

Oregon Healthcare
Workforce Institute



A Study of Selected High-Demand Clinical Health Care Occupations in Oregon's Fifteen Workforce Regions

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Workforce Institute



Advancing Solutions

Oregon Healthcare Workforce Institute

MISSION: To advance the development of a high-quality health care workforce in order to improve the health of every Oregonian.

Created out of an initiative from the Governor's office, the Oregon Healthcare Workforce Institute (OHWI) conducts research and collaborates with stakeholders to develop comprehensive statewide responses to the critical health care workforce needs in Oregon. OHWI is recognized by the Oregon State Legislature as a leader in addressing Oregon's health care workforce shortage and is designated as a workforce advisory entity to state agencies.

Oregon Healthcare Workforce Institute
4000 Kruse Way Place
Building 2, Suite 210
Lake Oswego, Oregon 97035

www.oregonhwi.org



Funded, in part, with Employer Workforce Training Funds approved by the Oregon Workforce Investment Board and administered by the Oregon Department of Community Colleges and Workforce Development.

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- September 2010 -

Jo Isgrigg, Ph.D., Executive Director
Jennifer C. Swendsen, Associate Director
Oregon Healthcare Workforce Institute

Acknowledgements

The Oregon Healthcare Workforce Institute thanks Oregon’s public and private health profession education and training programs and their program contacts, Oregon’s health profession boards, and the Oregon Employment Department for their willingness to provide data for this study of high-demand clinical health care occupations in Oregon’s fifteen workforce regions.

The Oregon Healthcare Workforce Institute is grateful for the ongoing support from Commissioner Camille Preus and the Oregon Department of Community Colleges and Workforce Development and from the Oregon Workforce Investment Board and Greg White, Executive Staff.

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A Study of Selected High-Demand Clinical Health Care Occupations in Oregon's Fifteen Workforce Regions

The growing and aging population, the increasing diversity of the population, the increasing number of people living with chronic diseases, advances in medical technology, and an aging health care workforce are major factors contributing to Oregon's health care workforce demand. The implications of this flood of factors require informed action to ensure that Oregonians have access to quality health care services.

Oregon Employment Department data shows that Oregon is projected to have nearly 58,000 health care job openings between 2008 and 2018.¹ Additionally, three of the state's top ten sectors projected to add the most jobs are in the health care industry: ambulatory health care, hospitals, and nursing and residential care.

State and national health reform efforts are expected to increase the demand for health care workers. An Oregon Health Authority report estimates that as a result of state and federal reform efforts, 310,000 previously uninsured Oregonians will gain access to health coverage.² The additional workforce needed to provide health care services to these individuals is not included in current employment projections. Understanding the impact of health reform is essential in creating an appropriate health care workforce development strategy for Oregon.

The purpose of this report is to provide information for each of Oregon's fifteen workforce regions regarding the supply and demand for selected high-demand clinical health care shortage occupations that require post-secondary training of up to two years. Many complex factors enter into the supply and demand dynamic. This report has compiled data for use by Oregon's regional workforce investment boards for strategic planning, program evaluation and identification of further research needs.

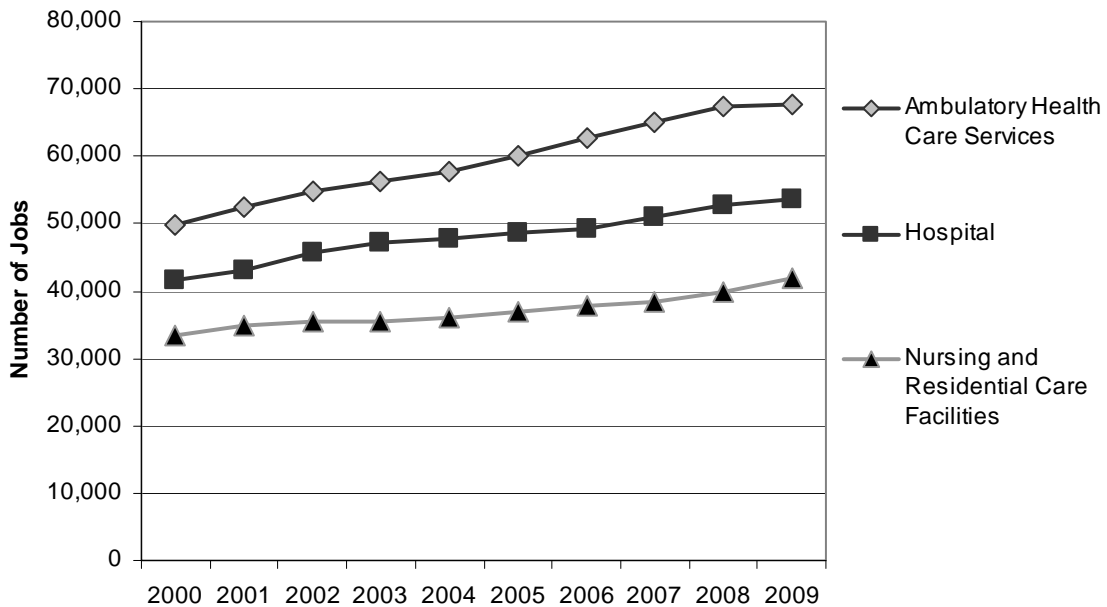
¹ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

² Oregon Health Authority (2010). *Board Report: State Finances and Federal Reform*. Available at <http://www.oregon.gov/OHA/OHPB/meetings/2010/100810-st-fin-fed-refm.pdf>.

EMPLOYMENT IN OREGON'S HEALTH CARE INDUSTRY

According to Oregon Employment Department data, employment in Oregon's health care industry grew by 31% between 2000 and 2009 (see chart below). The largest growth occurred in the ambulatory health care services sector, which added 17,800 jobs between 2000 and 2009, representing a 36% increase in employment. Hospital employment grew by 29%, adding 12,000 jobs to the labor market. Employment in Oregon's nursing and residential care facilities grew by 8,400, representing a 25% increase in employment in this sector.

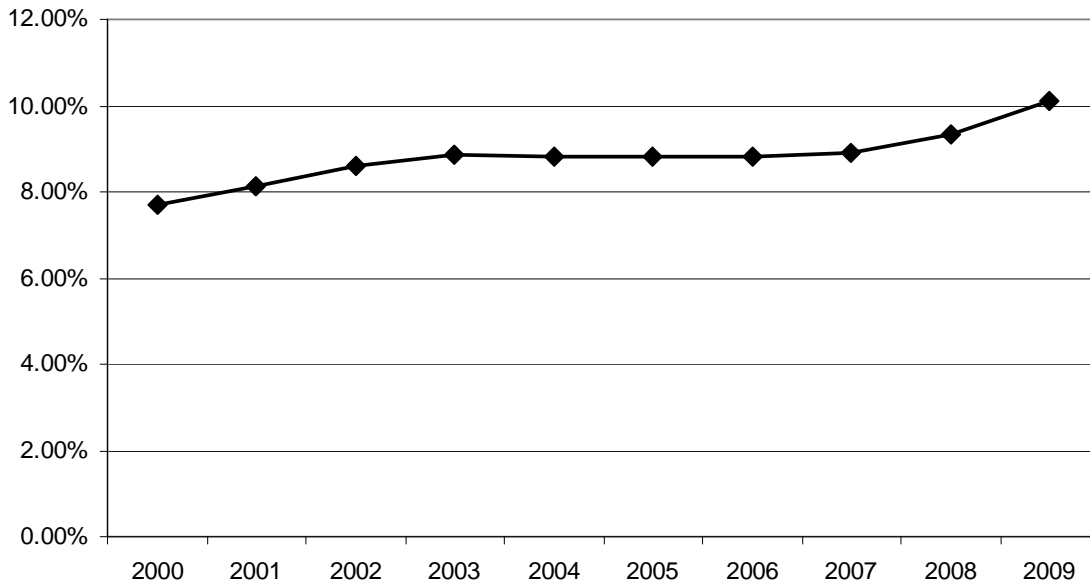
Employment in Oregon's Health Care Industry 2000-2009



Source: Oregon Employment Department

Employment in Oregon's health care industry comprises a growing share of the state's workforce, accounting for over ten percent of Oregon's total non-farm employment. Between 2007 and 2009, the increase in the percentage of the health care industry's share of the total workforce increased, reflecting continued job growth while other industries were experiencing job losses due to the downturn in the economy (see chart below).

Health Care Industry Employment as a Percentage of Total Employment 2000-2009



Source: Oregon Employment Department

THE ECONOMY

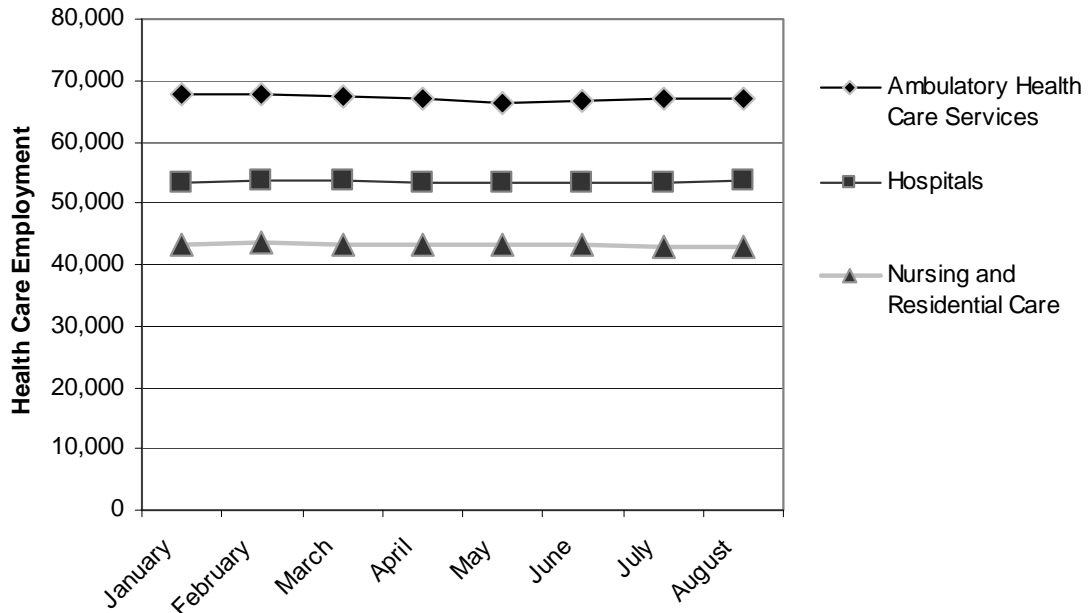
Although employment in the health care industry has shown greater resistance to the economic recession than most other industries, it has not been immune to job losses. The recession has caused some moderation of the health care workforce shortage as well, evidenced by a reduction in turnover and an increase in the number of qualified job applicants for available positions.³ In some cases, health care employers have scaled back or curtailed expansion of services, cut back jobs, reduced employee work hours or left vacant positions unfilled in response to revenue shortfalls.

According to Oregon Employment Department data, between January 2010 and August 2010, employment in Oregon's health care industry fluctuated moderately from a high of 165,200 in February to a low of 163,000 in May 2010. The average annual employment for January through

³ The Center for Health Workforce Studies (2010). *The Health Care Workforce in New York, 2008: Trends in the Supply and Demand for Health Workers*. Available at <http://chws.albany.edu>.

August 2010 is 163,850, slightly higher than the 2009 average annual employment rate of 163,000.

Oregon's Health Care Industry Employment - 2010



Source: Oregon Employment Department

The recession and resulting slow down in hiring health care workers have caused some health profession programs to struggle with decisions regarding student admissions into certain programs that may result in a temporary oversupply of a trained workforce. Yet, national health care workforce experts have cautioned that while the economy has tempered the workforce shortages, the effects are temporary and shortage concerns will intensify as the economy recovers. The key drivers of the demand for the health care workforce will continue to be major factors: the growing and aging population, the increasing diversity of the population, the increasing number of people living with chronic diseases, advances in medical technology, and an aging health care workforce.

A 2009 statewide vacancy survey by the Oregon Employment Department found that despite the recession, Oregon's health care and social assistance industry had far more vacancies (5,744) than

any other industry in the state.⁴ Job openings for registered nurses in Oregon represented nearly six percent of all vacancies statewide, ranking the highest of all occupations with job vacancies. Of the 1,004 reported vacancies for registered nurses, 11% had been open for more than 60 days. Nursing assistants ranked third on the list of occupations with the highest number of job vacancies. Of the 457 job openings for nursing assistants, 10% had been vacant for more than 60 days.

A search of statewide job openings on the Oregon Labor Market Information System's JobNET website conducted in September 2010 listed over 1,500 job announcements for registered nurses and nearly 450 for nursing assistants.⁵ These announcements included job openings for part-time, temporary, on-call and traveling positions. Additionally, the JobNET site listed 372 job announcements for medical assistants, 236 for dental assistants, 84 for radiologic, CAT and MRI technicians and technologists, and 51 job openings for medical and clinical lab technicians and technologists. Among the limitations of using this information to assess vacancies for health care occupations, the JobNET website does not offer an exhaustive list of all available job openings; however, it does offer some perspective on the occupations' employment demand trends.

STATE AND NATIONAL HEALTH REFORM

An Oregon Health Authority report estimates that as a result of the state and national health reform, 310,000 additional Oregonians will gain access to health insurance coverage by 2019, thus increasing the demand for health care services.⁶ This resulting increase in the demand for health care services is not yet reflected in employment projections.

State and national health reform also supports restructured health care delivery models, such as primary care health homes and new payment methods that focus on patient outcomes.⁷ These efforts intend to promote the use of interprofessional teams made up of health care professionals with different areas of expertise. This team approach to patient care focuses on a set of skills and

⁴ Oregon Employment Department (2009). *Vacancies Exist Despite Large Cutbacks*. Available at: <http://www.qualityinfo.org>.

⁵ Oregon Employment Department's JobNET website accessed at <http://www.qualityinfo.org>.

⁶ Oregon Health Authority (2010). *Board Report: State Finances and Federal Reform*. Available at <http://www.oregon.gov/OHA/OHPB/meetings/2010/100810-st-fin-fed-refm.pdf>.

⁷ Office for Oregon Health Policy and Research (2010). *Standards and Measures for Patient Centered Primary Care Homes*. Available at http://www.oregon.gov/OHPPR/HEALTHREFORM/PCPCH/docs/FinalReport_PCPCH.pdf.

team-functioning roles, rather than traditional occupation roles, for improving and coordinating patient care.

Primary care home pilot projects in Oregon and nationally have identified a new job role within interprofessional health care teams; that of a care coordinator. In these pilot projects, the role of a care coordinator has been filled by a variety of health professionals, including those typically trained at community colleges such as a nurse or medical assistant.

METHODOLOGY AND DATA SOURCES

This report, funded by the Oregon Department of Community Colleges and Workforce Development, provides graduate supply and employment demand data by workforce regions for their top three to five demand health care occupations that require post-secondary training of up to two years.

Employment demand data comes from the Oregon Employment Department's (OED) *Employment Projections by Industry and Occupation 2008-2018*.⁸ The Oregon Healthcare Workforce Institute's 2010 report, *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations* provides graduate data from Oregon's educational programs for selected high-demand clinical health care occupations for 2007 through 2010 and projections through 2012.⁹ Graduate data for medical assistants, dental assistants, and pharmacy technicians comes from the 2008 Oregon Labor Market Information System State Training Inventory.¹⁰ Job vacancy data comes from the Oregon Employment Department's 2009 job vacancy survey.¹¹

OCCUPATIONS

This report specifically comments on the top three high-demand health care occupations in each of Oregon's 15 workforce regions that require post-secondary training of up to two years. An

⁸ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupation*. Available at <http://www.oregonhwi.org/reports>.

¹⁰ Oregon Labor Market Information System State Training Inventory. Available at <http://www.qualityinfo.org>.

¹¹ Oregon Employment Department (2009). *Job Vacancies in Oregon*. Available at <http://www.qualityinfo.org/pubs/vacancy/sw.pdf>.

occupation is defined as in demand when the total job openings are greater than the median total openings for all occupations.¹²

OREGON'S WORKFORCE REGIONS

Region 1: Clatsop, Columbia and Tillamook Counties

Region 2: Multnomah and Washington Counties

Region 3: Marion, Polk and Yamhill Counties

Region 4: Benton, Lincoln and Linn Counties

Region 5: Lane County

Region 6: Douglas County

Region 7: Coos and Curry Counties

Region 8: Jackson and Josephine Counties

Region 9: Gilliam, Hood River, Sherman, Wasco and Wheeler Counties

Region 10: Crook, Deschutes and Jefferson Counties

Region 11: Klamath and Lake Counties

Region 12: Morrow and Umatilla Counties

Region 13: Baker, Union and Wallowa Counties

Region 14: Grant, Harney and Malheur Counties

Region 15: Clackamas County

TERMINOLOGY

Occupational Categories. The occupations identified in this report are defined by the Standard Occupational Classification (SOC) system used by the U.S. Bureau of Labor Statistics and the Oregon Employment Department to collect and analyze employment data.¹³

The occupational groupings of the SOC system have limitations when analyzing projections for specialty-trained workers within an occupational category.¹⁴ For example, the current SOC for registered nurses includes jobs filled by staff nurses, nurse practitioners, clinical nurse specialists,

¹² Oregon Employment Department (2010). Occupations in Demand in Spite of Sluggish Economy. Available at <http://qualityinfo.org>.

¹³ U.S. Department of Labor, Bureau of Labor Statistics (2010). *Standard Occupational Classification*. Available at <http://www.bls.gov/soc/>.

¹⁴ Oregon Employment Department (2006). *Oregon Health Care Workforce Needs Assessment*. Available at <http://www.qualityinfo.org/pubs/single/healthcare.pdf>.

certified nurse midwives, and certified registered nurse anesthetists.¹⁵ Similarly, when multiple job titles are grouped within one SOC, such as radiologic, CAT and MRI technologists and technicians, there is no distinction between levels of training and required certifications.¹⁶

Job Openings. In this report, job openings are defined as those created by new job growth and replacement openings created by those who permanently leave the occupation's labor pool.

Supply. For purposes of this report, graduate supply for the selected occupations is presented. Obtaining graduate supply data is the first step to identify and analyze educational pipeline efforts to produce a skilled workforce. When analyzing educational supply, the number of graduates from Oregon programs cannot be directly translated to new health care workers in Oregon. Migration to other states, non-clinical careers, transfers to other professions, licensure requirements, educational career pathways and other factors affect the number of graduates actually entering clinical health care careers in Oregon. Further research on data regarding those who actually enter the occupation's labor pool is required to assess the relationship between workforce supply and employment demand adequately.

Demand. In this report, employment projections reflect the count of the number of jobs in the specified occupational categories for the period of 2008 to 2018, as identified by the Oregon Employment Department.¹⁷ The demand for an occupation is an estimate of a projected number of jobs over a specified time period based on a formula that includes such factors as current employment patterns, demographics and related trends. Forecasting future health care employment is not an easy task given the multitude of factors that influence the demand for and use of health care services, including changes in reimbursements from publicly funded health insurance programs.¹⁸

¹⁵ The U.S. Department of Labor has revised the SOC system with 24 new occupational codes which include those for nurse anesthetists, nurse midwives, and nurse practitioners. These new codes will be used in future employment projections. See http://www.bls.gov/soc/soc_2010_whats_new.pdf.

¹⁶ The Center for Health Workforce Studies (2010). *The Health Care Workforce in New York, 2008: Trends in the Supply and Demand for Health Workers*. Available at http://chws.albany.edu/index.php?nys_track.

¹⁷ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

¹⁸ The Center for Health Workforce Studies (2010). *Health Care Employment Projections: An Analysis of Bureau of Labor Statistics Occupational Projections 2008-2018*. Available at <http://chws.albany.edu>.

Occupational demand projections reflect economic factors, or what the market is willing to pay, rather than an optimal number of workers needed, for example to ensure universal patient access to health care services. The health policy literature regarding the use of employment demand projections for health care workers states that because estimates are based on market conditions and current patterns of employment, inequities in health care access in the current delivery system are carried over into future projections.¹⁹ Emerging health care occupations, including those associated with new models of health care delivery or advances in technology, are excluded from employment projections since there are no baseline data on which to estimate employment demand.

The term “need” is increasingly used in the health care policy arena in relation to health reform efforts intent on increasing the number of individuals with access to health care insurance, new health care delivery models and improvements in patient outcomes. The need for health care workers, then, could be viewed as an optimal number required to meet the health care needs of a given patient population. This perspective focuses more on clinical and population benchmarks and omits the market influences on employment.

¹⁹ U.S. Department of Health and Human Services, Health Resources and Services Administration (2008). *The Physician Workforce: Projections and Research into Current Issues Affecting Supply and Demand*.

WORKFORCE REGION HEALTH CARE OCCUPATION PROFILES

Region 1: Clatsop, Columbia & Tillamook Counties

According to the Oregon Employment Department’s employment projections for 2008 to 2018, registered nurses ranked first among clinical health care occupations in highest demand in Clatsop, Columbia and Tillamook Counties, followed by nursing assistants and home health aides.²⁰

Top Five Demand Clinical Health Care Occupations in Clatsop, Columbia & Tillamook Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 1: Clatsop, Columbia & Tillamook					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ²¹ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 1	Region 1
Registered Nurses	399	521	122	80	202	16	11
Nursing Aides, Orderlies, and Attendants	264	344	80	30	110	58	39
Home Health Aides	193	250	57	22	79	n/a	n/a
Dental Assistants	103	139	36	23	59	7	n/a
Medical Assistants	115	157	42	15	57	6	8

REGISTERED NURSES

In 2010, Clatsop Community College graduated 16 students with associate degrees in nursing.²² For Region 1, the Oregon Employment Department estimated an average of 20 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation’s labor pool. In 2009, a vacancy survey of employers in this workforce region by the Oregon Employment Department identified 11 job vacancies for registered nurses.

²⁰ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

²¹ Oregon Employment Department (2009). *Job Vacancies in Northwest Oregon*. Available at <http://www.qualityinfo.org>.

²² Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon’s Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS AND HOME HEALTH AIDES

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 189 job openings in Region 1 for nursing assistants and home health aides between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers in this workforce region by the Oregon Employment Department identified 39 job vacancies for certified nursing assistants.

In 2009, 58 students completed nursing assistant training in Clatsop, Columbia and Tillamook Counties.²³ Not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

There is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including physical and emotional demands, low pay and lack of a career ladder. The

²³ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.²⁴

Region 1: Clatsop, Columbia & Tillamook					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	264	344	80	30	110
Home Health Aides	193	250	57	22	79
Psychiatric Aides	30	39	9	3	12
Totals	487	633	146	55	201

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

²⁴ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations -- National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 2: Multnomah and Washington Counties

The Oregon Employment Department's projections for 2008 to 2018 show that registered nurses ranked first among all health care occupations in highest demand in Multnomah and Washington Counties. Nursing assistants ranked third and medical assistants ranked fifth among the 71 health care occupations in this workforce region.²⁵

Top Five Demand Clinical Health Care Occupations in Multnomah and Washington Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 2: Multnomah and Washington					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ²⁶ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 2	Regions 2 & 15
Registered Nurses	13,770	16,516	2,746	2,645	5,391	855	451
Nursing Aides, Orderlies, and Attendants	4,357	5,161	804	474	1,278	727	162
Medical Assistants	2,823	3,513	690	353	1,043	470	n/a
Home Health Aides	2,765	3,478	713	311	1,024	n/a	143
Dental Assistants	1,562	1,974	412	332	744	265	n/a

REGISTERED NURSES

For Region 2, the Oregon Employment Department estimated an average of 539 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers in the Portland tri-county area by the Oregon Employment Department identified 451 job vacancies for registered nurses.

In 2010, Mt. Hood and Portland Community Colleges graduated 157 students with associate degrees in nursing.²⁷ Five colleges and universities located in Multnomah County graduated 698

²⁵ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

²⁶ Oregon Employment Department (2009). *Job Vacancies in the Portland Tri-County Area*. Available at <http://www.qualityinfo.org>.

²⁷ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

students with bachelor degrees in nursing (BSN), including 78 students in the Oregon Health & Science University's online BSN program.²⁸

Several caveats must be considered when analyzing graduate supply data for registered nurses. Not all graduates from Oregon's nursing programs will pursue careers in this particular workforce region or state. For example, the five baccalaureate nursing programs in Multnomah County serve as a hub for students from the Pacific Northwest and beyond. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 1,278 job openings in Region 2 for nursing assistants between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers in this workforce region by the Oregon Employment Department identified 162 job vacancies for certified nursing assistants.

In 2009, 727 students completed nursing assistant training in Multnomah and Washington Counties.²⁹ Not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

²⁸ Ibid.

²⁹ Ibid.

There is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including physical and emotional demands, low pay and lack of a career ladder. The federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.³⁰

Region 2: Multnomah and Washington					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	4,357	5,161	804	474	1,278
Home Health Aides	2,765	3,478	713	311	1,024
Psychiatric Aides	227	254	27	24	51
Psychiatric Technicians	101	109	8	26	34
Totals	7,450	9,002	1,552	835	2,387

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric technicians and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

MEDICAL ASSISTANTS

Ambulatory health care services is the fastest growing industry sector in Oregon.³¹ Between 2008 and 2018, the Oregon Employment Department projects this sector to gain 18,600 jobs statewide, an increase of 28 percent. The majority of medical assistants are employed in ambulatory health care settings such as physician offices and health care clinics. Medical assistants are the fifth largest health care occupation in Oregon.

The Oregon Employment Department projects 1,043 job openings for medical assistants in Region 2 between 2008 and 2018. The majority of these job openings, 690, are due to new job growth and the remaining 353 openings are to replace those who permanently leave the occupation's labor pool. Of the 17 medical assistant training programs in Oregon, five are located in Region 2. In 2008, these five medical assistant training programs graduated 470 students.

³⁰ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

³¹ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

Region 3: Marion, Polk and Yamhill Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Marion, Polk and Yamhill Counties.³² Nursing assistants ranked second while medical assistants ranked fourth among all health care occupations in these three counties.

Top Five Demand Clinical Health Care Occupations in Marion, Polk and Yamhill Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 3: Marion, Polk and Yamhill					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ³³ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 3	Region 3
Registered Nurses	2,906	3,712	806	578	1,384	73	102
Nursing Aides, Orderlies, and Attendants	1,769	2,280	511	202	713	334	48
Medical Assistants	793	1,063	270	103	373	75	n/a
Home Health Aides	868	1,123	255	99	354	n/a	n/a
Dental Assistants	485	649	164	106	270	18	n/a

REGISTERED NURSES

In 2010, Chemeketa Community College graduated 40 students with associate degrees in nursing and George Fox University graduated 33 students with bachelor degrees in nursing.³⁴ For Region 3, the Oregon Employment Department estimated an average of 138 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers in this workforce region by the Oregon Employment Department identified 102 job vacancies for registered nurses.

³² Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

³³ Oregon Employment Department (2009). *Job Vacancies in Marion, Polk and Yamhill Counties*. Available at <http://www.qualityinfo.org>

³⁴ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 713 job openings in Region 3 for nursing assistants between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers in this workforce region by the Oregon Employment Department identified 48 job vacancies for certified nursing assistants.

In 2009, 334 students completed nursing assistant training in Marion, Polk and Yamhill Counties.³⁵ Not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

³⁵ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.³⁶

Region 3: Marion, Polk and Yamhill					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	1,769	2,280	511	202	713
Home Health Aides	868	1,123	255	99	354
Psychiatric Technicians	275	404	129	86	215
Psychiatric Aides	213	297	84	25	109
Totals	3,125	4,104	979	412	1,391

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric technicians and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

MEDICAL ASSISTANTS

Ambulatory health care services is the fastest growing industry sector in Oregon.³⁷ Between 2008 and 2018, the Oregon Employment Department projects this sector to gain 18,600 jobs statewide, an increase of 28 percent. The majority of medical assistants are employed in ambulatory health care settings such as physician offices and health care clinics. Medical assistants are the fifth largest health care occupation in Oregon.

The Oregon Employment Department projects 373 job openings for medical assistants in Region 3 between 2008 and 2018. Of these job openings, 270 are due to new job growth and 103 openings are to replace those who permanently leave the occupation's labor pool. In Region 3, three medical assistant training programs graduated 75 students in 2008.

³⁶ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

³⁷ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

Region 4: Benton, Lincoln and Linn Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Benton, Lincoln and Linn Counties.³⁸ Nursing assistants ranked second while home health aides ranked fourth among all 68 health care occupations identified in these three counties.

Top Five Demand Clinical Health Care Occupations in Benton, Lincoln and Linn Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 4: Benton, Lincoln and Linn Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ³⁹ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 4	Regions 4 & 5
Registered Nurses	1,484	1,872	388	293	681	61	150
Nursing Aides, Orderlies, and Attendants	770	984	214	87	301	181	116
Home Health Aides	519	668	149	59	208	n/a	n/a
Medical Assistants	327	428	101	42	143	18	30
Dental Assistants	231	310	79	51	130	15	n/a

REGISTERED NURSES

In 2010, Linn-Benton and Oregon Coast Community Colleges graduated 61 students with associate degrees in nursing.⁴⁰ For Region 4, the Oregon Employment Department estimated an average of 68 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers in the Southern Willamette Valley and Central Oregon Coast by the Oregon Employment Department identified 150 job vacancies for registered nurses.

³⁸ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

³⁹ Oregon Employment Department (2009). *Job Vacancies in the Southern Willamette Valley and Central Coast*. Available at <http://www.qualityinfo.org>

⁴⁰ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS AND HOME HEALTH AIDES

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 301 job openings in Region 4 for nursing assistants and 208 job openings for home health aides between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 116 job vacancies for certified nursing assistants in the Southern Willamette Valley and Central Oregon Coast.

In 2009, 181 students completed nursing assistant training in Benton, Lincoln and Linn Counties.⁴¹ Not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁴¹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁴²

Region 4: Benton, Lincoln and Linn Counties					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	770	984	214	87	301
Home Health Aides	519	668	149	59	208
Psychiatric Aides	39	45	6	4	10
Totals	1,328	1,697	369	150	519

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric technicians and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

⁴² U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 5: Lane County

According to the Oregon Employment Department’s projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Lane County.⁴³ Home health aides ranked second while nursing aides ranked third among all 70 health care occupations identified in this county.

Top Five Demand Clinical Health Care Occupations in Lane County that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 5: Lane County					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁴⁴ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 5	Regions 4 & 5
Registered Nurses	2,806	3,537	731	554	1,285	69	150
Home Health Aides	1,171	1,464	293	131	424	n/a	n/a
Nursing Aides, Orderlies, and Attendants	1,210	1,490	280	134	414	393	116
Psychiatric Technicians	0	261	261	33	294	n/a	n/a
Medical Assistants	667	825	158	83	241	0	30

REGISTERED NURSES

In 2010, Lane Community College graduated 69 students with associate degrees in nursing.⁴⁵ For Region 5, the Oregon Employment Department estimated an average of 129 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation’s labor pool. In 2009, a vacancy survey of employers in the Southern Willamette Valley and Central Oregon Coast by the Oregon Employment Department identified 150 job vacancies for registered nurses.

⁴³ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁴⁴ Oregon Employment Department (2009). *Job Vacancies in the Southern Willamette Valley and Central Coast*. Available at <http://www.qualityinfo.org>

⁴⁵ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon’s Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

HOME HEALTH AIDES AND CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 424 job openings in Region 5 for home health aides and 414 job openings for nursing assistants between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 116 job vacancies for certified nursing assistants in the Southern Willamette Valley and Central Oregon Coast.

In 2009, 393 students completed nursing assistant training in Lane County.⁴⁶ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁴⁶ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁴⁷

Region 5: Lane County					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Home Health Aides	1,171	1,464	293	131	424
Nursing Aides, Orderlies, and Attendants	1,210	1,490	280	134	414
Psychiatric Technicians	0	261	261	33	294
Psychiatric Aides	50	209	159	13	172
Totals	2,431	3,424	993	311	1,304

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric technicians and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table below).

⁴⁷ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 6: Douglas County

According to the Oregon Employment Department’s projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Douglas County.⁴⁸ Nursing aides ranked second while home health aides ranked third among all 64 health care occupations identified in Douglas County.

Top Five Demand Clinical Health Care Occupations in Douglas County that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 6: Douglas County					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁴⁹ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 6	Regions 6, 7 & 8
Registered Nurses	789	897	108	147	255	51	109
Nursing Aides, Orderlies, and Attendants	350	417	67	38	105	39	50
Home Health Aides	279	341	62	31	93	n/a	n/a
Medical Assistants	153	183	30	19	49	23	n/a
Pharmacy Technicians	115	128	13	31	44	0	n/a

REGISTERED NURSES

In 2010, Umpqua Community College graduated 51 students with associate degrees in nursing.⁵⁰ For Region 6, the Oregon Employment Department estimated an average of 26 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation’s labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 109 job vacancies for registered nurses in Southwest Oregon, including Douglas, Coos, Curry, Jackson and Josephine Counties.

⁴⁸ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁴⁹ Oregon Employment Department (2009). *Job Vacancies in Southwest Oregon*. Available at <http://www.qualityinfo.org>

⁵⁰ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon’s Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS AND HOME HEALTH AIDES

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 105 job openings in Region 6 for certified nursing assistants and 93 job openings for home health aides between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 50 job vacancies for certified nursing assistants in Southwest Oregon, including Douglas, Coos, Curry, Jackson and Josephine Counties.

In 2009, 39 students completed nursing assistant training in Douglas County.⁵¹ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁵¹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁵²

Region 6: Douglas County					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	350	417	67	38	105
Home Health Aides	279	341	62	31	93
Psychiatric Aides	7	8	1	1	2
Totals	636	766	130	70	200

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

⁵² U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 7: Coos and Curry Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Coos and Curry Counties.⁵³ Nursing aides ranked second while medical assistants ranked fourth among all 59 health care occupations identified in these two counties.

Top Five Demand Clinical Health Care Occupations in Coos and Curry Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 7: Coos and Curry Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁵⁴ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 7	Regions 6, 7 & 8
Registered Nurses	618	711	93	116	209	33	109
Nursing Aides, Orderlies, and Attendants	316	373	57	34	91	78	50
Medical Assistants	147	175	28	18	46	7	n/a
Home Health Aides	164	191	27	18	45	n/a	n/a
Licensed Practical and Licensed Vocational Nurses	72	84	12	24	36	0	n/a

REGISTERED NURSES

In 2010, Southwestern Oregon Community College graduated 33 students with associate degrees in nursing.⁵⁵ For Region 7, the Oregon Employment Department estimated an average of 21 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 109 job vacancies for registered nurses in Southwest Oregon, including Douglas, Coos, Curry, Jackson and Josephine Counties.

⁵³ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁵⁴ Oregon Employment Department (2009). *Job Vacancies in Southwest Oregon*. Available at <http://www.qualityinfo.org>

⁵⁵ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 91 job openings in Region 7 for certified nursing assistants between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 50 job vacancies for certified nursing assistants in Southwest Oregon, including Douglas, Coos, Curry, Jackson and Josephine Counties.

In 2009, 78 students completed nursing assistant training in Coos and Curry Counties.⁵⁶ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁵⁶ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁵⁷

Certified nursing assistants may qualify for related jobs, such as home health aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed.

MEDICAL ASSISTANTS

Ambulatory health care services is the fastest growing industry sector in Oregon.⁵⁸ Between 2008 and 2018, the Oregon Employment Department projects this sector to gain 18,600 jobs statewide, an increase of 28 percent. Medical assistants are the fifth largest health care occupation in Oregon and the majority of medical assistants are employed in ambulatory health care settings such as physician offices and health care clinics.

The Oregon Employment Department projects 46 job openings for medical assistants in Region 7 between 2008 and 2018. Of these job openings, 28 are due to new job growth and 18 openings are to replace those who permanently leave the occupation's labor pool. In Region 7, Southwestern Oregon Community College graduated seven students from the medical assistant training program in 2008.

⁵⁷ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

⁵⁸ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

Region 8: Jackson and Josephine Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Jackson and Josephine Counties.⁵⁹ Nursing aides ranked second and medical assistants ranked fourth among all 69 health care occupations identified in these two counties.

Top Five Demand Clinical Health Care Occupations in Jackson and Josephine Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 8: Jackson and Josephine Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁶⁰ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 8	Regions 6, 7 & 8
Registered Nurses	2,175	2,589	414	416	830	81	109
Nursing Aides, Orderlies, and Attendants	1,204	1,462	258	133	391	46	50
Medical Assistants	761	930	169	94	263	23	n/a
Home Health Aides	711	887	176	80	256	n/a	n/a
Dental Assistants	403	482	79	83	162	30	n/a

REGISTERED NURSES

In 2010, Rogue Community College graduated 32 students with associate degrees in nursing and the Oregon Health & Science University School of Nursing program at Southern Oregon University graduated 49 students with baccalaureate degrees in nursing.⁶¹ For Region 8, the Oregon Employment Department estimated an average of 83 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 109 job

⁵⁹ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁶⁰ Oregon Employment Department (2009). *Job Vacancies in Southwest Oregon*. Available at <http://www.qualityinfo.org>

⁶¹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

vacancies for registered nurses in Southwest Oregon, including Douglas, Coos, Curry, Jackson and Josephine Counties.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 391 job openings in Region 8 for certified nursing assistants between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 50 job vacancies for certified nursing assistants in Southwest Oregon, including Douglas, Coos, Curry, Jackson and Josephine Counties.

In 2009, 46 students completed nursing assistant training in Coos and Curry Counties.⁶² It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

⁶² Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

It is important to note that there is a high turnover rate associated with direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁶³

Region 8: Jackson and Josephine Counties					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	1,204	1,462	258	133	391
Home Health Aides	711	887	176	80	256
Psychiatric Aides	42	52	10	5	15
Psychiatric Technicians	5	6	1	1	2
Totals	1,962	2,407	445	219	664

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric aides and psychiatric technicians. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

MEDICAL ASSISTANTS

Ambulatory health care services is the fastest growing industry sector in Oregon.⁶⁴ Between 2008 and 2018, the Oregon Employment Department projects this sector to gain 18,600 jobs statewide, an increase of 28 percent. Medical assistants are the fifth largest health care occupation in Oregon and the majority of medical assistants are employed in ambulatory health care settings such as physician offices and health care clinics.

The Oregon Employment Department projects 263 job openings for medical assistants in Region 8 between 2008 and 2018. Of these job openings, 169 are due to new job growth and 94 openings are to replace those who permanently leave the occupation's labor pool. Twenty-three students graduated from a medical assistant training program in Region 8 in 2008.

⁶³ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

⁶⁴ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

Region 9: Gilliam, Hood River, Sherman, Wasco and Wheeler Counties

According to the Oregon Employment Department’s projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Gilliam, Hood River, Sherman, Wasco and Wheeler Counties.⁶⁵ Nursing aides ranked second and medical assistants ranked seventh among all 60 health care occupations identified in these five counties.

Top Five Demand Clinical Health Care Occupations in Gilliam, Hood River, Sherman,
Wasco and Wheeler Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 9: Gilliam, Hood River, Sherman, Wasco and Wheeler Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁶⁶ Employer Reported Vacancies Regions 9, 10 & 11
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 9	
Registered Nurses	482	561	79	91	170	18	114
Nursing Aides, Orderlies, and Attendants	284	333	49	31	80	54	26
Medical Assistants	95	113	18	12	30	1	39
Licensed Practical and Licensed Vocational Nurses	43	53	10	15	25	0	n/a
Pharmacy Technicians	55	63	8	15	23	0	17

REGISTERED NURSES

In 2010, Columbia Gorge Community College graduated 18 students with associate degrees in nursing.⁶⁷ For Region 9, the Oregon Employment Department estimated an average of 17 job openings annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation’s labor pool. In 2009, a vacancy survey of employers by the Oregon Employment

⁶⁵ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁶⁶ Oregon Employment Department (2009). *Job Vacancies in the Central Oregon and Columbia Gorge Area*. Available at <http://www.qualityinfo.org>

⁶⁷ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon’s Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Department identified 114 job vacancies for registered nurses in the Central Oregon and Columbia Gorge area.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 80 job openings in Region 9 for certified nursing assistants between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 26 job vacancies for certified nursing assistants in the Central Oregon and Columbia Gorge area.

In 2009, 54 students completed nursing assistant training in Region 9.⁶⁸ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

⁶⁸ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁶⁹

Region 9: Gilliam, Hood River, Sherman, Wasco and Wheeler Counties					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	284	333	49	31	80
Home Health Aides	68	79	11	7	18
Psychiatric Aides	3	3	0	0	0
Totals	355	415	60	38	98

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

MEDICAL ASSISTANTS

Ambulatory health care services is the fastest growing industry sector in Oregon.⁷⁰ Between 2008 and 2018, the Oregon Employment Department projects this sector to gain 18,600 jobs statewide, an increase of 28 percent. Medical assistants are the fifth largest health care occupation in Oregon and the majority of medical assistants are employed in ambulatory health care settings such as physician offices and health care clinics.

The Oregon Employment Department projects 30 job openings for medical assistants in Region 9 between 2008 and 2018. Of these job openings, 18 are due to new job growth and 12 openings are to replace those who permanently leave the occupation's labor pool. The Oregon Labor Market Information System State Training Inventory listed one graduate from a medical assistant training program in Region 9 in 2008.

⁶⁹ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

⁷⁰ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

Region 10: Crook, Deschutes & Jefferson Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Crook, Deschutes and Jefferson Counties.⁷¹ Home health aides ranked second and nursing aides ranked third among all 69 health care occupations identified in Region 10.

Top Five Demand Clinical Health Care Occupations in Crook, Deschutes and Jefferson Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 10: Crook, Deschutes & Jefferson					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁷² Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 10	Regions 9, 10 & 11
Registered Nurses	1,503	1,949	446	302	748	34	114
Home Health Aides	576	743	167	66	233	n/a	n/a
Nursing Aides, Orderlies, and Attendants	386	498	112	44	156	34	26
Medical Assistants	331	442	111	43	154	16	39
Dental Assistants	223	298	75	49	124	18	n/a

REGISTERED NURSES

In 2010, Central Oregon Community College graduated 34 students with associate degrees in nursing.⁷³ For Region 10, the Oregon Employment Department estimated an average of 75 job openings for registered nurses annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 114 job vacancies for registered nurses in the Central Oregon and Columbia Gorge area.

⁷¹ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁷² Oregon Employment Department (2009). *Job Vacancies in the Central Oregon and Columbia Gorge Area*. Available at <http://www.qualityinfo.org>.

⁷³ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the distribution and career choices of registered nurses following graduation is warranted.

HOME HEALTH AIDES AND CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 233 job openings for home health aides and 156 job openings for nursing aides in Region 10 between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 26 job vacancies for certified nursing assistants in the Central Oregon and Columbia Gorge area.

In 2009, 34 students completed nursing assistant training in Region 10.⁷⁴ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁷⁴ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁷⁵

Region 10: Crook, Deschutes and Jefferson Counties					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Home Health Aides	576	743	167	66	233
Nursing Aides, Orderlies, and Attendants	386	498	112	44	156
Psychiatric Technicians	17	22	5	5	10
Psychiatric Aides	13	18	5	2	7
Totals	992	1,281	289	117	406

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric technicians and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

⁷⁵ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 11: Klamath and Lake Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Klamath and Lake Counties.⁷⁶ Nursing aides ranked second and substance abuse and behavioral disorder counselors ranked sixth in projected job openings among all 66 health care occupations identified in Klamath and Lake Counties.

Top Five Demand Clinical Health Care Occupations in Klamath and Lake Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 11: Klamath and Lake Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁷⁷ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 11	Regions 9, 10 & 11
Registered Nurses	419	496	77	80	157	25	114
Nursing Aides, Orderlies, and Attendants	252	315	63	28	91	50	26
Substance Abuse and Behavioral Disorder Counselors	81	94	13	18	31	0	n/a
Medical Assistants	93	112	19	11	30	0	39
Pharmacy Technicians	66	76	10	18	28	0	17

REGISTERED NURSES

In 2010, Oregon Health & Science University's School of Nursing program at Oregon Institute of Technology in Klamath Falls graduated 25 students with baccalaureate degrees in nursing.⁷⁸ For Region 11, the Oregon Employment Department estimated an average of 16 job openings for registered nurses annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon

⁷⁶ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁷⁷ Oregon Employment Department (2009). *Job Vacancies in the Central Oregon and Columbia Gorge Area*. Available at <http://www.qualityinfo.org>.

⁷⁸ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Employment Department identified 114 job vacancies for registered nurses in the Central Oregon and Columbia Gorge area, including Klamath and Lake Counties.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the geographic distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 91 job openings for nursing aides in Region 11 between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 26 job vacancies for certified nursing assistants in the Central Oregon and Columbia Gorge area.

In 2009, 50 students completed nursing assistant training in Region 11.⁷⁹ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

⁷⁹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

There is a high turnover rate associated with direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁸⁰

Region 11: Klamath and Lake Counties					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	252	315	63	28	91
Home Health Aides	68	88	20	8	28
Psychiatric Aides	3	3	0	0	0
Totals	323	406	83	36	119

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

SUBSTANCE ABUSE AND BEHAVIORAL DISORDER COUNSELORS

Factors contributing to the demand for substance abuse and behavioral disorder counselors include the growth of treatment programs as an alternative to incarceration and the increasing knowledge of treatments for addiction. The Oregon Employment Department identified 81 substance abuse and behavioral disorder counselor jobs in Klamath and Lake Counties in 2008 and projects the number of these jobs to increase to 94 by 2018.⁸¹ In addition to the 13 new jobs projected, the Oregon Employment Department estimates there will be 18 job openings to replace those who permanently leave the occupation's labor pool.

⁸⁰ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

⁸¹ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

There are no training or educational programs for substance abuse and behavioral disorder counselors in Klamath and Lake Counties.⁸² Central Oregon, Chemeketa, Portland and Rogue Community Colleges offer certificate programs for this occupation. These four community colleges graduated a total of 15 students in 2010. Chemeketa, Mt. Hood, Portland, Rogue and Southwestern Oregon Community Colleges graduated a total of 61 students with associate degrees in 2010. Additionally, Portland State University offers a graduate certificate and Lewis & Clark College offers a Master's degree in training for professional level jobs in this occupation.

⁸² Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Region 12: Morrow and Umatilla Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Morrow and Umatilla Counties.⁸³ Nursing aides ranked second and home health aides ranked third in projected job openings among all 64 health care occupations identified in Morrow and Umatilla Counties.

Top Five Demand Clinical Health Care Occupations in Morrow and Umatilla Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 12: Morrow and Umatilla Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁸⁴ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 12	Regions 12, 13 & 14
Registered Nurses	414	464	50	77	127	22	68
Nursing Aides, Orderlies, and Attendants	187	215	28	20	48	23	43
Home Health Aides	114	134	20	12	32	n/a	n/a
Pharmacy Technicians	66	75	9	18	27	0	n/a
Dental Assistants	62	74	12	13	25	0	n/a

REGISTERED NURSES

In 2010, Blue Mountain Community College graduated 22 students with associate degrees in nursing.⁸⁵ For Region 12, the Oregon Employment Department estimated an average of 13 job openings for registered nurses annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 68 job vacancies for registered nurses in Eastern Oregon.

⁸³ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁸⁴ Oregon Employment Department (2009). *Job Vacancies in Eastern Oregon*. Available at <http://www.qualityinfo.org>

⁸⁵ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the geographic distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS AND HOME HEALTH AIDES

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 48 job openings for nursing aides and 32 job openings for home health aides in Region 12 between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 43 job vacancies for certified nursing assistants in Eastern Oregon.

In 2009, 23 students completed nursing assistant training in Region 12.⁸⁶ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁸⁶ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁸⁷

Region 12: Morrow and Umatilla Counties					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	187	215	28	20	48
Home Health Aides	114	134	20	12	32
Psychiatric Technicians	56	58	2	14	16
Psychiatric Aides	59	62	3	6	9
Totals	416	469	53	52	105

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric technicians and psychiatric aides. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

⁸⁷ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 13: Baker, Union and Wallowa Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Baker, Union and Wallowa Counties.⁸⁸ Nursing aides ranked second and home health aides ranked third in projected job openings among all 59 health care occupations identified in these three counties.

Top Five Demand Clinical Health Care Occupations in Baker, Union and Wallowa Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 13: Baker, Union & Wallowa Counties					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁸⁹ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 13	Regions 12, 13 & 14
Registered Nurses	334	387	53	63	116	25	68
Nursing Aides, Orderlies, and Attendants	177	211	34	19	53	6	43
Home Health Aides	172	204	32	19	51	n/a	n/a
Substance Abuse and Behavioral Disorder Counselors	45	53	8	10	18	0	n/a
Medical Assistants	52	64	12	6	18	0	39

REGISTERED NURSES

In 2010, the Oregon Health & Science University School of Nursing program at Eastern Oregon University in La Grande graduated 25 students with baccalaureate degrees in nursing.⁹⁰ For Region 13, the Oregon Employment Department estimated an average of 12 job openings for registered nurses annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 68 job vacancies for registered nurses in Eastern Oregon.

⁸⁸ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁸⁹ Oregon Employment Department (2009). *Job Vacancies in Eastern Oregon*. Available at <http://www.qualityinfo.org>

⁹⁰ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the geographic distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS AND HOME HEALTH AIDES

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 53 job openings for nursing aides and 51 job openings for home health aides in Region 13 between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 43 job vacancies for certified nursing assistants in the Eastern Oregon.

In 2009, six students completed nursing assistant training in Region 13.⁹¹ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration

⁹¹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁹²

⁹² U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 14: Grant, Harney and Malheur Counties

According to the Oregon Employment Department's projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Grant, Harney and Malheur Counties.⁹³ Nursing aides ranked second and home health aides ranked third in projected job openings among all 60 health care occupations identified in Grant, Harney and Malheur Counties.

Top Five Demand Clinical Health Care Occupations in Grant, Harney and Malheur Counties that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 14: Grant, Harney & Malheur					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁹⁴ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 14	Regions 12, 13 & 14
Registered Nurses	340	397	57	64	121	20	68
Nursing Aides, Orderlies, and Attendants	220	267	47	24	71	41	43
Home Health Aides	125	150	25	14	39	n/a	n/a
Licensed Practical and Licensed Vocational Nurses	65	79	14	23	37	0	16
Substance Abuse and Behavioral Disorder Counselors	60	68	8	13	21	0	n/a

REGISTERED NURSES

In 2010, Treasure Valley Community College graduated 20 students with associate degrees in nursing.⁹⁵ For Region 14, the Oregon Employment Department estimated an average of 12 job openings for registered nurses annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the

⁹³ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁹⁴ Oregon Employment Department (2009). *Job Vacancies in Eastern Oregon*. Available at <http://www.qualityinfo.org>.

⁹⁵ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

Oregon Employment Department identified 68 job vacancies for registered nurses in Eastern Oregon.

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the geographic distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS AND HOME HEALTH AIDES

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 71 job openings for nursing aides and 39 job openings for home health aides in Region 14 between 2008 and 2018 due to new job growth and those permanently leaving the occupations' labor pools. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 43 job vacancies for certified nursing assistants in the Eastern Oregon.

In 2009, 41 students completed nursing assistant training in Region 14.⁹⁶ It is noted that not all students who graduate from certified nursing assistant training programs choose to make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

⁹⁶ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

It is important to note that there is a high turnover rate associated with these direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.⁹⁷

⁹⁷ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

Region 15: Clackamas County

According to the Oregon Employment Department’s projections for 2008 to 2018, registered nurses ranked first among the health care occupations in highest demand in Clackamas County.⁹⁸ Nursing aides ranked second and medical assistants ranked fourth in projected job openings among all 70 health care occupations identified in Clackamas County.

Top Five Demand Clinical Health Care Occupations in Clackamas County that Require Post-Secondary Training of Up to Two Years

Standard Occupational Title	Region 15: Clackamas County					Most Recent Annual Count of Graduates	2009 Job Vacancy Survey ⁹⁹ Employer Reported Vacancies
	Employment		Projected Job Openings 2008-2018				
	2008	2018	Due to Growth	Due to Replacement	Total	Region 15	Region 15
Registered Nurses	2,382	2,937	555	465	1,020	38	27
Nursing Aides, Orderlies, and Attendants	984	1,234	250	110	360	337	28
Medical Assistants	548	710	162	70	232	269	n/a
Dental Assistants	409	531	122	88	210	11	n/a
Home Health Aides	673	784	111	73	184	n/a	n/a

REGISTERED NURSES

In 2010, Clackamas Community College graduated 38 students with associate degrees in nursing.¹⁰⁰ For Region 15, the Oregon Employment Department estimated an average of 102 job openings for registered nurses annually between 2008 and 2018 due to new job growth and those permanently leaving the occupation’s labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 27 job vacancies for registered nurses in Clackamas County.

⁹⁸ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

⁹⁹ Oregon Employment Department (2009). *Job Vacancies in Clackamas County*. Available at <http://www.qualityinfo.org>.

¹⁰⁰ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon’s Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

It is worth noting that nursing schools in neighboring Multnomah County graduated 157 students with associate degrees in nursing and 698 students with bachelor degrees in nursing.¹⁰¹ The 2009 job vacancy survey by the Oregon Employment Department identified 451 job vacancies for registered nurses in the Portland tri-county area.¹⁰²

Several caveats must be considered when analyzing graduate supply data for registered nurses. For example, not all graduates from Oregon's nursing programs will pursue careers in this workforce region or state. Some graduates are already employed as nurses, but are advancing their careers by obtaining a higher-level degree. There are those who will continue their educational path to higher degrees without entering the labor market. Additionally, there are graduates from nursing programs who choose not to work in the field.

When analyzing employment demand data it is important to note that the SOC for registered nurses includes multiple job titles filled by nurses with different levels of education and skills. As such, further research on the geographic distribution and career choices of registered nurses following graduation is warranted.

CERTIFIED NURSING ASSISTANTS

Over the next several decades, as Oregon's population continues to age and the number of persons living with chronic health conditions increases, the demand for long term care workers will also increase. The Oregon Employment Department estimated 360 job openings for nursing aides in Region 15 between 2008 and 2018 due to new job growth and those permanently leaving the occupation's labor pool. In 2009, a vacancy survey of employers by the Oregon Employment Department identified 28 job vacancies for certified nursing assistants in Clackamas County and 162 job vacancies in the Portland tri-county area.

In 2009, 337 students completed nursing assistant training in Clackamas County.¹⁰³ It is noted that not all students who graduate from certified nursing assistant training programs choose to

¹⁰¹ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

¹⁰² Oregon Employment Department (2009). *Job Vacancies in the Portland Tri-County Area*. Available at qualityinfo.org.

¹⁰³ Oregon Healthcare Workforce Institute (2010). *Graduates from Oregon's Health Profession Training Programs: A Supply Trend Analysis of Select High-Demand Clinical Health Occupations*. Available at <http://www.oregonhwi.org>.

make the occupation their lifelong career. Additionally, many certified nursing assistants use their certification and job experience as a career pathway into nursing programs or other health profession education.

It is important to note that there is a high turnover rate associated with direct caregiver occupations due to a variety of factors including the physical and emotional demands of the job, low pay and lack of a career ladder. The federal Health Resources and Services Administration identified that as a consequence of the high turnover rate, the supply of these workers nationally has lagged relative to demand.¹⁰⁴

Region 15: Clackamas County					
Standard Occupational Title	Employment		Projected Job Openings 2008-2018		
	2008	2018	Growth	Replacement	Total
Nursing Aides, Orderlies, and Attendants	984	1,234	250	110	360
Home Health Aides	673	784	111	73	184
Psychiatric Aides	5	6	1	1	2
Psychiatric Technicians	4	4	0	1	1
Totals	1,666	2,028	362	185	547

Source: Oregon Employment Department

Certified nursing assistants may qualify for related jobs, such as home health aides, psychiatric aides and psychiatric technicians. Thus, when considering graduate supply and employment demand, multiple occupational categories should be reviewed (see table above).

MEDICAL ASSISTANTS

Ambulatory health care services is the fastest growing industry sector in Oregon.¹⁰⁵ Between 2008 and 2018, the Oregon Employment Department projects this sector to gain 18,600 jobs statewide, an increase of 28 percent. Medical assistants are the fifth largest health care occupation in Oregon and the majority of medical assistants are employed in ambulatory health care settings such as physician offices and health care clinics.

¹⁰⁴ U.S. Department of Health and Human Services Health Resources and Services Administration (2004). *Nursing Aides, Home Health Aides, and Related Health Care Occupations--National and Local Workforce Shortages and Associated Data Needs*. Available at <http://ftp.hrsa.gov/bhpr/nationalcenter/RNandHomeAides.pdf>.

¹⁰⁵ Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

The Oregon Employment Department projected 232 job openings for medical assistants in Region 15 between 2008 and 2018. Of these job openings, 162 are due to new job growth and 70 openings are to replace those who permanently leave the occupation's labor pool.

The Oregon Labor Market Information System State Training Inventory listed 14 graduates from Clackamas Community College's medical assistant training program in Oregon City and 255 graduates from Pioneer Pacific College's medical assistant training program in Wilsonville in 2008.

APPENDIX

Statewide Occupational Employment Projections 2008-2018: Health Care Projections

Standard Occupational Code Title	Employment		2008-2018 Openings		
	2008	2018	Due to Growth	Due to Replacement	Total
Registered Nurses	30,656	37,427	6,771	5,947	12,718
Nursing Aides, Orderlies, and Attendants	12,842	15,950	3,108	1,433	4,541
Medical Secretaries	8,528	10,680	2,152	1,294	3,446
Physicians and Surgeons	7,456	9,278	1,822	1,472	3,294
Home Health Aides	8,599	10,775	2,176	965	3,141
Medical Assistants	7,113	8,948	1,835	895	2,730
Dental Assistants	4,360	5,527	1,167	928	2,095
Interviewers, Except Eligibility and Loan	3,987	4,868	881	1,056	1,937
Pharmacy Technicians	3,910	4,465	555	1,056	1,611
Dental Hygienists	3,142	4,003	861	729	1,590
Licensed Practical and Licensed Vocational Nurses	2,582	3,172	590	900	1,490
Child, Family, and School Social Workers	3,332	3,785	453	894	1,347
Medical and Health Services Managers	3,112	3,763	651	655	1,306
Medical Records and Health Information Technicians	2,639	3,274	635	603	1,238
Pharmacists	3,180	3,649	469	757	1,226
Healthcare Support Workers, All Other	3,137	3,804	667	387	1,054
Substance Abuse and Behavioral Disorder Counselors	2,328	2,796	468	518	986
Radiologic, CAT, and MRI Technologists and Technicians	2,261	2,793	532	365	897
Medical and Clinical Laboratory Technologists	1,947	2,392	445	412	857
Mental Health and Substance Abuse Social Workers	1,675	2,057	382	469	851
Emergency Medical Technicians and Paramedics	1,768	2,155	387	400	787
Physical Therapists	2,117	2,616	499	286	785
Mental Health Counselors	1,675	2,030	355	375	730
Rehabilitation Counselors	1,726	2,067	341	384	725

Source: Oregon Employment Department (2009). *Employment Projections by Industry and Occupation 2008-2018*. Available at <http://www.qualityinfo.org/pubs/projections/projections.pdf>.

Standard Occupational Code Title	Employment		2008-2018 Openings		
	2008	2018	Due to Growth	Due to Replacement	Total
Social Workers, All Other	1,768	1,993	225	472	697
Medical and Public Health Social Workers	1,261	1,521	260	349	609
Psychiatric Technicians	444	866	422	165	587
Health Technologists and Technicians, All Other	1,303	1,592	289	295	584
Dentists, General	1,004	1,270	266	316	582
Medical Transcriptionists	1,589	1,939	350	197	547
Clinical, Counseling, and School Psychologists	1,108	1,302	194	342	536
Medical and Clinical Laboratory Technicians	1,064	1,328	264	227	491
Surgical Technologists	922	1,144	222	260	482
Respiratory Therapists	1,077	1,301	224	217	441
Psychiatric Aides	667	997	330	83	413
Occupational Therapists	937	1,137	200	189	389
Opticians, Dispensing	851	1,043	192	193	385
Healthcare Practitioner and Technical Workers, All Other	635	761	126	233	359
Health Educators	865	1,014	149	199	348
Medical Equipment Preparers	985	1,206	221	122	343
Occupational Health and Safety Specialists	725	794	69	254	323
Dietitians and Nutritionists	555	663	108	204	312
Medical Equipment Repairers	678	772	94	209	303
Physician Assistants	644	813	169	133	302
Speech and Language Pathologists	832	958	126	163	289
Massage Therapists	808	965	157	118	275
Dental Laboratory Technicians	938	1,005	67	188	255
Physical Therapist Aides	602	757	155	98	253
Optometrists	354	450	96	134	230
Cardiovascular Technologists and Technicians	579	709	130	93	223
Physical Therapist Assistants	529	661	132	86	218
Dentists, All Other	331	416	85	104	189
Health Diagnosing and Treating Practitioners, All Other	456	550	94	92	186

Standard Occupational Code Title	Employment		2008-2018 Openings		
	2008	2018	Due to Growth	Due to Replacement	Total
Chiropractors	383	489	106	77	183
Diagnostic Medical Sonographers and Ultrasound Technologists	454	561	107	73	180
Marriage and Family Therapists	317	397	80	72	152
Recreational Therapists	175	242	67	74	141
Ophthalmic Laboratory Technicians	468	479	11	92	103
Occupational Health and Safety Technicians	205	219	14	71	85
Audiologists	185	226	41	41	82
Nuclear Medicine Technologists	195	244	49	32	81
Dietetic Technicians	150	185	35	42	77
Radiation Therapists	177	216	39	36	75
Athletic Trainers	140	161	21	50	71
Counselors, All Other	169	199	30	37	67
Therapists, All Other	140	168	28	31	59
Occupational Therapist Assistants	141	176	35	23	58
Medical Appliance Technicians	106	113	7	21	28
Orthotists and Prosthetists	85	93	8	18	26
Podiatrists	49	60	11	10	21
Occupational Therapist Aides	21	24	3	3	6

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