Health Analytics Office of Health Analytics

Oregon's Health Care Workforce Supply

Based on data collected during 2015 and 2016

This fact sheet provides a snapshot of the state's health care workforce supply using data collected by the Oregon Health Authority in collaboration with seven health professional licensing boards.

Number of health care professionals

As Oregon's population increases and the number of Oregonians with health insurance grows, it is important to understand the health care workforce to make sure the supply of providers is able to meet the increasing demand. Since 2010, Oregon's population has increased by 6.2 percent and nearly 1.1 million Oregonians have gained health coverage through the Oregon Health Plan or private insurance offered by the Oregon Marketplace. Today nearly

95% of the population has health coverage (Oregon Health Insurance Survey, 2015, Oregon Health Authority). This stresses the capacity of health care providers to deliver health services.

Determining the supply of health care workers involves more than simply adding up the number of people working in health care in Oregon. Other factors such as the ratio of providers to the population served and the future plans of

Table 1. Number of active licensees in Oregon

	Number licensed in Oregon					
Occupation	2009-10	2011-12	2013-14	2015-16	Trend [†]	Percentage change [‡]
Certified nursing assistants (CNA)	18,331	18,872	18,414	18,025	<u></u>	-1.67%
Dentists (DDS/DMD)	3,697	3,655	3,528	3,852	~	4.19%
Physicians (MD/DO)*	14,646	-	14,710	15,607	_/	6.56%
Dental hygienists (RDH)	3,777	3,467	3,980	4,254	/	12.63%
Certified pharmacy technicians (CPHT)	5,005	5,185	5,774	5,924		18.36%
Registered nurses (RN)	43,015	44,481	47,456	51,926		16.74%
Licensed practical nurses (LPN)	4,081	4,283	4,660	4,934		20.90%
Clinical nurse specialists (CNS)	165	191	192	202	/	22.42%
Physical therapist assistants (PTA)	869	916	1,041	1,136		30.72%
Physical therapists (PT)	3,139	3,383	3,720	4,148		32.14%
Certified registered nurse anesthetists (CRNA)	466	513	605	644		3 8.20%
Occupational therapists (OT)	1,269	1,422	1,482	1,844		45 .31%
Nurse practitioners (NP)	2,277	2,438	2,794	3,444		51.2 5%
Physician assistants (PA)*	1,036	-	1,308	1,578		52.3 2%
Dietitians (LD)	510	605	684	825		61.76%
Occupational therapy assistants (OTA)**	228	257	314	454		99.12%
Pharmacists (RPH)	-	5,665	5,799	7,511	_/	32.59%
Podiatrists (DPM)*	-	-	182	190	/	4.40%
Oregon Population	3,837,300	3,883,735	3,962,710	4,076,350	_	6.23%

Axes are not the same between occupations and should not be compared.

[‡] Percentage change is from 2009-10 to 2015-16 except for Pharmacists (2011-12 to 2015-16) and Podiatrists (2013-14 to 2015-16).

^{* 2011-2012} data unavailable from OMB. Mean values were imputed into trend lines for Physicians and Physician Assistants.

^{**} The increase in licensed OTAs between 2009-10 and 2015-16 may be due in part to a new Associates of OTA program in the state in 2010.

providers to expand or reduce their practice must be taken into account. The number of students graduating from health care training programs, future migration of health care workers to Oregon from other states, and the types of insurance accepted by providers are also important factors, but are outside the scope of this report.

Since 2009, the number of providers licensed in Oregon has increased for all of the profiled health professions except certified nursing assistants.

Not all licensees who hold a license in Oregon are actively working in the health care field in Oregon. Further, not all active licensees complete the workforce survey (e.g. new licensees). Table 1 shows trends over time in the number health care professionals who are licensed to work in Oregon, while Table 2 provides an estimate of the number of licensees (new and renewing) who are practicing in Oregon. This estimate of the number of licenses practicing in Oregon is derived from the percent of survey respondents that are actively working in the state.

This estimate provides a more accurate picture of the supply of health care workers in Oregon. For example, pharmacists holding an Oregon license are less likely to work in the state than most other licensed professionals, as seen by a relatively small active practice rate (55.4%).

Table 2. Estimated number of providers practicing in Oregon

Occupation	Providers licensed in OR	Active practice rate [†]	Number of providers practicing in OR (Estimated) [‡]
Dentistry			
Dentists (DDS/DMD)	3,852	75.7%	2,917
Dental hygienists (RDH)	4,254	74.4%	3,163
Dietetics			
Dietitians (LD)	825	83.9%	692
Medicine			
Physicians (MD/D0)	15,607	80.6%	12,580
Podiatrists (DPM)	190	89.5%	170
Physician assistants (PA)	1,578	95.0%	1,498
Nursing			
Nurse practitioners (NP)	3,444	88.5%	3,048
Certified registered nurse anesthetists (CRNA)	644	81.6%	525
Clinical nurse specialists (CNS)	202	89.3%	180
Registered nurses (RN)	51,926	85.6%	44,436
Licensed practical nurses (LPN)	4,934	85.9%	4,239
Certified nursing assistants (CNA)	18,025	88.7%	15,989
Occupational therapy			
Occupational therapists (OT)	1,844	79.2%	1,460
Occupational therapy assistants (OTA)	454	80.1%	363
Pharmacy			
Pharmacists (RPH)	7,511	55.4%	4,165
Certified pharmacy technicians (CPHT)	5,924	85.9%	5,091
Physical therapy			
Physical therapists (PT)	4,148	78.0%	3,234
Physical therapist assistants (PTA)	1,136	74.0%	840

[†] Active practice rate = % survey takers who are active in OR (of those with known work location and practice status); Active means licensees who 1) identified their employment status as 'employed in the field', 'self-employed in the field', 'volunteer', or 'other'; and 2) reported a primary practice location in Oregon.

^{*} Number of providers practicing in OR (Estimated) = Providers licensed in OR * Active practice rate

Population-to-provider ratio

Health care workforce supply can also be measured by the population-to-provider ratio: it provides insight into the number of individuals each health care provider might serve. It is calculated by dividing the number of people living in an area by the number of health care provider FTEs actively practicing in the same area. A lower population-to-provider ratio suggests more access to care for individuals living in a certain region. A higher ratio suggests less access.

At present, population-to-provider ratios vary by profession from 165 people per registered nurse to 84,153 people per

clinical nurse specialist. To put these ratios into context, one must consider the demand for services provided by the health care worker and the amount of time a provider may spend with a patient. For example, dental hygienists, providing preventive care to a wide range of the population, generally have a smaller population-to-provider ratio than podiatrists, who provide specialized care to a small segment of the population. As such, the appropriate ratio to meet the demand at the state level may differ between occupations.

Table 3. FTE, direct patient care FTE, and population-to-provider ratio

Occupation	FTE (Estimated) [†]	Direct Patient Care FTE (Estimated) [‡]	Population-to- Provider Ratio*
Dentistry			
Dentists (DDS/DMD)	2,331	2,140	1,905:1
Dental hygienists (RDH)	2,127	1,856	2,196:1
Dietetics			
Dietitians (LD)	528	311	13,119:1
Medicine			
Physicians (MD/D0)	10,921	9,522	428:1
Podiatrists (DPM)	149	135	30,097:1
Physician assistants (PA)	1,349	1,210	3,370:1
Nursing			
Nurse practitioners (NP)	2,513	2,129	1,915:1
Certified registered nurse anesthetists (CRNA)	474	450	9,065:1
Clinical nurse specialists (CNS)	163	48	84,153:1
Registered nurses (RN)	36,552	24,661	165:1
Licensed practical nurses (LPN)	3,757	2,633	1,548:1
Certified nursing assistants (CNA)	13,661	11,863	344:1
Occupational therapy			
Occupational therapists (OT)	1,142	808	5,045:1
Occupational therapy assistants (OTA)	299	235	17,370:1
Pharmacy			
Pharmacists (RPH)	3,606	2,861	1,425:1
Certified pharmacy technicians (CPHT)	4,616	2,390	1,706:1
Physical therapy			
Physical therapists (PT)	2,722	2,206	1,848:1
Physical therapist assistants (PTA)	685	569	7,166:1

[†] FTE (Estimated): # practicing in OR (Estimated) * average FTE for occupation

[‡] Direct Patient Care FTE (Estimated): # practicing in OR (Estimated) * average Patient Care FTE for occupation

^{*} Population-to-provider ratio based on Direct Patient Care FTE (Estimated) in OR

²⁰¹⁶ Oregon population: 4,076,350; Source: Oregon population estimate from Portland State University Population Research Center (https://www.pdx.edu/prc/population-reports-estimates)

Future practice plans

Within each profession and in the aggregate, the health care workforce is always changing. Professionals may move out of state, change the number of hours they work, or retire; each of these affects the overall supply of health care workers.

The majority (76.6%) of providers actively practicing in Oregon plan no changes to their practice, 4.3 percent intend to leave the workforce, and 5.2 percent intend to reduce their practice hours in the next two years. The primary reason for leaving the workforce differs by occupation. Some are more likely to retire (e.g. clinical nurse specialists), while others are much more likely to report plans to leave the occupation and move to another field (e.g. certified pharmacy technicians).

New licensees and increased practice hours for other licensees may make up for these decreases to the workforce. In the next two years, 6.1 percent of the work-

force plans to increase their practice hours. The occupations with the highest percentage planning to increase their hours are certified nursing assistants (11.1%), dentists (10.6%), and dental hygienists (10.3%).

Figure 1. Practice plans in the next two years



Figure 2. Plan to leave the Oregon workforce in the next two years



Note: Figures 1 and 2 show the distribution for the subset of licensees who completed the Health Care Workforce Survey and are working in the field in Oregon.

About this fact sheet:

The Health Care Workforce Reporting Program (HWRP) collects workforce-related information directly from health care professionals via a questionnaire embedded in the license renewal process. Data reported in this fact sheet were collected during a two-year period (2015-2016).

For questions about this report, contact:

Stacey Schubert, MPH
Research and Data Manager
Oregon Health Authority
stacey.s.schubert@dhsoha.state.or.us
971-255-6731

For more information about methodology and results, visit:

https://www.oregon.gov/oha/hpa/analytics/Pages/Health-Care-Workforce-Reporting.aspx

Sources:

State population estimates come from Portland State University Population Research Center (https://www.pdx.edu/prc/population-reports-estimates)

Suggested Citation:

Oregon Health Authority. (2017). *Oregon's health care workforce supply: Based on data collected during 2015 and 2016.* Portland, OR: Oregon Health Authority.

This document can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request this publication in another format or language, contact the Oregon Health Authority Director's Office at 503-947-2340 or OHA.DirectorsOffice@state.or.us.