical Salesperson, Pharmaceutical Service Representative, Pharmacy Sales Representative, Chemical and Pharmaceutical Sales Representative, Pharmaceutical Detailer

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: Between one and twelve months on-the-job

Work Experience Required: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 31%

This report analyzes the demand for pharmaceutical sales representatives using two methods. First, an inverse staffing pattern was ran to determine the concentration of sales representatives, wholesale and manufacturing, technical and scientific products within the industry for pharmaceutical sales. After that, a real-time search of regional online job postings was conducted to gauge employer demand for pharmaceutical sales representatives. This report concludes with a section on the California Community College sales and salesmanship (TOP 0509.40) program.

Job Opportunities

In 2018, only 8% sales representatives, wholesale and manufacturing, technical and scientific products workers, were employed in the drugs and druggists' sundries merchant wholesalers industry sector (NAICS 424210), which is an industry comprised of establishments primarily engaged in the distribution of medical and pharmaceutical products (U.S. Census Bureau, 2016). Job projections suggest that the only 14 new sales representatives, wholesale and manufacturing, technical and scientific products jobs will be added to the drugs and druggists' sundries merchant wholesalers industry over the next five years. Exhibit 1 displays five-year projections for sales representatives involved in this industry in the Inland Empire/Desert Region.

Exhibit 1: Five-year projections for sales representatives, wholesale and manufacturing, technical and scientific products by industry

Industry	2018 Jobs	2023 Jobs	5-Yr % Change (New Jobs)	Percent of Occupation in Industry
All Industries	1,724	1,801	4%	100%
Drugs and Druggists' Sundries Merchant Wholesalers (NAICS 424210)	137	151	10%	8%

Source: EMSI 2018.4

Job Postings, Employers, Skills, Education, and Advertised Salary

A real-time search of job advertisements for sales representatives, wholesale and manufacturing, technical and scientific products with pharmaceutical sales skills was conducted in order to determine the demand for pharmaceutical sales skills in the Inland Empire/Desert Region. Exhibit 2 displays the number of job ads posted during the last 12 months along with the regional and statewide average time to fill for pharmaceutical sales representatives in the Inland Empire/Desert Region. On average, local employers fill online job postings for pharmaceutical sales representatives within 38 days. This regional average is one day less than the statewide average, indicating that it is neither relatively easy nor difficult for local employers to find qualified candidates.

Exhibit 2: Job ads and time to fill for pharmaceutical sales representatives, Apr 2018 – Mar 2019

Occupation	Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
Pharmaceutical Sales Representatives	81	38	39

Source: Burning Glass – Labor Insights

Exhibit 3 displays the employers posting the most job ads for sales representatives during the last 12 months in the Inland Empire/Desert Region.

Exhibit 3: Employers posting the most job ads for pharmaceutical sales representatives, Apr 2018 – Mar 2019

Occupation	Employers
Pharmaceutical Sales Representatives (n=49)	<ul style="list-style-type: none"> • Syneos Health • IQVIA • AstraZeneca

Source: Burning Glass – Labor Insights

Exhibit 4 displays a sample of specialized and employability skills that employers are seeking when looking for workers to fill pharmaceutical sales representative positions. Specialized skills are occupation-specific skills that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as “soft skills.” The skills requested in job postings may be utilized as a helpful guide for curriculum development.

Exhibit 4: Sample of in-demand skills from employer job ads for pharmaceutical sales representatives, Apr 2018 – Mar 2019

Occupation	Specialized Skills	Employability Skills
Pharmaceutical Sales Representatives (n=81)	<ul style="list-style-type: none"> • Biotechnology • Sales Goals • Medical Equipment Industry Knowledge 	<ul style="list-style-type: none"> • Communication Skills • Building Effective Relationships • Teamwork/Collaboration

Source: Burning Glass – Labor Insights

Exhibit 5 displays the minimum advertised education requirement from employer job ads. Nearly all employers hiring pharmaceutical sales representatives are looking for candidates with a bachelor’s degree.

Exhibit 5: Minimum advertised education requirements for pharmaceutical sales representatives, Apr 2018 – Mar 2019

Occupation	Minimum Advertised Education Requirement from Job Ads			
	Number of Job Ads (n=)	High school diploma or vocational training	Associate degree	Bachelor’s degree or higher
Pharmaceutical Sales Representatives	46	4%	-	96%

Source: EMSI 2018.4, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework.

Exhibit 6 displays advertised salary data from real-time job postings over the last 12 months. The mean real-time salary for pharmaceutical sales representatives in the Inland Empire/Desert Region is \$74,000. Please note that salary figures are prorated to reflect full-time, annual wage status. For reference, the MIT Living Wage estimate for a single adult living in the Inland Empire/Desert Region is \$12.39 per hour, or \$25,775 annually (Glasmeier, 2019).

Exhibit 6: Advertised salary information for pharmaceutical sales representatives, Apr 2018 – Mar 2019

Occupation	Real-Time Salary Information				
	Number of job postings	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000
Pharmaceutical Sales Representatives	32	3%	44%	12%	41%

Source: Burning Glass – Labor Insights

Headcount and Program Outcomes

This portion of the report provides data on the California Community College sales and salesmanship (TOP 0509.40) program. This program prepares students for employment in sales through the instruction of sales functions and tasks generally applicable to any marketing environment, including retailing, sales, and customer service (Taxonomy of Programs, 2012).

The Inland Empire does not have any reported completions in TOP 0509.40 Sales and Salesmanship. Exhibit 7 displays the headcount from the most recent year available on LaunchBoard for sales and salesmanship programs in the Inland Empire/Desert Region.

Exhibit 7: Headcount for sales and salesmanship programs in the Inland Empire/Desert Region

0509.40 – Sales and Salesmanship	CCC Headcount, Academic Year 2016-17
Chaffey	37
Moreno Valley	-
Norco	13
Riverside City	22
Total CCC Headcount, Academic Year 2016-17	76

Source: LaunchBoard

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor’s Office Management Information Systems (MIS) by community colleges, which comes from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and

earnings metrics are sourced from records provided by California’s Employment Development Department’s Unemployment Insurance database. Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2017). Data from the latest academic year for each metric is provided in Exhibit 8.

Exhibit 8: Sales and salesmanship strong workforce program outcomes

Strong Workforce Program Metrics: 0509.40 – Sales and Salesmanship Academic Year 2015-16, unless noted otherwise	Inland Empire/Desert Region	California Median
Course enrollments (2016-17)	76	28
Completed 12+ units in one year (2016-17)	17	18
Economically disadvantaged students* (2016-17)	82%	76%
Transferred to a four-year institution	N/A	13
Employed in the fourth fiscal quarter after exit (all exiters)	N/A	61%
Median annual earnings* (all exiters)	N/A	\$29,051
Median change in earnings (all exiters)	N/A	39%

Source: LaunchBoard

*Data for these metrics is available in Community College Pipeline. All others are available in Strong Program Workforce Metrics.

Recommendation

Pharmaceutical sales representatives educate doctors about potentially life-saving medications and persuade the doctors to prescribe these drugs to their patients. This job is primarily employed by pharmaceutical manufacturers and distributors and has a technical understanding of their products. Traditional labor market data and employer job posting suggest that most employers are looking for a candidate with a bachelor’s degree. This level of educational attainment is currently outside of the purview of the regional community colleges.

Furthermore, the primary industry that employs pharmaceutical sales is only projected to add 14 new jobs over the next five years. Job opportunities may be limited graduates of program targeted towards pharmaceutical sales. For these reasons, the Inland Empire/Desert Center of Excellence does not recommend this program for community college development.

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Contact

Michael Goss, Director
Center of Excellence, Inland Empire/Desert Region
michael.goss@chaffey.edu
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