2020
Oregon's Licensed Health Care Workforce Supply

Based on data collected during 2009 through January 2020

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Oregon Health Authority
Office of Health Analytics

Oregon Health Authority

Health Care Workforce Reporting Program

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About the data in this report

Oregon's Health Care Workforce Reporting Program (HWRP) was created in 2009. As directed by Oregon Revised Statute 676.410, the HWRP collects and tabulates information from licensees of 17 health licensing boards upon renewal.

Data in this report was collected prior to the onset of the COVID-19 pandemic in the Spring of 2020. At this time, it is uncertain how the pandemic may affect the licensed health care workforce supply in Oregon. Future supply reports will assess the impact of COVID-19.

This report adds data from three licensing boards that were not included in previous reports. It also introduces data on providers who have secondary practice locations in Oregon. For those reasons, data from this report should not be compared with data from earlier reports.

Executive Summary

Report objectives

This report on Oregon's licensed health care workforce evaluates:

- how many professionals are licensed and practicing in Oregon as well as how much of their time was spent with patients;
- which counties professionals are working in and the supply available relative to the population size;
- county differences in demand for services measured by selected target populations;
- and how many professionals specialize in primary care, behavioral health, oral health and more.

Why is it important to measure supply?

The health care workforce is a large contributor to the economy.

Understanding the supply of the licensed health care workforce in Oregon is essential to making evidence-based policy decisions about health care access, cost and quality and has implications for the broader state economy.[1] In 2018, the health care sector was the largest employer in the United States, exceeding both manufacturing and retail sectors.[2] Nationally, about 1 in 8 people who were employed work as health care professionals or within a health system[3,4] with similar levels seen in Oregon.[5] Historically, jobs in health care have been relatively resilient in times of recession[6] and are good opportunities for improving social class, particularly for women.[1] The health care industry pivots on its workforce — labor costs make up about 50 percent of health care spending in the United States,[7,8] while at the same time shortages of health care professionals are predicted due to the health care demands of aging populations and increases in chronic diseases.[9-15]

Demands on health care are increasing in Oregon.

Over the next decade, the population of those 65 years of age and older will likely grow at over 3 times the rate of the population 64 years and younger.[16] Currently, just over half of the population has one or more chronic conditions.[17] At the same time, more Oregonians had insurance coverage in 2018 (94.0%) compared with the rest of the country (91.5%).[18,19]

Major events like the COVID-19 pandemic may impact supply and care delivery.

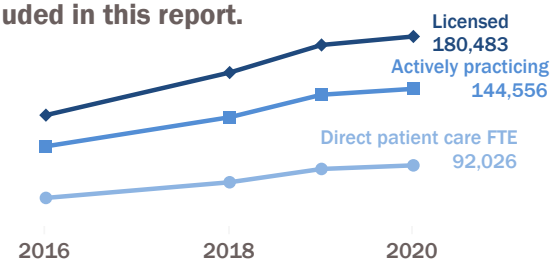
As the COVID-19 pandemic continues, there will be unforeseen impacts on the health care workforce including possible slow growth of the workforce in the coming years. For example, the Oregon Center for Nursing has reported difficulties with nursing students completing clinical rotations during the pandemic,[20] and there are likely excess pressures on currently practicing professionals, particularly those with private practices.[21] Future reports will assess COVID-19 impacts on the licensed health care workforce supply.

Explore these data and learn more:
Oregon's licensed health care workforce supply dashboard.

Key insights

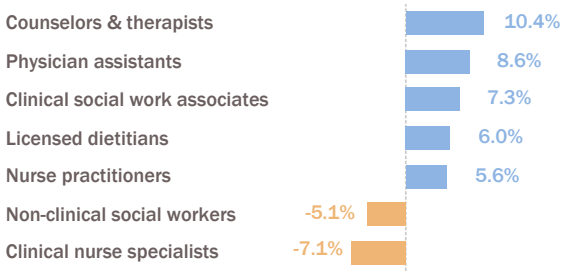
Data from over 180,000 licensed health care professionals are included in this report.

Three important supply estimates are discussed including number licensed, actively practicing and full-time equivalent (FTE) providers of direct patient care (page 5).



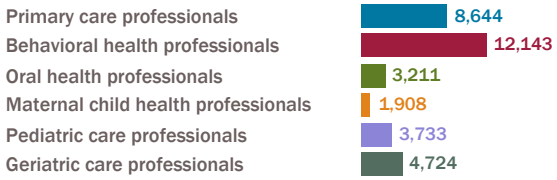
Direct patient care FTE increased over time for some occupations but not others.

Growth in direct patient care FTE was greatest for counselors and therapists, physician assistants, clinical social work associates, licensed dietitians and nurse practitioners (page 7). Clinical nurse specialists and non-clinical social workers lost the most direct patient care FTE on average over time.



Behavioral health professionals were the largest specialty group with 12,143 actively practicing.

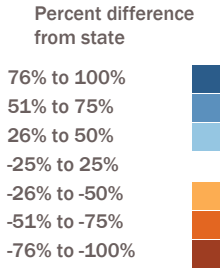
Other specialty groups include primary care, oral health, maternal child health, pediatric care and geriatric care professionals (page 9).

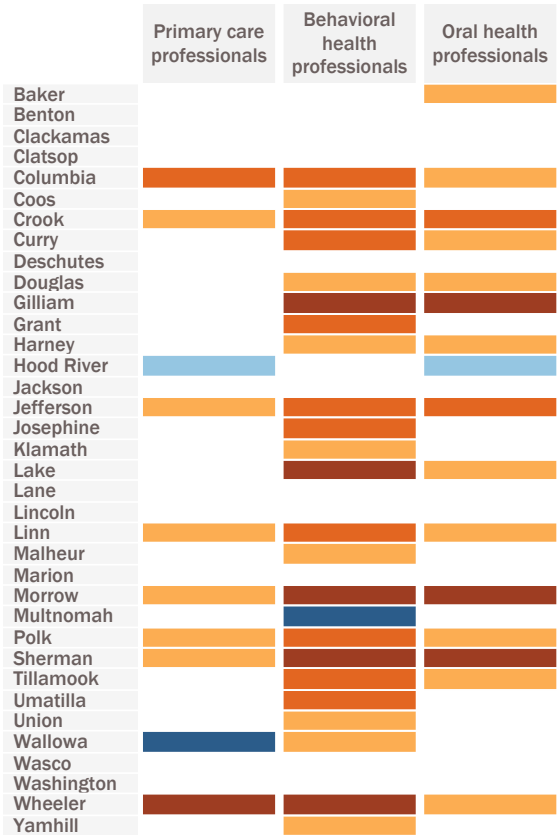


Behavioral health professionals are concentrated in Multnomah and neighboring counties and relatively underrepresented throughout the rest of the state.

The number of health care professionals available for every 10,000 Oregonians was mapped by county (pages 10-12) and a heat map was created to summarize the findings (page 13-14). Health care professionals are generally well represented in Deschutes, Hood River, Multnomah, Wallowa, and Washington counties and generally underrepresented in Columbia, Crook, Gilliam, Jefferson, Morrow, Sherman, and Wheeler. Primary care professionals are more evenly distributed throughout the state compared with other specialty groups. Of the specialty groups, unequal distribution is worst for behavioral health professionals.

Orange colors indicate that the county supply is less than supply statewide. Blue colors indicate that the county supply is higher than supply statewide. In both cases, the darker the color the larger the difference.





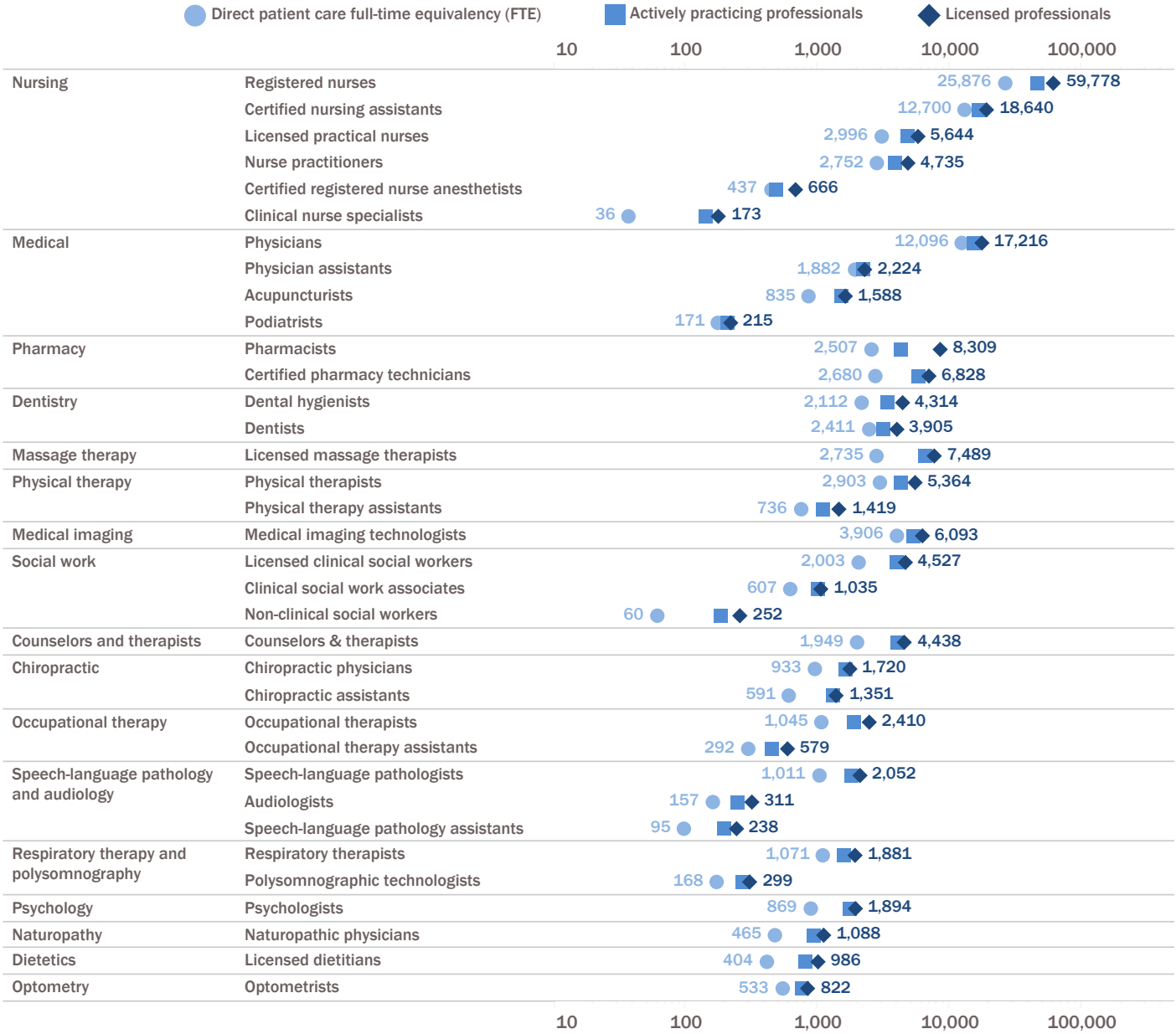
Findings

Supply estimates include licensed, actively practicing, and direct patient care FTE for 2020.

This analysis includes a wide range of occupations that practice physical and behavioral health, from eastern and western traditions and from allied health care occupations. The nursing workforce was the largest with 89,636 licensed professionals, followed by medical, pharmacy, and dentistry.

The number of hours worked per week and the amount of time spent in patient care varies by professional and by occupation, so direct patient care FTE is estimated from licensed and actively practicing to better understand the current supply of health care professionals available to the Oregon population. Knowing the number of licensed and actively practicing professionals helps us to understand the potential capacity of the workforce.

Of registered nurses, there were 59,778 holding active licenses in Oregon in 2020. Of those licensed, an estimated 45,135 were actively practicing, meaning they reported providing services to Oregon residents. Of all actively practicing registered nurses, there were an estimated 25,876 full-time equivalent (FTE) providers of direct patient care, where 1 FTE is equal to 40 hours of work in direct patient care per week. Supply estimates for each occupation can be found below.



		Direct patient care FTE	Actively practicing	Licensed
Nursing	Registered nurses	25,876		59,778
	Certified nursing assistants	12,700		18,640
	Licensed practical nurses	2,996		5,644
	Nurse practitioners	2,752		4,735
	Certified registered nurse anesthetists	437		666
	Clinical nurse specialists	36		173
Medical	Physicians	12,096		17,216
	Physician assistants	1,882		2,224
	Acupuncturists	835		1,588
	Podiatrists	171		215
Pharmacy	Pharmacists	2,507		8,309
	Certified pharmacy technicians	2,680		6,828
Dentistry	Dental hygienists	2,112		4,314
	Dentists	2,411		3,905
Massage therapy	Licensed massage therapists	2,735		7,489
Physical therapy	Physical therapists	2,903		5,364
	Physical therapy assistants	736		1,419
Medical imaging	Medical imaging technologists	3,906		6,093
Social work	Licensed clinical social workers	2,003		4,527
	Clinical social work associates	607		1,035
	Non-clinical social workers	60		252
Counselors and therapists	Counselors & therapists	1,949		4,438
Chiropractic	Chiropractic physicians	933		1,720
	Chiropractic assistants	591		1,351
Occupational therapy	Occupational therapists	1,045		2,410
	Occupational therapy assistants	292		579
Speech-language pathology and audiology	Speech-language pathologists	1,011		2,052
	Audiologists	157		311
	Speech-language pathology assistants	95		238
Respiratory therapy and polysomnography	Respiratory therapists	1,071		1,881
	Polysomnographic technologists	168		299
Psychology	Psychologists	869		1,894
Naturopathy	Naturopathic physicians	465		1,088
Dietetics	Licensed dietitians	404		986
Optometry	Optometrists	533		822

Supply estimates vary over time by occupation and workforce.

The number of hours worked per week and the amount of time spent in direct patient care are practice characteristics that vary by occupation, workforce and year affecting supply estimates over time. For example, in 2020 optometrists who held an active license in Oregon actively practiced in Oregon at a higher average rate (90.4%; 743 actively practiced of 822 licensed) compared with pharmacists (50.5%; 4,198 actively practiced of 8,309 licensed).

This active practice rate varies between occupations but also by year. For dentists, this rate remains relatively steady over time, while for nurse practitioners, the rate seems to be decreasing slightly between 2018 and 2020. In terms of time spent in direct patient care, physicians spend more time in direct patient care on average (81.3% of time or 12,096 FTE from 14,882 who actively practiced) compared with nurse practitioners (72.5% of time or 2,752 FTE from 3,794 who actively practiced). Psychologists, counselors and therapists and pharmacists spend about 50-60 percent of time in direct patient care on average. Professionals can also report spending time in administration and management, teaching, doing research or some other activity.

More information about these graphs

When assessing the supply of the health care workforce, it is essential to understand how factors like practice characteristics and license renewal cycles impact supply estimates and longitudinal trends. Importantly, these factors often vary by occupation. Longitudinal trends are affected by changes in Health Care Workforce Reporting Program methodology, duration of participation in the program by health licensing boards, and differing renewal cycles.

For some occupations, the number of licensed professionals is available 2010 and onward while other occupations are only included 2018 or 2019 and onward. Reliable estimates for actively practicing and direct patient care FTE are available for 2016 and onward where the number of licensed is known.

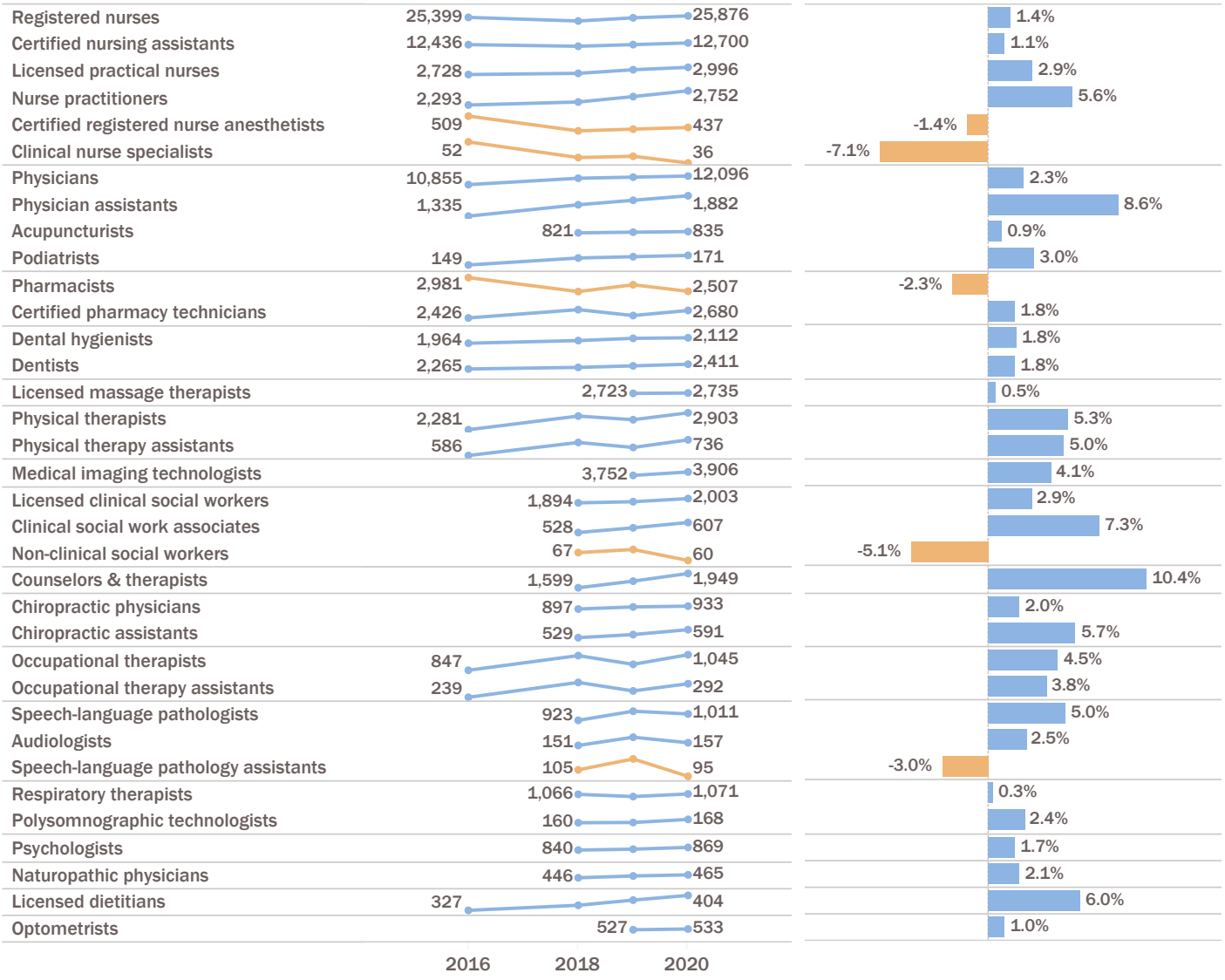
Licensing boards have either annual or biennial renewal cycles and supply estimates fluctuate for occupations that renew on biennial periodic cycles (pharmacy, occupational therapy, physical therapy, and speech-language pathology and audiology occupations). For those occupations, the number of licensees is higher in renewing years compared with non-renewing years as licensees generally leave the workforce at time of license renewal, which is reflected the following year. Beginning in 2018, supply estimates are reported annually (instead of biennially).

*Note: Estimates for physicians, physician assistants, podiatrists and acupuncturists for 2019 are an average of 2018 and 2020 estimates.

Average annual percent change in direct patient care FTE varies by occupation.

As Oregon's population grows, the supply of direct patient care FTE must also grow to ensure continued access to health care professionals. Average annual percent change in direct patient care FTE varies by occupation, with some occupations keeping pace with the Oregon population's average annual growth of 1.3 percent during the same time period. Noteworthy growth was observed for physician assistants, counselors and therapists, licensed dietitians, nurse practitioners, physical therapy occupations, and occupational therapy occupations.

For advanced practice registered nurses, a 5.6 percent average annual growth for nurse practitioners (459 greater FTEs) overshadowed a 7.1 percent average annual decline in clinical nurse specialists and a 1.4 percent average annual decline in certified registered nurse anesthetists (16 and 72 fewer FTEs respectively). Pharmacist FTE decreased while certified pharmacy technician FTE grew. Similar trends were seen for social work and speech-language pathology occupations. Note axes are not the same between occupations and should not be compared.



Explore these data and learn more:
Oregon's licensed health care workforce supply dashboard.

Licensing boards shared insight on factors that may affect supply.

The health professional licensing boards who collaborate with the HWRP responded to HWRP questions about possible factors affecting supply trends over time. The boards noted the importance of such factors as the availability of good in-state educational programs; workforce-friendly state policies and regulations, such as low licensing fees and progressive telemedicine policies; and professional associations' efforts to facilitate clinical rotations and promote health care workforce occupations at varying educational institutions. Boards also speculated that growth in direct patient care FTE may have increased during this time period because overall demand for services increased.

Changes in demand for services

For example, increases in demand for dentistry and physical therapy could have been driven by an aging population. For physical therapy, there may have been a paradigm shift towards referring patients to physical therapy for pain instead of prescribing medications like opioids. FTE may have increased for medical imaging professionals due to policy changes which expanded opportunities for physician assistants and nurse practitioners to supervise interventional imaging services; additionally, there was an expansion of imaging services to rural hospitals. Another factor increasing FTE for some occupations may be reduced social stigma, or wider acceptance of or interest in mental health, wellness and nutrition, sleep awareness, and naturopathic medicine services.

Factors that may affect supply trends over time

- Overall demand for services
- Reduced social stigma, or wider acceptance of mental health, wellness and nutrition, sleep awareness, and naturopathic medicine services
- Workforce-friendly state policies and regulations
- Professional association support of students
- Insurance coverage and reimbursement
- Availability of in-state educational programs

Insurance coverage and reimbursement

Insurance coverage and reimbursement increased for some occupations, notably in mental health, nutrition counseling and hands-on chiropractic services. However, insurance companies declined to cover some health care services by naturopathic physicians, which could impact the amount of time spent in direct patient care. Some pharmacists have reported that their hours are being reduced in retail pharmacies around the state, possibly due to declining reimbursement or generally increased costs.

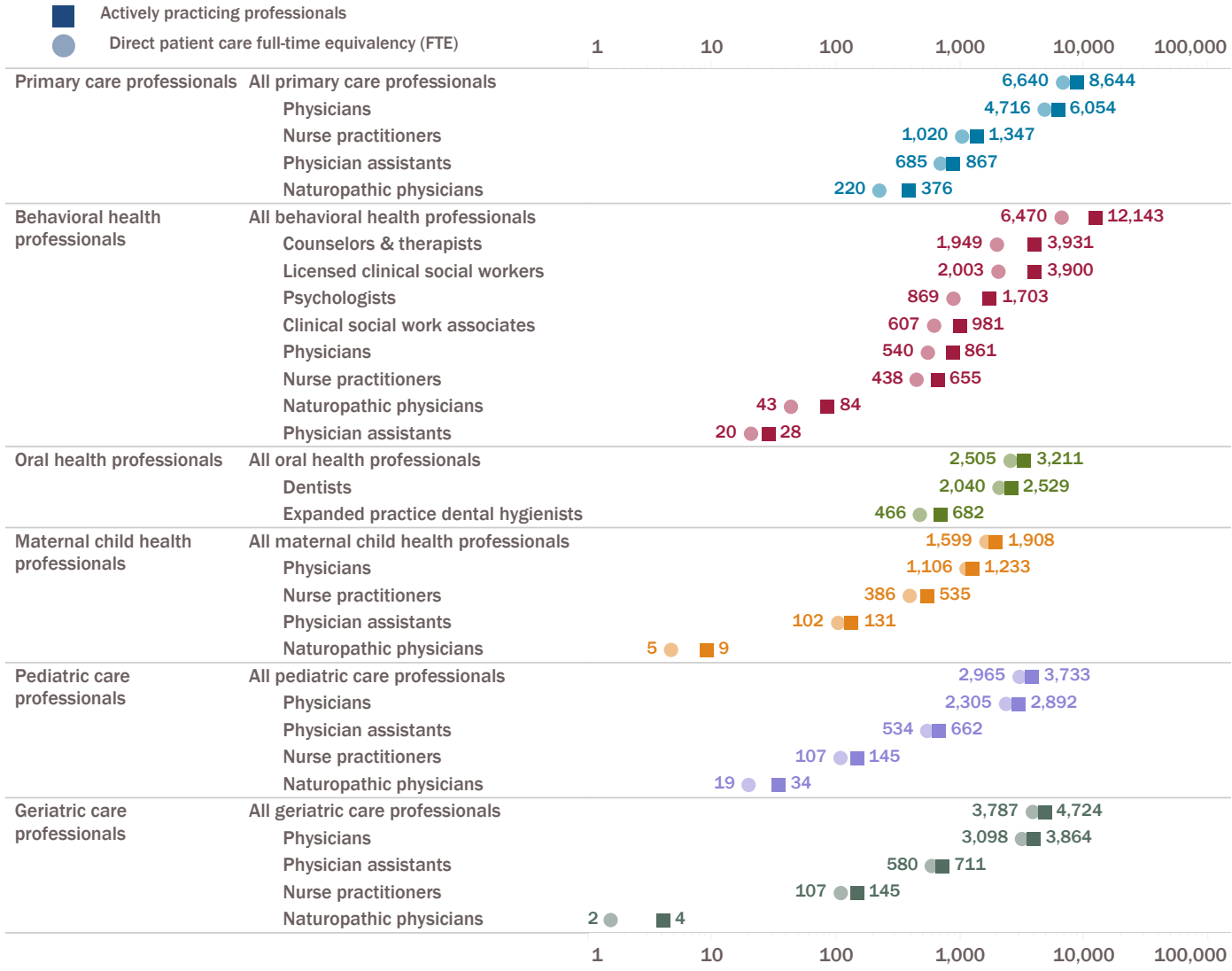
Educational programs

Lack of educational programs in Oregon may negatively impact supply. A respiratory therapy program at Lane Community College was recently closed and in 2018 a certified registered nursing program closed in Oregon. These closures could be correlated with other factors that influenced change in direct patient care FTE. There were no clinical nurse specialists programs in Oregon, so all new licensees come from programs in other states. Additionally, clinical nurse specialists do not generally perform duties that require time in direct patient care. Similarly, direct patient care is limited for non-clinical social workers compared with licensed clinical social workers. It's possible that employers may require or encourage recruitment of licensed clinical social workers, even when the position duties may not require that level of license, simply because it is the highest-level license offered. The Oregon Board of Licensed Clinical Social Workers is working with Portland State University to more effectively communicate the role of non-clinical social workers to employers and prospective students.

Supply estimates are also available for specialty groups of health care professionals for 2020.

In addition to evaluating the health care workforce supply by occupation, it is important to evaluate it through a multidisciplinary lens which groups health care professionals by specialty rather than by occupation. For example, physicians, nurse practitioners, physician assistants and naturopathic physicians may all specialize in primary care and provide this service to Oregonians. Supply estimates for the specialty groups of primary care, behavioral health, oral health, maternal child health, geriatric care and pediatric care professionals show the occupational diversity by specialty.

Behavioral health professionals were the largest specialty group with 12,143 actively practicing. There were an estimated 8,644 primary care professionals actively practicing in Oregon, the majority of which were physicians. Geriatric care and pediatric care professionals are subgroups of primary care professionals, so for example, an estimated 3,733 primary care professionals were also pediatric care professionals. Because specialty providers were identified by their self-reported specialty and they may report multiple specialties, providers may fall into more than one of the specialty groups shown here.



Note: Some professionals are included in more than one specialty group; specialty groups are not mutually exclusive.

County provider-to-population ratios from 2020 show differences in the distribution of professionals.

Determining whether the supply of health care professionals is sufficient to meet the needs of Oregonians across the state requires more than knowing the number of actively practicing professionals or direct patient care FTE for different health care occupations and specialty groups – it requires the assessment of supply estimates relative to the population at state and county levels. This sort of analysis gives insight into the density of health care professionals across Oregon. For measures that assess the supply of the workforce relative to an underlying population, supply estimates for direct patient care FTE are utilized.

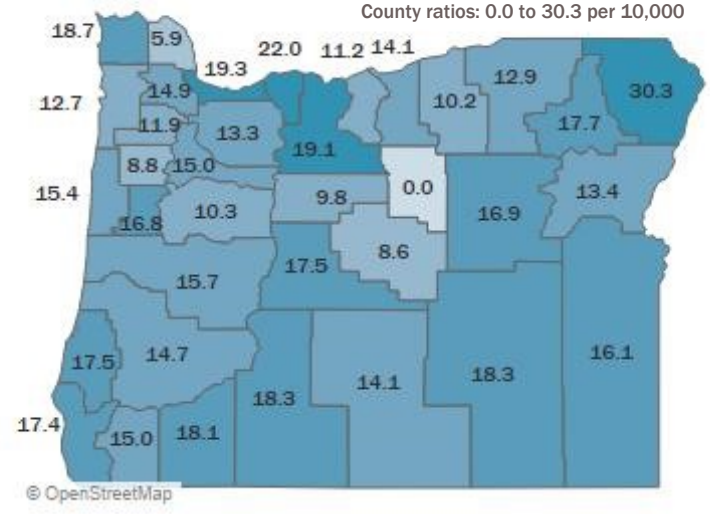
Statewide there were an estimated 15.7 primary care professionals per 10,000 Oregonians, although this provider-to-population ratio differs depending on county. County provider-to-population ratios for primary care providers range from 30.3 per 10,000 in Wallowa county to none reported practicing in Wheeler county, while some counties fall closer to the statewide average, like Marion county at 15.0 per 10,000.

Statewide there were an estimated 15.3 behavioral health professionals per 10,000 Oregonians with none observed in Sherman, Gilliam and Wheeler counties and with the highest densities observed in Multnomah (28.6 per 10,000) and Deschutes (17.7 per 10,000) counties.

Statewide there were an estimated 5.9 oral health professionals per 10,000 Oregonians, with no or few providers observed in Sherman, Gilliam and Morrow counties and with the highest density observed in Hood River county at 8.8 per 10,000.

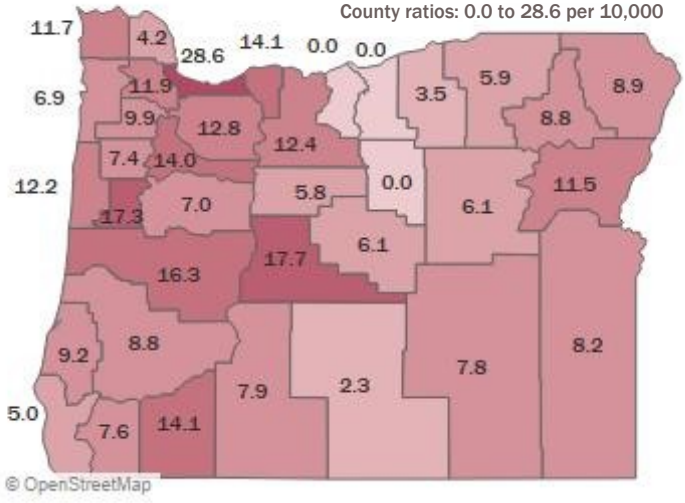
Primary care professionals

Statewide ratio: 15.7 per 10,000
County ratios: 0.0 to 30.3 per 10,000



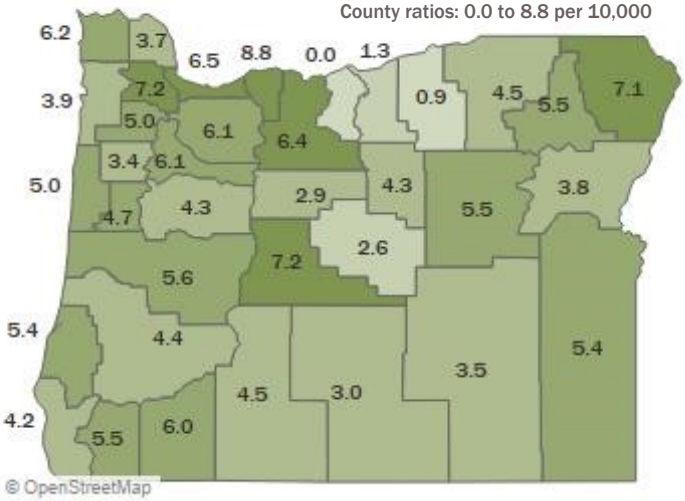
Behavioral health professionals

Statewide ratio: 15.3 per 10,000
County ratios: 0.0 to 28.6 per 10,000



Oral health professionals

Statewide ratio: 5.9 per 10,000
County ratios: 0.0 to 8.8 per 10,000



Population estimates sourced from 2018 PSU population research center.

On telehealth and mobile practices

These data currently focus on physical practice locations where the professionals deliver care and do not reflect areas where telehealth is available, nor do they fully reflect providers with a mobile practice. Future reports will assess telehealth and mobile practice in more detail.

County provider-to-selected target population ratios from 2020 contextualize demand for services.

To better understand where in Oregon there may be more demand for health care professionals, supply relative to selected target populations was measured for each of the specialty groups – defined in this report as populations that may be more likely to access services from certain specialty health care professionals. Since primary care professionals play a critical role in managing chronic illness,[22-25] provider-to-population ratios of primary care professionals relative to adults with at least one chronic disease is shown below. Statewide there are 3.7 primary care professionals per 1,000 adult Oregonians with at least one chronic disease.

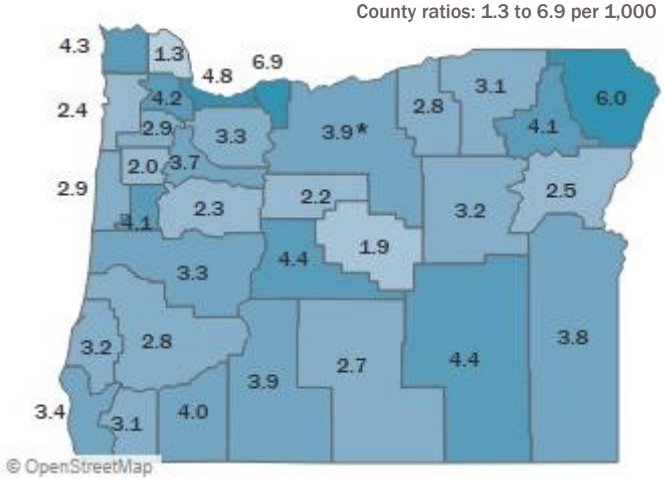
Maps with the following specialty groups and selected target populations are found on this page and the next:

- primary care professionals: adults with at least one chronic disease,[26,27]
- behavioral health professionals: adults with frequent mental distress,[26, 27]
- oral health professionals: adults without a dental visit in the last year,[26, 27]
- maternal child health professionals: mothers and children, based on number of births,[28]
- pediatric care professionals: children 18 years of age and under,[26]
- geriatric care professionals: adults 65 years and over for.[26]

Explore these data and learn more:
Oregon's licensed health care workforce supply dashboard.

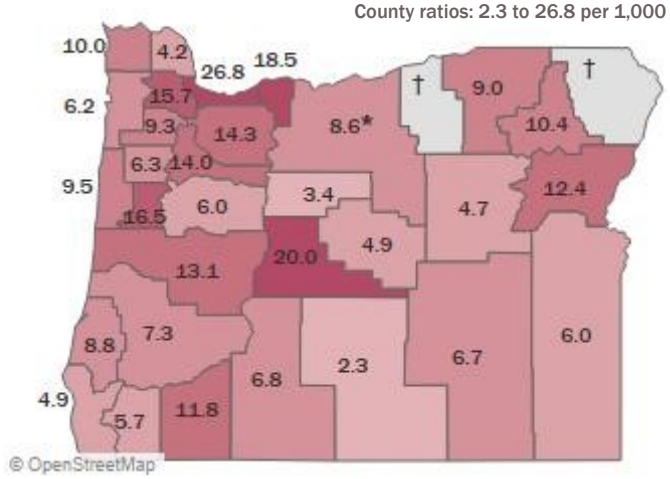
Primary care professionals and adults with at least one chronic condition.

Statewide ratio: 3.7 per 1,000
County ratios: 1.3 to 6.9 per 1,000



Behavioral health professionals and adults with mental distress.

Statewide ratio: 14.8 per 1,000
County ratios: 2.3 to 26.8 per 1,000

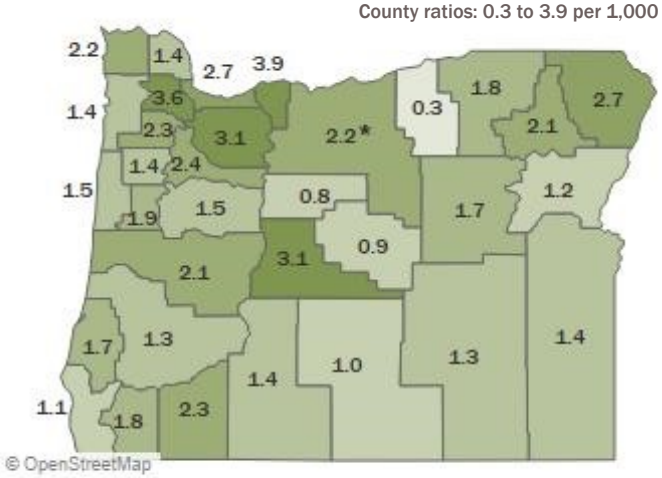


Selected target populations differ by specialty group of professionals; population estimates sourced from 2014-2017 BRFSS, 2014-2017 OHA vital statistics, and population estimates sourced from 2014-2017 PSU population research center.
Due to small populations of interest: *the counties of Gilliam, Sherman, Wasco and Wheeler are aggregated and referred to as the North Central region; †estimates for counties in gray are suppressed.

County provider-to-selected target population ratios from 2020 contextualize demand for services (continued).

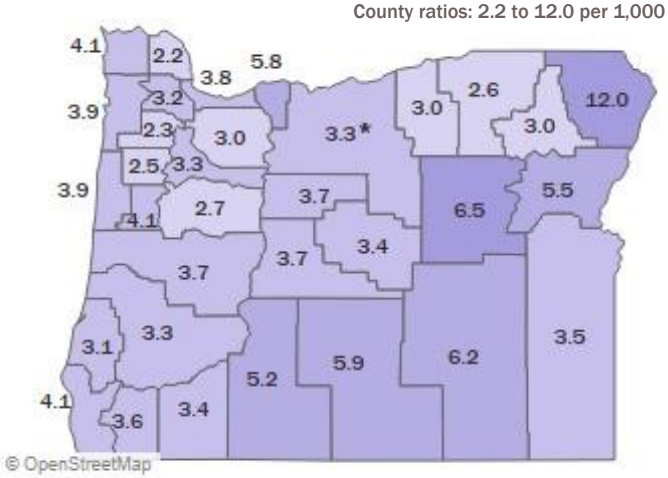
Oral health professionals and adults without a dental visit in the last year.

Statewide ratio: 2.3 per 1,000
County ratios: 0.3 to 3.9 per 1,000



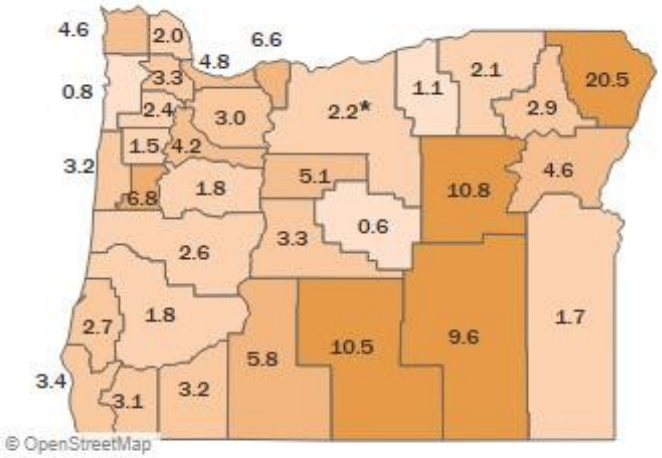
Pediatric care professionals and children 18 years of age and under.

Statewide ratio: 3.4 per 1,000
County ratios: 2.2 to 12.0 per 1,000



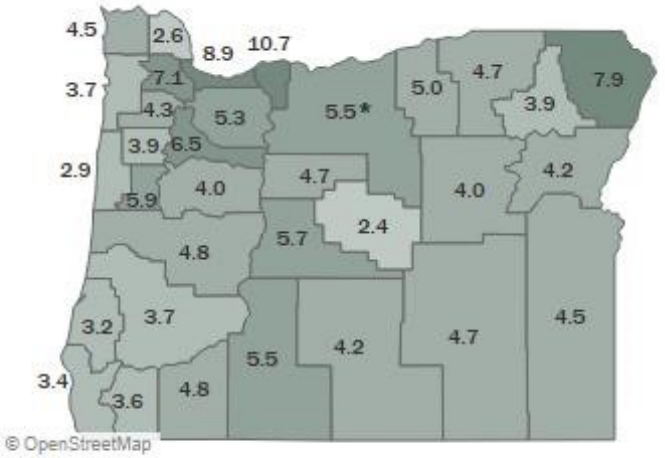
Maternal child health professionals and number of births.

Statewide ratio: 3.5 per 100
County ratios: 0.6 to 20.5 per 100



Geriatric care professionals and adults 65 years of age and over.

Statewide ratio: 5.6 per 1,000
County ratios: 2.4 to 10.7 per 1,000



Selected target populations differ by specialty group of professionals; population estimates sourced from 2014-2017 BRFSS, 2014-2017 OHA vital statistics, and population estimates sourced from 2014-2017 PSU population research center.
Due to small populations of interest: *the counties of Gilliam, Sherman, Wasco and Wheeler are aggregated and referred to as the North Central region; †estimates for counties in gray are suppressed.

Heat map summarizes differences between statewide and county provider-to-population ratios in 2020 (see next page).

Why is a heat map helpful?

If health care professionals were distributed equitably across Oregon, then provider-to-population ratios at the county level would have little variation. However, this is not the case. By assessing the percent difference between county provider-to-population ratios and the statewide ratio, counties with the lowest and highest density of health care professionals can be identified. The heat map depicted on the following page is a visual representation of state and county ratio differences from the maps presented previously.

How do you interpret the heat map?

Orange colors indicate that the county ratio is less than the statewide ratio. Blue colors indicate that the county ratio is higher than the statewide ratio.

In both cases, the darker the color the larger the difference. Rows that are predominantly orange indicate that health care professionals are underrepresented in the county. Columns that are predominantly orange indicate the health professionals in that occupation or specialty group are not equally distributed across the state. For example, the provider-to-population ratio of primary care professionals in Columbia county is 62 percent less than the ratio throughout the state overall. In Hood River, the provider-to-population ratio of primary care professionals is 40 percent higher than the ratio throughout the state.

By comparing provider-to-population ratios with provider-to-selected target population ratios, we can better identify which counties may have more demand for services.

For example, the provider-to-population ratio for primary care professionals in Lake county is 10 percent less than the statewide ratio. The ratio of primary care professionals relative to adults with at least one chronic condition, however, is 26 percent less than the same ratio at the state level, indicating that there may be a higher demand for primary care professionals in Lake county that may have not been apparent when looking at the provider-to-population ratio alone. Conversely, in Hood River county the primary care professional to adult with chronic disease ratio is 87 percent less than the statewide ratio, while the standard provider-to-population ratio is 40 percent less. Assessing workforce supply relative to selected target populations helps to identify counties which may have more or less demand for services, based population differences.

Geographic representation of the health care workforce.

Health care professionals are generally well represented in Deschutes, Hood River, Multnomah, Wallowa, and Washington counties and generally underrepresented in Columbia, Crook, Gilliam, Jefferson, Morrow, Sherman, and Wheeler counties. Primary care professionals are more evenly distributed throughout the state compared with other specialty groups; this is particularly true for pediatric care professionals and also geriatric care professionals. Of the specialty groups, unequal distribution is worst for behavioral health professionals and oral health professionals. Behavioral health professionals are overrepresented in Multnomah county and most underrepresented in Lake, Morrow, Gilliam, Sherman and Wheeler counties. Maternal child health professionals are most underrepresented in Crook and Tillamook counties.

Heat map summarizes differences between statewide and county provider-to-population ratios in 2020 (continued).

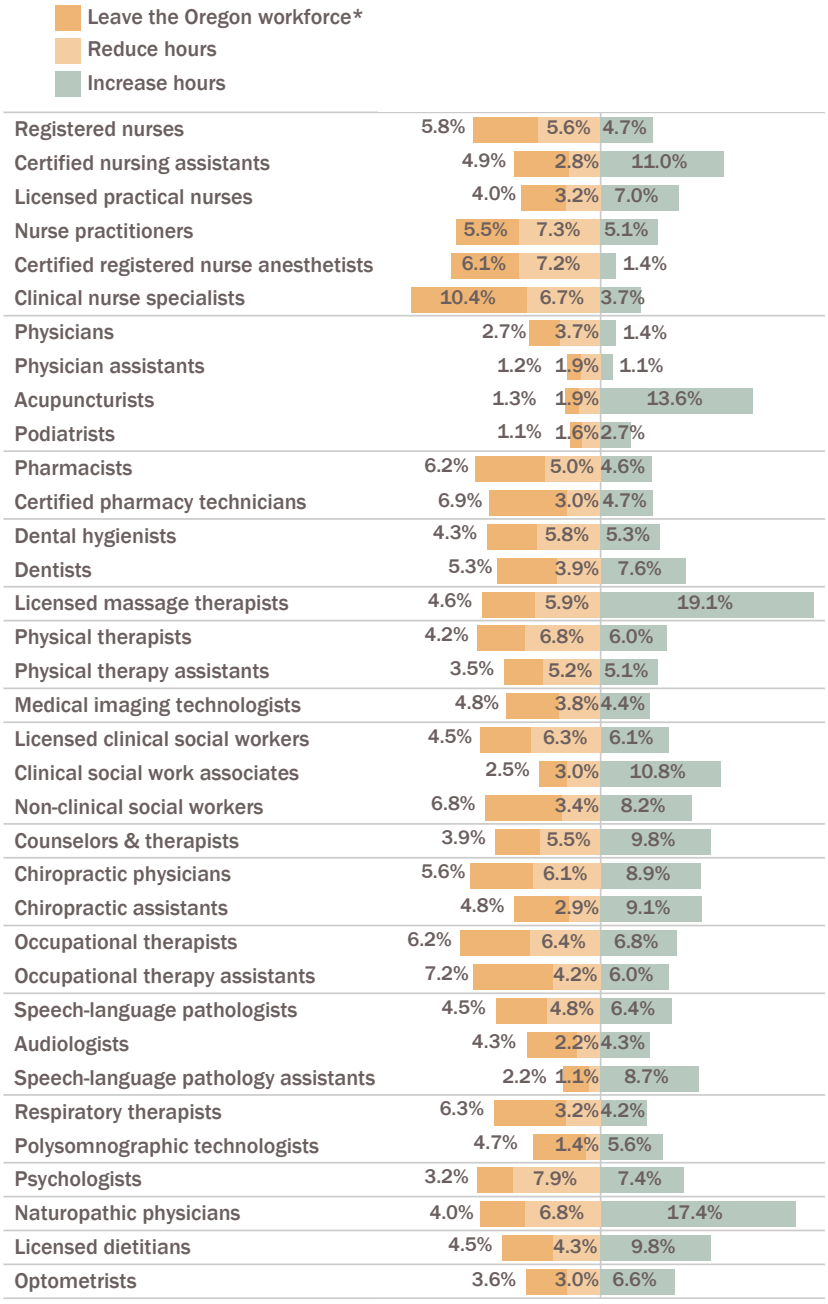
Columns: provider-to-population ratio and provider-to-selected target population ratio.

	Primary care professionals		Behavioral health professionals		Oral health professionals		Maternal child health professionals	Pediatric care professionals	Geriatric care professionals
	Pop	Selected Pop	Pop	Selected Pop	Pop	Selected Pop	Selected Pop	Selected Pop	Selected Pop
Baker	-15%	-33%	-25%	-16%	-35%	-51%	31%	61%	-25%
Benton	7%	11%	13%	12%	-21%	-20%	92%	20%	5%
Clackamas	-15%	-11%	-16%	-3%	3%	30%	-15%	-11%	-6%
Clatsop	19%	16%	-23%	-32%	4%	-7%	30%	20%	-20%
Columbia	-62%	-65%	-72%	-71%	-38%	-40%	-43%	-36%	-54%
Coos	11%	-13%	-40%	-41%	-9%	-29%	-22%	-9%	-44%
Crook	-45%	-49%	-60%	-66%	-57%	-60%	-82%	1%	-57%
Curry	11%	-7%	-68%	-67%	-30%	-54%	-5%	20%	-39%
Deschutes	11%	20%	16%	36%	22%	30%	-8%	9%	1%
Douglas	-6%	-25%	-43%	-51%	-26%	-43%	-49%	-5%	-35%
Grant	7%	-14%	-60%	-68%	-7%	-27%	204%	90%	-29%
Harney	16%	19%	-49%	-55%	-40%	-46%	169%	80%	-16%
Hood River	40%	87%	-8%	26%	49%	68%	87%	69%	90%
Jackson	15%	7%	-8%	-20%	2%	-4%	-10%	-2%	-15%
Jefferson	-37%	-40%	-62%	-77%	-51%	-64%	45%	9%	-16%
Josephine	-5%	-17%	-51%	-61%	-8%	-24%	-12%	6%	-35%
Klamath	17%	6%	-48%	-54%	-24%	-39%	64%	51%	-2%
Lake	-10%	-26%	-85%	-85%	-49%	-59%	196%	72%	-26%
Lane	—	-10%	7%	-11%	-5%	-12%	-28%	7%	-14%
Lincoln	-2%	-22%	-20%	-36%	-16%	-34%	-8%	16%	-49%
Linn	-34%	-38%	-54%	-59%	-27%	-36%	-49%	-21%	-29%
Malheur	3%	2%	-47%	-59%	-8%	-42%	-51%	4%	-21%
Marion	-5%	-1%	-8%	-5%	3%	1%	17%	-4%	15%
Morrow ‡	-35%	-25%	-77%	—	-85%	-88%	-68%	-12%	-11%
Multnomah	23%	30%	87%	82%	10%	14%	36%	11%	59%
North Central *	—	5%	—	-41%	—	-5%	-39%	-4%	-2%
Gilliam	-10%	—	-100%	—	-78%	—	—	—	—
Sherman	-28%	—	-100%	—	-100%	—	—	—	—
Wasco	22%	—	-19%	—	9%	—	—	—	—
Wheeler	-100%	—	-100%	—	-27%	—	—	—	—
Polk	-44%	-45%	-52%	-57%	-42%	-38%	-58%	-26%	-31%
Tillamook	-19%	-34%	-55%	-58%	-33%	-41%	-76%	14%	-34%
Umatilla	-18%	-17%	-62%	-39%	-23%	-25%	-41%	-25%	-17%
Union	13%	10%	-43%	-29%	-7%	-11%	-18%	-13%	-31%
Wallowa ‡	93%	63%	-42%	—	20%	17%	479%	251%	40%
Washington	-5%	15%	-22%	6%	21%	53%	-7%	-6%	27%
Yamhill	-24%	-22%	-35%	-37%	-15%	—	-33%	-34%	-23%

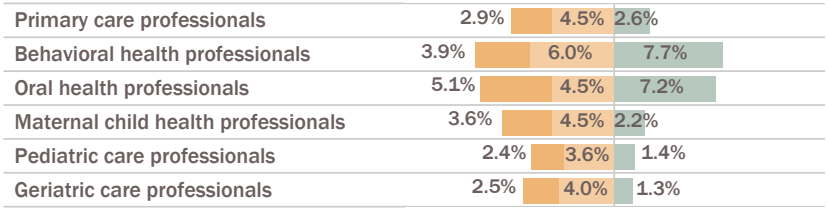
*Estimate for the North Central region is shown for the provider-to-select target population ratio for Gilliam, Sherman, Wasco and Wheeler counties. ‡Estimates for the provider-to-population with frequent mental distress is suppressed for Wallowa and Morrow counties.

Future plans to increase hours, reduce hours or leave the workforce in 2020.

All occupations



Specialty groups



Health care professionals reported plans for their practices over the next two years, including intentions to maintain, increase or decrease their practice hours, as well as intentions to leave the occupation or to move out of state. Those who intended to leave the Oregon workforce at the highest rates were clinical nurse specialists (10.4 percent), occupational therapy assistants (7.2 percent), certified pharmacy technicians (6.9 percent), non-clinical social workers (6.8 percent), and certified registered nurse anesthetists (6.1 percent).

Those who intended to increase practice hours at the highest rates were licensed massage therapists (19.1 percent), naturopathic physicians (17.4 percent), acupuncturists (13.6 percent), certified nursing assistants (11.0 percent), clinical social work associates (10.8 percent), licensed dietitians (9.8 percent) and counselors and therapists (9.8 percent). Note that plans to increase practice hours do not necessarily reflect the ability to do so; for example, providers might try to increase their hours but lack sufficient patient demand for services.

Out of the specialty groups, oral health professionals indicated the intention to leave the Oregon workforce at the highest rate of 5.1 percent, while 7.2 percent indicated that they intended to increase their practice hours over the next two years. Behavioral health professionals had intentions of increasing their practice hours at the highest rate of 7.7 percent.

Supplemental materials

The Health Care Workforce Reporting Program (HWRP)

The HWRP collaborates with 17 health regulatory licensing boards (seven since 2009, ten since 2016 and 2017) to collect, process, and analyze data for over 35 occupations to understand Oregon's health care workforce; inform public and private educational and workforce investments; and inform policy recommendations for the Governor's Office, legislative leadership and state agencies regarding Oregon's health care workforce (Oregon Revised Statute (ORS) 676.410; Oregon Administrative Rule (OAR) 409-026).

For more information about methodology and results, visit

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

Limitations

The Health Care Workforce Reporting Program (HWRP) collects data on occupations that are licensed in Oregon and are included in HWRP, so one major limitation of this data is that it does not represent the entire health care workforce. Data in this report was collected prior to the onset of the COVID-19 pandemic in the Spring of 2020. At this time, it is uncertain how the pandemic may affect the supply of the health care workforce in Oregon. The program does not currently collect data for many unlicensed health care professionals including traditional health workers, health care interpreters, qualified mental health professionals, addiction counselors, peer support specialists, licensed professional counselor interns, lab scientists/technicians, medical assistants, opthalmogist technicians, and more. Survey data comes only from renewing licensees, so this report assumes that new licensees would respond similarly to renewing licensees. There is a time lag in reporting, so estimates reflect a historical point in time. Length of participation in the HWRP varies by board, so reliable estimates over time vary by occupation. Currently we are unable to estimate the number of professionals who provide telehealth. This report adds data from three licensing boards that were not included in previous reports. It also introduces data on providers who have secondary practice locations in Oregon. For those reasons, data from this report should not be compared with data from earlier reports. Data is collected for up to two practice locations, so data may not be accurate for health care professionals who have three or more practice locations or who have a mobile practice. Lastly, diversity is not in the scope of this report; please find the most recent licensed health care workforce diversity report on our website.

Methodology and definitions

Data sources for this report include workforce data from HWRP for 2014 through the first quarter of 2020. HWRP collects workforce-related information directly from health care professionals via a survey embedded in the license renewal process. Health care professionals with an active license in each reporting year (January 2018, 2019 and 2020; month of verification varied by occupation in 2016), were included in this report. Estimates are dependent on licensees who completed the survey. Each licensee can report workforce data for up to two practice locations. Please refer to the HWRP's General Methods documentation on the website for further details. Other data sources for this report include population estimates from Portland State University (PSU) for 2014 through 2019,[26] from the Behavioral Risk Factor Surveillance System (BRFSS) county file 2014 through 2017,[27] and Oregon Vital Statistics for 2014 through 2017.[28]

Definitions

Workforce supply measures are stratified by occupation (license type), by specialty group or a combination of both.

- **Specialty groups** include primary care professionals, behavioral health professionals, oral health professionals, maternal child health professionals, pediatric care professionals, and geriatric care professionals.
- **Primary care professionals** include physicians and physician assistants who specialize in family practice, general practice, geriatric medicine, pediatrics, adolescent medicine, internal medicine, or obstetrics and

gynecology; nurse practitioners who specialize in family practice, geriatrics, pediatrics, internal medicine, or OB/GYN/women's health; and naturopathic physicians who specialize in family medicine, pediatrics, geriatrics or obstetrics.

- **Behavioral health professionals** include all psychologists, counselors and therapists, licensed clinical social workers, and clinical social work associates; physicians and physician assistants who specialize in psychiatry (addiction, neurology, child, adolescent, geriatric, or forensic) or psychoanalysis; nurse practitioners who specialize in psychiatry/mental health; and naturopathic physicians who specialize in mental health.
- **Oral health professionals include** dentists who specialize in oral health, pediatric dentistry or public health; and expanded practice dental hygienists who specialize in oral health, pediatric dentistry or public health and who report holding an expanded practice permit.
- **Maternal child health professionals** include physicians and physician assistants who specialize in obstetrics and gynecology, neonatology/perinatal or maternal and fetal medicine. Also included are primary care physicians and physician assistants who answer a subsequent question saying they provide maternal child health in their practice (important for rural communities where primary care physicians provide the bulk of maternity care); nurse practitioners who specialize in maternal-child health, OB/GYN/women's health; and naturopathic physicians who specialize in obstetrics.
- **Pediatric and geriatric care professionals** are subgroups of primary care professionals and include nurse practitioners and naturopathic physicians who specialize in pediatrics or geriatrics respectively, as well as physicians and physicians assistants who report any of the primary care specialties in addition to acknowledging in subsequent questions that they provide pediatric or geriatric services.
- Specialty groups are not mutually exclusive, so some professionals are included in more than one.

Workforce supply measures include licensed, actively practicing, direct patient care full-time equivalency (FTE), provider-to-population ratios, and provider-to-selected target population ratios at the state and county levels.

- **Licensed professionals** include all health care professionals who hold an active license from an Oregon health licensing board.
- **Actively practicing professionals** are estimated by multiplying the number of licensed professionals by the proportion of survey respondents who indicate they currently provide services to Oregon residents and have a practice location in Oregon.
- **The equivalent number of professionals providing full-time direct patient care (direct patient care FTE)** is estimated by multiplying the number of actively practicing professionals by the average hours spent in direct patient care per week divided by 40 (note that this calculation caps the number of hours per week at 80 per practice location).
- **Provider-to-population ratios** are calculated by dividing direct patient care FTE by the PSU population estimate for the reporting year. PSU estimates for 2016, 2017, 2018, and 2019 are used for the HWRP reporting years 2016, 2018, 2019, 2020 (respectively). Provider-to-selected target population ratios are calculated by dividing direct patient care FTE by selected target populations are as follows:
    - Primary care providers per population of adults with one or more chronic health conditions (including asthma, arthritis, diabetes, cancer, heart disease, depression or COPD)[26, 27]
    - Behavioral health professionals per population of adults with frequent mental distress (14+ days in past 30 days)[26, 27]
    - Oral health professionals per population of adults without a dental visit for any reason within past year[26, 27]
    - Maternal child health providers per births[28]
    - Pediatricians per children 18 and under[26]
    - Geriatricians per adult 65 and older[26]

These denominators (1) were the prevalence of risk factors from BRFSS[27] multiplied by the average population estimates from PSU[26] or (2) were the average population estimates for age groups from PSU[26] or (3) were average birth estimates from OHA vital statistics[28] (all averaged for the years 2014-2017).

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29. Icons made by Tyler Gobberdiel and Adrien Coquet from The Noun Project, 2020.

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