

Program Endorsement Brief:

Pharmacy Technicians and Pharmacy Aides in the North region

North/Far North Center of Excellence, November 2019

INTRODUCTION

This report provides an overview of the labor market demand and educational program supply for pharmacy technicians and pharmacy aides in the 7-county North region and the broader 22-county North/Far North region.

SUMMARY OF KEY FINDINGS

- Pharmacy technology occupations are projected to have nearly 350 annual openings over the next five years.
- Median hourly wages for the selected occupations are above the regional living wage for a single adult. Hourly wages range from \$13 to \$20 per hour.
- While the typical entry-level education for pharmacy technicians and aides is a high school diploma, most incumbent workers have attended some college. Entry-level pharmacy technicians and aides will also require short to moderate lengths of on-the-job training.
- Pharmacy technology training programs in the North region conferred an average of 100 awards per year over the last three years.

The report contains the following sections:

- Occupational demand,
- Wages and job postings,
- Education and training,
- Regional program supply, and
- Findings and recommendations.

OCCUPATIONAL DEMAND

The following Standard Occupational Classification (SOC) codes related to the proposed program were included in the analysis:¹

29-2052.00 - Pho	29-2052.00 - Pharmacy Technicians					
Description:	Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.					
Sample job titles:	Accredited Pharmacy Technician; Billing and Quality Technician; Certified Pharmacy Technician (CPhT); Compounding Technician; Lead Pharmacy Tech, Certified Pharmacy Technician (Lead Pharmacy Tech, CPhT); Lead Pharmacy Technician (Lead Pharmacy Tech); Pharmacy Technician (Pharmacy Tech); Senior Pharmacy Technician; Technician, Inventory Specialist					

31-9095.00 - Pharmacy Aides					
Description:	Record drugs delivered to the pharmacy, store incoming merchandise, and inform the supervisor of stock needs. May operate cash register and accept prescriptions for filling.				
Sample job titles:	Ancillary, Certified Pharmacist Assistant, Drug Purchaser, Front Counter Clerk, Pharmacist Assistant, Pharmacy Aide, Pharmacy Ancillary, Pharmacy Assistant, Pharmacy Cashier, Pharmacy Clerk				

Exhibit 1 summarizes the job trends by SOC codes in the 7-county North region, 22-county North/Far North region, and California.²

Exhibit 1. Employment and projected occupational demand³

Occupation	SOC	2008	2018	2023	2018-23 %	Annual
		Jobs	Jobs	Jobs	Change	Openings
Pharmacy Technicians	29-2052	2,081	2,642	2,745	3.9%	238
Pharmacy Aides	31-9095	978	723	693	-4.2%	110
NORTH	TOTALS	3,058	3,366	3,438	2.1%	348
Pharmacy Technicians	29-2052	2,776	3,441	3,576	3.9%	312
Pharmacy Aides	31-9095	1,437	1,035	974	-5.9%	159
NORTH/FAR NORTH	TOTALS	4,213	4,476	4,550	1.6%	471
Pharmacy Technicians	29-2052	28,947	37,661	39,988	6.2%	3,446
Pharmacy Aides	31-9095	12,680	9,183	8,890	-3.2%	1 , 387
CALIFORNIA	TOTALS	41,628	46,844	48,877	4.3%	4,834

^{10*}NET OnLine. U.S. Department of Labor Education & Training Administration. Accessed November 22, 2019. https://www.onetonline.org/.

² The 7-county North region includes El Dorado, Placer, Nevada, Sacramento, Sutter, Yolo and Yuba. The 15-county Far North region includes the Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama and Trinity counties. The 22-county North/Far North region is the combination of the 7-county North and 15-county Far North regions.

³ Emsi 2019.4; QCEW Employees, Non-QCEW Employees and Self-Employed.

Exhibit 2 compares the rates of change of the total number of jobs between 2008 and 2018 in the North region, the North/Far North region, and California. It also compares occupational demand projections from 2018 through 2023 across the same areas. The rate of change is indexed to the base year 2008 total number of jobs.

Exhibit 2. Rate of Change for Selected Occupations⁴

WAGES AND JOB POSTINGS

Exhibit 3 compares the median hourly wages of the selected occupations in the study regions to the North region's 7-county average living wage for a one-adult household.⁵

--- California - Projected

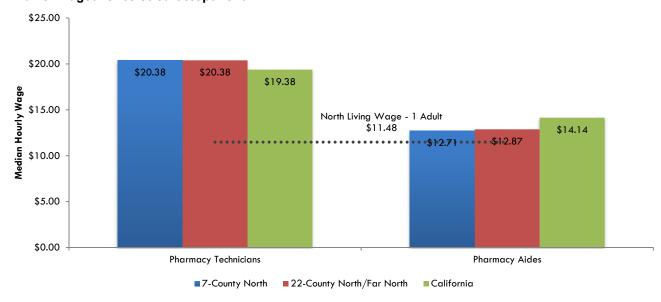


Exhibit 3. Wages for selected occupations⁶

California - Historical

⁴ Ibid

⁵ "Family Needs Calculator (Formerly the Self-Sufficiency Standard)." Insight Center for Community Economic Development, February 2018. https://insightcced.org/2018-family-needs-calculator/.

⁶ Emsi 2019.4; QCEW Employees, Non-QCEW Employees and Self-Employed.

Burning Glass identified a pool of 983 job postings in the North region for the selected occupations. This data represents job listings posted online within the last year, from November 1, 2018 through October 31, 2019. Exhibit 4 compares the 12-month job posting trends of the selected occupations to the median number of job postings in the North region.

Exhibit 4: Job postings trend for selected occupations⁷

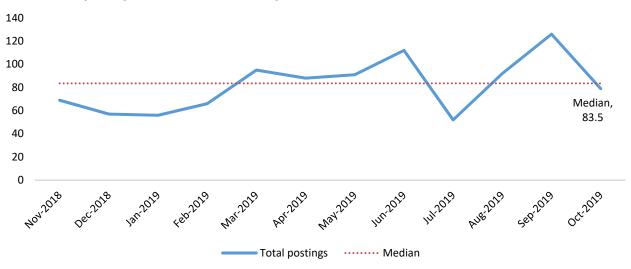
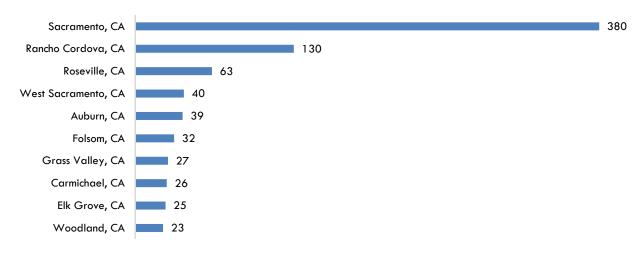


Exhibit 5 shows the number of job postings in the North region, by city, for the selected occupations.

Exhibit 5. Top job postings locations for selected occupations8



⁷ Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool," http://www.burning-glass.com, 2019.

⁸ Ibid.

Exhibit 6 lists North region employers with the most job openings for the selected occupations. Seventy-five percent of job postings included the employer's name.

Exhibit 6: Top employers by number of job postings9

Employer	North (n = 742)			
	Number of Postings	Percent of Postings		
CVS Health	129	17%		
Rite Aid Corporation	71	10%		
Walgreens Boots Alliance Inc	65	9%		
Sutter Health	36	5%		
Dignity Health	33	4%		
Raley Family Of Fine Stores	30	4%		
Walmart / Sam's	28	4%		
Centene Corporation	27	4%		
Raleys	23	3%		
Sutter Medical Center	22	3%		

Exhibit 7 shows the top job titles for the selected occupations in the North region. All 983 job postings included a job title.

Exhibit 7. Top job titles by number of job postings¹⁰

29-2052.00 - Pharmac			31-9095.00 - Pharmacy Aides				
(n = 906)		(n = 77)				
Title	Job	% Job	Title	Job	% Job		
	Postings	Posting		Postings	Posting		
Pharmacy Technician	811	90%	Pharmacy Cashier	26	34%		
Certified Pharmacy Technician	76	8%	Pharmacy Clerk	24	31%		
Pharmacy Coordinator	5	1%	Pharmacy Assistant	12	16%		
Data Entry Technician	4	0%	Pharmacist	4	5%		
Prescription Filling Coordinator	3	0%	Administrative Assistant	2	3%		
Ambulatory Care Clinic Pharm- Refill	2	0%	Executive Assistant	1	1%		
Coordinator, Order Entry	2	0%	Pharmacy Clerk, Contract	1	1%		
Operations Specialist	1	0%	Pharmacy Clerk, Health, Medical	1	1%		
Order Entry Technician	1	0%	Pharmacy Clerk, Information And Technology Industry	1	1%		

⁹ Ibid.

¹⁰ Ibid.

Exhibit 8 shows the skills most in-demand for the selected occupations in the North region. All 983 job postings included skills information.

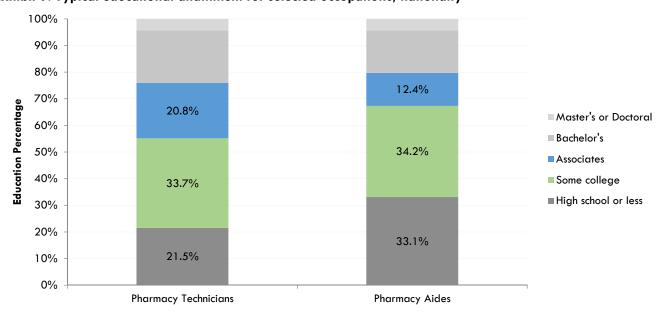
Exhibit 8. Top skills by number of job postings 11

29-2052.00 - Pharmac (n = 906			31-9095.00 - Pharmacy Aides (n = 77)			
Title	Job Postings	% Job Posting	Title	Job Postings	% Job Posting	
Retail Industry Knowledge	310	34%	Customer Service	39	51%	
Customer Service	294	32%	Retail Industry Knowledge	21	27%	
Pharmacist Assistance	232	26%	Packaging	19	25%	
Prescription Filling	223	25%	Cleaning	15	19%	
Calculation	143	16%	Health Insurance Portability and Accountability Act (HIPAA)	13	17%	
Customer Contact	139	15%	Customer Complaint Resolution	11	14%	
Customer Billing	136	15%	Product Location	11	14%	
Quality Assurance and Control	125	14%	Patient Referral	10	13%	
Packaging	121	13%	Sales	10	13%	

EDUCATION AND TRAINING

Exhibit 9 shows the average level of educational attainment for workers 25 years and older by occupation across the U.S.

Exhibit 9. Typical educational attainment for selected occupations, nationally¹²



¹¹ Ibid.

^{12 &}quot;Educational Attainment for Workers 25 Years and Older by Detailed Occupation." U.S. Bureau of Labor Statistics. U.S. Department of Labor, September 4, 2019. https://www.bls.gov/emp/tables/educational-attainment.htm.

Exhibit 10 shows the typical education requirements, on-the-job training, and work experience requirements for entry-level positions in the selected occupations in the North region.

Exhibit 10. Typical education, training, and work experience for selected occupations¹³

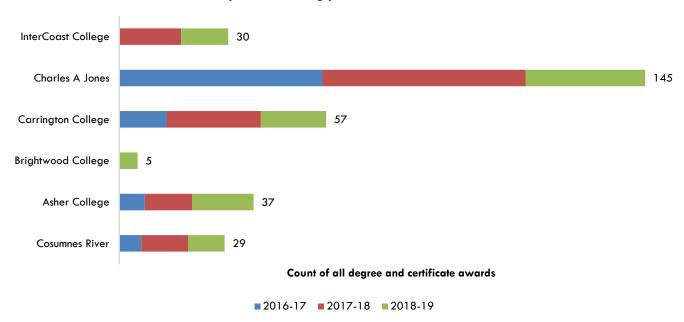
Occupations	soc	Typical Entry-Level Education	Typical On-The- Job Training	Work Experience Required
Pharmacy Technicians	29-2052	High school diploma or equivalent	Moderate-term on-the-job training	None
Pharmacy Aides	31-9095	High school diploma or equivalent	Short-term on-the- job training	None

PROGRAM SUPPLY

Analysis of existing educational programs shows that there is one Taxonomy of Program (TOP) code related to training for the selected pharmacy technology occupations: 1221.00 – Pharmacy Technology. The corresponding Classification of Instructional Programs (CIP) code is 51.0805 – Pharmacy Technician/Assistant.

Exhibit 11 compares the total number of awards (certificates and degrees) conferred by related training providers in the selected TOP and CIP codes in the North region over the last three academic years.

Exhibit 11. Total awards conferred by North training providers, 2016-2019¹⁴



¹³ Emsi 2019.4; QCEW Employees, Non-QCEW Employees and Self-Employed.

¹⁴ COE Supply Tables, California Community Colleges Chancellor's Office DataMart, and Integrated Postsecondary Education Data System (IPEDS).

Exhibit 12 displays program awards by level and year for the selected education programs over the last three academic years.

Exhibit 12. Program awards conferred by North region training providers, 2016-2019¹⁵

1221.00 — Pharmacy Technology and 51.0805 — Pharmacy Technician/Assistant								
	Certificate			Associate				
Training Providers	2016-17	201 <i>7</i> - 18	2018- 19	3-Yr Avg	2016-17	201 <i>7</i> - 18	2018- 19	3-Yr Avg
Cosumnes River				-	6	13	10	10
Asher College	7	13	1 <i>7</i>	12				
Brightwood College	0	0	5	2				
Carrington College	0	14	18	11	13	12	0	8
Charles A Jones	56	56	33	48				
InterCoast College	0	1 <i>7</i>	13	10				
NORTH REGION TOTALS	63	100	86	83	19	25	10	18

FINDINGS

- Between 2008 and 2018, pharmacy technology occupations grew by a net of 308 jobs in the North region alone. Jobs for pharmacy technicians made up the bulk of this growth, with 560 jobs added in the last 10 years. Pharmacy aides lost 250 jobs during the same time period.
- Jobs for pharmacy technicians are projected to increase by 4% over the next five years, adding 100 new
 jobs by 2023. Jobs for pharmacy aides are projected to continue to decrease, losing 30 jobs over the
 next five years.
- Pharmacy technology occupations are projected to have nearly 350 job openings per year over the next five years. Overall job growth in the North region (2%) will outpace growth in the North/Far North region (1.6%), but is projected to lag behind the statewide average of 4%.
- Median hourly wages for the selected occupations are above the regional living wage for a single adult (\$11.48). Hourly wages are highest for pharmacy technicians in North, at \$20 per hour. Pharmacy aides are estimated to earn \$13 per hour in the North.
- Burning Glass Labor Insights identified a pool of 983 jobs for pharmacy technicians and aides posted online in the last 12 months. Most job postings were for pharmacy technicians (n = 906) rather than pharmacy aides (n = 77).
- Between 47% and 55% of incumbent pharmacy technicians and pharmacy aides have either attended some college or earned an associate degree. The typical entry-level education for both occupations is a high school diploma. Both occupations require some level of on-the-job training.
- While Cosumnes River is the only community college training provider, there are several other
 postsecondary training providers in the North region. Together, these training providers issued a total of
 303 awards in the last three years.
- North region training providers conferred an average of 83 certificates and 18 associate degrees in pharmacy technology programs between 2016 and 2019.

¹⁵ Ibid.

RECOMMENDATIONS

 Based on a three-year average of annual award in pharmacy technology (101 certificates and degrees), and projected yearly openings for pharmacy technology occupations (348 openings), the region appears to have some demand for programs related to the occupation.

COE Recommendation							
Program is not recommended	Additional information needed						
	Program is not						

METHODOLOGY

Occupations in this report were identified using O*Net. Findings in this report were determined using labor market data from the Bureau of Labor Statistics (BLS), U.S. Census Bureau data from Emsi, and jobs posting data from Burning Glass.

APPENDIX A: DATA SOURCES

Sources used for data analysis purposes in this report include:

- U.S. Department of Labor/Employment and Training Administration (DOLETA) O*NET Online
- Burning Glass, Labor Insight/Jobs
- Economic Modeling Specialists, International (EMSI)
- California Employment Development Department, Labor Market Information Division (EDD, LMID)
- Bureau of Labor Statistics, Occupational Employment Statistics (OES)
- California Community Colleges Chancellor's Office, Cal-PASS Plus LaunchBoard
- Living Insight Center for Community Economic Development, Self-Sufficiency Standard Tool for California
- California Community Colleges Chancellor's Office Management Information Systems (MIS Data Mart)
- U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

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November 2019

