The Diversity of Oregon's Health Care Workforce

Based on data collected during 2015 and 2016

Oregon Health Authority
Office of Health Analytics

This report provides a snapshot of the state's health care workforce diversity using data collected by the Oregon Health Authority in collaboration with seven health professional licensing boards. All data are self-reported at the time of the license renewal and do not capture all active licensees in the State.

This report explores the relative distribution of selected health care professions, including primary care providers, and the population by race, ethnicity, gender and language. Data of the following licensing boards were included in this report: the Oregon Medical Board, Board of Dentistry, State Board of Nursing, Board of Pharmacy, Physical Therapist Licensing Board, Occupational Therapy Licens-

ing Board, and the Board of Examiners of Licensed Dieticians. Future reports will include data of ten additional licensing boards, including three behavioral health licensing boards.

OHA has improved data collection methods to reduce the amount of missing race and ethnicity data. Approximately 0.2 percent of the workforce records are missing race and ethnicity data because it was not entered by the licensee or it was not collected by the licensing board. Another 9.2 percent of licensees declined to report race or ethnicity.

This report should not be compared with earlier versions due to significant changes in data collection.

Race and ethnicity

Oregon's population has become more diverse. In the last decade, while the white, non-Hispanic population has decreased from 81.4% to 76.5% (ACS; 1 year estimates), minority populations have been increasing (Figure 1). At present, Oregon's health care workforce is less racially and ethnically diverse than the state as a whole (Figure 2, Page 2).

Table 1 shows the current number of the health care providers by race and ethnicity. Table 2 (Page 2) shows the distribution of health care professions' race, ethnicity and
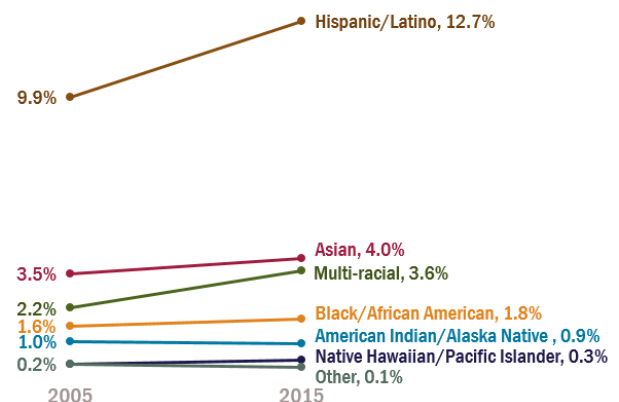
Figure 1: Increasing Diversity in Oregon

Hispanic/Latino, 12.7%
9.9%
Asian, 4.0%
Multi-racial, 3.6%
3.5%
2.2%
Black/African American, 1.8%
1.6%
American Indian/Alaska Native , 0.9%
1.0%
Native Hawaiian/Pacific Islander, 0.3%
0.2%
Other, 0.1%
2005   2015

Table 1: Health Care Workforce, by Race and Ethnicity

| Board | Total | Hispanic/ Latino | Non-Hispanic/Latino | | | | | | | Refused/ declined | Missing (no data) |
			White	Black/ African American	American Indian/ Alaskan Native	Asian	Native Hawaiian/ Pacific Islander	Other	Multi-racial		
Medical	13,459	385	10,051	137	23	1,392	34	121	139	1,177	0
Dentistry	5,423	158	4,072	27	18	403	14	49	100	571	11
Nursing	53,431	2,762	40,791	1,026	378	2,085	294	199	1,038	4,714	144
Pharmacy	8,522	422	5,795	71	58	868	58	49	179	1,022	0
Physical Therapy	3,943	85	3,202	11	9	182	12	12	66	364	0
Occupational Therapy	1,599	29	1,320	4	4	57	0	8	30	145	2
Licensed Dietitians*	470	10	403	0	2	17	0	1	4	33	0
Total	86,847	3,851	65,634	1,276	492	5,004	412	439	1,556	8,026	157

* Data collected from licensed dietitians are incomplete. They do not represent all renewing licensees.
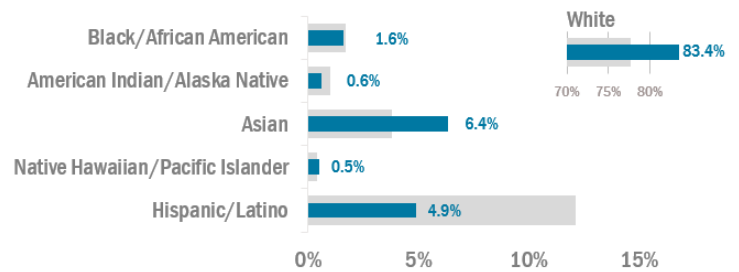
gender, among those that reported race, ethnicity and gender, as compared with the state's population. Differences are noted at the 0.5 percentage point level. Nursing and Pharmacy licensees most closely match the state's population. Overall, Hispanic and multi-racial health care providers are underrepresented in all professions. White, non-Hispanic health care providers are overrepresented in all professions except Pharmacy. Of all the racial minority groups, Asian health care providers are overrepresented in the Medical, Dental, Pharmacy, and Physical Therapy professions.

Females are overrepresented in all professions, except for medical professions.

The licensed health care workforce in nearly all Oregon counties is less Hispanic than the overall population (Gilliam is the exception, but has only one provider). Figure 3 shows the difference between the percentage of Hispanic health care professionals and the Hispanic population by county, with darker blue indicating a bigger gap. Of note, while counties with a larger-than-average Hispanic population have a higher number of Hispanic health professionals, they still show the largest gaps.

Traditional health workers (THWs) may help offset these gaps. THWs include five primary worker types, including: Community Health Workers, Peer Support Specialists, Peer Wellness Specialists, Personal Health Navigators, and Doulas. Utilization of THWs assures delivery of high-quality, culturally competent care which is instrumental in achieving Oregon's Triple Aim. As of December 2016, OHA has certified over 1,500 THWs.

Figure 2: Health Care Workforce vs Population

Black/African American 1.6%
American Indian/Alaska Native 0.6%
Asian 6.4%
Native Hawaiian/Pacific Islander 0.5%
Hispanic/Latino 4.9%
White 83.4%

Note: Chart does not include "other" or "multi-racial" categories

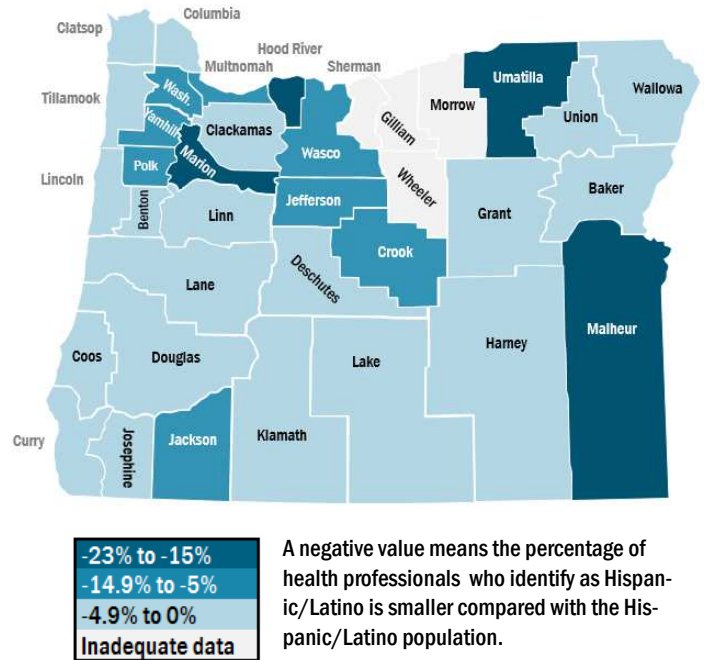Figure 3: Gap in Hispanic/Latino health care professionals compared with county population

-23% to -15%
-14.9% to -5%
-4.9% to 0%
Inadequate data

A negative value means the percentage of health professionals who identify as Hispanic/Latino is smaller compared with the Hispanic/Latino population.

Table 2: Race, Ethnicity, and Gender Distribution: Health Care Workforce vs Population

Board	Hispanic/ Latino	Non-Hispanic/Latino								Female	Male
		White	Black/ African American	American Indian/ Alaskan Native	Asian	Native Hawaiian/ Pacific Islander	Other	Multi-racial		Female	Male
Medical	3.1%	81.8%	1.1%	0.2%	11.3%	0.3%	1.0%	1.1%		39.8%	60.2%
Dentistry	3.3%	84.1%	0.6%	0.4%	8.3%	0.3%	1.0%	2.1%		62.9%	37.1%
Nursing	5.7%	84.0%	2.1%	0.8%	4.3%	0.6%	0.4%	2.1%		86.7%	13.3%
Pharmacy	5.6%	77.3%	0.9%	0.8%	11.6%	0.8%	0.7%	2.4%		69.7%	30.3%
Physical Therapy	2.4%	89.5%	0.3%	0.3%	5.1%	0.3%	0.3%	1.8%		67.9%	32.1%
Occupational Therapy	2.0%	90.9%	0.3%	0.3%	3.9%	0.0%	0.6%	2.1%		89.4%	10.6%
Licensed Dietitians	2.3%	92.2%	0.0%	0.5%	3.9%	0.0%	0.2%	0.9%		97.6%	2.4%
State Population	12.1%	77.6%	1.7%	1.0%	3.8%	0.4%	0.2%	3.2%		50.5%	49.5%

Note: Providers with missing data were excluded from the analysis. Approximately 1.8 percent are missing gender data. Racial categories exclude Hispanics.

Above state population
Similar to state population
Below state population

Language

Twenty percent of health care professionals self-reported speaking languages other than English. As seen in Figure 4, the health care workforce is a more linguistically diverse than the population.

Spanish is spoken by almost 10 percent of the health care providers. Seventy-five percent of these providers are located in six counties (Clackamas, Jackson, Lane, Multnomah, Marion, and Washington). Statewide, Nurse Practitioners, Physician Assistants, and Physicians are most likely to be Spanish speakers (18%, 16%, and 16% respectively), while Clinical Nurse Specialists (1%), Occupational Therapy Assistants (4%), and Licensed Dietitians (6%) are least likely to. Only 7.2 percent of RNs, which comprise the biggest group in the health care workforce, speak Spanish. After Spanish, the second most spoken language is French, and the third is Tagalog.

At the time of this report, additional data on proficiency, certification and language use were available from all boards except the Oregon Medical Board. For these licensees, two in ten Spanish speakers are native speakers and 4,260 providers reported using Spanish while providing patient care. Of these, only 4% reported being certified but 35% received training in medical terminology.
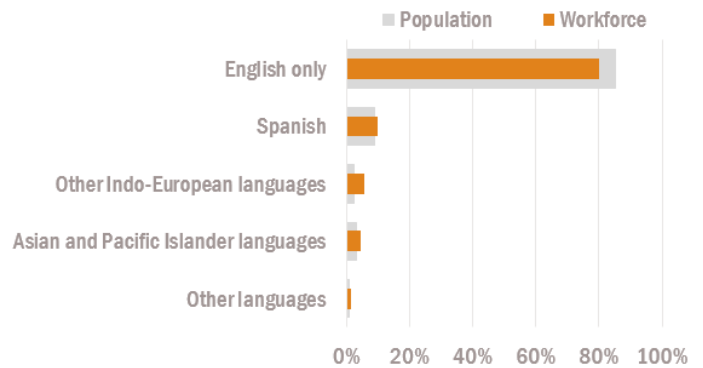
There is no guarantee that a provider who speaks a particular language will be available when a non-English-speaking client needs one. Health care interpreters (HCI) help to fill the gaps.

The utilization of language services, such as interpretation by qualified and certified HCIs, has been shown to im-prove cross-cultural communication, leading to increased compliance with recommended treatment plans, improved health care outcomes, overall reduction of healthcare cost, and ultimately, reduction in health disparities. Oregon's Health Care Interpreter program is based on Title 6 of the federal Civil Rights Act and Oregon law (ORS 413.550). To comply with these laws, OAR 333-002-0000 was implemented to develop an HCI workforce and ensure the availability of quality health care interpretation for patients who are considered Limited English Proficient (LEP).

Certified and qualified interpreters must have formal training and experience and certified interpreters must pass National certification exams. As of January 2017, Oregon has 257 qualified and 91 certified health care interpreters.

Figure 4: Oregon's health care workforce is more linguistically diverse than the population

Legend: Population, Workforce

- English only
- Spanish
- Other Indo-European languages
- Asian and Pacific Islander languages
- Other languages

(0% 20% 40% 60% 80% 100%)
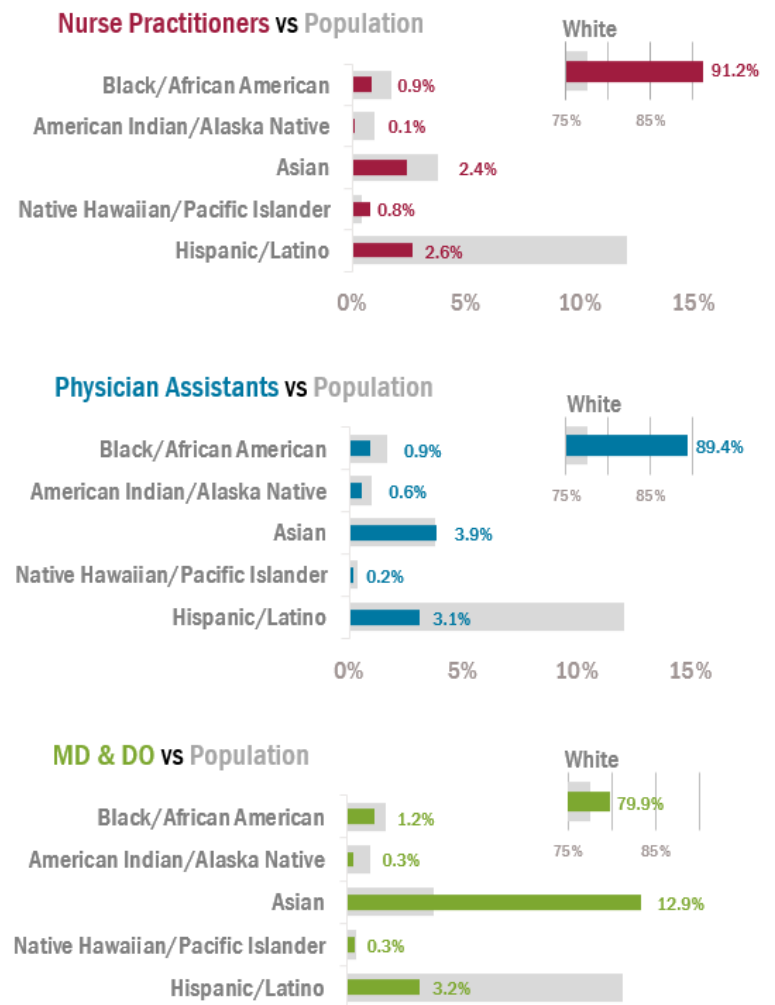
Primary care providers

Primary care providers (PCPs), including nurse practitioners, physicians and physician assistants, comprise approximately 6.8 percent (n=5,917) of the health care workforce. Primary care providers are defined as MD, PA, DO licensees whose practice specialties are in family medicine, family practice, family practice and osteopathic manipulative treatment, general practice, geriatric medicine, pediatrics, adolescent medicine, or internal medicine and NP licensees who select 'Primary Care' for their primary practice setting or 'Nurse Practitioner—Primary Care' for their primary practice position.

Figure 5 shows the racial and ethnic distribution of Oregon's PCPs compared with Oregon's population. Most non-white races tend to be underrepresented among PCPs with the exception of providers of Asian descent. Asian physicians are overrepresented relative to Oregon's population, while the percentage of Asian physician assistants is comparable to the state's population.

Thirty-six percent of primary care providers reported speaking a language other than English. They are more linguistically diverse than the health care work force as a whole. Spanish is the language most spoken by PCPs (19% reported speaking it), followed by languages in the Indo-European group (nearly 10% reported speaking a language in this group).

Note: See Methods and sources for definition of Indo-European languages.

Figure 5: Primary Care Workforce vs Population

Nurse Practitioners vs Population

	Percent
White	91.2%
Black/African American	0.9%
American Indian/Alaska Native	0.1%
Asian	2.4%
Native Hawaiian/Pacific Islander	0.8%
Hispanic/Latino	2.6%

Physician Assistants vs Population

	Percent
White	89.4%
Black/African American	0.9%
American Indian/Alaska Native	0.6%
Asian	3.9%
Native Hawaiian/Pacific Islander	0.2%
Hispanic/Latino	3.1%

MD & DO vs Population

	Percent
White	79.9%
Black/African American	1.2%
American Indian/Alaska Native	0.3%
Asian	12.9%
Native Hawaiian/Pacific Islander	0.3%
Hispanic/Latino	3.2%

Note: Providers with missing data were excluded from the analysis. Racial categories exclude Hispanics.

Methods and sources

Workforce licensing data:

Health professionals are licensees who worked in Oregon and renewed a license from one of the following boards during these dates:

• Oregon Medical Board (license types: medical doctor (MD); doctor in osteopathy (DO); and medical doctor/volunteer/emeritus (MDVE); and physician assistant (PA) - October through December 2015);

• Oregon State Board of Nursing (license types: registered nurse (RN), nurse practitioner (NP); certified registered nurse anesthetist (CRNA); clinical nurse specialist (CNS), licensed practical nurse (LPN); and certified nursing assistant (CAN) - May 1, 2014 through June 31, 2016);

• Oregon Board of Dentistry (dentists (D) and volunteer dentists (VD) - January 1 through April 30, 2015 and January 1 through April 30, 2016; registered dental hygienists (RDH) and volunteer registered dental hygienists (VRDH) - July 1 through Sept. 30, 2015 and July 1 through Sept. 30, 2016);

• Oregon Occupational Therapy Licensing Board (license types: occupational therapist (OT) and occupational therapy assistant (OTA) - March 1 through May 31, 2016);

• Oregon Board of Pharmacy (pharmacists (RPH) - April 1 through June 30, 2015; certified pharmacy technicians (CPhT) - July 1 through October 30, 2016);

• Oregon Physical Therapist Licensing Board (license types: physical therapist (PT) and physical therapist assistants (PTA) - January 1, through April 30, 2016);

• Oregon Board of Licensed Dieticians (license type: registered dietitian (RD) - August 1, 2015 through August 31, 2016). Note: Data for licensed dietitians are incomplete. Approximately 18 percent of licensees did not complete the survey at renewal.

Workforce data were extracted from the most recent workforce database. The Oregon Medical Board provided race and ethnicity data collected with their own data system; all the other health professions' race/ethnicity data were collected through a common format workforce survey that licensees must complete as part of their renewal process.

All race/ethnicity categories in the workforce data were coded as mutually exclusive to match the American Community Survey (ACS) race/ethnicity categories and allow comparisons. When a licensee selected Hispanic as his or her ethnicity, the licensee was coded as being Hispanic. If there were other races selected along with Hispanic ethnicity, such as "Black" or "Asian," the licensee would only be counted in the Hispanic category and not in other catego-

ries. Of the 3,851 licensees coded as Hispanic, approximately 56.9 percent identified with at least one racial category (White: 49.4%; Multi-racial: 3.2%; American Indian/Alaska Native: 1.9%, Black/AA: 1.1%; Asian: 0.8%; Native Hawaiian/Pacific Islander: 0.5%). The remaining 43.1 percent chose "Other" (15.9%), declined to report a race (13.9%) or were missing data (13.4%). When a licensee selected a non-Hispanic ethnicity and more than one race, the licensee was coded as "Multiracial" and was not included in the specific race categories. When a licensee selected "Other" as race and no other race was selected, the licensee was coded as "Other."

Table 2 uses a difference of 0.5 percent as the threshold to identify gaps between provider and population diversity.

Data were analyzed and tabulated with SAS 9.4; graphics were produced in Excel.

Population data comes from five-year ACS estimates (data collected over 60-month period, 2010–2014). These estimates are not as current as the one-year estimates, but the primary advantage of using multiyear estimates is the data's availability and increased statistical reliability for less populated areas and small population subgroups.

Regarding languages, ACS coded 381 different languages nationwide. Standard tables separate out 39 languages and the four main language groups used here: Spanish, other Indo-European languages (most languages of Europe and the Indic languages of India, as well as Iranian languages), Asian and Pacific Island languages (among them Chinese, Korean, Japanese, Vietnamese, Hmong, Khmer, Lao, Thai, Tagalog and others) and all other languages (such as Uralic languages, languages of Africa, Native American languages, and more). Some health professionals reporting speaking more than one language may be counted in more than one language group; 92 percent of the health professionals were coded in only one language group.

At production time for this report, detailed language data were not available from the OMB. Thus we were unable to report on language proficiency, language use with patients, training in medical terminology or language certification for OMB licensees.

This report was produced by the Office of Health Analytics, Oregon Health Authority.

Appendix A: Oregon population: race and ethnicity, by county

	Total	Hispanic/ Latino		Non-Hispanic													
				White	%	Black/AA	%	AI/AN	%	Asian	%	NH/PI	%	Other	%	Multi-racial	%
Oregon	3,900,343	473,729	12.1%	3,426,614	87.9%	67,305	1.7%	37,699	1.0%	149,886	3.8%	13,942	0.4%	6,134	0.2%	124,051	3.2%
Baker	16,049	587	3.7%	14,780	92.1%	37	0.2%	242	1.5%	105	0.7%	26	0.2%	-	0.0%	272	1.7%
Benton	86,034	5,788	6.7%	71,149	82.7%	834	1.0%	401	0.5%	5,150	6.0%	278	0.3%	96	0.1%	2,338	2.7%
Clackamas	384,697	30,934	8.0%	322,205	83.8%	3,029	0.8%	1,835	0.5%	14,736	3.8%	958	0.2%	203	0.1%	10,797	2.8%
Clatsop	37,236	2,946	7.9%	32,267	86.7%	255	0.7%	117	0.3%	435	1.2%	27	0.1%	-	0.0%	1,189	3.2%
Columbia	49,325	2,170	4.4%	44,287	89.8%	100	0.2%	754	1.5%	510	1.0%	118	0.2%	16	0.0%	1,370	2.8%
Coos	62,678	3,586	5.7%	54,022	86.2%	315	0.5%	1,774	2.8%	744	1.2%	82	0.1%	170	0.3%	1,985	3.2%
Crook	20,798	1,513	7.3%	18,522	89.1%	83	0.4%	264	1.3%	53	0.3%	23	0.1%	-	0.0%	340	1.6%
Curry	22,341	1,345	6.0%	19,631	87.9%	2	0.0%	442	2.0%	97	0.4%	3	0.0%	23	0.1%	798	3.6%
Deschutes	163,141	12,417	7.6%	143,653	88.1%	597	0.4%	906	0.6%	1,927	1.2%	155	0.1%	57	0.0%	3,429	2.1%
Douglas	107,156	5,324	5.0%	95,471	89.1%	331	0.3%	1,464	1.4%	980	0.9%	106	0.1%	69	0.1%	3,411	3.2%
Gilliam	1,926	144	7.5%	1,752	91.0%	11	0.6%	19	1.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Grant	7,325	238	3.2%	6,782	92.6%	26	0.4%	43	0.6%	16	0.2%	2	0.0%	-	0.0%	218	3.0%
Harney	7,253	321	4.4%	6,396	88.2%	45	0.6%	272	3.8%	82	1.1%	3	0.0%	42	0.6%	92	1.3%
Hood River	22,620	6,846	30.3%	14,734	65.1%	63	0.3%	109	0.5%	305	1.3%	71	0.3%	-	0.0%	492	2.2%
Jackson	206,583	23,606	11.4%	171,054	82.8%	1,291	0.6%	1,200	0.6%	2,011	1.0%	611	0.3%	143	0.1%	6,667	3.2%
Jefferson	21,830	4,250	19.5%	13,297	60.9%	142	0.7%	3,465	15.9%	173	0.8%	93	0.4%	31	0.1%	379	1.7%
Josephine	83,021	5,549	6.7%	73,113	88.1%	259	0.3%	1,229	1.5%	502	0.6%	126	0.2%	111	0.1%	2,132	2.6%
Klamath	65,985	7,395	11.2%	52,869	80.1%	563	0.9%	2,037	3.1%	656	1.0%	110	0.2%	103	0.2%	2,252	3.4%
Lake	7,854	585	7.4%	6,778	86.3%	11	0.1%	115	1.5%	65	0.8%	6	0.1%	11	0.1%	283	3.6%
Lane	354,764	27,879	7.9%	297,202	83.8%	3,108	0.9%	3,273	0.9%	8,624	2.4%	780	0.2%	487	0.1%	13,411	3.8%
Lincoln	46,138	3,808	8.3%	38,535	83.5%	146	0.3%	1,230	2.7%	598	1.3%	67	0.1%	138	0.3%	1,616	3.5%
Linn	118,270	9,590	8.1%	102,446	86.6%	506	0.4%	2,046	1.7%	1,339	1.1%	74	0.1%	39	0.0%	2,230	1.9%
Malheur	30,740	9,970	32.4%	19,216	62.5%	305	1.0%	133	0.4%	439	1.4%	18	0.1%	33	0.1%	626	2.0%
Marion	320,448	80,204	25.0%	215,738	67.3%	2,932	0.9%	2,389	0.7%	5,819	1.8%	2,201	0.7%	1,749	0.5%	9,416	2.9%
Morrow	11,217	3,722	33.2%	7,043	62.8%	34	0.3%	91	0.8%	41	0.4%	12	0.1%	-	0.0%	274	2.4%
Multnomah	757,371	83,465	11.0%	542,530	71.6%	40,623	5.4%	4,929	0.7%	51,370	6.8%	4,628	0.6%	1,668	0.2%	28,158	3.7%

Appendix A: Oregon population: race and ethnicity, by county

| | Total | Hispanic/ Latino | | Non-Hispanic | | | | | | | | | | | | | |
				White	%	Black/AA	%	AI/AN	%	Asian	%	NH/PI	%	Other	%	Multi-racial	%
Oregon	3,900,343	473,729	12.1%	3,426,614	87.9%	67,305	1.7%	37,699	1.0%	149,886	3.8%	13,942	0.4%	6,134	0.2%	124,051	3.2%
Polk	76,464	9,636	12.6%	61,135	80.0%	387	0.5%	775	1.0%	1,629	2.1%	278	0.4%	-	0.0%	2,624	3.4%
Sherman	1,790	97	5.4%	1,567	87.5%	6	0.3%	34	1.9%	1	0.1%	-	0.0%	-	0.0%	85	4.7%
Tillamook	25,334	2,443	9.6%	21,710	85.7%	75	0.3%	212	0.8%	178	0.7%	74	0.3%	39	0.2%	603	2.4%
Umatilla	76,645	19,058	24.9%	52,304	68.2%	488	0.6%	1,362	1.8%	555	0.7%	102	0.1%	73	0.1%	2,703	3.5%
Union	25,736	1,088	4.2%	23,187	90.1%	148	0.6%	173	0.7%	238	0.9%	238	0.9%	9	0.0%	655	2.5%
Wallowa	6,893	172	2.5%	6,472	93.9%	31	0.4%	33	0.5%	25	0.4%	4	0.1%	14	0.2%	142	2.1%
Wasco	25,387	4,070	16.0%	19,424	76.5%	110	0.4%	996	3.9%	281	1.1%	156	0.6%	-	0.0%	350	1.4%
Washington	547,451	87,650	16.0%	376,160	68.7%	9,425	1.7%	2,406	0.4%	48,846	8.9%	2,254	0.4%	746	0.1%	19,964	3.6%
Wheeler	1,357	48	3.5%	1,258	92.7%	-	0.0%	8	0.6%	3	0.2%	-	0.0%	-	0.0%	40	2.9%
Yamhill	100,486	15,285	15.2%	78,908	78.5%	987	1.0%	921	0.9%	1,353	1.3%	258	0.3%	64	0.1%	2,710	2.7%

Appendix B: Oregon health care workforce: race and ethnicity, by county

| | Total | Hispanic/ Latino | Non-Hispanic | | | | | | | Refused/ Declined | Missing (no data) |
			White	Black/AA	AI/AN	Asian	NH/PI	Other	Multi-racial		
Oregon	86,847	3,851	65,634	1,276	492	5,004	412	439	1,556	8,026	157
Baker	271	5	214	-	1	3	1	-	5	42	-
Benton	2,113	73	1,698	12	14	80	8	7	38	181	2
Clackamas	6,770	291	4,899	118	32	565	45	47	115	642	16
Clatsop	742	26	612	3	2	35	4	1	8	50	1
Columbia	295	9	230	2	-	15	-	2	6	31	-
Coos	1,357	36	1,057	6	28	59	2	5	35	128	1
Crook	205	4	170	-	1	4	-	1	4	21	-
Curry	281	11	225	2	2	4	1	2	3	31	-
Deschutes	3,955	110	3,336	13	21	72	13	9	49	329	3
Douglas	1,892	48	1,525	10	16	55	5	4	30	199	-
Gilliam	12	1	9	-	-	-	-	-	1	1	-
Grant	110	2	96	1	2	3	-	1	-	5	-
Harney	115	3	98	-	2	1	-	-	2	9	-
Hood River	524	34	423	-	1	10	-	1	3	52	-
Jackson	4,988	243	3,934	21	31	148	16	20	73	489	13
Jefferson	233	16	184	1	9	3	-	1	2	17	-
Josephine	1,553	61	1,222	3	10	39	7	7	26	178	-
Klamath	1,074	70	827	1	16	19	4	8	28	98	3
Lake	141	6	108	-	1	3	-	-	3	20	-
Lane	7,933	273	6,232	69	52	266	18	34	165	810	14
Lincoln	732	26	597	5	8	26	5	1	7	57	-
Linn	1,686	54	1,405	8	10	42	4	2	34	124	3
Malheur	674	60	502	2	1	19	2	2	12	73	1
Marion	7,526	509	5,552	103	54	346	45	47	120	735	15
Morrow	68	2	59	-	1	-	-	-	3	3	-
Multnomah	25,531	1,084	18,581	698	89	1,984	144	155	508	2,235	53

Appendix B: Oregon health care workforce: race and ethnicity, by county

| | Total | Hispanic/ Latino | Non-Hispanic | | | | | | | Refused/ Declined | Missing (no data) |
			White	Black/AA	AI/AN	Asian	NH/PI	Other	Multi-racial		
Oregon	86,847	3,851	65,634	1,276	492	5,004	412	439	1,556	8,026	157
Polk	697	34	540	1	7	30	1	5	10	67	2
Sherman	2	-	2	-	-	-	-	-	-	-	-
Tillamook	343	17	277	1	1	6	-	1	8	30	2
Umatilla	1,111	71	854	13	9	39	2	4	20	97	2
Union	493	6	412	1	3	8	7	2	4	49	1
Wallowa	120	2	102	-	-	3	-	1	-	12	-
Wasco	758	34	608	-	10	14	-	1	9	81	1
Washington	10,901	529	7,795	174	49	1,044	66	61	200	961	22
Wheeler	14	-	11	-	-	-	1	-	-	2	-
Yamhill	1,523	99	1,177	7	8	54	10	7	23	136	2

Health care workforce missing county information: 104

Source: Health Care Workforce Database, Oregon Health Authority, 2015-2016

Appendix C: Oregon population and health care workforce: Hispanic/Latino ethnicity, by county

County	Population			Health Care Workforce			% Difference
	Total	Hispanic/Latino	%	Total	Hispanic/Latino	%	
Oregon	3,900,343	473,729	12.1%	79,358	3,851	4.9%	-7.3%
Baker	16,049	587	3.7%	229	5	2.2%	-1.5%
Benton	86,034	5,788	6.7%	1,941	73	3.8%	-3.0%
Clackamas	384,697	30,934	8.0%	6,175	291	4.7%	-3.3%
Clatsop	37,236	2,946	7.9%	693	26	3.8%	-4.2%
Columbia	49,325	2,170	4.4%	266	9	3.4%	-1.0%
Coos	62,678	3,586	5.7%	1,239	36	2.9%	-2.8%
Crook	20,798	1,513	7.3%	184	4	2.2%	-5.1%
Curry	22,341	1,345	6.0%	252	11	4.4%	-1.7%
Deschutes	163,141	12,417	7.6%	3,647	110	3.0%	-4.6%
Douglas	107,156	5,324	5.0%	1,708	48	2.8%	-2.2%
Gilliam	1,926	144	7.5%	11	1	9.1%	1.6%
Grant	7,325	238	3.2%	105	2	1.9%	-1.3%
Harney	7,253	321	4.4%	106	3	2.8%	-1.6%
Hood River	22,620	6,846	30.3%	477	34	7.1%	-23.1%
Jackson	206,583	23,606	11.4%	4,526	243	5.4%	-6.1%
Jefferson	21,830	4,250	19.5%	218	16	7.3%	-12.1%
Josephine	83,021	5,549	6.7%	1,384	61	4.4%	-2.3%
Klamath	65,985	7,395	11.2%	979	70	7.2%	-4.1%
Lake	7,854	585	7.4%	121	6	5.0%	-2.5%
Lane	354,764	27,879	7.9%	7,166	273	3.8%	-4.0%
Lincoln	46,138	3,808	8.3%	680	26	3.8%	-4.4%
Linn	118,270	9,590	8.1%	1,573	54	3.4%	-4.7%
Malheur	30,740	9,970	32.4%	605	60	9.9%	-22.5%
Marion	320,448	80,204	25.0%	6,837	509	7.4%	-17.6%
Morrow	11,217	3,722	33.2%	65	2	3.1%	-30.1%
Multnomah	757,371	83,465	11.0%	23,473	1,084	4.6%	-6.4%

Appendix C: Oregon population and health care workforce: Hispanic/Latino ethnicity, by county

County	Population			Health Care Workforce			% Difference
	Total	Hispanic/ Latino	%	Total	Hispanic/ Latino	%	
Oregon	3,900,343	473,729	12.1%	79,358	3,851	4.9%	-7.3%
Polk	76,464	9,636	12.6%	634	34	5.4%	-7.2%
Sherman	1,790	97	5.4%	2	-	0.0%	-5.4%
Tillamook	25,334	2,443	9.6%	314	17	5.4%	-4.2%
Umatilla	76,645	19,058	24.9%	1,021	71	7.0%	-17.9%
Union	25,736	1,088	4.2%	445	6	1.3%	-2.9%
Wallowa	6,893	172	2.5%	108	2	1.9%	-0.6%
Wasco	25,387	4,070	16.0%	680	34	5.0%	-11.0%
Washington	547,451	87,650	16.0%	10,011	529	5.3%	-10.7%
Wheeler	1,357	48	3.5%	12	-	0.0%	-3.5%
Yamhill	100,486	15,285	15.2%	1,396	99	7.1%	-8.1%

Health care workforce missing county information: 104

Sources: Health Care Workforce Database, Oregon Health Authority, 2015-2016; American Community Survey 5-year file, 2010-2014

Appendix D: Oregon health care workforce: race, ethnicity, and gender distribution, by license type

	Hispanic/ Latino	Non-Hispanic								Female	Male
		White	Black/ AA	AI/AN	Asian	NI/PI	Other	Multi-racial		Female	Male
Dentistry											
Dentists	3.0%	80.2%	0.6%	0.2%	12.6%	0.4%	1.3%	1.7%		24.9%	75.1%
Dental Hygienists	3.5%	87.5%	0.5%	0.5%	4.6%	0.2%	0.7%	2.4%		97.3%	2.7%
Dietietics											
Dietitians	2.3%	92.2%	0.0%	0.5%	3.9%	0.0%	0.2%	0.9%		97.6%	2.4%
Medicine											
Physicians	3.2%	80.7%	1.2%	0.2%	12.4%	0.3%	1.1%	1.1%		37.1%	62.9%
Podiatrists	2.1%	86.2%	0.7%	0.0%	9.0%	0.7%	0.0%	1.4%		21.0%	79.0%
Physician Assistants	3.1%	90.5%	0.7%	0.4%	3.4%	0.4%	0.4%	1.2%		63.8%	36.2%
Nursing											
Certified Nursing Assistants	13.3%	69.3%	6.1%	1.2%	5.8%	1.3%	0.6%	2.5%		83.8%	16.2%
Licensed Practical Nurses	6.6%	80.3%	3.2%	1.2%	4.5%	0.7%	0.5%	3.0%		87.6%	12.4%
Registered Nurses	3.3%	88.7%	0.8%	0.6%	3.9%	0.4%	0.4%	1.9%		88.0%	12.0%
Nurse Practitioners	2.9%	90.4%	0.7%	0.4%	2.9%	0.5%	0.4%	1.9%		88.0%	12.0%
Certified Registered Nurse Anesthetists	4.0%	88.9%	0.3%	0.0%	4.5%	0.0%	0.3%	2.0%		45.8%	54.2%
Clincal Nurse Specialists	2.1%	93.1%	0.0%	0.0%	2.1%	0.0%	0.0%	2.8%		93.3%	6.7%
Occupational Therapy											
Occupational Therapists	1.6%	91.1%	0.3%	0.3%	4.1%	0.0%	0.3%	2.2%		90.0%	10.0%
Occupational Therapist Assistants	3.5%	90.1%	0.4%	0.0%	3.2%	0.0%	1.4%	1.4%		86.8%	13.2%
Pharmacy											
Pharmacists	2.3%	75.6%	0.9%	0.5%	17.3%	0.4%	1.1%	1.8%		55.2%	44.8%
Certified Pharmacy Technicians	8.0%	78.5%	1.0%	1.0%	7.4%	1.1%	0.3%	2.8%		80.3%	19.7%
Physical Therapy											
Physical Therapists	2.6%	88.6%	0.2%	0.2%	6.0%	0.3%	0.4%	1.8%		65.9%	34.1%
Physical Therapist Assistants	1.6%	92.7%	0.5%	0.5%	1.5%	0.5%	0.3%	2.2%		75.7%	24.3%
State Population	12.1%	77.6%	1.7%	1.0%	3.8%	0.4%	0.2%	3.2%		50.5%	49.5%

Sources: Health Care Workforce Database, Oregon Health Authority, 2015-2016; American Community Survey 5-year file, 2010-2014

Appendix E: Oregon population and health care workforce: languages spoken other than English, by county

SPEAK A LANGUAGE OTHER THAN ENGLISH		Total	Only English speakers	%	Spanish or Spanish Creole	%	Other Indo-European languages	%	Asian and Pacific Island languages	%	Other languages	%
Oregon	HCWF	86,847	69,325	79.8%	8,572	9.9%	4,754	5.5%	3,946	4.5%	1,081	1.2%
	Population	3,668,536	3,121,336	85.1%	324,212	8.8%	93,531	2.5%	108,129	2.9%	21,328	0.6%
Baker	HCWF	271	244	90.0%	17	6.3%	8	3.0%	5	1.8%	-	0.0%
	Population	15,242	14,537	95.4%	433	2.8%	140	0.9%	76	0.5%	56	0.4%
Benton	HCWF	2,113	1,771	83.8%	187	8.8%	98	4.6%	55	2.6%	103	4.9%
	Population	82,342	71,839	87.2%	4,581	5.6%	1,849	2.2%	3,220	3.9%	853	1.0%
Clackamas	HCWF	6,770	5,187	76.6%	617	9.1%	462	6.8%	443	6.5%	3	0.0%
	Population	363,666	320,458	88.1%	20,412	5.6%	10,836	3.0%	10,217	2.8%	1,743	0.5%
Clatsop	HCWF	742	618	83.3%	64	8.6%	34	4.6%	27	3.6%	1	0.1%
	Population	35,296	32,139	91.1%	2,020	5.7%	528	1.5%	443	1.3%	166	0.5%
Columbia	HCWF	295	261	88.5%	13	4.4%	12	4.1%	8	2.7%	7	2.4%
	Population	46,701	44,414	95.1%	1,419	3.0%	424	0.9%	370	0.8%	74	0.2%
Coos	HCWF	1,357	1,153	85.0%	112	8.3%	56	4.1%	45	3.3%	-	0.0%
	Population	59,598	57,090	95.8%	1,274	2.1%	759	1.3%	387	0.6%	88	0.1%
Crook	HCWF	205	182	88.8%	16	7.8%	3	1.5%	4	2.0%	2	1.0%
	Population	19,885	19,058	95.8%	567	2.9%	201	1.0%	25	0.1%	34	0.2%
Curry	HCWF	281	234	83.3%	30	10.7%	10	3.6%	2	0.7%	32	11.4%
	Population	21,332	20,553	96.3%	533	2.5%	134	0.6%	68	0.3%	44	0.2%
Deschutes	HCWF	3,955	3,463	87.6%	318	8.0%	145	3.7%	47	1.2%	5	0.1%
	Population	153,966	143,640	93.3%	7,307	4.7%	1,584	1.0%	1,256	0.8%	179	0.1%
Douglas	HCWF	1,892	1,662	87.8%	121	6.4%	74	3.9%	43	2.3%	-	0.0%
	Population	101,694	97,888	96.3%	1,942	1.9%	1,129	1.1%	592	0.6%	143	0.1%
Gilliam	HCWF	12	12	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
	Population	1,819	1,705	93.7%	97	5.3%	12	0.7%	5	0.3%	0	0.0%
Grant	HCWF	110	95	86.4%	7	6.4%	2	1.8%	3	2.7%	2	1.8%
	Population	6,993	6,839	97.8%	91	1.3%	42	0.6%	15	0.2%	6	0.1%
Harney	HCWF	115	104	90.4%	9	7.8%	2	1.7%	-	0.0%	-	0.0%
	Population	6,885	6,554	95.2%	101	1.5%	112	1.6%	12	0.2%	106	1.5%
Hood River	HCWF	524	385	73.5%	118	22.5%	24	4.6%	4	0.8%	8	1.5%
	Population	21,104	14,963	70.9%	5,891	27.9%	139	0.7%	111	0.5%	0	0.0%

Appendix E: Oregon population and health care workforce: languages spoken other than English, by county

SPEAK A LANGUAGE OTHER THAN ENGLISH		Total	Only English speakers	%	Spanish or Spanish Creole	%	Other Indo-European languages	%	Asian and Pacific Island languages	%	Other languages	%
Oregon	HCWF	86,847	69,325	79.8%	8,572	9.9%	4,754	5.5%	3,946	4.5%	1,081	1.2%
	Population	3,668,536	3,121,336	85.1%	324,212	8.8%	93,531	2.5%	108,129	2.9%	21,328	0.6%
Jackson	HCWF	4,988	4,088	82.0%	571	11.4%	211	4.2%	133	2.7%	3	0.1%
	Population	194,614	176,333	90.6%	14,119	7.3%	2,318	1.2%	1,546	0.8%	298	0.2%
Jefferson	HCWF	233	194	83.3%	27	11.6%	8	3.4%	3	1.3%	-	0.0%
	Population	20,318	16,728	82.3%	2,908	14.3%	89	0.4%	146	0.7%	447	2.2%
Josephine	HCWF	1,553	1,329	85.6%	133	8.6%	64	4.1%	37	2.4%	3	0.2%
	Population	78,852	74,994	95.1%	2,353	3.0%	1,001	1.3%	433	0.5%	71	0.1%
Klamath	HCWF	1,074	910	84.7%	105	9.8%	44	4.1%	20	1.9%	-	0.0%
	Population	62,144	56,586	91.1%	4,070	6.5%	660	1.1%	441	0.7%	387	0.6%
Lake	HCWF	141	129	91.5%	6	4.3%	4	2.8%	3	2.1%	-	0.0%
	Population	7,546	7,145	94.7%	360	4.8%	16	0.2%	21	0.3%	4	0.1%
Lane	HCWF	7,933	6,713	84.6%	706	8.9%	335	4.2%	208	2.6%	-	0.0%
	Population	336,950	307,918	91.4%	16,351	4.9%	5,416	1.6%	5,753	1.7%	1,512	0.4%
Lincoln	HCWF	732	607	82.9%	70	9.6%	30	4.1%	25	3.4%	-	0.0%
	Population	43,818	40,435	92.3%	2,709	6.2%	295	0.7%	331	0.8%	48	0.1%
Linn	HCWF	1,686	1,476	87.5%	123	7.3%	42	2.5%	42	2.5%	-	0.0%
	Population	110,856	102,934	92.9%	5,685	5.1%	1,301	1.2%	630	0.6%	306	0.3%
Malheur	HCWF	674	542	80.4%	98	14.5%	30	4.5%	12	1.8%	-	0.0%
	Population	28,570	21,760	76.2%	6,359	22.3%	176	0.6%	204	0.7%	71	0.2%
Marion	HCWF	7,526	6,029	80.1%	832	11.1%	354	4.7%	288	3.8%	-	0.0%
	Population	297,593	223,242	75.0%	59,684	20.1%	8,007	2.7%	5,480	1.8%	1,180	0.4%
Morrow	HCWF	68	57	83.8%	8	11.8%	4	5.9%	-	0.0%	-	0.0%
	Population	10,428	7,377	70.7%	3,006	28.8%	21	0.2%	24	0.2%	0	0.0%
Multnomah	HCWF	25,531	19,407	76.0%	2,562	10.0%	1,787	7.0%	1,589	6.2%	-	0.0%
	Population	711,200	568,689	80.0%	59,341	8.3%	33,238	4.7%	41,314	5.8%	8,618	1.2%
Polk	HCWF	697	564	80.9%	76	10.9%	32	4.6%	25	3.6%	-	0.0%
	Population	71,862	62,879	87.5%	6,597	9.2%	898	1.2%	1,178	1.6%	310	0.4%
Sherman	HCWF	2	2	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
	Population	1,690	1,643	97.2%	44	2.6%	0	0.0%	1	0.1%	2	0.1%

Appendix E: Oregon population and health care workforce: languages spoken other than English, by county

SPEAK A LANGUAGE OTHER THAN ENGLISH		Total	Only English speakers	%	Spanish or Spanish Creole	%	Other Indo-European languages	%	Asian and Pacific Island languages	%	Other languages	%
Oregon	HCWF	86,847	69,325	79.8%	8,572	9.9%	4,754	5.5%	3,946	4.5%	1,081	1.2%
	Population	3,668,536	3,121,336	85.1%	324,212	8.8%	93,531	2.5%	108,129	2.9%	21,328	0.6%
Tillamook	HCWF	343	292	85.1%	35	10.2%	13	3.8%	3	0.9%	-	0.0%
	Population	24,067	22,407	93.1%	1,426	5.9%	155	0.6%	59	0.2%	20	0.1%
Umatilla	HCWF	1,111	926	83.3%	127	11.4%	39	3.5%	25	2.3%	-	0.0%
	Population	71,077	56,253	79.1%	13,718	19.3%	429	0.6%	461	0.6%	216	0.3%
Union	HCWF	493	432	87.6%	36	7.3%	13	2.6%	13	2.6%	-	0.0%
	Population	24,196	22,882	94.6%	769	3.2%	188	0.8%	336	1.4%	21	0.1%
Wallowa	HCWF	120	105	87.5%	11	9.2%	2	1.7%	3	2.5%	-	0.0%
	Population	6,553	6,283	95.9%	132	2.0%	102	1.6%	36	0.5%	0	0.0%
Wasco	HCWF	758	646	85.2%	84	11.1%	18	2.4%	13	1.7%	-	0.0%
	Population	23,831	20,229	84.9%	2,995	12.6%	217	0.9%	203	0.9%	187	0.8%
Washington	HCWF	10,901	8,184	75.1%	1,133	10.4%	720	6.6%	773	7.1%	-	0.0%
	Population	510,100	390,835	76.6%	63,991	12.5%	19,714	3.9%	31,593	6.2%	3,967	0.8%
Wheeler	HCWF	14	9	64.3%	4	28.6%	-	0.0%	1	7.1%	-	0.0%
	Population	1,308	1,272	97.2%	30	2.3%	3	0.2%	3	0.2%	0	0.0%
Yamhill	HCWF	1,523	1,232	80.9%	187	12.3%	67	4.4%	40	2.6%	-	0.0%
	Population	94,440	80,835	85.6%	10,897	11.5%	1,398	1.5%	1,139	1.2%	171	0.2%

Health care workforce missing county information: 104

Sources: Health Care Workforce Database, Oregon Health Authority, 2015-2016; American Community Survey 5-year file, 2010-2014

NOTE:
Columns are mutually exclusive for population data; they are not for healthcare workforce data as one health care worker may have been classified in more than one language group.
Health care workforce data includes languages other than English; these were classified into the four ACS language groups. Some Health care workers were classified in more than one language group.
English only speaking health care workers did not report any other language other than English.