

# Oregon's Health Care Workforce Reporting Program

## Analytic Methods

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The Health Care Workforce Reporting Program was created in 2009 with the passage of HB 2009, which required the Oregon Health Authority to collaborate with seven health profession licensing boards to collect health care workforce data via their licensing renewal process. In 2015, SB 230 added ten additional health licensing boards to the program. Future reports will include data from all 17 licensing boards.

These data are collected to:

- ◇ Understand Oregon's health care workforce;
  - ◇ Inform public and private educational and workforce investments; and
  - ◇ Provide data to inform policy recommendations for state agencies and the Legislative Assembly regarding Oregon's health care workforce.
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## Methods & Sources

All licensees must be licensed by a state health licensing board and renew their license according to each board's licensing cycle (See Table 1). At the time of license renewal, licensees complete the Health Care Workforce Survey. Data in these fact sheets were collected during license renewals in 2016, 2017, and the first half of 2018. The Oregon Medical Board administers the workforce survey using their own data system; all the other health professions' data were collected through a common format workforce survey that licensees must complete as part of their renewal process.

Data collected include provider demographics, education and languages spoken other than English, practice locations, number of hours worked and future practice plans at each location, and specialty information. For selected occupations (medical professions, naturopathic physicians, chiropractic physicians, dentists, and nurse practitioners) data regarding insurance plans accepted are also collected.

To see an example workforce survey, visit: <https://tinyurl.com/yacjs56v>

Data were analyzed and tabulated with SAS 9.4; graphics were produced in Excel. Charts in these sheets explore the relative distribution of selected measures for the subset of licensees who completed the Health Care Workforce Survey and reported a primary work location in Oregon. Missing data is not included, however, data in charts may not sum to 100 due to rounding.

### Comparisons across time

Due to the addition of data from six licensing boards, data presented at the statewide level should not be compared with earlier reports. Data from most specific occupations may be compared. However, due to changes in methodology, estimates for occupations licensed by the Oregon Medical Board should not be directly compared to previous years.

### Estimated Number Practicing in Oregon

The number of providers licensed in the state is obtained directly from each of the licensing boards. Not all licensees who hold an active license in Oregon are actively working in the field in Oregon. Further, not all active licensees complete the workforce survey (e.g. new licensees). The estimate of all licensees (new and renewing)

**Table 1. Participating boards, licensed professions, and renewal cycle information**

Licensing board	Licensed professions	Renewal period	Renewal cycle	Data included in this report
OR Board of Chiropractic Examiners	Chiropractic physicians	Ongoing	1-yr	Nov 1, 2016 - Dec 31, 2017
	Chiropractic assistants <sup>1</sup>	Jun - Aug	1-yr	Jun 1, 2017 - Jan 16, 2018
OR Board of Licensed Professional Counselors and Therapists	Licensed professional counselors and therapists	Ongoing	1-yr	Nov 1, 2016 - Jan 16, 2018
OR Board of Dentistry <sup>2</sup>	Dentists	Jan - Mar	2-yr	Jan 1, 2016 - Dec 31, 2017
	Registered dental hygienists	Jul - Sep	2-yr	Jan 1, 2016 - Dec 31, 2017
OR Board of Licensed Dietitians	Licensed dietitians	Ongoing	1-yr	Dec 1, 2016 - Jan 16, 2018
OR Medical Board <sup>3</sup>	Physicians, Podiatrists, Physician assistants	Oct - Dec (odd yrs)	2-yr	Oct 1, 2017 - Mar 31, 2018
	Acupuncturists	Apr - Jun (even yrs)	2-yr	Apr 1, 2016 - Jun 30, 2016
OR Board of Naturopathic Medicine	Naturopathic physician	Nov - Dec	1-yr	Nov 1, 2017 - Jan 30, 2018
OR Board of Nursing <sup>4</sup>	Nurse practitioners, Certified registered nurse anesthetists, Registered nurses, Licensed practical nurses, Certified nursing assistants	Ongoing	2-yr	Jan 1, 2016 - Jan 29, 2018
OR Occupational Therapy Licensing Board	Occupational therapists, Occupational therapy assistants	Mar - May (even yrs)	2-yr	Jan 1, 2016 - Jan 30, 2018
OR Board of Pharmacy	Pharmacists	Apr - Jun (odd yrs)	2-yr	Jan 1, 2016 - Jan 11, 2018
	Certified pharmacy technicians	Apr - Jun (even yrs)	2-yr	Jan 1, 2016 - Jan 11, 2018
OR Physical Therapy Licensing Board	Physical therapists, Physical therapist assistants	Jan - Mar (Even yrs)	2-yr	Jan 1, 2016 - Jan 16, 2018
OR Board of Psychology	Psychologists	Ongoing	2-yr	Jul 1, 2016 - Jul 31, 2018
Respiratory Therapist and Polysomnographic Technologist Licensing Board	Respiratory therapists, Polysomnographic technologists	Ongoing	1-yr	Nov 1, 2016 - Dec 31, 2017
OR Board of Licensed Social Workers	Licensed clinical social workers, Clinical social worker associates, Non-clinical social workers	Ongoing	2-yr	Jul 1, 2016 - Jul 31, 2018
OR Board of Examiners For Speech-Language Pathology and Audiology	Audiologists, Speech-language pathologists, Speech-language pathologist assistants	Nov - Dec (Odd yrs)	2-yr	Nov 1, 2017 - Feb 2, 2018

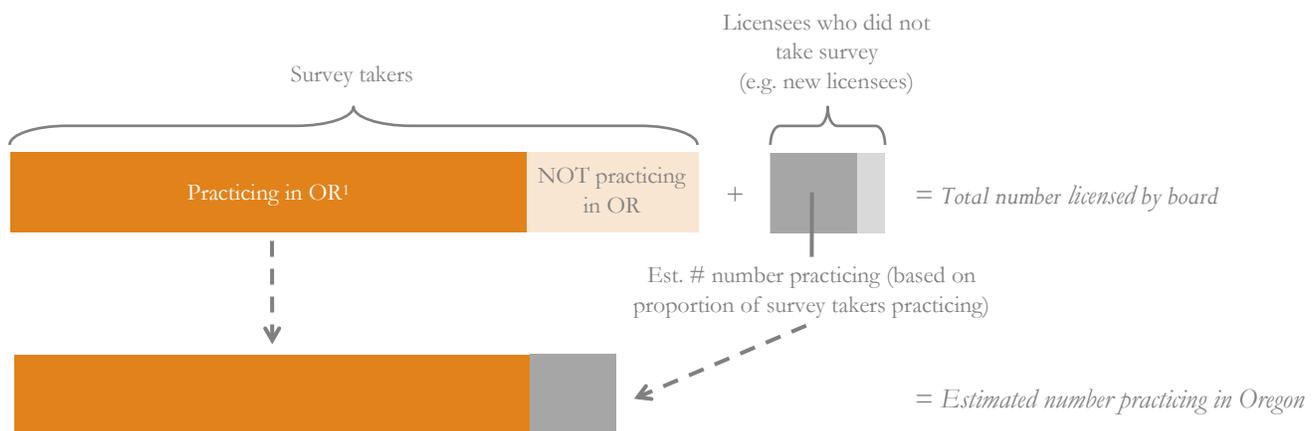
<sup>1</sup> Chiropractic assistants switched on ongoing renewals in 6/1/2018.

<sup>2</sup> Those licensed in even-numbered years renew in even-numbered years and those licensed in odd-numbered years renew in odd-numbered years.

<sup>3</sup> Workforce data are collected by the Oregon Medical Board with their own application.

<sup>4</sup> Those born in even-numbered years must renew by their birthday in even-numbered years and those born in odd-numbered years must renew by their birthday in odd-numbered years.

**Figure 1. Estimation of number practicing schematic**



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working in the state is derived from the percent of survey respondents who are actively practicing in the state.<sup>1</sup> Specifically:

*Active practice rate = % survey takers who are active in OR (of those with known work location and practice status)*

*Number practicing in OR (Estimated) = Total # licensed in OR \* Active practice rate*

This estimation assumes that practice rates for those who do not complete the workforce survey (e.g. new licensees) is the same as those who have completed the survey.

### **FTE estimation**

Not all licensees who work in Oregon work full time and not all licensees spend time in direct patient care. In addition to the estimated number of providers in the state, these reports also look at the total number of FTEs and the number of FTEs in direct patient care.

At the licensee level, FTE is calculated based on total hours worked (capped at 40 hours, so no health care professional is counted as more than 1 FTE), as well as based on time spent in direct patient care (Direct Patient Care FTE; also capped at 40 hours). For dentists only, direct patient care FTE was weighted based on the number of auxiliaries reported (e.g., chairside assistants, hygienists, etc.) and age, according to HRSA Procedures for Shortage Designation.

At the statewide level, the total FTE and FTEs in direct patient care are estimated as follows:

*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*

Where the average FTE and average Patient Care FTE for each occupation are calculated from the health care workforce survey data.

### **Population-to-provider ratio**

State maps display the population-to-provider ratio based on the estimated number of direct patient care FTEs who are practicing in the county.

*County patient care FTE (estimated) =*

*Direct patient care FTE (estimated statewide) \* % observed direct patient care FTE in county*

Statewide and county population estimates come from the Portland State University Population Research Center (<https://www.pdx.edu/prc/population-reports-estimates>).

### **Race & ethnicity**

Race and ethnicity population data comes from five-year ACS estimates (data collected over 60-month period, 2011–2015). 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.

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 was only counted in the Hispanic category and not in the other categories.

Of the 5,015 licensees coded as Hispanic, approximately 59.5 percent identified with at least one racial category (White: 50.8%; Multi-racial: 4.5%; American Indian/Alaska Native: 2.1%, Black/AA: 1.1%; Asian: 0.5%; Native Hawaiian/Pacific Islander: 0.5%). The remaining 40.5 percent chose "Other" (19.4%), declined to report a race (18.9%) or were missing data (2.3%). When a licensee selected a non-Hispanic ethnicity and more than one race, the licensee was coded as "Multiracial"

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<sup>1</sup>Practicing in Oregon 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. Secondary practice locations were not included, and may increase the available number of providers.

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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.”

### **Language**

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). Health professionals reporting speaking more than one language may be counted in more than one language group; 91 percent of the health professionals were coded in only one language group.

### **Primary care providers**

Primary care providers (PCPs), including nurse practitioners, physicians and physician assistants, comprise approximately 6.3 percent of the health care workforce. Primary care providers are defined as MD, DO, and PA 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, NP licensees who select ‘Primary Care’ for their primary practice setting or ‘Nurse Practitioner—Primary Care’ for their primary practice position, and ND licensees who select yes to “Do you consider yourself a primary care provider at this practice location?”

### **Behavioral health care providers**

Behavioral health care providers, including psychiatric nurse practitioners, physicians and physician assistants, psychologist examiners, licensed professional counselors and therapists, and licensed clinical social workers, comprise approximately 8.9 percent of the health care workforce. Behavioral health care providers are defined as MD, DO, and PA licensees whose practice specialties are in psychiatry, addiction psychiatry, child and/or adolescent psychiatry, forensic psychiatry, geriatric psychiatry, or psychoanalysis, NP licensees with a specialty of psychiatry/mental health, psychologists, licensed professional counselors and therapists, and licensed clinical social workers.

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### 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 2016, 2017, and the first half of 2018.

### For questions about this report, contact:

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### For more information, visit:

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

### Sources:

- State population estimates come from the Portland State University Population Research Center (<https://www.pdx.edu/prc/population-reports-estimates>)
- U.S. Census Bureau: American Fact Finder. American Community Survey 5-Year Estimates 2013–2017: Hispanic or Latino origin by race (table name B03002, geography of Oregon). Washington, DC: U.S. Census Bureau: American Fact Finder; 2018 [updated 2019 February 7; cited 2019 August 7]. Available from <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#acsST>

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