Rural Medical Training Facilities Workgroup
Established by 2017 Budget Note to HB 5006

DATE: September 15, 2018

TO: Oregon Legislative Assembly and the Legislative Administrator

FROM: Rural Medical Training Facilities Workgroup
Laurie Skillman, Oregon Department of Veterans' Affairs, Workgroup Coordinator

Legislative Report on Rural Medical Training Facilities Workgroup
Budget Note to HB 5006 (2017)

Link to Executive Summary and this Legislative Report: https://www.oregon.gov/odva/Connect/Pages/Reports.aspx
Contact: Laurie Skillman, ODVA Senior Policy Advisory on this report and related reporting at laurie.skillman@state.or.us

Overview and Purpose of the Workgroup

The Rural Medical Training Facilities Workgroup (Workgroup) was established in the 2017 Oregon State Legislative Session in a Budget Note to HB 5006 to the Oregon Department of Veterans' Affairs (ODVA) *(Attachment A)*. ODVA convened and facilitated the Workgroup in collaboration with the Oregon Health Authority and the Oregon State Board of Nursing, to investigate issues related to alleviating shortages of skilled and experienced nurses, medical technicians, allied health professionals and behavioral health (mental health) professionals, particularly in the City of Roseburg and in Douglas County.

The Workgroup was directed to consider issues related to establishing a medical training facility in partnership with local academic programs. In addition, the Workgroup was asked to consider medical training programs for veterans transitioning from the military to the workforce. This report to the Legislature was prepared by ODVA and documents the results of the Workgroup as directed by the budget note.

Executive Summary

The Workgroup approached the legislative directive by first determining whether and to what extent healthcare workforce shortages exist and then consider alternative solutions to alleviating the shortages.

After careful examination and consideration of significant data available, the Workgroup came to consensuses that significant current and projected workforce shortages exist in multiple allied health and behavioral health fields in Roseburg/Douglas County, throughout rural Oregon, and statewide.

The Workgroup then considered alternative solutions and came to consensus that they would not recommend or endorse any particular solution; instead, they would simply present all alternatives in the report to the legislature.

Participants in the Workgroup and Meetings

A diverse group of individuals participated in the Workgroup, including state Legislators and local elected officials. Participants included representatives from Oregon Department of Veterans' Affairs,

Oregon Health Authority, Oregon State Board of Nursing, Umpqua Community College, the Governor's Office, and local participants including local Oregon tribes, the City of Roseburg, Douglas County, local hospital or medical facilities, including the Roseburg VA Medical Center (Roseburg VAMC), and Mercy Medical Center. Local medical practitioners with experience in training nursing and medical technician students also participated. ODVA provided staffing and coordination. *(Attachment B)*. The Workgroup met six times from September 2017 to August 2018. There were 15-20 regular participants of the Workgroup, and 8-15 additional individuals attended each meeting.

Two-Stage Approach

The Workgroup used a two-stage approach to investigate the issues. First, the Workgroup collected and reviewed the data and statistics on the actual shortage of allied and behavioral health professionals, including but not limited to nurses and medical technicians. Second, the Workgroup considered potential solutions to determine how to alleviate the shortage of medical professionals and fill the needs of the community and the region, including examining the capacity of existing medical training institutions in Oregon and establishing a medical training facility.

Part I: The Need for Skilled and Trained Medical Workforce

The Workgroup determined that significant current and projected workforce shortages exist in multiple allied health and behavioral health fields in Roseburg/Douglas County, throughout rural Oregon, and statewide. Additionally, the Workgroup found that existing educational program capacity for those fields/occupations in the state is insufficient to resolve workforce shortages, particularly in Roseburg/Douglas County and other rural areas.

Part II: Solutions for Alleviating Skilled and Trained Medical Workforce Shortage, Including a Medical Training Facility

The Workgroup considered a number of alternative solutions to resolve allied and behavioral health workforce shortages. The Workgroup determined that there is no single solution, and a better approach would be to have a multi-pronged approach and use a variety of solutions. Among the potential solutions considered are: the expansion and creation of incentive programs; recruitment bonuses for health care and behavioral health care providers; competitive salaries and incentives for health care professors and teachers; and the promotion of health careers at secondary schools. The most comprehensive approach considered was to build educational capacity through a regional medical college in Roseburg that offers advanced (Bachelors, Masters and PhD) degrees in multiple high-demand allied and mental health fields.

This legislative report provides key findings on allied and mental health workforce shortages, limitations of current educational program capacity in Oregon, and potential solutions, including the creation of a regional non-physician medical college. The main components of a preliminary business plan developed by Oregonians for Rural Health and its supporting partners that outlines an initial framework for degree offerings and programs is included in this report.

Part I: Determination of Need for Skilled and Trained Medical Workforce
Evaluation of Healthcare Workforce Demand

Healthcare Demand in Oregon

The demand for healthcare in Oregon is growing steadily, including in rural communities. More Oregonians have health insurance today due in large part to the implementation of the Affordable Care Act in 2013. According to the Oregon Health Authority (OHA) 2017 Oregon Health Insurance Survey *(Attachment C)*, about 94 percent of Oregonians have health insurance. In addition, the general population is aging, which further drives up demand for chronic care and other services. The number of elderly patients in counties throughout Southern Oregon is notably higher than in urban centers of the state by 4 to 16 percent *(Attachment D)*.

Hospitals and providers have continued to expand services to keep up with demand. However, workforce shortages in multiple allied and behavioral health fields make maintaining healthcare services increasingly difficult despite aggressive and often costly recruiting efforts; expanding service to meet the future needs will be a significant challenge. Rural communities, in addition to veteran medical facilities, have reported acute allied and behavioral health workforce shortages that will pose substantial barriers to healthcare access. Understaffed hospitals and clinics decrease the quantity and quality of care provided. Longer wait times to see a doctor, in addition to less time spent per patient, are already making news headlines.

Review of Data on Healthcare Workforce

The Workgroup reviewed data and statistics from a number of sources that provided a comprehensive understanding of allied and behavioral health workforce shortages and needs in Oregon, Roseburg and Douglas County.

Data sources included:

- Current job openings among healthcare providers in the city of Roseburg/Douglas County, including:
    - CHI Mercy Health, July 2018 *(Attachment E)*
    - Roseburg VA Medical Center, July 2018 (*Attachment F)*
- Oregon Employment Department: Oregon's Future Workforce Needs: Job Growth to 2027 by Industry *(Attachment G)*
- Oregon State Board of Nursing Licensing Report, July 2018 *(Attachment H)*
  Oregon Health Authority Office of Health Analytics:
    - Oregon's Medical Workforce *(Attachment I)*
    - Oregon's Nursing Workforce *(Attachment J)*
    - Oregon's Physical Therapy Workforce *(Attachment K)*
    - Examining the Health Care Workforce Needs for Communities and Patients in Oregon 2018 *(Attachment L)*
- Oregon Health Sciences University: Oregon Areas of Unmet Health Care Need Report August 2017. *(Attachment M)*
- Oregon State Board of Nursing Approved Nursing Education Program List *(Attachment N)*

Oregonians for Rural Health

Oregonians for Rural Health, based in Douglas County and founded in January 2016, is a coalition of community leaders, healthcare providers, economic development groups, educators and others dedicated to promoting the health and vitality of rural communities in Oregon.

In the spring of 2018, Oregonians for Rural Health and its supporting partners determined that college programs should be phased-in over time, starting with allied and mental health fields/occupations that are in high demand. The following were identified as prospective advanced-level phase one programs for the college based on input from regional hospitals, clinics and the Roseburg VAMC:

- Nursing
    - Registered Nurse (Bachelor and Master of Nursing Level)
    - Nurse Practitioner (Master of Nursing and Doctoral Level)
- Mental Health
    - Clinical Psychologist/Licensed Professional Counselor (Master Level)
    - Clinical Social Worker (Bachelor and Master Level)
- Physical Therapist (Doctoral Level)
- Radiological Technologist (Bachelor Level)
- Medical/Clinical Laboratory Technologist (Bachelor Level)

Oregon Center for Nursing Analysis

Oregonians for Rural Health contracted with the Oregon Center for Nursing (OCN) to evaluate the current and projected workforce demand for the selected allied and mental health fields/occupations both statewide and in rural counties, in addition to state-based educational program capacity. The following is a summary of key findings *(see Attachment N for the full OCN report)*.

OCN's allied and mental health workforce analysis was primarily based on Oregon Employment Department (OED) 2017-2027 employment projections and job openings data. Data from the 2014 OED Jobs Opening Survey was also used, in addition to licensing data from state licensing boards. OCN was directed by Oregonians for Rural Health to focus its evaluation on those fields/occupations requiring baccalaureate and above level degrees given the planned focus of the college. However, data from the OED does not report nursing workforce by level of education. Therefore, supply and need information do not explore the differences in education level for nurses.

It should be noted that OED 2017 current employment data for registered nurses does not comport with nurse licensing figures provided by the Oregon State Board of Nursing (OSBN) *(Attachment H).* As indicated by OSBN in the attachment, this discrepancy is due in part to the fact that not all actively licensed nurses are part of the workforce in the state. A license is required to provide care to any Oregonian even if the nurse is not physically located in Oregon.

Table 1 below illustrates is number of healthcare workers for the selected fields/occupations in Oregon during 2017. The projected 2027 employment figures for each field/occupation are also provided, in addition to total openings with breakdowns of openings due to industry growth and attrition.

Table 1: Estimated and Projected Employment and Job Openings by Occupation (2017-2027)*

Program	2017 Employment	2027 Employment	Total Openings	Openings Due to Growth	Openings Due to Attrition
Registered Nurse	37,353	43,600	26,635	6,247	20,388
Nurse Practitioner	1,762	2,376	1,608	614	994
Physical Therapist	3,052	3,885	2,222	833	1,389
Radiologic Tech.	2,254	2,551	1,517	297	1,220
Med/Clinical Lab Tech	2,281	2,521	1,693	240	1,453
MH Counselor	3,158	3,715	4,068	557	3,511
MHSA Social Worker	2,304	2,684	2,861	380	2,481

*Source: Oregon Employment Department, July 2017

OCN also provided an analysis of occupational deficits for the selected fields/occupations by OED Region to gauge workforce demand in rural counties (see Tables 2 and 3 below).

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Table 2 – Oregon Employment Department Regions

OED Region	Counties
East Cascades	Crook, Deschutes, Gilliam, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco, Wheeler
Eastern Oregon	Baker, Grant, Harney, Malheur, Morrow, Umatilla, Union, Wallowa
Lane	Lane
Mid-Valley	Linn, Marion, Polk, Yamhill
Northwest Oregon	Benton, Clatsop, Columbia, Lincoln, Tillamook
Portland Tri-County	Clackamas, Multnomah, Washington
Rogue Valley	Jackson, Josephine
Southwestern Oregon	Coos, Curry, Douglas

Table 3 – Occupation Deficits by OED Region

Occupation	OED Regions with 20% Deficit
Registered Nurse	Eastern Oregon, Mid-Valley, Northwest Oregon, Southwestern Oregon
Nurse Practitioner	East Cascades, Mid-Valley
Physical Therapy	Mid-Valley
Radiologic Tech	Mid-Valley
Med Lab Tech	Eastern Oregon, Mid-Valley, Northwest Oregon, Southwestern Oregon
MH Counselors	Mid-Valley, Northwest Oregon, Rogue Valley
MHSA Social Worker	Eastern Oregon, Northwest Oregon

*Source: Oregon Employment Department, July 2017

Oregon Center for Nursing Analysis of Current Academic Capacity

Ample academic opportunities are critical to ensuring an adequate supply of qualified healthcare workers. OCN evaluated state-based educational program capacity for the selected fields/occupations based on three metrics. The first metric was the number of schools or programs in the state to meet the projected need. The second metric was the number of graduates from each program within the occupation. The third metric was the acceptance rate, which is the percent of applicants who were admitted into the school or program. Taken together and combined with other measures, such as the number of annual job openings, it is possible to assess whether adequate capacity exists in the current educational system to meet the need for allied healthcare occupations.

Table 4 below provides the number of schools for the selected fields/occupations, in addition to admissions, application and acceptance rates. As illustrated, applicants for many of the fields/occupations have few choices of where to study. Four of the seven fields of study have only one or two schools available in Oregon and many are extremely competitive for admission. Additionally, of the 46 academic programs listed, only nine are located outside of the Portland area and only four programs are located south of Eugene.

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Table 4 – Number of Schools, Admission, and Applicants (2016-2017 Academic Year)

Program	Number of Schools	Number Admitted	Number of Applicants	Acceptance Rates
Registered Nurse*	23	1,740	7,876	22%
Nurse Practitioner	2	29	81	36%
Physical Therapist	2	94	1,645	6%
Radiologic Tech.	1	48	100	48%
Med/Clinical Lab Tech	1	50	82	61%
MH Counselor	11	208	767	25%
MHSA Social Work	4	343	810	35%

*Source: Data collected in 2018 by the Oregon Center for Nursing
*Note: Data for 17 associate level degree programs are included

Table 5 below provides the number of annual graduates for selected fields/occupations compared to OED estimated annual job openings. For most occupations, there appear to not be enough graduates to fill all projected job openings. Based on these statewide figures, Oregon's educational system is not matriculating enough graduates to meet projected need alone. This would indicate that many jobs will not be filled and that employers and the community must rely on other means to meet needs, either by migration from other states, or the use of non-permanent workers also known as "travelers."

Table 5 – Number of Annual Graduates and Job Openings

Occupation	Annual Graduates (2016-2017)*	OED Estimated Annual Job Openings**
Registered Nurse***	1,570	2,664
Nurse Practitioner	89	161
Physical Therapist	92	222
Radiologic Technologist	45	152
Med/Clinical Laboratory Tech	47	169
MH Counselor	166	407
MHSA Social Worker	313	286

*Source: Oregon Employment Department, July 2017; does not include projections for the U.S. Dept. Veteran Affairs
**Source: Oregon Center for Nursing, August 2018
***Note: Data from the 17 associate degree nursing programs in Oregon are included.

Oregon Center for Nursing Key findings

Key findings from the research analysis by the Oregon Center for Nursing include:

- The current supply of healthcare workers in nursing fields (BSN, MSN and NP), physical therapy, medical/clinical and radiologic technology, mental health counseling and licensed social work is inadequate to provide critical access to healthcare in many of regions, including rural communities, across Oregon
- Projections of future industry growth and current job openings strongly suggest there is a need for more healthcare workers.
- A maldistribution of nursing, allied health and mental health professionals favoring metro areas exists leaving rural hospitals and healthcare organizations consistently experiencing workforce shortages in crucial areas
- Oregon's current educational capacity alone will not meet the need for healthcare workers regionally or across the state
- Education and trainings opportunities required for individuals to obtain advanced-level degrees (bachelor's, master's and doctorate level) are lacking in the state

Part II: Solutions for Alleviating Skilled and Trained Medical Workforce Shortage, Including a Medical Training Facility

The Workgroup considered a number of potential solutions to help alleviate allied and mental health workforce shortages. However, it was important to the participants to state that they did not come to consensus on one or more of these solution; instead, they wanted to simply present all the information they had considered to the Legislature.

Potential Solutions to Alleviating Workforce Shortage

The potential solutions to help alleviate allied and mental health workforce shortages the workgroup considered included:

- Expand and enhance existing incentive programs for allied and mental health professionals to practice in rural settings, such as the Health Care Provider Incentive Program loan repayment program, established by the Legislature in HB 3261 (2017. This is administered the OHSU Office od Rural health.
- Create specific new incentive programs for medical professionals in allied and mental health fields.
- Provide educational programs and incentives for veterans with active service medical training to pursue health careers in U.S. Department of Veterans Affairs and civilian medical centers.
- Forge strong, mutually beneficial partnerships with federal U.S. Department of Veterans Affairs Divisions related to community partnerships, workforce development and veteran student instruction.
- Develop new incentive programs to increase the number of teaching faculty at all degree levels (especially in nursing). It is very difficult to recruit and retain faculty due to low pay.
- Promote health careers in secondary schools.
- Create a pipeline of skilled healthcare professionals by building a medical college that offers advanced nursing, allied and mental health degrees.

Building a Regional Allied and Mental Health Medical College

Among the potential solutions considered, building a regional allied and mental health medical college in Southern Oregon was presented by Oregonians for Rural Health and its supporting partners (the coalition) as a long-lasting solution to providing reliable healthcare access, while serving as an economic driver for the local and regional economy. The coalition developed a preliminary business plan to demonstrate feasibility and to serve as an initial framework for degree offerings and programs to be confirmed and finalized by the academic institution/institutions secured to administer college.

The following is a summary of the preliminary business plan that outlines the college vision, selection of programs, footprint and estimated costs, partnerships for student recruitment and training, and location. The full preliminary college business plan is included in this report *(Attachment P)*.

Overview:

Analysis of workforce demand in multiple allied and mental health fields demonstrates that the current and projected supply of health care workers is inadequate to meet healthcare demand, as outlined in Part I of this report (Determination of Need). In addition, educational programs in the state offering allied and mental health instruction are primarily located outside of Southern and rural Oregon in urban centers. Admission into a majority of the existing allied and mental health programs in the state is highly competitive, further limiting educational opportunities.

The collation proposes that a regional college in Southern Oregon offer degree programs in allied and mental health fields with the highest workforce demand, while complementing and building upon existing educational programs offered by community colleges and other institutions. The college would therefore focus on advanced (Bachelor, Master and PhD level) degree programs in the high demand fields of nursing (BSN, MSN and DNP), physical therapy, radiology, medical/clinical lab technology, licensed clinical psychology and social work. Other allied and mental health degree programs may be phased in over time, depending on demand.

It is anticipated that the college will be public, private, or a public/private partnership, depending on the academic institution/institutions secured to manage administration. The city of Roseburg is the targeted site for the college given it is well-situated on the I-5 corridor, centrally located in Southern Oregon and strong local support exists from city and county governments. The location is also in close proximity to the U.S. Department of Veterans Affairs' largest regional medical facility where a new 150,000 square-foot hospital is being built.

College Vision

- Build a top-rated college providing advanced instruction in multiple high-demand allied and mental health fields/occupations.
- Serve as a reliable pipeline of skilled and specialized allied and mental health providers for both the private sector (particularly in Southern/rural Oregon) and U.S. Department of Veterans Affairs (VA).
- Offer advanced-level (Bachelor, Master and PhD level) degrees in multiple high-demand allied health fields, including mental health.
- Partner with state-of-the-art regional hospitals and clinics to provide scholarship opportunities and critical hands-on learning through clinical rotations.
- Collaborate with associate level health programs at multiple regional community colleges.
- Provide new accelerated program pathways, including priority placement for veterans with active service medical training to obtain allied and/or mental health degrees and practice at the VA or in the private sector.
- Integrate physical and behavioral instruction across degree programs.
- Ensure ongoing access to local quality healthcare for our communities and veterans.

Selection of Programs

An assessment of allied and mental health workforce needs among regional hospitals, clinics and VA medical facilities was conducted to determine which fields/occupations were among those with the highest demand to inform program selection for the college. The following were identified as phase one programs for the college:

- Nursing
    - Bachelor and Master of Science in Nursing (BSN and MSN)
    - Doctor of Nursing Practice (DNP)
- Mental Health
    - Master of Arts in Clinical Mental Health Counseling
    - Bachelor and Master of Arts in Social Work (BSW and MSW)
- Doctor of Physical Therapy (DPT)
- Bachelor of Science in Radiologic Technology (BSRT)
- Bachelor of Science in Medical Laboratory Science (BMLS)

Estimated enrollment and tuition figures for phase one programs can be found in the plan *(Attachment P).*

Future academic degree programs in allied health fields that the coalition explored for a second phase of the college are as follows:

- Master of Science Physician Assistant (MSPA)
- Doctor of Pharmacy (Pharm-D)
- Doctor of Clinical Psychology (Psy-D)
- Master of Science in Rehabilitation Counseling (MSRC)
- Doctor of Occupational Therapy (OTD)
- Master of Science Speech-Language Pathology
- Bachelor of Science Cardiology Technician (BSCT)
- Bachelor of Science Health Education
- Bachelor of Science Health Information Management (BSHIM)
- Master of Health Services Administration (MHSA)

Footprint and Estimated Costs

Initial estimates project the college footprint for phase one to be approximately 152,500 square feet. By academic year four, the college is expected to instruct nearly 900 students. The business plan also provided a preliminary assessment of costs to build, open, and operate the college. The Oregonians for Rural Health worked with industry experts and a local Roseburg engineering firm to provide the following projections (based on projected enrollment figures):

- Initial estimates for land and capital costs total approximately $86 million
- Operating funds before the college becomes solvent in year three of student enrollment are approximately $23 million
- Total start-up funding needed totals approximately $109 million over five years

With the college as a stand-alone institution, the initial projections have the college breaking even in year three of being fully operational with students. The start-up costs include hard and soft costs for the construction of the college, along with land acquisition. A full budget projection summary that includes revenue and expenses can be found in *(Attachment P).*

Veteran Affairs and Regional Partnerships

A key component of the regional allied and mental health college will be establishing close partnerships with the Roseburg VAMC, rural Oregon hospitals and healthcare organizations, and existing educators that include community colleges.

The coalition presented numerous possibilities for VA-specific programming that would serve as mutually beneficial to veterans in rural Oregon and the VA VISN 20 region (which includes Alaska, Washington, Idaho, and Oregon):

- Create accelerated pathway programs for veterans who are leaving the service with medical training but have no professional certification to work as a healthcare professional in civilian settings
- Utilize existing VA programs – like the GI Bill and others (i.e. the 2014 Choice Act) – to develop a practical and affordable route for veterans to advance their education and go on to serve communities and other veterans
- Reserve up to 50 percent or more of more student seats for veterans who meet college application requirements

Key partnerships will also be developed with hospitals and healthcare organizations throughout Oregon – especially those in rural areas – to obtain commitments for student recruitment, scholarships, and clinical rotations. It is the coalition's intent that participating hospitals and clinics would provide externships and clinical rotations for students at the college. This would provide enriching, hands-on educational experiences at top-rated medical facilities. Students would have the opportunity to be part of multi-disciplinary teams, working under highly-skilled and experienced medical professionals—many who are recognized leaders in their fields.

Clinical rotations would also give students first-hand exposure to leading industry practices and state-of-the-art medical technologies, plus serve as pathways into professional jobs. And, to further ensure students connect with jobs post-graduation, placement programs would be coordinated with healthcare providers and occupational organizations/associations.

It is also the intent of the coalition for the college to complement and collaborate with community colleges by establishing articulation agreements to provide pathways for students to advance their education upon receiving associate degrees and pre-requisite training in pre-health fields. Additional programming possibilities are also explored in the business plan to pursue joint instructional programs, dual-enrollment or degree partnership programs, and synergies across a range of different areas such as sharing faculty, support staff, and equipment.

Location

The city of Roseburg is the targeted site for the college given it is well-situated on the I-5 corridor and is centrally located in Southern Oregon where clinical rotations and job placement can be focused to address the region's areas that rank high in unmet healthcare need by the Oregon Office of Rural Health. There are multiple build sites with suitable infrastructure available to accommodate a large college campus footprint. Locating the college in proximity to CHI Mercy Health and the Roseburg VA hospital will aid in facilitating educational and clinical rotation opportunities for students. Additionally, the initiative has the support of the City of Roseburg and surrounding communities, Douglas County, and local state legislators.

Attachments

Attachment	Description
A.	HB 5006 Budget Note
B.	Rural Medical Training Facilities Workgroup Participants
C.	Oregon Health Authority (OHA) 2017 Oregon Health Insurance Survey Link: https://www.oregon.gov/oha/HPA/ANALYTICS/InsuranceData/2017-OHIS-Early-Release-Results.pdf
D.	U.S. Census Bureau QuickFacts: Jackson County, Oregon; Josephine County, Oregon; Curry County, Oregon; Coos County, Oregon; Douglas County, Oregon; Oregon Link: https://www.census.gov/quickfacts/fact/table/jacksoncountyoregon,josephinecountyoregon,currycountyoregon,cooscountyoregon,douglascountyoregon,or/PST045217)
E.	CHI Mercy Allied Health Job Openings (July 23, 2018)
F.	Department of Veterans Affairs Roseburg Healthcare System Job Opening (July 2018)
G.	Oregon Employment Department: Oregon's Future Workforce Needs: Job Growth to 2027 by Industry Link: Oregon's Future Workforce Needs: Job Growth to 2027 by Industry
H.	Oregon State Board of Nursing Licensing Report, July 2018
I.	Oregon Health Authority Office of Health Analytics: Oregon's Medical Workforce Link: Oregon's Medical Workforce
J.	Oregon Health Authority Office of Health Analytics: Oregon's Nursing Workforce Link: Oregon's Nursing Workforce
K.	Oregon Health Authority Office of Health Analytics: Oregon's Physical Therapy Workforce Link: Oregon's Physical Therapy Workforce
L.	Oregon Health Authority Office of Health Analytics: Link: Examining the Health Care Workforce Needs for Communities and Patients in Oregon 2018
M.	Oregon Health Sciences University: Oregon Areas of Unmet Health Care Need Report August 2017. Link: Oregon Health Sciences University: Oregon Areas of Unmet Health Care Need Report August 2017
N.	Oregon State Board of Nursing Approved Nursing Education Program List
O.	Oregon Center for Nursing Healthcare Workforce and Educational Program Report
P.	Southern Oregon Allied & Mental Health College Business Plan

Attachment A: Budget Note to HB 5006

The Rural Medical Training Workgroup was created by the 2017 Legislature in a budget note to HB 5006 to the budget for the Oregon Department of Veterans' Affairs. The budget note reads:

Due to the shortage of nurses and medical technicians in the City of Roseburg and Douglas County that would be required to staff the approved Veterans' Home, the Subcommittee adopted the following budget note:

Budget Note:

- The Oregon Department of Veterans' Affairs, in collaboration with the Oregon Health Authority and the Oregon State Board of Nursing, is directed to convene a rural medical training facilities workgroup that will investigate issues related to alleviating a shortage of skilled and experienced nurses and medical technicians in the City of Roseburg and in Douglas County. Representatives from the City of Roseburg, Douglas County, local hospital or medical facilities, including the Roseburg VA Medical Center, and local medical practitioners with experience in training nursing and medical technician students should be included in the workgroup membership.
- The workgroup should consider issues related to establishing a medical training facility in partnership with local academic programs and methods of reintegrating veterans who are transitioning out of military service into society through higher education and career training.
- The Department [Oregon Department of Veterans' Affairs] shall report the results of the workgroup and recommendations to the Legislature by September 15, 2018.

Attachment B: Rural Medical Training Workgroup Participants

Workgroup
Mitch Sparks, Acting Director, Oregon Department of Veterans' Affairs, sparksm@odva.state.or.us
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Mary Jaeger, External Affairs Director, Oregon Dept. of Consumer and Business Services, mary.jaeger@oregon.gov
Rep. Gary Leif, House District 2, Rep.GaryLeif@oregonlegislature.gov

Invited Legislators:
Representative Cedric Hayden, House District 7, Rep.CedricHayden@state.or.us
Senator Dallas Heard, Senate District 1, Sen.dallasheard@oregonlegislature.gov
Representative Paul Evans, House District 20, Rep.PaulEvans@state.or.us
Senator Brian Boquist, Senate District 12, Sen.BrianBoquist@state.or.us
Rep. Gary Leif, House District 2, Rep.GaryLeif@oregonlegislature.gov

Attendees:
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Staffing:
Laurie Skillman, Senior Policy Advisor, Oregon Department of Veterans' Affairs, laurie.skillman@state.or.us

Attachment C

Oregon Health Authority (OHA) 2017 Oregon Health Insurance Survey
Link: https://www.oregon.gov/oha/HPA/ANALYTICS/InsuranceData/2017-OHIS-Early-Release-Results.pdf

Oregon Health Insurance Survey

Early Release Results

2017

Oregon's health transformation efforts are focused on improving access to care, creating better health and lowering costs. Since the Affordable Care Act (ACA) passed, the percentage of Oregonians who have health insurance coverage has grown by 10 percent. Today, more than 3.7 million Oregonians or nearly 94 percent of people in the state have insurance coverage. The Oregon Health Insurance Survey (OHIS) is an important source of information about health care coverage in the state. The survey provides detailed information about the impacts of health system reform efforts related to coverage, access to care and utilization. This fact sheet is part of a series exploring health insurance coverage using data from the 2017 survey and presents information about trends in health insurance coverage for Oregonians.

OREGON'S INSURANCE COVERAGE RATE

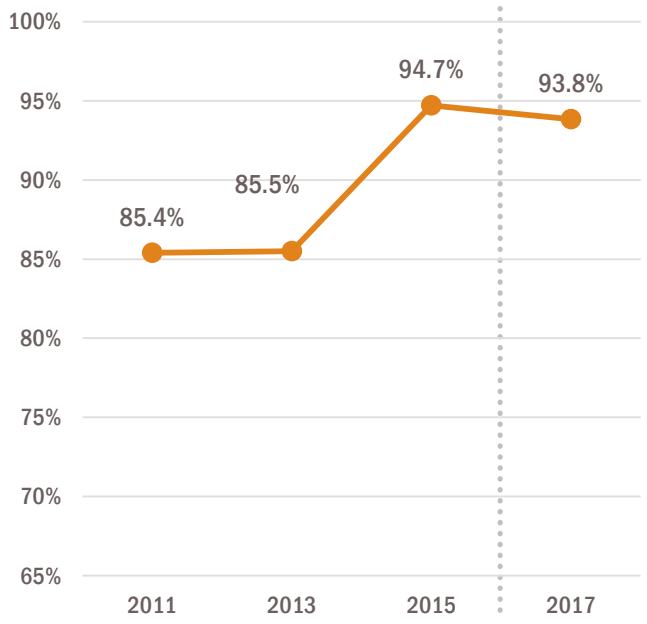
In 2017, 93.8% of Oregonians had health insurance coverage while 6.2% did not. This represents approximately 3.75 million[1] people with health coverage and just over 245,000 without.

There was a 0.9 percentage point decrease in the insurance rate between 2015 and 2017 which is not statistically significant. The slight decrease is likely due to methodological changes in the way the data was analyzed. In 2017, the analytic team used a more sophisticated method of collecting and weighting the data, which likely represents a more accurate picture of the number of people insured in the state.

The dotted gray line between 2015 and 2017 in the charts signifies methodology changes in the OHIS.

Nearly 94% of Oregonians were insured in 2017.

Point in time insurance rates



Dotted line: methodology changes

Oregon Health Authority

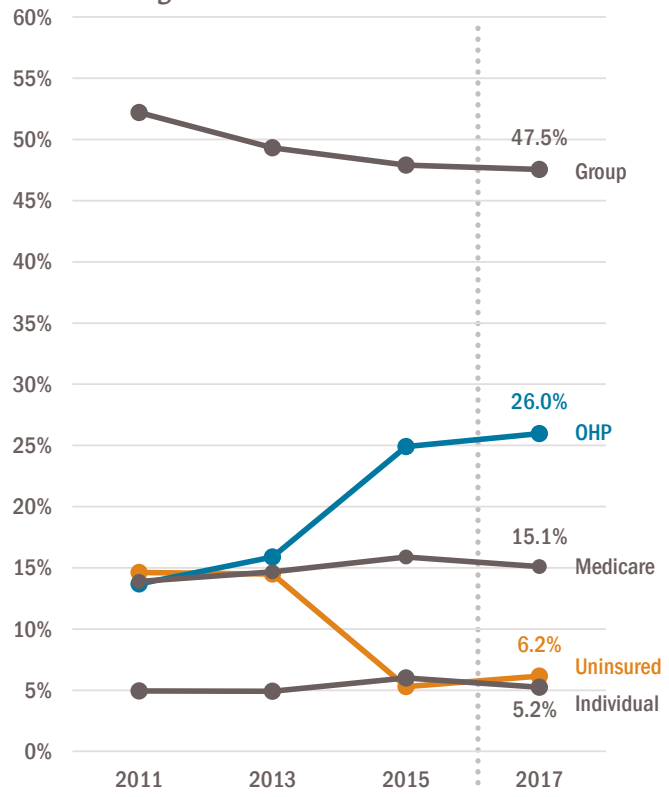
TYPES OF INSURANCE COVERAGE

After significant shifts in health insurance coverage from 2013 to 2015, coverage remained relatively steady from 2015 to 2017. In 2017, 47.5% of Oregonians have private group[2] health insurance, 26.0% have Medicaid through the Oregon Health Plan, 15.1% have Medicare, 5.2% have individual private insurance, and 6.2% are uninsured.

Changes in the types of insurance coverage between 2015 and 2017 likely reflect methodology changes to the OHIS.

Insurance coverage remained relatively steady in all categories between 2015 and 2017.

Insurance coverage rates



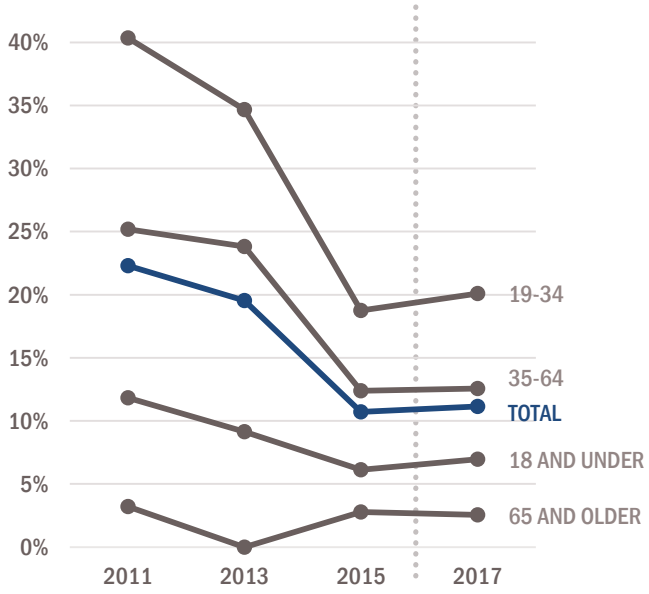
INSURANCE COVERAGE GAPS BY AGE GROUP

This chart shows the proportion of people currently uninsured, and among those insured, the proportion who had a time in the past 12 months without insurance coverage. This is called a coverage gap.

The proportion of Oregonians with a coverage gap did not change between 2015 and 2017. This shows that health insurance coverage was stable for many Oregonians. In 2017, 88.9% of Oregonians were insured for all of the previous 12 months.

The rate of people without health insurance for a period of time remained stable from 2015 to 2017.

Those currently insured but who had coverage gap in last 12 months and those currently uninsured.



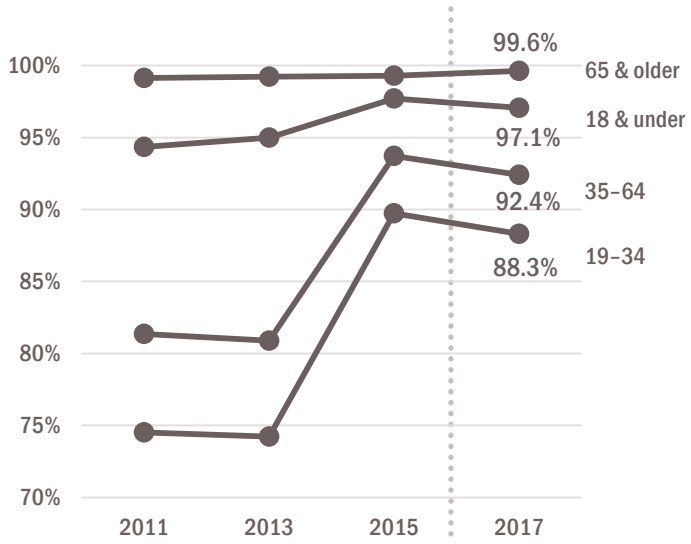
INSURANCE COVERAGE BY AGE GROUP

The slight decrease in overall insurance coverage between 2015 and 2017 is driven predominantly by small decreases in coverage among two age groups: 19 to 34 year olds, and 35 to 64 year olds. These decreases are likely due to methodology changes to the OHIS which improved data quality.

Coverage for adults 65 and older and for children and teens 18 and younger remained relatively flat. Older adults receive nearly universal health insurance coverage through Medicare. Most children and teens are eligible for coverage either through private insurance, the Oregon Health Plan, or the Healthy Kids Program.

About 88% of young adults had insurance coverage in 2017.

Point in time insurance rates



REFERENCES

[1] Population estimates based on weighted calculation using US Census Data.

[2] The coverage types are defined as follows:

- **Individual coverage** is bought directly by the respondent or another person. It includes plans bought on the insurance exchange, through a broker, or directly from an insurance provider.
- **Group coverage** is obtained through someone's work, union, association or trust; Cobra or state continuation; Veteran's Affairs, Military Health, TRICARE or CHAMPUS; or a student health insurance program.
- **OHP/Healthy Kids coverage** is Medicaid coverage in Oregon and includes Medicaid CCO and FFS.
- **Medicare coverage** is for adults aged 65 years and older and for individuals with disabilities. This category is for Medicare medical programs only. The survey does not differentiate between specific types of Medicaid or Medicare programs.

NOTE: Indian Health Services is not considered as health insurance, however, there were only 33 individuals in the survey that had only IHS for health coverage. These 33 are counted as uninsured. People with IHS and another type of coverage are counted in the other type of coverage.

ABOUT THIS REPORT

The Oregon Health Insurance Survey (OHIS) collects information about health insurance coverage, access to care, and utilization in Oregon. The survey is fielded every two years, and data in this fact sheet is from all years of the survey. More than 9,000 Oregonian households completed the survey between March and August of 2017. The survey used landline and cell phone numbers in Oregon, and was distributed across the state by region, race and ethnicity, and age. Some methodology changes in 2017 around sampling, questionnaire design and structure, breadth of the data, and weighting create slightly different results than previous years. While the data is still comparable and valid for trend analysis, some variance is attributable to methodological differences in the 2017 OHIS. For more information about OHIS methods and results, go to: http://www.oregon.gov/oha/HPA/ANALYTICS/Pages/Insurance-Data.aspx

This fact sheet was prepared by the Oregon Health Authority's Office of Health Analytics. The Office of Health Analytics collects and analyzes data to inform policy, monitor progress toward transformation goals, and evaluate programs. The Office supports OHA efforts to further the triple aim goals of better health, better care, and lower costs.

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You can get this document in other languages, large print, braille or a format you prefer. Contact the Oregon Health Authority Director's Office at 503-947-2340 or OHA. DirectorsOffice@state.or.us.

QuickFacts

Jackson County, Oregon; Josephine County, Oregon; Curry County, Oregon; Coos County, Oregon; Douglas County, Oregon; Oregon

QuickFacts provides statistics for all states and counties, and for cities and towns with a ***population of 5,000 or more***.

Table

All Topics	Jackson County, Oregon	Josephine County, Oregon	Curry County, Oregon	Coos County, Oregon	Douglas County, Oregon	Oregon
Population estimates, July 1, 2017, (V2017)	**217,479**	**86,352**	**22,669**	**63,888**	**109,405**	
PEOPLE						
Population						
Population estimates, July 1, 2017, (V2017)	**217,479**	**86,352**	**22,669**	**63,888**	**109,405**	
Population estimates base, April 1, 2010, (V2017)	203,206	82,713	22,364	63,043	107,667	
Population, percent change - April 1, 2010 (estimates base) to July 1, 2017, (V2017)	7.0%	4.4%	1.4%	1.3%	1.6%	
Population, Census, April 1, 2010	203,206	82,713	22,364	63,043	107,667	
Age and Sex						
Persons under 5 years, percent	⚠ 5.6%	⚠ 5.2%	⚠ 4.0%	⚠ 5.1%	⚠ 5.2%	
Persons under 18 years, percent	⚠ 20.7%	⚠ 19.6%	⚠ 14.6%	⚠ 18.6%	⚠ 19.4%	
Persons 65 years and over, percent	⚠ 21.5%	⚠ 25.4%	⚠ 33.2%	⚠ 25.3%	⚠ 25.1%	
Female persons, percent	⚠ 51.1%	⚠ 51.3%	⚠ 50.8%	⚠ 50.7%	⚠ 50.7%	
Race and Hispanic Origin						
White alone, percent (a)	⚠ 92.1%	⚠ 93.1%	⚠ 92.1%	⚠ 90.4%	⚠ 92.8%	
Black or African American alone, percent (a)	⚠ 0.9%	⚠ 0.6%	⚠ 0.6%	⚠ 0.8%	⚠ 0.5%	
American Indian and Alaska Native alone, percent (a)	⚠ 1.6%	⚠ 1.7%	⚠ 2.5%	⚠ 2.9%	⚠ 2.1%	
Asian alone, percent (a)	⚠ 1.5%	⚠ 1.1%	⚠ 0.9%	⚠ 1.3%	⚠ 1.1%	
Native Hawaiian and Other Pacific Islander alone, percent (a)	⚠ 0.4%	⚠ 0.2%	⚠ 0.1%	⚠ 0.3%	⚠ 0.2%	
Two or More Races, percent	⚠ 3.5%	⚠ 3.4%	⚠ 3.8%	⚠ 4.4%	⚠ 3.4%	
Hispanic or Latino, percent (b)	⚠ 12.9%	⚠ 7.5%	⚠ 7.1%	⚠ 6.5%	⚠ 5.9%	
White alone, not Hispanic or Latino, percent	⚠ 80.9%	⚠ 86.9%	⚠ 86.2%	⚠ 85.2%	⚠ 87.8%	
Population Characteristics						
Veterans, 2012-2016	20,965	8,920	3,123	7,171	13,781	
Foreign born persons, percent, 2012-2016	5.9%	3.7%	3.5%	3.8%	2.7%	
Housing						
Housing units, July 1, 2017, (V2017)	95,387	39,062	12,959	31,065	50,261	
Owner-occupied housing unit rate, 2012-2016	62.9%	66.0%	66.0%	64.8%	67.6%	
Median value of owner-occupied housing units, 2012-2016	$224,500	$225,100	$222,100	$169,900	$170,000	
Median selected monthly owner costs -with a mortgage, 2012-2016	$1,441	$1,325	$1,414	$1,197	$1,227	
Median selected monthly owner costs -without a mortgage, 2012-2016	$475	$360	$365	$365	$384	
Median gross rent, 2012-2016	$895	$834	$846	$727	$763	
Building permits, 2017	805	250	43	32	244	
Families & Living Arrangements						
Households, 2012-2016	83,969	34,778	10,396	25,755	43,937	
Persons per household, 2012-2016	2.47	2.38	2.12	2.40	2.40	
Living in same house 1 year ago, percent of persons age 1 year+, 2012-2016	81.1%	83.2%	82.2%	84.1%	83.6%	
Language other than English spoken at home, percent of persons age 5 years+, 2012-2016	9.6%	4.8%	5.1%	4.9%	3.8%	
Education						
High school graduate or higher, percent of persons age 25 years+, 2012-2016	88.9%	88.8%	89.7%	88.9%	89.1%	
Bachelor's degree or higher, percent of persons age 25 years+, 2012-2016	26.1%	17.3%	23.6%	18.4%	16.3%	
Health						
With a disability, under age 65 years, percent, 2012-2016	11.7%	14.2%	17.0%	16.3%	14.9%	
Persons without health insurance, under age 65 years, percent	⚠ 8.0%	⚠ 7.9%	⚠ 8.8%	⚠ 8.3%	⚠ 7.5%	
Economy						
In civilian labor force, total, percent of population age 16 years+, 2012-2016	57.5%	47.2%	44.2%	50.1%	50.3%	
In civilian labor force, female, percent of population age 16	53.8%	43.9%	41.8%	47.3%	46.9%	

years+, 2012-2016						
Total accommodation and food services sales, 2012 ($1,000) (c)	382,194	124,466	46,467	126,230	217,232	
Total health care and social assistance receipts/revenue, 2012 ($1,000) (c)	1,443,797	418,474	79,908	350,304	544,347	
Total manufacturers shipments, 2012 ($1,000) (c)	1,624,646	434,819	175,970	315,734	1,017,255	
Total merchant wholesaler sales, 2012 ($1,000) (c)	828,368	D	14,633	287,821	D	
Total retail sales, 2012 ($1,000) (c)	3,202,715	987,863	244,642	745,808	1,103,438	
Total retail sales per capita, 2012 (c)	$15,516	$11,912	$10,996	$11,926	$10,297	
Transportation						
Mean travel time to work (minutes), workers age 16 years+, 2012-2016	18.6	20.1	14.1	18.7	20.0	
Income & Poverty						
Median household income (in 2016 dollars), 2012-2016	$46,343	$37,867	$38,661	$39,110	$42,052	
Per capita income in past 12 months (in 2016 dollars), 2012-2016	$25,612	$23,004	$24,908	$24,261	$23,608	
Persons in poverty, percent	⚠ 14.6%	⚠ 18.0%	⚠ 14.1%	⚠ 17.5%	⚠ 15.6%	

BUSINESSES

Businesses						
Total employer establishments, 2016	6,107	1,934	687	1,557	2,500	
Total employment, 2016	72,083	22,347	5,235	17,908	29,777	
Total annual payroll, 2016 ($1,000)	2,741,498	758,640	169,146	658,463	1,157,198	
Total employment, percent change, 2015-2016	2.6%	4.3%	3.4%	0.7%	4.0%	
Total nonemployer establishments, 2016	16,943	5,805	1,812	3,602	5,748	
All firms, 2012	20,226	7,322	2,477	4,388	7,843	
Men-owned firms, 2012	9,589	3,455	1,119	2,289	3,508	
Women-owned firms, 2012	7,335	2,284	753	1,283	2,321	
Minority-owned firms, 2012	2,185	627	167	394	545	
Nonminority-owned firms, 2012	17,279	6,281	2,196	3,755	6,808	
Veteran-owned firms, 2012	1,970	774	250	577	776	
Nonveteran-owned firms, 2012	16,912	5,906	2,041	3,400	6,232	

GEOGRAPHY

Geography						
Population per square mile, 2010	73.0	50.4	13.7	39.5	21.4	
Land area in square miles, 2010	2,783.55	1,639.67	1,627.46	1,596.17	5,036.08	
FIPS Code	41029	41033	41015	41011	41019	

Value Notes

1. Includes data not distributed by county.

Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistica indistinguishable. Click the Quick Info icon to the left of each row in TABLE view to learn about sampling error.

The vintage year (e.g., V2017) refers to the final year of the series (2010 thru 2017). *Different vintage years of estimates are not comparable.*

Fact Notes

- **(a)** Includes persons reporting only one race
- **(b)** Hispanics may be of any race, so also are included in applicable race categories
- **(c)** Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

Value Flags

- **D** Suppressed to avoid disclosure of confidential information
- **F** Fewer than 25 firms
- **FN** Footnote on this item in place of data
- **NA** Not available
- **S** Suppressed; does not meet publication standards
- **X** Not applicable
- **Z** Value greater than zero but less than half unit of measure shown
- **-** Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of median estimates falls in the lowest or upper interval of an open ended distribution.

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Ec Census, Survey of Business Owners, Building Permits.

Attachment E: CHI Mercy Medical Center Allied Health Job Openings

CHI Mercy Medical Center
Allied Health Openings

Specialty	Current Staff	Annual Hires/Vacancies	Vacancy Rate
Registered Nurse	338	54	16%
Nurse Practitioner	10	4	40%
Physical Therapist	26	5	19%
Radiology**	54	12	22%
Medical Technician	9	6	67%
Licensed Clinical Social Worker	3	1	33%

** Radiology includes:
Nuclear Medicine Tech
Sonographer
Cardiac Sonographer
EP Procedural Specialist
CT Technician
Mammography Tech
MRI Tech
Radiology Tech
Special Procedures Tech

The above data includes only Mercy Medical Center and related clinics. It does not include non-affiliated clinics, federally qualified health centers, rural health centers, or school districts nor any openings for the Reedsport area, including lower Umpqua Hospital.

Information provided July 23, 2018

Attachment F: Roseburg VA Data

Roseburg Veterans Affairs Medical Center | July 2018

The Roseburg Veterans Affairs Medical Center employs 269 Registered Nurses, and has a current need for 42 Registered Nurses which is 16% vacancy rate. Additional data is below. Clearly there is a need for these professionals in the VA, and is also important that we continue to grow as we will need to consider further losses through attrition, retirements, etc., and we are concerned about this.

Roseburg VA Health Care System	Positions	Vacancies	Vacancy Rate
Registered Nurse	269	42	16%
Nurse Practitioner	37	6	16%
Physical Therapist	11	1	9%
Radiologic Technologist	17	5	29%
Med/Clinical Laboratory Technologist	17	1	6%
Mental Health Counselor	0	0	N/A
MHSA Social Worker	55	11	20%

The numbers of Registered Nurses and Nurse Practitioners practicing in the state of Oregon were not considered. In the VA it is not necessary to have a license within the state where practicing. In the Roseburg VA Healthcare System there are 37 Nurse Practitioners, 18 of them are not licensed in the state of Oregon. There are 227 Registered Nurses and 53 are not licensed in the state of Oregon

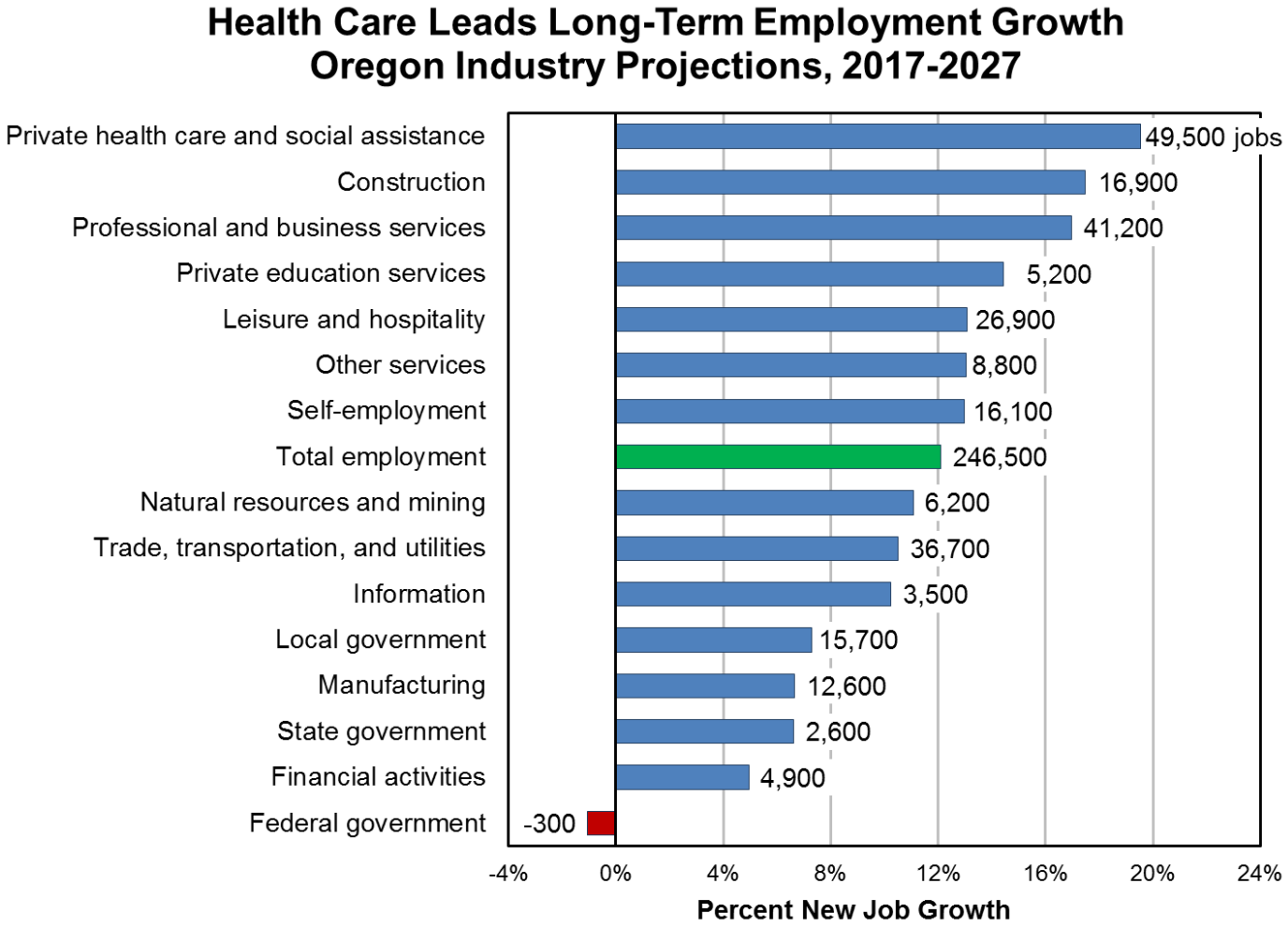
Oregon's Future Workforce Needs: Job Growth to 2027 by Industry

June 26, 2018 *by Gail Krumenauer*

Oregon's total employment will grow by 245,800 jobs between 2017 and 2027. The 12 percent employment increase includes private-sector gains of 211,700 jobs, growth of 18,000 jobs in government, and an additional 16,100 self-employed Oregonians.

Big Industries Add the Most Jobs

Health care and social assistance will add 49,500 jobs, the most of any sector statewide. It's followed by professional and business services with 41,200 additional jobs in 2027. There may be little surprise seeing health care and professional and business services among the top industries adding jobs, as they are two of the largest industries in the state. It's notable that in addition to their size, these are also two of the three fastest-growing industries.



Fast growth in health care (20%) can be attributed to the growth and aging of the state's population. Within health care, independent health care practitioners (such as chiropractors, physical and speech therapists), offices of other specialists (25%), and nursing and residential

care facilities (20%) are expected to grow much faster than hospitals (13%).

Professional and business services growth (17%) will be driven by gains in professional and technical services such as computer systems design (29%) and management of companies and enterprises (28%). Management of companies and enterprises includes corporate offices headquartered in Oregon.

Buildup in Construction

The other fastest-growing industry in Oregon is not among the biggest. Fueled by demand from both population and economic growth, with low residential and commercial vacancy rates and associated rising prices, construction jobs should build up by 17 percent between 2017 and 2027.

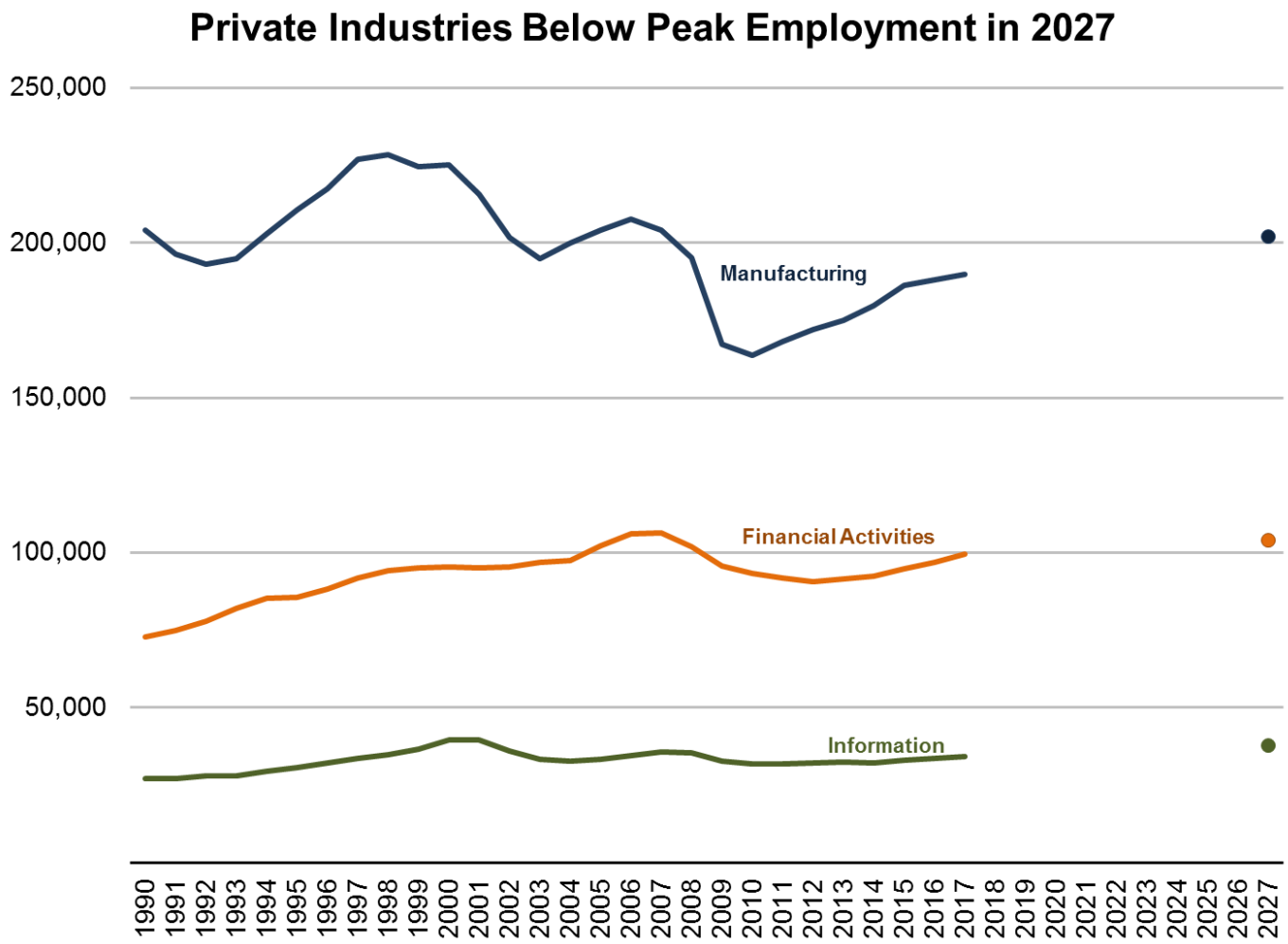
Within construction, building finishing contractors are projected to add 2,800 jobs, a gain of 20 percent. This includes contractors for drywall and insulation, flooring, and finish carpentry. Employment at other specialty trade contractors – such as building demolition crews, earth movers, foundation diggers, and some types of paving work – should increase by 2,000 jobs (24%). Residential and nonresidential building construction growth should each rise by 20 percent over the decade.

Peak Employment

While overall employment and jobs in many sectors are expected to grow beyond their current peak levels, some sectors will fall short of their peak employment by 2027. Manufacturing employment should grow by 7 percent to 200,200 jobs. That's well below 228,500 in 1998, and slightly short of the most recent peak in 2006 (207,500 jobs). Growth of 5 percent in financial activities results in 104,000 jobs, below its height of 106,400 in 2007. The information sector's addition of 3,500 jobs between 2017 and 2027 results in industry employment of 37,700. Information last peaked in 2001 at 39,700 jobs.

Each of these three below-peak sectors consist of different component industries growing in notably different ways. Some smaller components of manufacturing – such as food (15%) and beverage manufacturing (30%) – show notably faster projected growth rates. Meanwhile, the relatively larger wood product manufacturing (0.4%) and paper manufacturing (-7%) industries show little net growth or projected declines by 2027.

In financial activities, expected population growth and increased construction is associated with the projected 8 percent gain in real estate jobs. By comparison, financial establishments primarily engaged in deposit banking and extending credit – which account for the bulk of all financial activities – are projected to grow by just 2 percent.

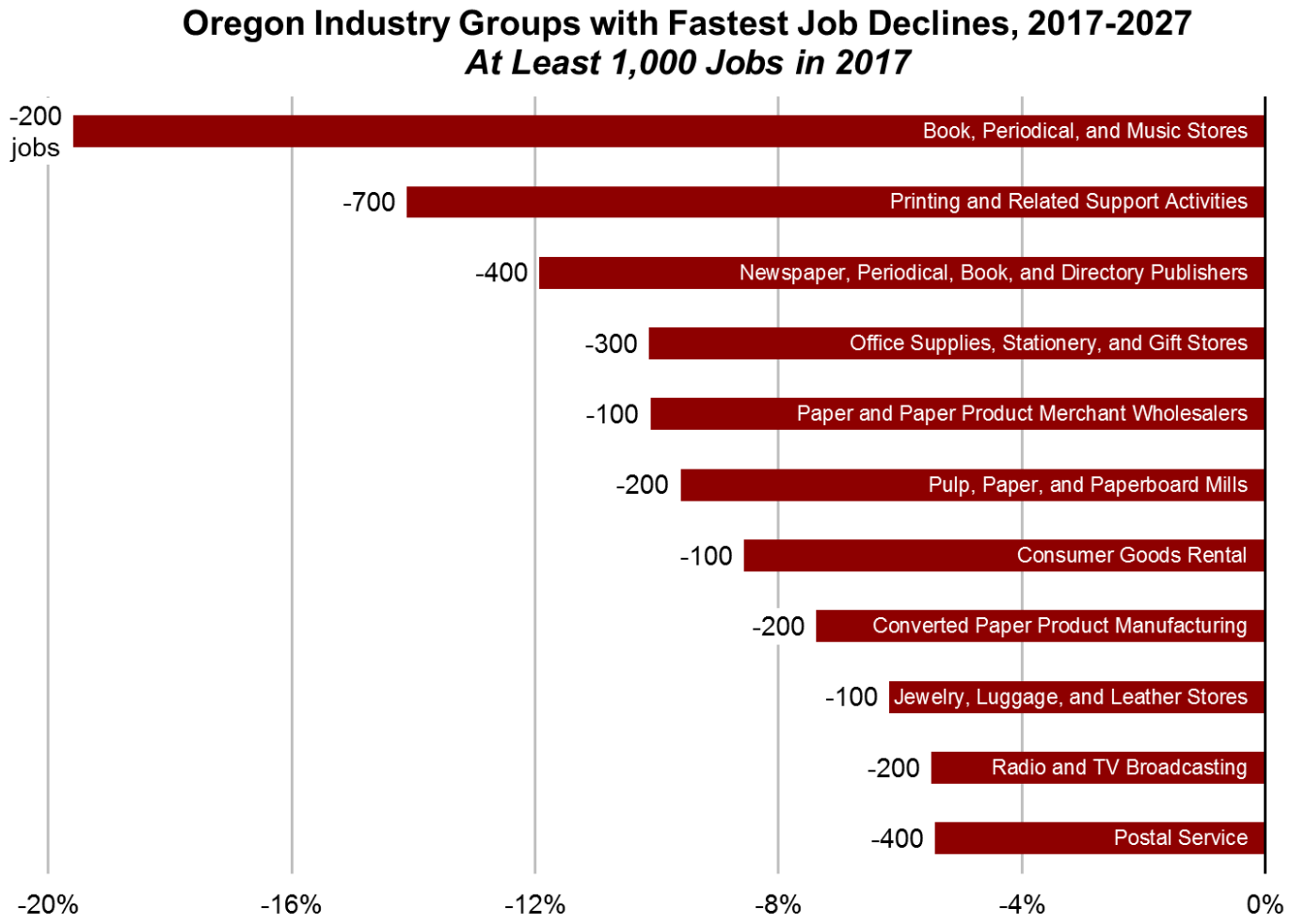


One portion of the information sector consists of the growing software publishing industry, with projected growth of 26 percent by 2027. That's quite a contrast from projected growth in the other information-related industries. Telecommunications jobs are expected to decline by 4 percent, while newspaper, book, and directory publishers can expect job losses totaling 400 (-12%).

Slow-Growing and Declining Industries

Several other industry groups with the biggest projected losses relate to the production and distribution of various paper-related products. These include book, periodical, and music stores (-20%); printing and related support activities (-14%); newspaper, book, and directory publishers (-12%); office supplies, stationery, and gift stores (-10%); paper and paper product merchant wholesalers (-10%); pulp, paper, and paperboard mills (-10%); and converted paper product manufacturing (-7%).

Projections show relatively slow growth or decline in all broad areas of government. Federal government declines should continue (-1%), largely due to federal postal employment losses (-6%). State government growth (7%) will be driven primarily by state-owned hospitals, and local government gains are expected to total 7 percent.



All Industries Need Workers

Whether growing rapidly or showing a net loss of jobs by 2027, all broad industries provide employment opportunities to Oregonians. The demand is clear in some industries. Together health care, professional and business services, and construction will account for nearly half of all new jobs in the state. Slower growing sectors and declining industries still offer many job opportunities though, as they need to replace some retiring workers or others leaving the industry. More information about Oregon's long-term employment projections can be found at QualityInfo.org/projections.

Attachment H: Oregon State Board of Nursing Licensing Report | July 2018

The Oregon State Board of Nursing (OSBN), under ORS 678.150, is legislatively mandated to "Examine, license, and renew duly qualified applicants" and "prescribe standards and curricula for nursing education programs preparing persons for licensure". Per this statute, the Board is accountable for the licenses of all Registered Nurses (RN), Licensed Practical Nurses (LPN), Nurse Practitioners (NP), Clinical Nurse Specialist (CNS), Certified Registered Nurse Anesthetists (CRNA), Certified Nursing Assistant (CNA), and Certified Medication Aide (CMA). Statute also authorizes the OSBN to authorize and approve all education programs providing initial licensing and certification for all of the above license types. The OSBN is the only Health Care Licensing Board in the State authorized to approve educational programs based in Oregon in the preparation for Oregon licensing.

Workforce data analysis does not capture the number of licenses for which the Board is accountable. The discrepancy in numbers may be due to:

(1) OSBN data counts actual active licenses in real time, there is no data lag. As the Board continues to issue licenses daily the OSBN database automatically increases the number of licenses published on our website.

(2) Not all actively licensed nurses are part of the workforce. Nurses can keep their license active provided they have worked 960 hours of practice in the past 5 years.

(3) A license is required to provide care to any Oregonian even if the nurse is not physically located in Oregon. Managed Care and other types of providers or reviewers of healthcare interacting with Oregonians located in Oregon, are located outside the state. The nursing workforce in those organizations must be licensed in Oregon but will likely never live here since their work is done electronically. It is estimated that about 20,000 Oregon licensed nurses do not have an Oregon address and can be presumed to live out of state.

As of July 20th, 2018, here is the total license count, by license type, for which the OSBN is accountable:

RN: 61, 472

LPN: 5,501

NP: 4,350

CNS: 190

CRNA: 655

CNA: 18,927

CMA: 992 Total: 92,087.

Oregon Health Authority
Office of Health Analytics

Oregon's Medical Workforce

Based on data collected during 2015 and 2016

These fact sheets provide a snapshot of the state's medical workforce using data collected by the Oregon Health Authority in collaboration with the Oregon Medical Board.

The mission of the Oregon Medical Board (OMB) is to protect the health, safety and wellbeing of Oregon citizens by regulating the practice of medicine in a manner that promotes access to quality care. Among other professions it oversees, the OMB licenses physicians (doctors of medicine and doctors of osteopathic medicine), physician assistants and podiatric physicians. Active licenses for these professions are generally issued for a two-year period. Federally employed physicians practicing exclusively in federal government programs or facilities (for example, those who work only at the Portland VA Medical Center) are not required to be licensed by the OMB in order to practice in Oregon.

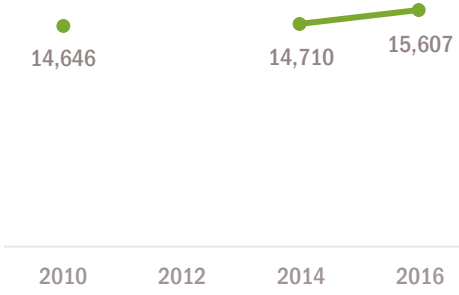
Workforce data are collected for physicians, physician assistants and podiatrists and are presented as individual occupational profiles.

If you would like more information about the Oregon Medical Board, please visit: http://www.oregon.gov/OMB

Physicians (MD/DO)

MD/DOS LICENSED IN OREGON

2012 Data unavailable



ESTIMATED NUMBER OF MD/DOS WORKING IN OREGON:

12,580

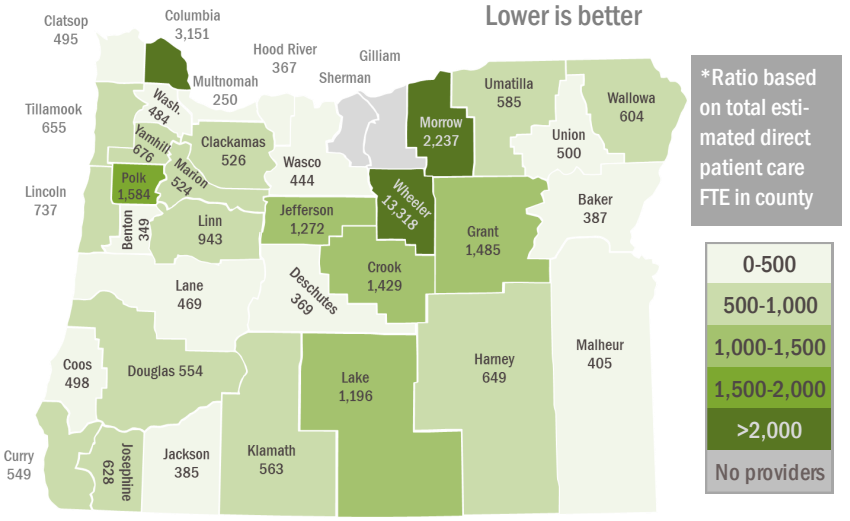
ESTIMATED PATIENT CARE FTE IN OREGON:

9,522

All subsequent data presented are from physicians who completed the Health Care Workforce Survey and are working in Oregon (n=11,867).

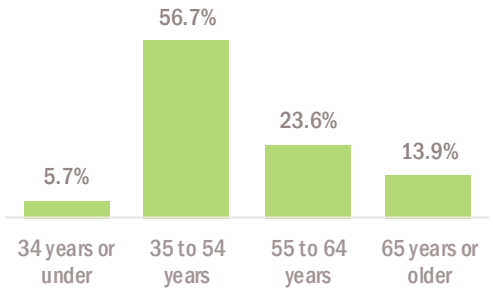
ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

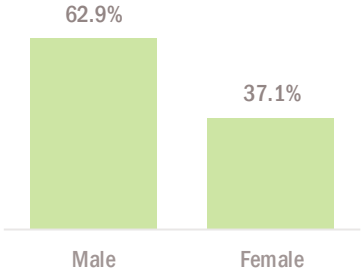


WORKFORCE DEMOGRAPHICS

AGE

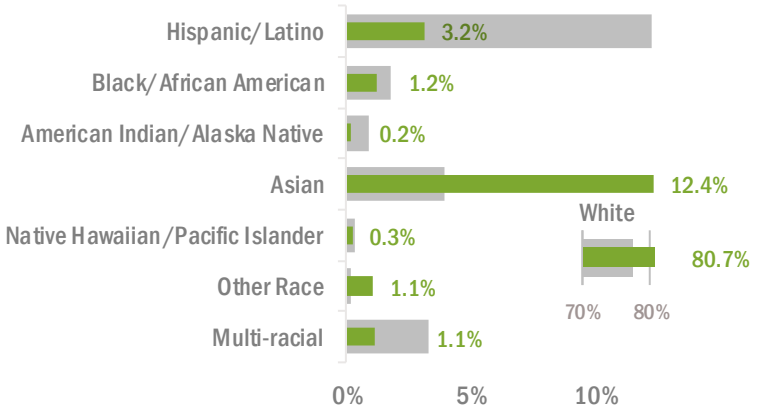


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



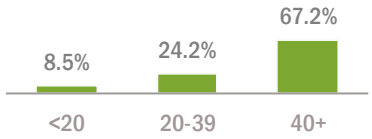
* Licensees who did not report race and ethnicity data are excluded from this chart. 9.1% of workforce are either missing data (0.0%) or declined to answer (9.1%). Racial categories exclude Hispanic.

Physicians (MD/DO)

WORKFORCE SUPPLY

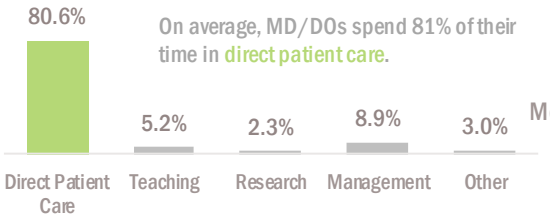
HOURS WORKED PER WEEK

67% of MD/DOs work at least 40 hours each week.

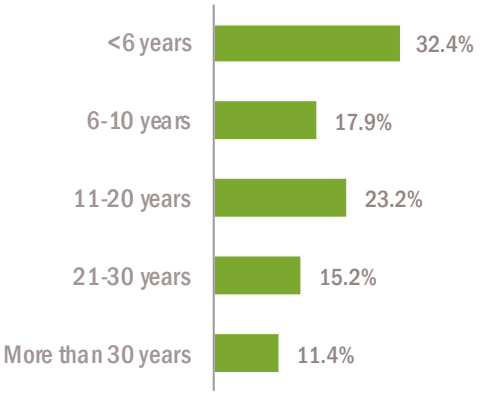


HOW MD/DOS SPEND THEIR TIME

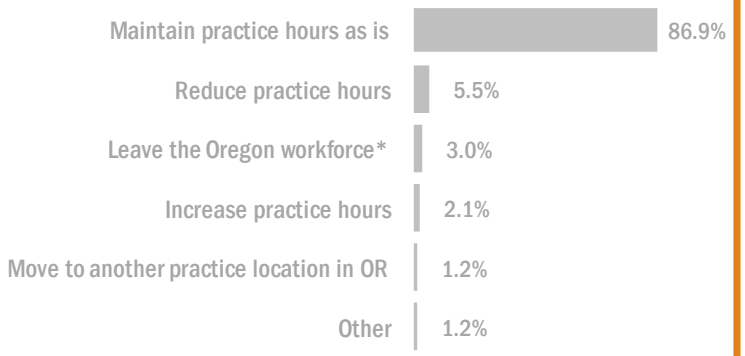
On average, MD/DOs spend 81% of their time in direct patient care.



NUMBER OF YEARS LICENSED IN OREGON



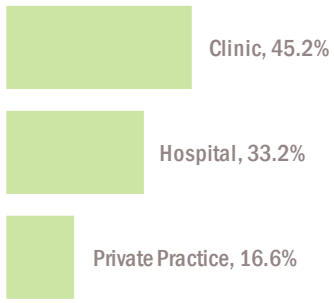
PRACTICE PLANS IN THE NEXT TWO YEARS



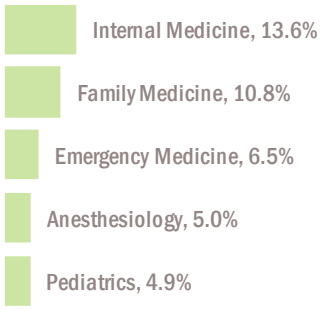
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation. Some licensees that plan to leave the OR workforce are completing their training in OR.

PRACTICE SETTINGS & SPECIALTIES

TOP 3 PRACTICE SETTINGS

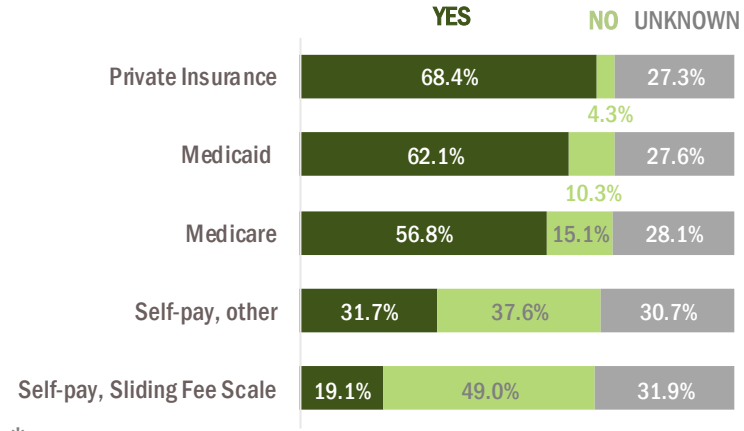


TOP 5 SPECIALTIES



PAYER MIX*

DOES PROVIDER CURRENTLY SEE PATIENTS WITH...

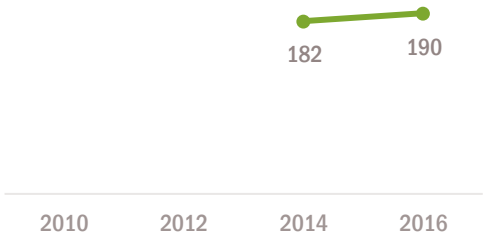


*Only includes those who report spending time in direct patent care (n=11,385)

Podiatrists (DPM)

DPMS LICENSED IN OREGON

2010-12 Data unavailable



ESTIMATED NUMBER OF DPMS WORKING IN OREGON:

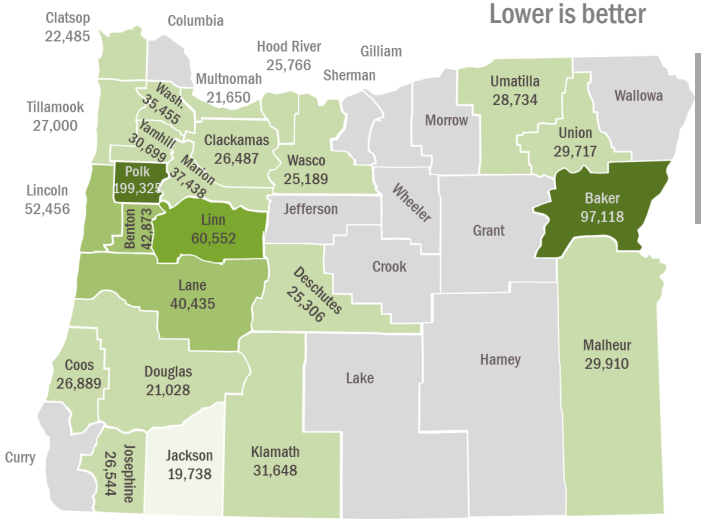
170

ESTIMATED PATIENT CARE FTE IN OREGON:

135

ESTIMATED POPULATION-TO-PROVIDER RATIO*

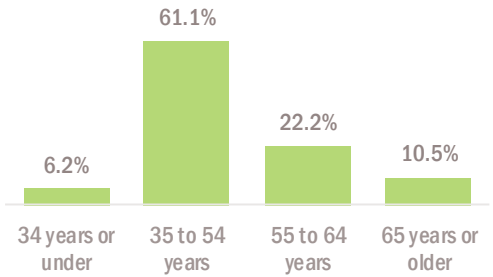
Lower is better



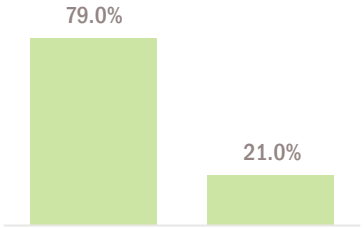
All subsequent data presented are from podiatrists who completed the Health Care Workforce Survey and are working in Oregon (n=162).

WORKFORCE DEMOGRAPHICS

AGE

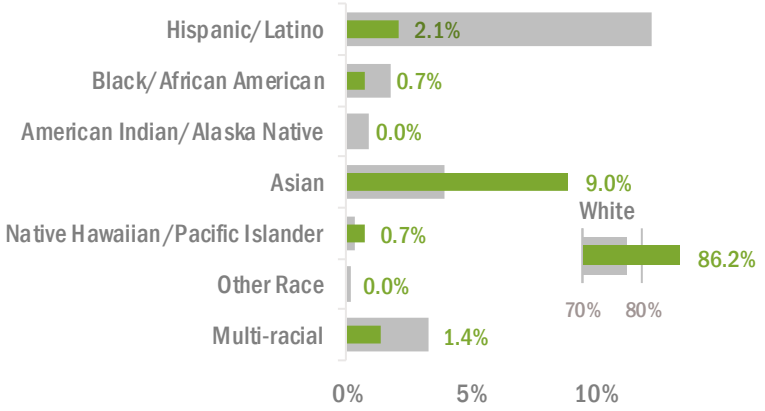


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



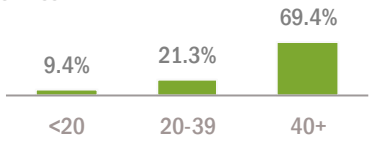
* Licensees who did not report race and ethnicity data are excluded from this chart. 10.5% of workforce are either missing data (0.0%) or declined to answer (10.5%). Racial categories exclude Hispanic.

Podiatrists (DPM)

WORKFORCE SUPPLY

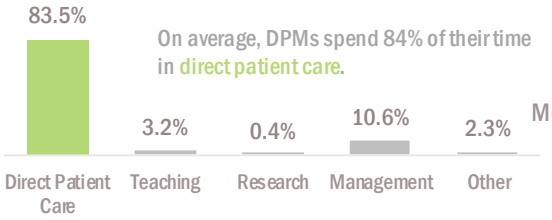
HOURS WORKED PER WEEK

69% of DPMs work at least 40 hours each week.



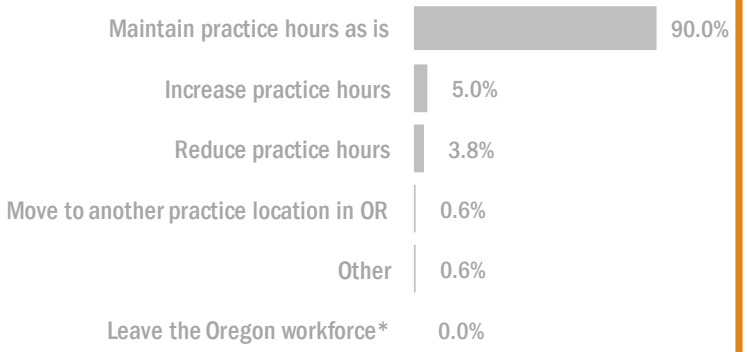
HOW DPMS SPEND THEIR TIME

On average, DPMs spend 84% of their time in direct patient care.



NUMBER OF YEARS LICENSED IN OREGON

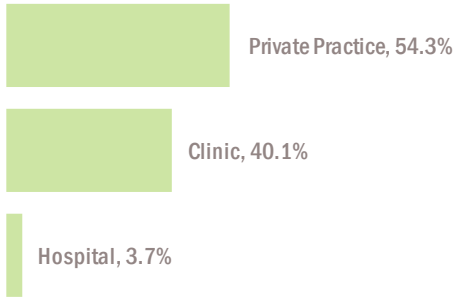
PRACTICE PLANS IN THE NEXT TWO YEARS



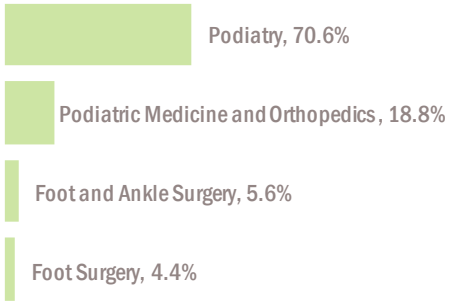
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation. Some licensees that plan to leave the OR workforce are completing their training in OR.

PRACTICE SETTINGS & SPECIALTIES

TOP 3 PRACTICE SETTINGS

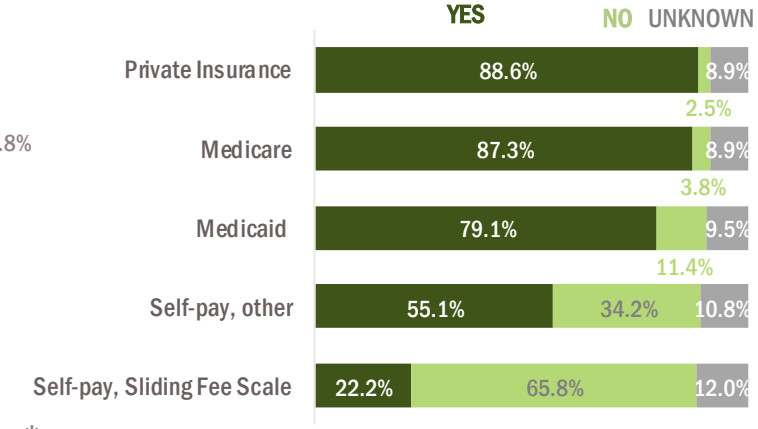


TOP SPECIALTIES



PAYER MIX*

DOES PROVIDER CURRENTLY SEE PATIENTS WITH...

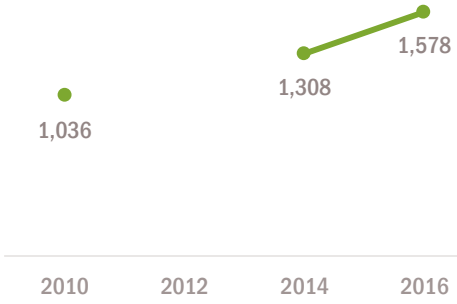


*Only includes those who report spending time in direct patent care (n=158)

Physician Assistants (PA)

PAS LICENSED IN OREGON

2012 Data unavailable



ESTIMATED NUMBER OF PAS WORKING IN OREGON:

1,498

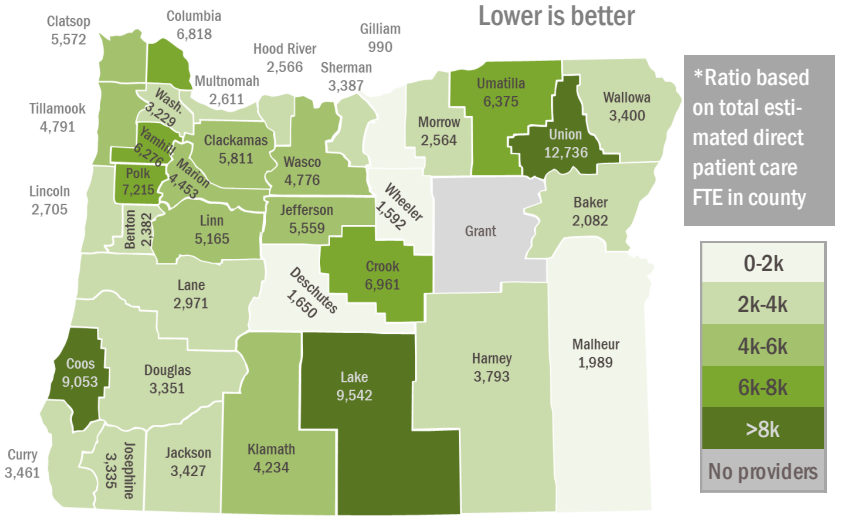
ESTIMATED PATIENT CARE FTE IN OREGON:

1,210

All subsequent data presented are from physician assistants who completed the Health Care Workforce Survey and are working in Oregon (n=1,430).

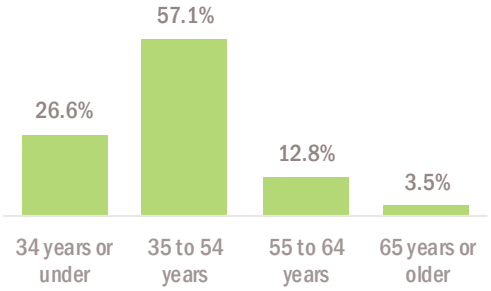
ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

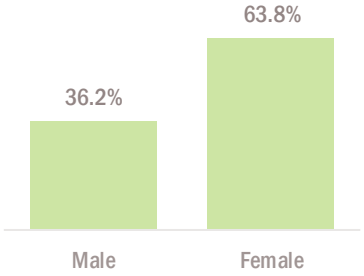


WORKFORCE DEMOGRAPHICS

AGE

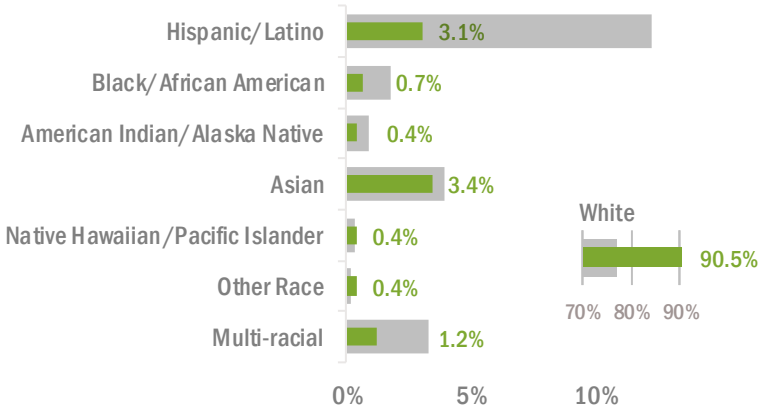


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



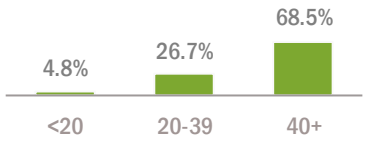
* Licensees who did not report race and ethnicity data are excluded from this chart. 6.0% of workforce are either missing data (0.0%) or declined to answer (6.0%). Racial categories exclude Hispanic.

Physician Assistants (PA)

WORKFORCE SUPPLY

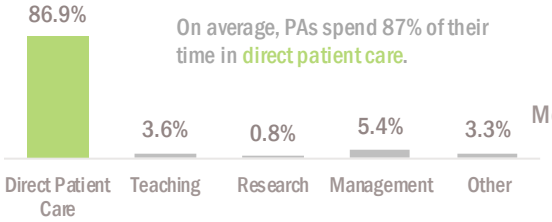
HOURS WORKED PER WEEK

69% of PAs work at least 40 hours each week.

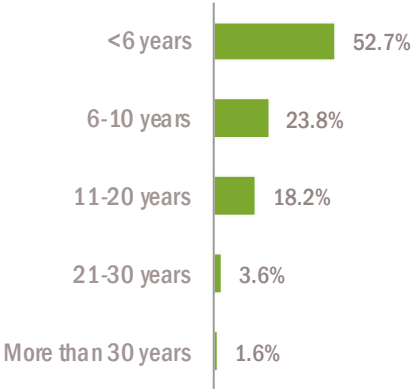


HOW PAS SPEND THEIR TIME

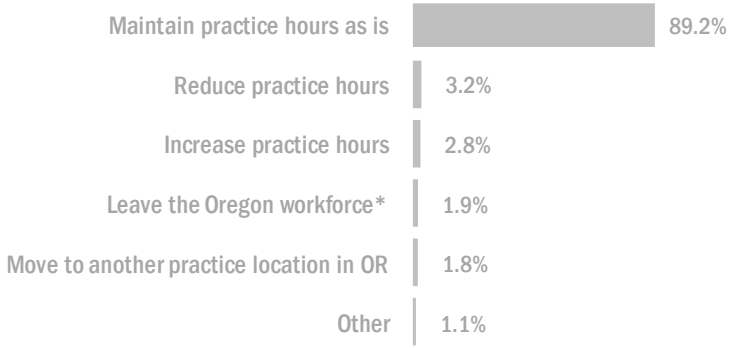
On average, PAs spend 87% of their time in direct patient care.



NUMBER OF YEARS LICENSED IN OREGON



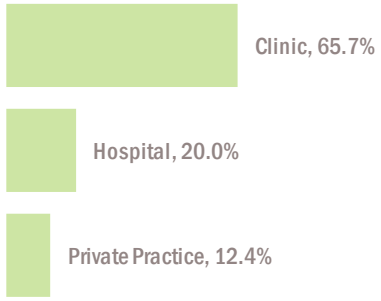
PRACTICE PLANS IN THE NEXT TWO YEARS



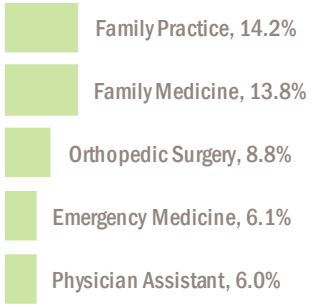
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation. Some licensees that plan to leave the OR workforce are completing their training in OR.

PRACTICE SETTINGS & SPECIALTIES

TOP 3 PRACTICE SETTINGS

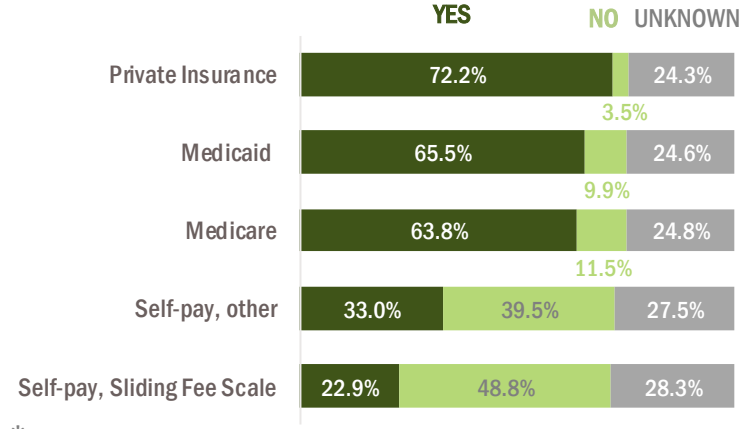


TOP 5 SPECIALTIES



PAYER MIX*

DOES PROVIDER CURRENTLY SEE PATIENTS WITH...



*Only includes those who report spending time in direct patent care (n=1,422)

Appendix A: Estimated count, FTE in direct patient care, and population-to-provider FTE ratio by county

		MD/DO			DPM			PA		
County	Population	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio
BAKER	16,510	54	42.7	387	1	0.2	97,118	9	7.9	2,082
BENTON	91,320	342	261.8	349	2	2.1	42,873	45	38.3	2,382
CLACKAMAS	404,980	1,004	770.1	526	20	15.3	26,487	88	69.7	5,811
CLATSOP	38,225	98	77.2	495	2	1.7	22,485	8	6.9	5,572
COLUMBIA	50,795	25	16.1	3,151	0	0.0	-	11	7.5	6,818
COOS	63,190	147	126.9	498	4	2.4	26,889	8	7.0	9,053
CROOK	21,580	19	15.1	1,429	0	0.0	-	4	3.1	6,961
CURRY	22,600	51	41.1	549	0	0.0	-	7	6.5	3,461
DESCHUTES	176,635	627	478.3	369	12	7.0	25,306	127	107.1	1,650
DOUGLAS	110,395	246	199.2	554	6	5.3	21,028	41	32.9	3,351
GILLIAM	1,980	0	0.0	-	0	0.0	-	2	2.0	990
GRANT	7,410	8	5.0	1,485	0	0.0	-	0	0.0	-
HARNEY	7,320	12	11.3	649	0	0.0	-	4	1.9	3,793
HOOD RIVER	24,735	93	67.5	367	1	1.0	25,766	14	9.6	2,566
JACKSON	213,765	698	554.9	385	13	10.8	19,738	78	62.4	3,427
JEFFERSON	22,790	23	17.9	1,272	0	0.0	-	5	4.1	5,559
JOSEPHINE	84,675	158	134.7	628	3	3.2	26,544	29	25.4	3,335
KLAMATH	67,410	151	119.8	563	2	2.1	31,648	19	15.9	4,234
LAKE	8,015	8	6.7	1,196	0	0.0	-	1	0.8	9,542
LANE	365,940	981	779.9	469	12	9.1	40,435	143	123.2	2,971
LINCOLN	47,735	83	64.8	737	1	0.9	52,456	21	17.7	2,705
LINN	122,315	169	129.8	943	3	2.0	60,552	28	23.7	5,165
MALHEUR	31,705	95	78.4	405	1	1.1	29,910	22	15.9	1,989
MARION	333,950	801	637.5	524	11	8.9	37,438	98	75.0	4,453
MORROW	11,745	5	5.3	2,237	0	0.0	-	5	4.6	2,564
MULTNOMAH	790,670	4,446	3,166.9	250	43	36.5	21,650	374	302.9	2,611
POLK	79,730	66	50.4	1,584	1	0.4	199,325	15	11.1	7,215
SHERMAN	1,795	0	0.0	-	0	0.0	-	1	0.5	3,387
TILLAMOOK	25,920	54	39.6	655	1	1.0	27,000	7	5.4	4,791
UMATILLA	79,880	165	136.5	585	4	2.8	28,734	18	12.5	6,375
UNION	26,745	65	53.5	500	1	0.9	29,717	2	2.1	12,736
WALLOWA	7,140	14	11.8	604	0	0.0	-	2	2.1	3,400
WASCO	26,700	78	60.1	444	1	1.1	25,189	7	5.6	4,776
WASHINGTON	583,595	1,602	1,205.7	484	20	16.5	35,455	230	180.7	3,229
WHEELER	1,465	1	0.1	13,318	0	0.0	-	1	0.9	1,592
YAMHILL	104,990	192	155.2	676	4	3.4	30,699	22	16.7	6,276
STATEWIDE	4,076,350	12,580	9,522	428	170	135	30,097	1,498	1,210	3,370

Note: Circles indicate whether county has no providers (red) or is above (yellow) or below (green) the statewide ratio by 50%.

Population-to-provider ratios are based on the estimated patient care FTE in the county. Values greater than the county population are due to less than 1.0 FTE in county.

About these fact sheets:

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:

- 2016 State and county population estimates come from Portland State University Population Research Center (https://www.pdx.edu/prc/population-reports-estimates)
- Statewide race & ethnicity data comes from five-year ACS estimates (data collected over 60-month period, 2011–2015)

Suggested Citation:

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

Oregon Health Authority
Office of Health Analytics

Oregon's Nursing Workforce

Based on data collected during 2015 and 2016

These fact sheets provide a snapshot of the state's nursing workforce using data collected by the Oregon Health Authority in collaboration with the Oregon Board of Nursing.

The Oregon State Board of Nursing safeguards the public's health and wellbeing by providing guidance for, and regulation of, entry into the profession, nursing education and continuing safe practice.

The Board of Nursing, with the help of its staff, determines licensure and certification requirements; interprets the Oregon Nurse Practice Act; evaluates and approves nursing education programs and nursing assistant training programs; issues licenses and renewals; investigates complaints and takes disciplinary action against nurses and nursing assistants who violate the Oregon Nurse Practice Act; maintains the nursing assistant registry; and, administers nursing assistant competency evaluations.

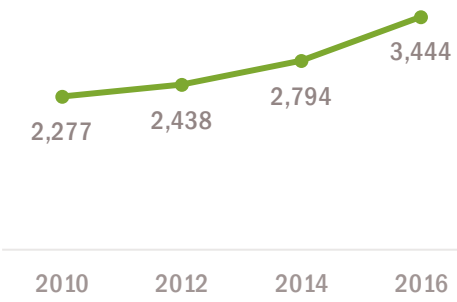
The board licenses/certifies registered nurses (RN), licensed practical nurses (LPN), and certified nursing assistants (CNA). RNs can also be licensed in advanced practice that includes nurse practitioners (NP), certified registered nurse anesthetists (CRNA), and clinical nurse specialists (CNS). CNAs can also hold a certified medication aide certificate (CMA).

Workforce data were collected for CNAs, LPNs, RNs, NPs, CRNAs and CNSs and are presented as individual occupational profiles. For this report, multiple certificate/license holders were grouped into the nursing category corresponding to their certification of license type: CNA, LPN, RN or into an advanced practice category (NP, CRNA or CNS).

If you would like more information about the Oregon Board of Nursing, please visit: http://www.oregon.gov/osbn

Nurse Practitioners (NP)

NPS LICENSED IN OREGON



ESTIMATED NUMBER OF NPS WORKING IN OREGON:

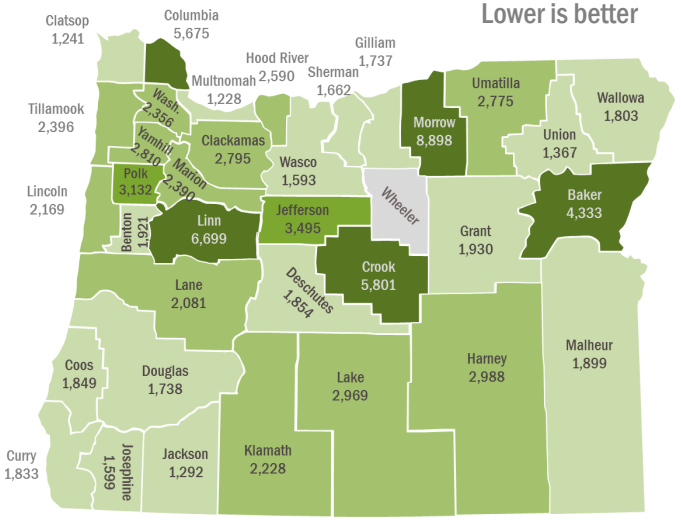
3,048

ESTIMATED PATIENT CARE FTE IN OREGON:

2,129

ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

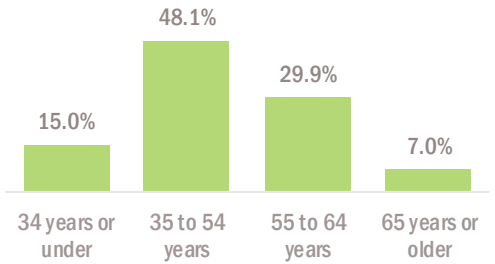


*Ratio based on total estimated direct patient care FTE in county

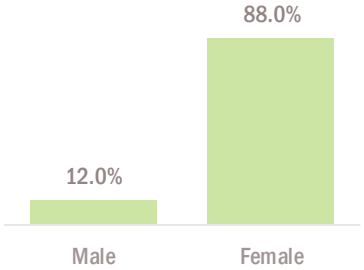
All subsequent data presented are from licensed nurse practitioners who completed the Health Care Workforce Survey and are working in Oregon (n=2,432).

WORKFORCE DEMOGRAPHICS

AGE

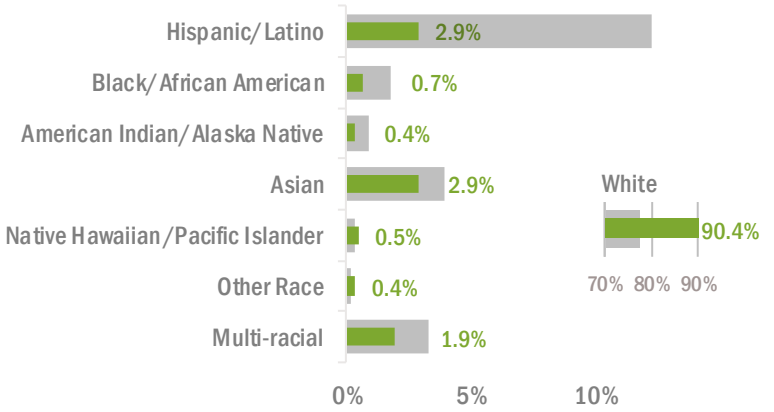


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



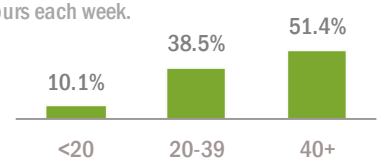
* Licensees who did not report race and ethnicity data are excluded from this chart. 6.6% of workforce are either missing data (0.4%) or declined to answer (6.2%). Racial categories exclude Hispanic.

Nurse Practitioners (NP)

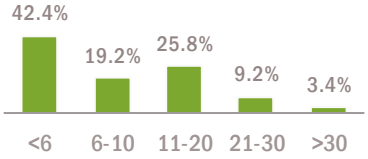
WORKFORCE SUPPLY

HOURS WORKED PER WEEK

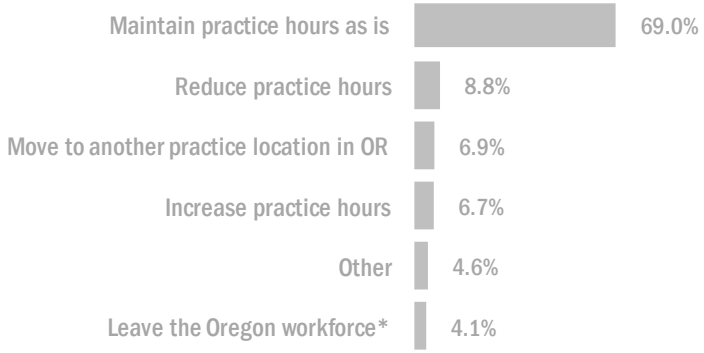
51% of NPs work at least 40 hours each week.



NUMBER OF YEARS LICENSED IN OREGON



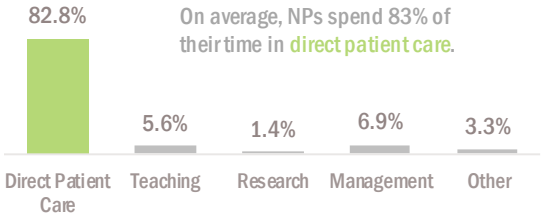
PRACTICE PLANS IN THE NEXT TWO YEARS



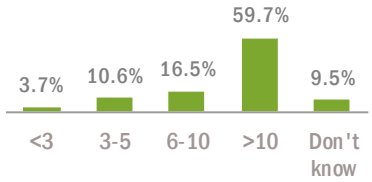
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

HOW NPS SPEND THEIR TIME

On average, NPs spend 83% of their time in direct patient care.

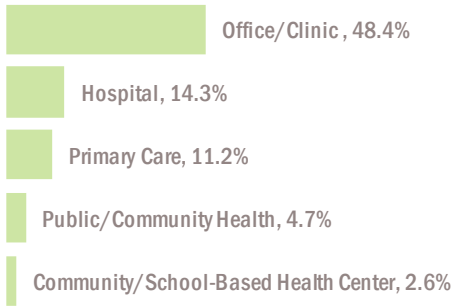


YEARS TO RETIREMENT

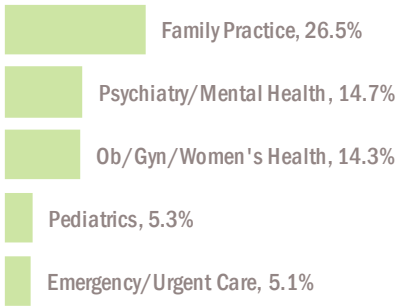


PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS

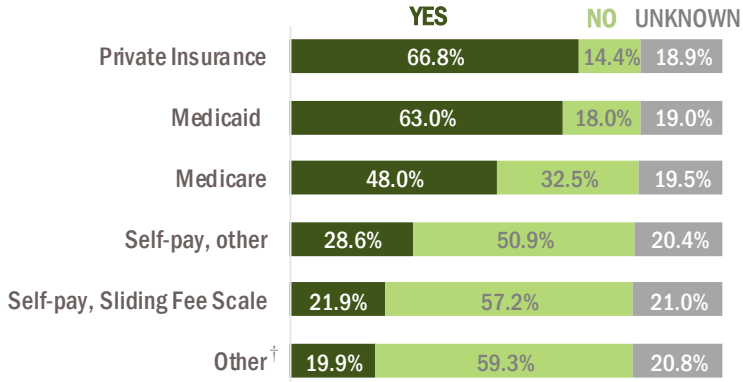


TOP 5 SPECIALTIES



PAYER MIX*

DOES PROVIDER CURRENTLY SEE PATIENTS WITH...

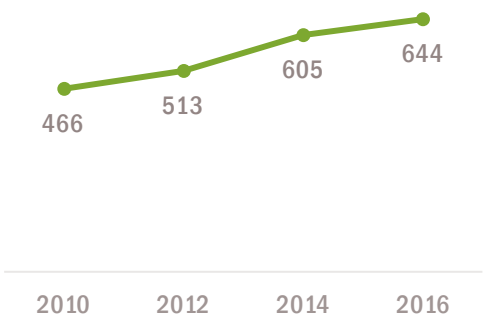


* Only includes those who report spending time in direct patent care (n=2,250)

† Other includes VA, Indian Health, etc.

Certified Registered Nurse Anesthetist (CRNA)

CRNAS LICENSED IN OREGON



ESTIMATED NUMBER OF CRNAS WORKING IN OREGON:

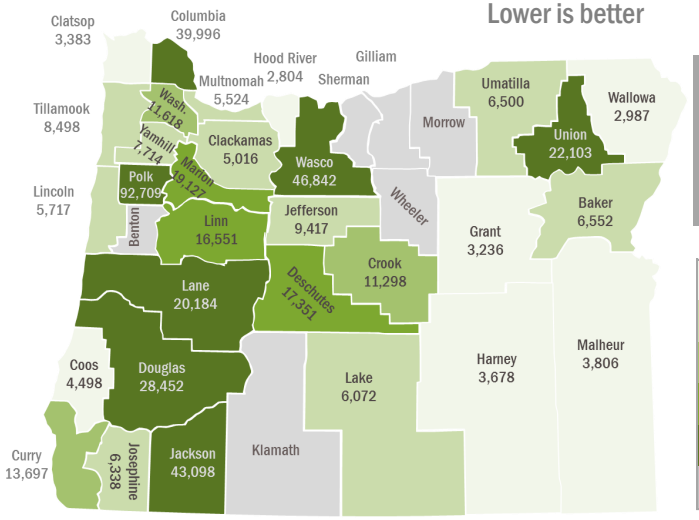
525

ESTIMATED PATIENT CARE FTE IN OREGON:

450

ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

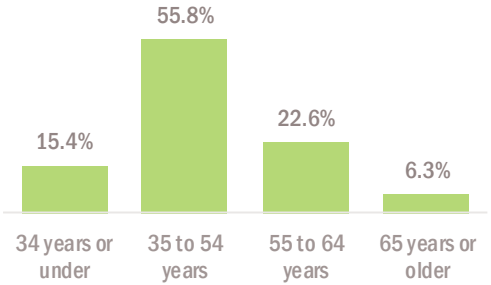


*Ratio based on total estimated direct patient care FTE in county

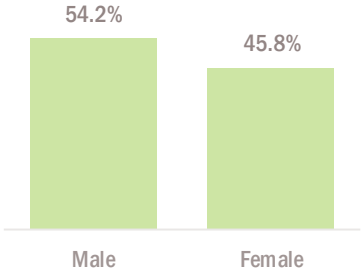
All subsequent data presented are from certified registered nurse anesthetists who completed the Health Care Workforce Survey and are working in Oregon (n=416).

WORKFORCE DEMOGRAPHICS

AGE

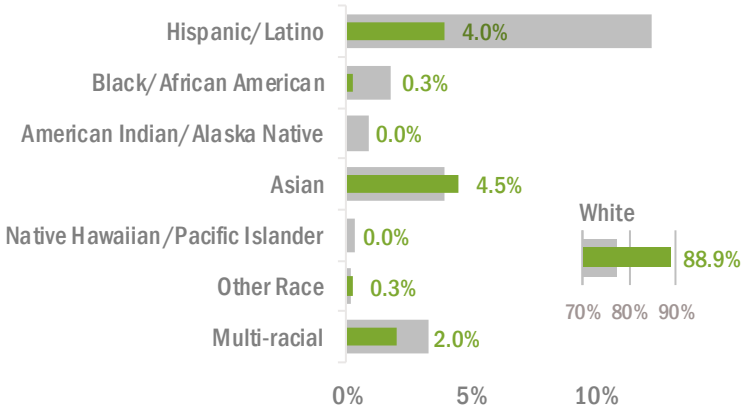


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



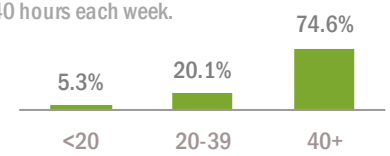
* Licensees who did not report race and ethnicity data are excluded from this chart. 15.4% of workforce are either missing data (0.0%) or declined to answer (15.4%). Racial categories exclude Hispanic.

Certified Registered Nurse Anesthetist (CRNA)

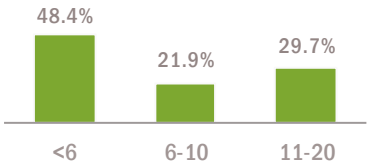
WORKFORCE SUPPLY

HOURS WORKED PER WEEK

75% of CRNAs work at least 40 hours each week.

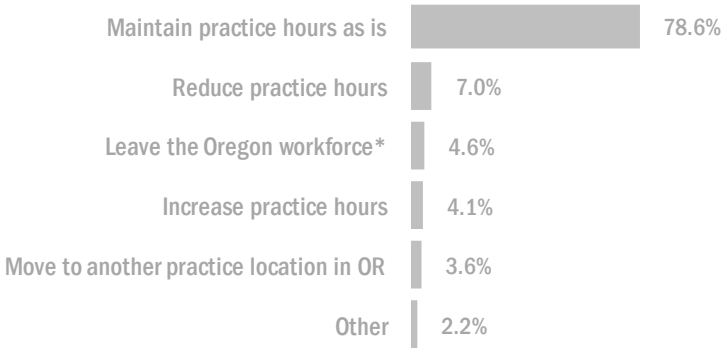


NUMBER OF YEARS LICENSED IN OREGON*



*CRNAs were licensed in Oregon beginning in 1998.

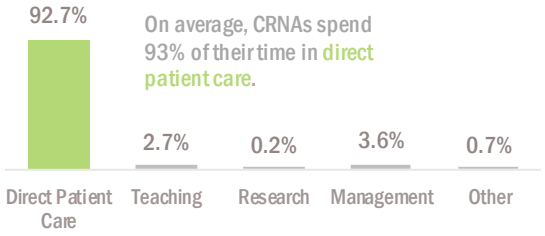
PRACTICE PLANS IN THE NEXT TWO YEARS



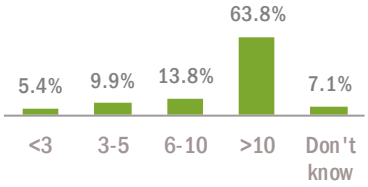
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

HOW CRNAS SPEND THEIR TIME

On average, CRNAs spend 93% of their time in direct patient care.

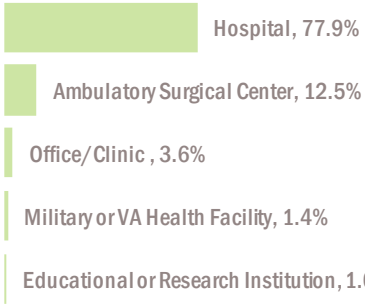


YEARS TO RETIREMENT

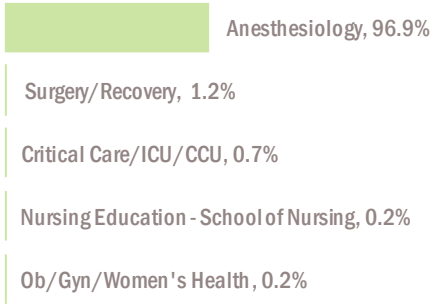


PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS

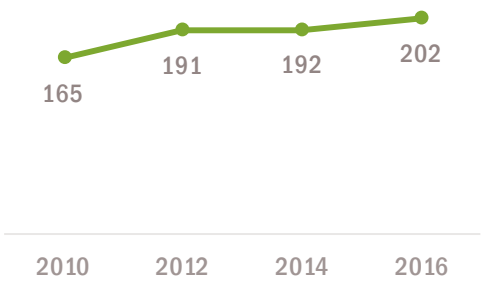


TOP 5 SPECIALTIES



Clinical Nurse Specialists (CNS)

CNSS LICENSED IN OREGON



ESTIMATED NUMBER OF CNSS WORKING IN OREGON:

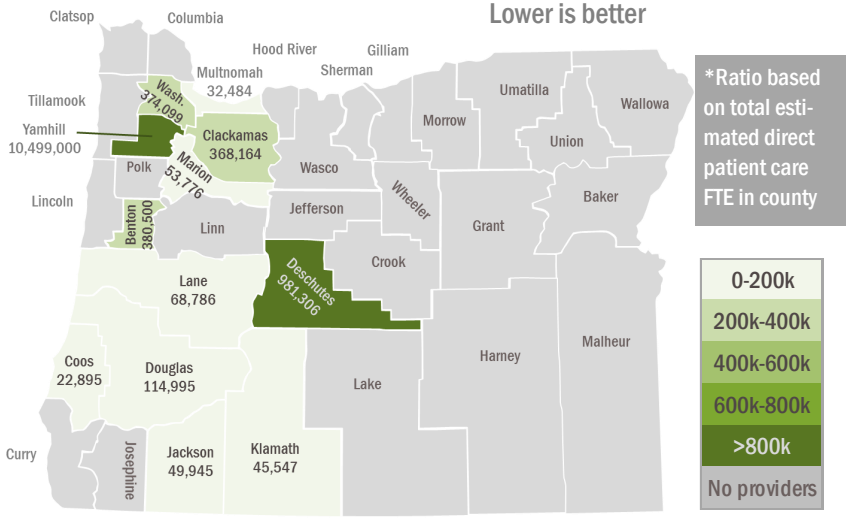
180

ESTIMATED PATIENT CARE FTE IN OREGON:

48

ESTIMATED POPULATION-TO-PROVIDER RATIO*

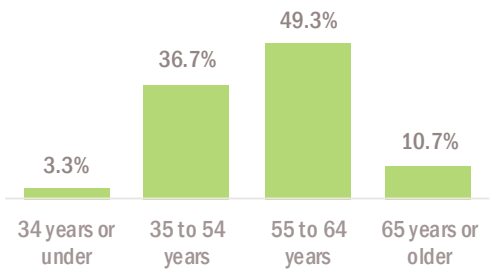
Lower is better



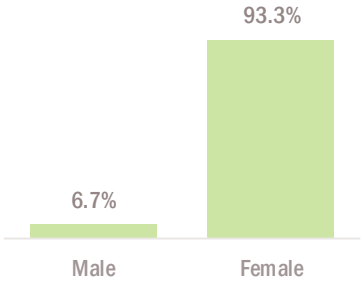
All subsequent data presented are from clinical nurse specialists who completed the Health Care Workforce Survey and are working in Oregon (n=150).

WORKFORCE DEMOGRAPHICS

AGE

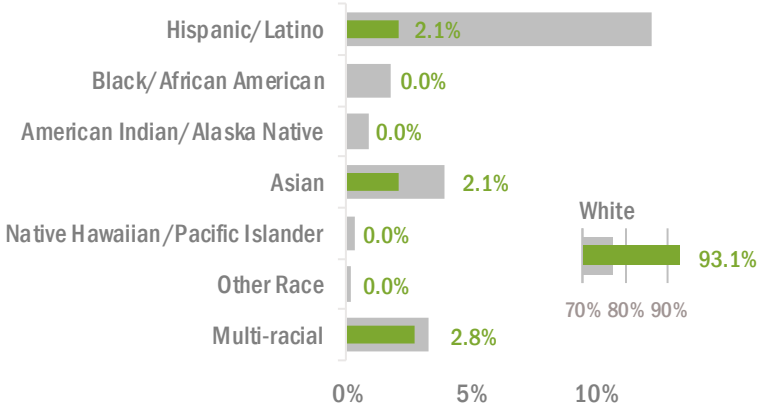


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



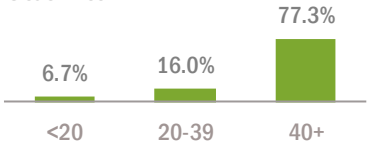
* Licensees who did not report race and ethnicity data are excluded from this chart. 4.0% of workforce are either missing data (0.7%) or declined to answer (3.3%). Racial categories exclude Hispanic.

Clinical Nurse Specialists (CNS)

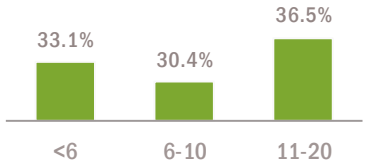
WORKFORCE SUPPLY

HOURS WORKED PER WEEK

77% of CNAs work at least 40 hours each week.

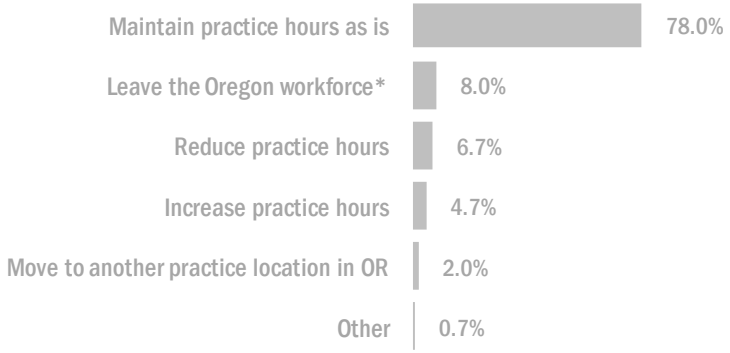


NUMBER OF YEARS LICENSED IN OREGON*



* CNSs were licensed in Oregon beginning in 2001.

PRACTICE PLANS IN THE NEXT TWO YEARS

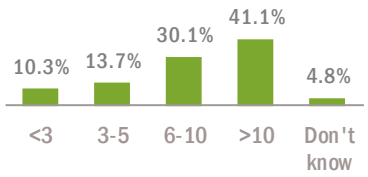


* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

HOW CNSS SPEND THEIR TIME

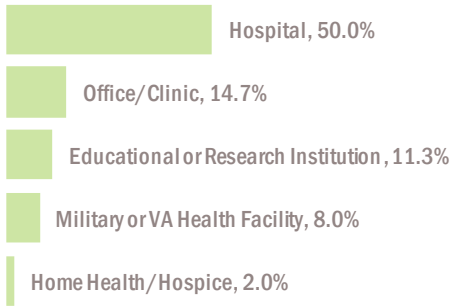
On average, CNSs spend 30% of their time in direct patient care.

YEARS TO RETIREMENT

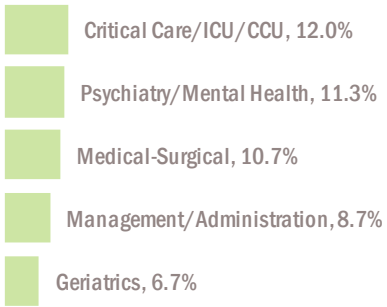


PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS

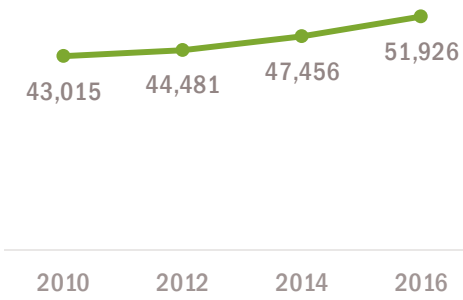


TOP 5 SPECIALTIES



Registered Nurses (RN)

RNS LICENSED IN OREGON



ESTIMATED NUMBER OF RNS WORKING IN OREGON:

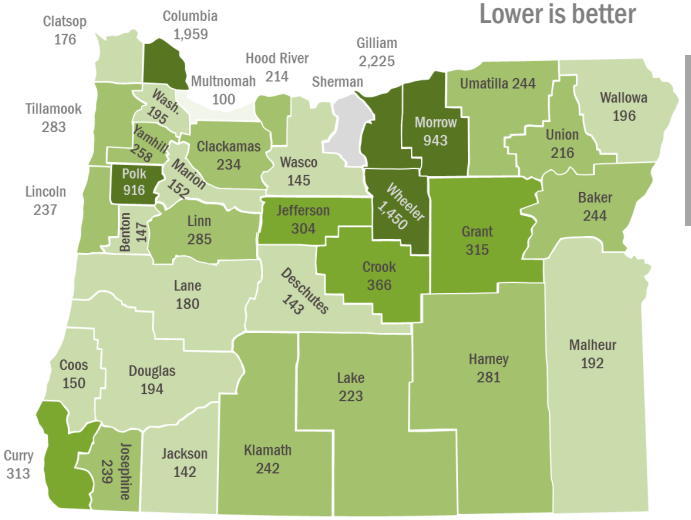
44,436

ESTIMATED PATIENT CARE FTE IN OREGON:

24,661

ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

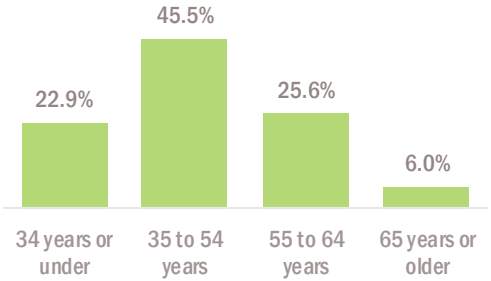


*Ratio based on total estimated direct patient care FTE in county

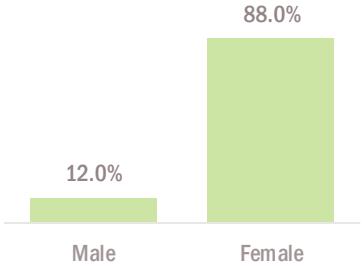
All subsequent data presented are from licensed registered nurses who completed the Health Care Workforce Survey and are working in Oregon (n=35,035).

WORKFORCE DEMOGRAPHICS

AGE

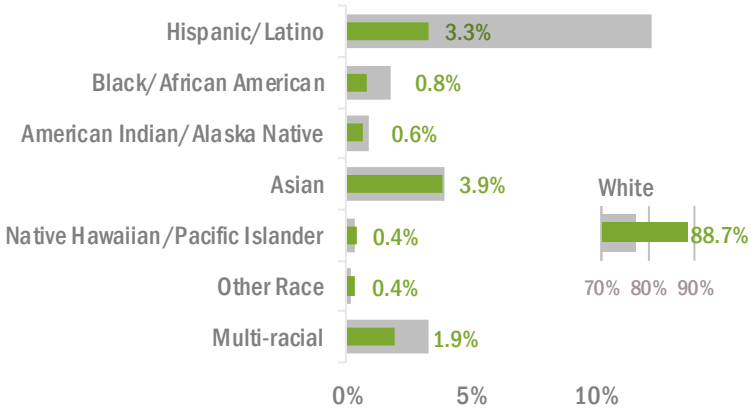


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



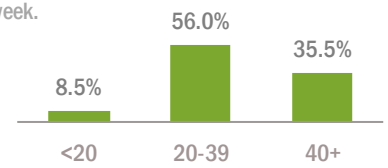
* Licensees who did not report race and ethnicity data are excluded from this chart. 8.7% of workforce are either missing data (0.2%) or declined to answer (8.5%). Racial categories exclude Hispanic.

Registered Nurses (RN)

WORKFORCE SUPPLY

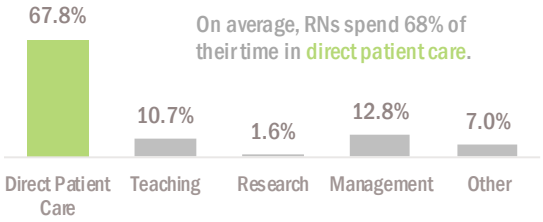
HOURS WORKED PER WEEK

36% of RNs work at least 40 hours each week.

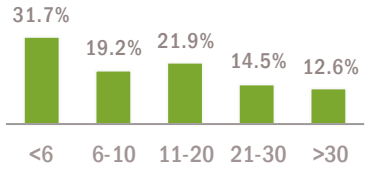


HOW RNS SPEND THEIR TIME

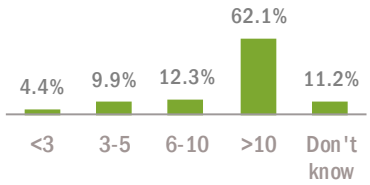
On average, RNs spend 68% of their time in direct patient care.



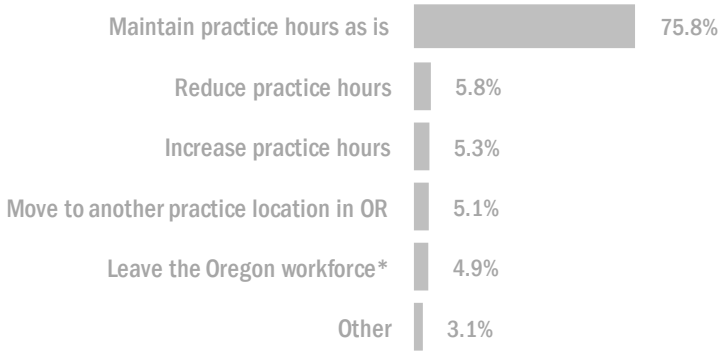
NUMBER OF YEARS LICENSED IN OREGON



YEARS TO RETIREMENT



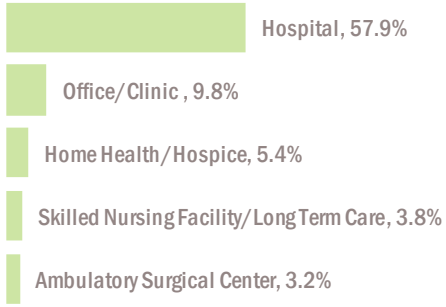
PRACTICE PLANS IN THE NEXT TWO YEARS



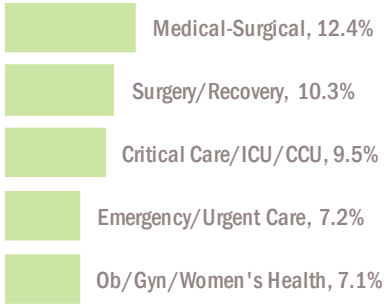
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS

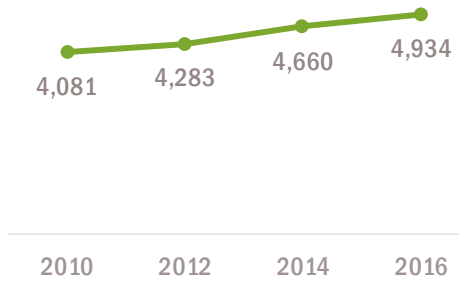


TOP 5 SPECIALTIES



Licensed Practical Nurses (LPN)

LPNS LICENSED IN OREGON



ESTIMATED NUMBER OF LPNS WORKING IN OREGON:

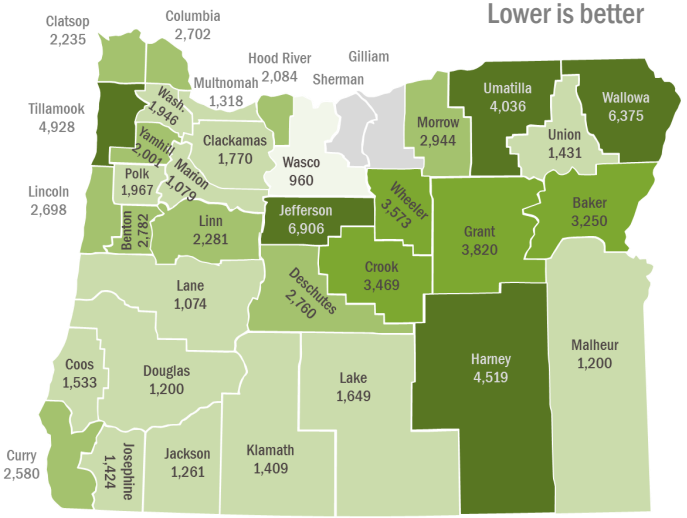
4,239

ESTIMATED PATIENT CARE FTE IN OREGON:

2,633

ESTIMATED POPULATION-TO-PROVIDER RATIO*

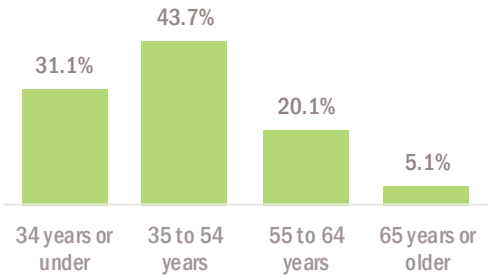
Lower is better



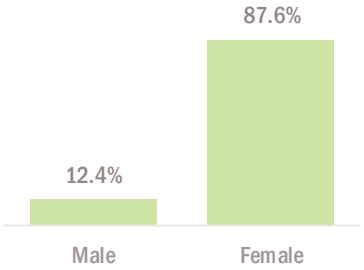
All subsequent data presented are from licensed practical nurses who completed the Health Care Workforce Survey and are working in Oregon (n=3,423).

WORKFORCE DEMOGRAPHICS

AGE

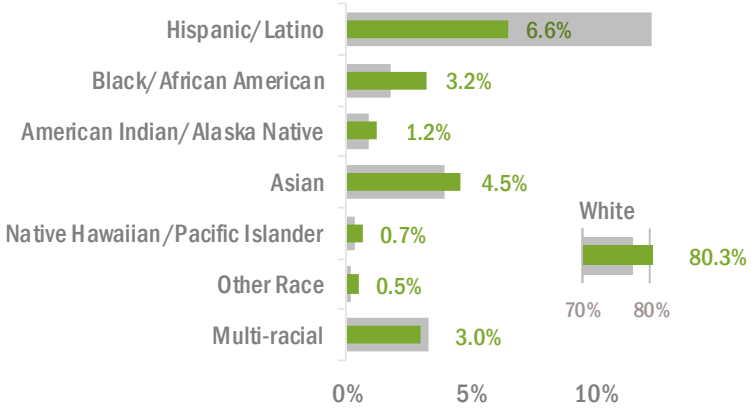


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



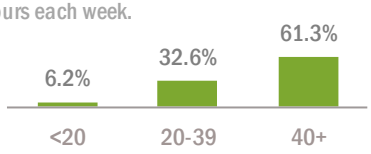
* Licensees who did not report race and ethnicity data are excluded from this chart. 9.5% of workforce are either missing data (0.2%) or declined to answer (9.3%). Racial categories exclude Hispanic.

Licensed Practical Nurses (LPN)

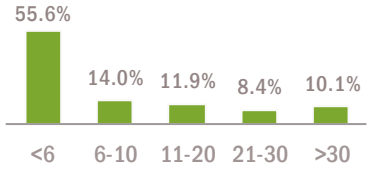
WORKFORCE SUPPLY

HOURS WORKED PER WEEK

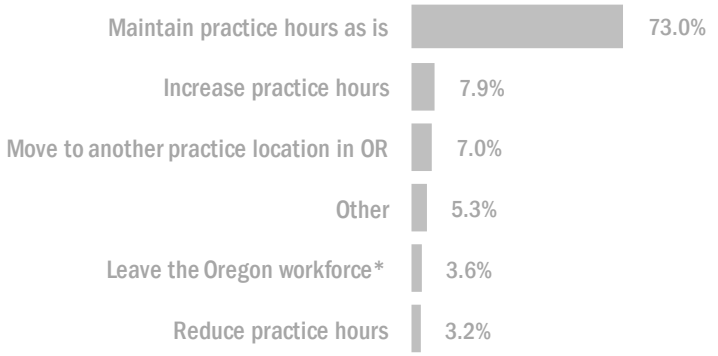
61% of LPNs work at least 40 hours each week.



NUMBER OF YEARS LICENSED IN OREGON



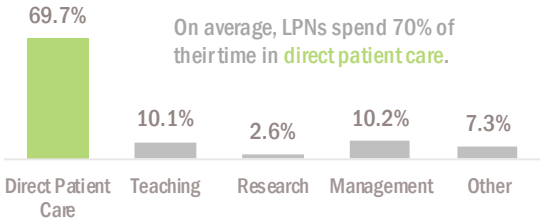
PRACTICE PLANS IN THE NEXT TWO YEARS



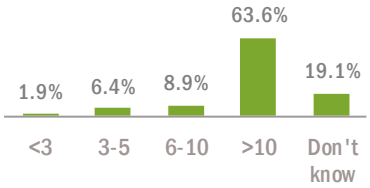
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

HOW LPNS SPEND THEIR TIME

On average, LPNs spend 70% of their time in direct patient care.

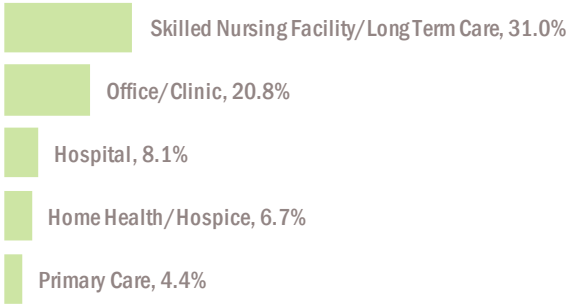


YEARS TO RETIREMENT

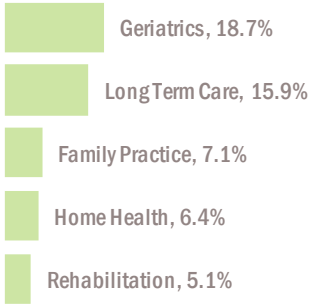


PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS

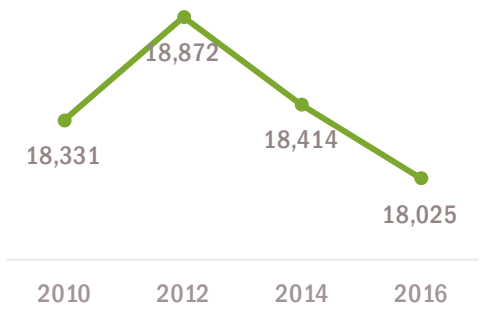


TOP 5 SPECIALTIES



Certified Nursing Assistants (CNA)

CNAS LICENSED IN OREGON



ESTIMATED NUMBER OF CNAS WORKING IN OREGON:

15,989

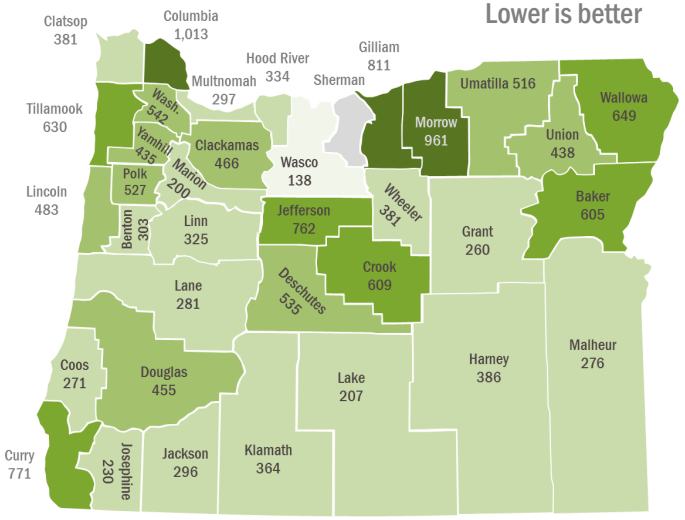
ESTIMATED PATIENT CARE FTE IN OREGON:

11,863

All subsequent data presented are from certified nursing assistants who completed the Health Care Workforce Survey and are working in Oregon (n=11,975).

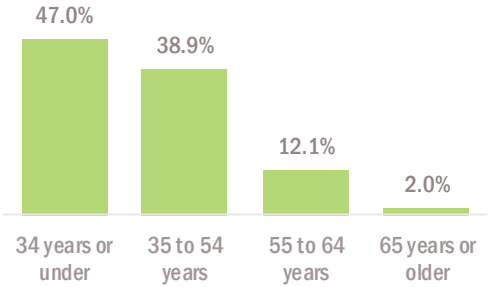
ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

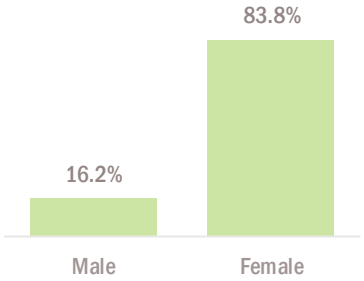


WORKFORCE DEMOGRAPHICS

AGE

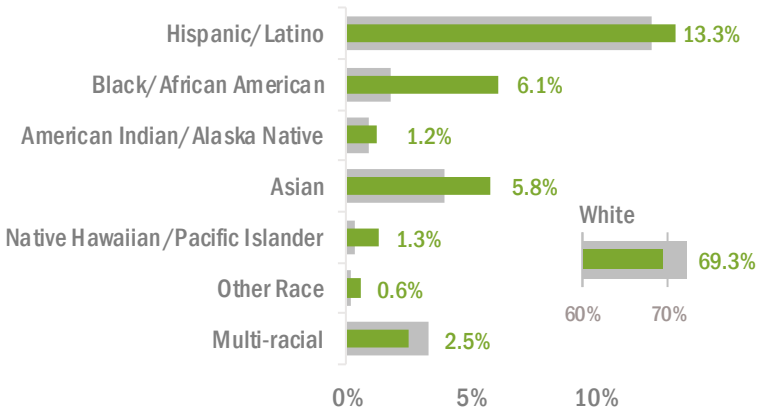


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



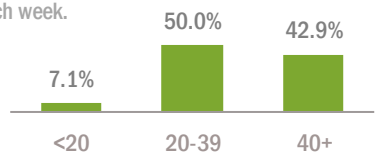
* Licensees who did not report race and ethnicity data are excluded from this chart. 10.6% of workforce are either missing data (0.5%) or declined to answer (10.1%). Racial categories exclude Hispanic.

Certified Nursing Assistants (CNA)

WORKFORCE SUPPLY

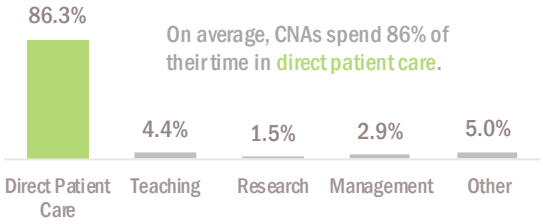
HOURS WORKED PER WEEK

43% of CNAs work at least 40 hours each week.

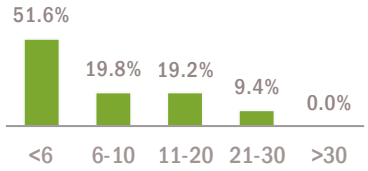


HOW CNAS SPEND THEIR TIME

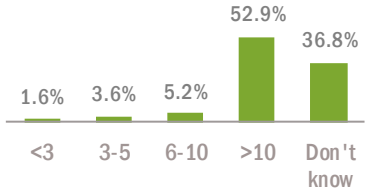
On average, CNAs spend 86% of their time in direct patient care.



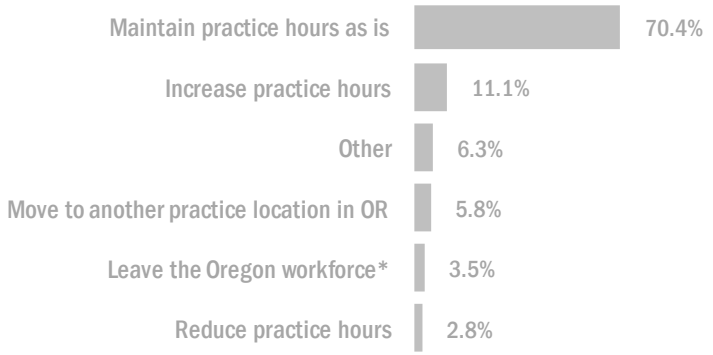
NUMBER OF YEARS LICENSED IN OREGON



YEARS TO RETIREMENT



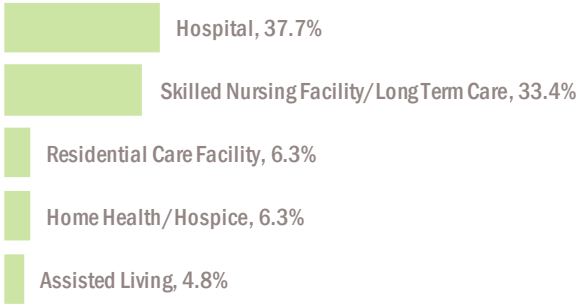
PRACTICE PLANS IN THE NEXT TWO YEARS



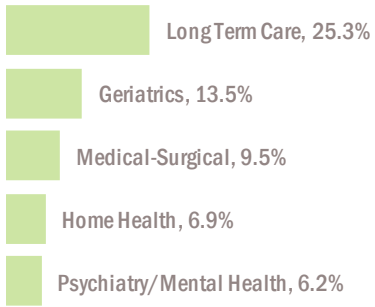
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS



TOP 5 SPECIALTIES



Appendix A: Estimated count, FTE in direct patient care, and population-to-provider FTE ratio by county

		NP			CRNA			CNS		
County	Population	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio
BAKER	16,510	6	3.8	4,333	3	2.5	6,552	0	0.0	-
BENTON	91,320	67	47.5	1,921	0	0.0	-	5	0.2	380,500
CLACKAMAS	404,980	208	144.9	2,795	96	80.7	5,016	7	1.1	368,164
CLATSOP	38,225	40	30.8	1,241	11	11.3	3,383	0	0.0	-
COLUMBIA	50,795	14	9.0	5,675	1	1.3	39,996	2	0.0	-
COOS	63,190	40	34.2	1,849	17	14.1	4,498	6	2.8	22,895
CROOK	21,580	5	3.7	5,801	3	1.9	11,298	0	0.0	-
CURRY	22,600	18	12.3	1,833	3	1.7	13,697	0	0.0	-
DESCHUTES	176,635	138	95.3	1,854	11	10.2	17,351	2	0.2	981,306
DOUGLAS	110,395	87	63.5	1,738	5	3.9	28,452	1	1.0	114,995
GILLIAM	1,980	1	1.1	1,737	0	0.0	-	0	0.0	-
GRANT	7,410	5	3.8	1,930	3	2.3	3,236	0	0.0	-
HARNEY	7,320	5	2.5	2,988	3	2.0	3,678	0	0.0	-
HOOD RIVER	24,735	15	9.6	2,590	11	8.8	2,804	0	0.0	-
JACKSON	213,765	232	165.5	1,292	6	5.0	43,098	13	4.3	49,945
JEFFERSON	22,790	9	6.5	3,495	3	2.4	9,417	0	0.0	-
JOSEPHINE	84,675	71	52.9	1,599	15	13.4	6,338	0	0.0	-
KLAMATH	67,410	40	30.3	2,228	0	0.0	-	2	1.5	45,547
LAKE	8,015	4	2.7	2,969	3	1.3	6,072	0	0.0	-
LANE	365,940	234	175.9	2,081	23	18.1	20,184	12	5.3	68,786
LINCOLN	47,735	29	22.0	2,169	9	8.4	5,717	1	0.0	-
LINN	122,315	23	18.3	6,699	8	7.4	16,551	0	0.0	-
MALHEUR	31,705	21	16.7	1,899	10	8.3	3,806	0	0.0	-
MARION	333,950	194	139.8	2,390	20	17.5	19,127	15	6.2	53,776
MORROW	11,745	3	1.3	8,898	0	0.0	-	0	0.0	-
MULTNOMAH	790,670	987	643.7	1,228	167	143.1	5,524	104	24.3	32,484
POLK	79,730	37	25.5	3,132	1	0.9	92,709	0	0.0	-
SHERMAN	1,795	1	1.1	1,662	0	0.0	-	0	0.0	-
TILLAMOOK	25,920	13	10.8	2,396	5	3.1	8,498	0	0.0	-
UMATILLA	79,880	38	28.8	2,775	13	12.3	6,500	0	0.0	-
UNION	26,745	28	19.6	1,367	1	1.2	22,103	0	0.0	-
WALLOWA	7,140	6	4.0	1,803	3	2.4	2,987	0	0.0	-
WASCO	26,700	23	16.8	1,593	1	0.6	46,842	0	0.0	-
WASHINGTON	583,595	351	247.7	2,356	57	50.2	11,618	7	1.6	374,099
WHEELER	1,465	0	0.0	-	0	0.0	-	0	0.0	-
YAMHILL	104,990	57	37.4	2,810	14	13.6	7,714	1	0.0	10,499,000
STATEWIDE	4,076,350	3,048	2,129	1,915	525	450	9,065	180	48	84,153

Note: Circles indicate whether county has no providers (red) or is above (yellow) or below (green) the statewide ratio by 50%.

Population-to-provider ratios are based on the estimated patient care FTE in the county. Values greater than the county population are due to less than 1.0 FTE in county.

Appendix A: Continued

		RN			LPN			CNA		
County	Population	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio
BAKER	16,510	127	67.7	244	7	5.1	3,250	47	27.3	605
BENTON	91,320	1,103	620.4	147	55	32.8	2,782	420	301.7	303
CLACKAMAS	404,980	3,100	1,730.6	234	376	228.8	1,770	1,207	869.5	466
CLATSOP	38,225	389	216.9	176	25	17.1	2,235	139	100.2	381
COLUMBIA	50,795	76	25.9	1,959	30	18.8	2,702	69	50.1	1,013
COOS	63,190	764	421.0	150	62	41.2	1,533	323	233.2	271
CROOK	21,580	107	58.9	366	10	6.2	3,469	49	35.5	609
CURRY	22,600	126	72.3	313	15	8.8	2,580	42	29.3	771
DESCHUTES	176,635	2,219	1,233.7	143	96	64.0	2,760	446	330.3	535
DOUGLAS	110,395	994	568.1	194	126	92.0	1,200	311	242.9	455
GILLIAM	1,980	3	0.9	2,225	0	0.0	-	3	2.4	811
GRANT	7,410	54	23.5	315	4	1.9	3,820	36	28.6	260
HARNEY	7,320	59	26.1	281	3	1.6	4,519	31	19.0	386
HOOD RIVER	24,735	227	115.3	214	16	11.9	2,084	101	74.1	334
JACKSON	213,765	2,590	1,504.7	142	271	169.5	1,261	965	723.1	296
JEFFERSON	22,790	139	74.9	304	7	3.3	6,906	39	29.9	762
JOSEPHINE	84,675	650	354.3	239	94	59.5	1,424	481	367.5	230
KLAMATH	67,410	497	278.5	242	66	47.9	1,409	252	185.2	364
LAKE	8,015	71	36.0	223	9	4.9	1,649	54	38.7	207
LANE	365,940	3,815	2,035.4	180	583	340.7	1,074	1,815	1,301.8	281
LINCOLN	47,735	380	201.7	237	32	17.7	2,698	136	98.9	483
LINN	122,315	744	429.5	285	82	53.6	2,281	493	376.1	325
MALHEUR	31,705	305	165.5	192	37	26.4	1,200	160	114.9	276
MARION	333,950	3,917	2,203.6	152	465	309.6	1,079	2,106	1,668.8	200
MORROW	11,745	32	12.5	943	5	4.0	2,944	18	12.2	961
MULTNOMAH	790,670	14,077	7,928.2	100	985	599.8	1,318	3,660	2,666.7	297
POLK	79,730	229	87.0	916	64	40.5	1,967	201	151.2	527
SHERMAN	1,795	0	0.0	-	0	0.0	-	0	0.0	-
TILLAMOOK	25,920	172	91.5	283	9	5.3	4,928	54	41.1	630
UMATILLA	79,880	562	327.2	244	30	19.8	4,036	214	154.8	516
UNION	26,745	248	123.8	216	27	18.7	1,431	93	61.1	438
WALLOWA	7,140	65	36.4	196	1	1.1	6,375	16	11.0	649
WASCO	26,700	380	183.9	145	42	27.8	960	249	193.8	138
WASHINGTON	583,595	5,477	2,997.6	195	509	299.9	1,946	1,435	1,076.6	542
WHEELER	1,465	4	1.0	1,450	1	0.4	3,573	5	3.9	381
YAMHILL	104,990	735	406.6	258	94	52.5	2,001	318	241.4	435
STATEWIDE	4,076,350	44,436	24,661	165	4,239	2,633	1,548	15,989	11,863	344

Note: Circles indicate whether county has no providers (red) or is above (yellow) or below (green) the statewide ratio by 50%.

Population-to-provider ratios are based on the estimated patient care FTE in the county. Values greater than the county population are due to less than 1.0 FTE in county.

About these fact sheets:

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:

- 2016 State and county population estimates come from Portland State University Population Research Center (https://www.pdx.edu/prc/population-reports-estimates)
- Statewide race & ethnicity data comes from five-year ACS estimates (data collected over 60-month period, 2011–2015)

Suggested Citation:

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

Oregon Health Authority
Office of Health

Oregon's Physical Therapy Workforce

Based on data collected during 2015 and 2016

These fact sheets provide a snapshot of the state's physical therapy workforce using data collected by the Oregon Health Authority in collaboration with the Oregon Physical Therapist Licensing Board.

The board's purpose is public protection and to establish professional standards of practice which assure that physical therapists and physical therapist assistants are properly educated, hold valid/current licenses, practice within their scope of practice and continue to receive ongoing training throughout their careers.

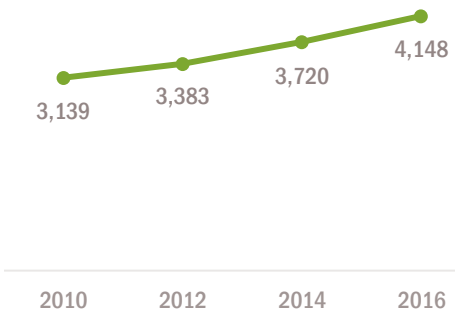
Physical therapy practice is governed by state statutes and rules, which define the scope of practice. The board issues licenses, promulgates rules, monitors continuing competency, investigates complaints, issues civil penalties for violations and may revoke, suspend or impose probation on a licensee or limit his/her practice.

Workforce data were collected for physical therapists and physical therapy assistants and are presented as individual occupational profiles.

If you would like more information about the Oregon Physical Therapist Licensing Board, please visit: http://www.oregon.gov/PTBrd

Physical Therapists (PT)

PTS LICENSED IN OREGON



ESTIMATED NUMBER OF PTS WORKING IN OREGON:

3,234

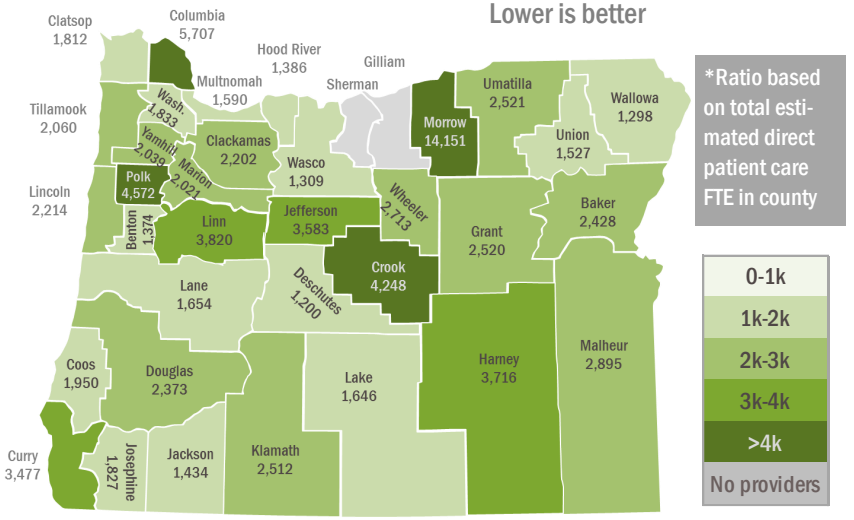
ESTIMATED PATIENT CARE FTE IN OREGON:

2,206

All subsequent data presented are from physical therapists who completed the Health Care Workforce Survey and are working in Oregon (n=3,131).

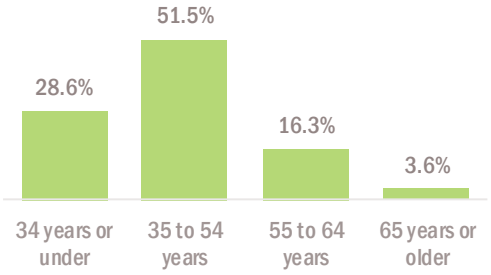
ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

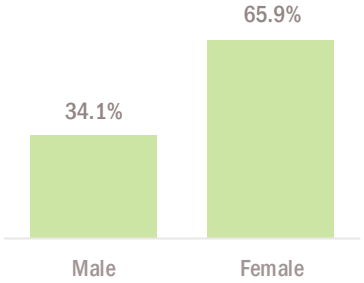


WORKFORCE DEMOGRAPHICS

AGE

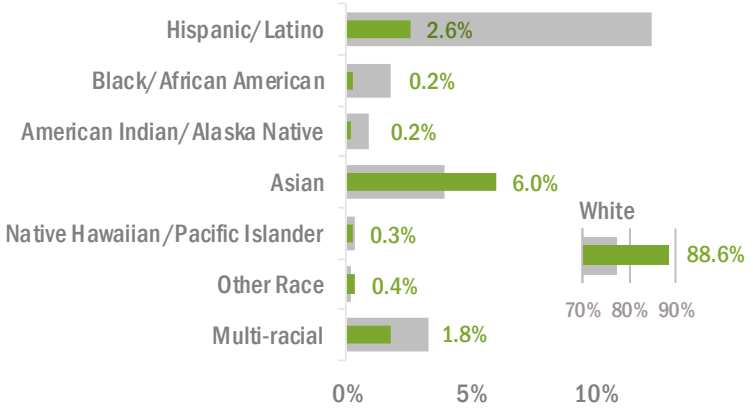


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



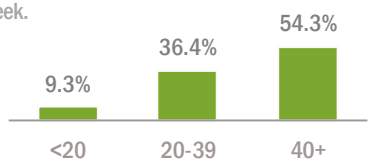
* Licensees who did not report race and ethnicity data are excluded from this chart. 9.0% of workforce are either missing data (0.0%) or declined to answer (9.0%). Racial categories exclude Hispanic.

Physical Therapists (PT)

WORKFORCE SUPPLY

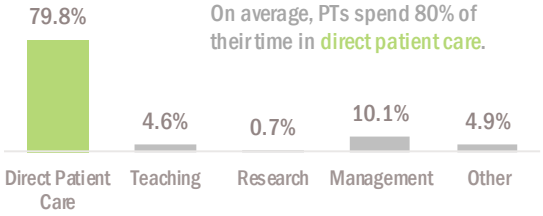
HOURS WORKED PER WEEK

54% of PTs work at least 40 hours each week.

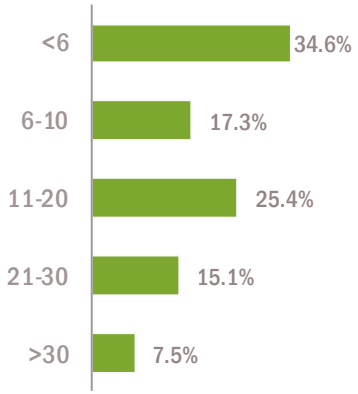


HOW PTS SPEND THEIR TIME

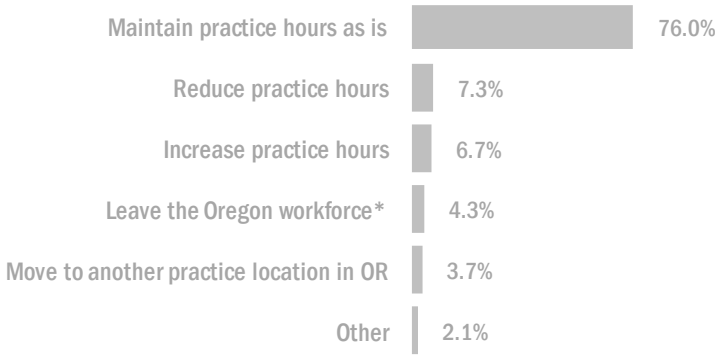
On average, PTs spend 80% of their time in direct patient care.



NUMBER OF YEARS LICENSED



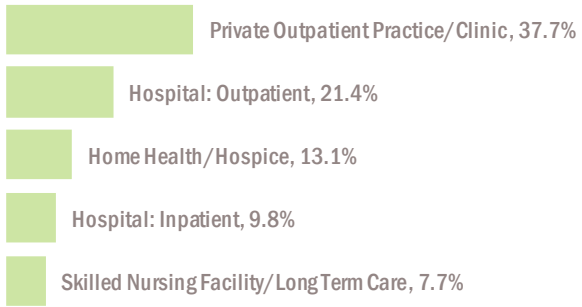
PRACTICE PLANS IN THE NEXT TWO YEARS



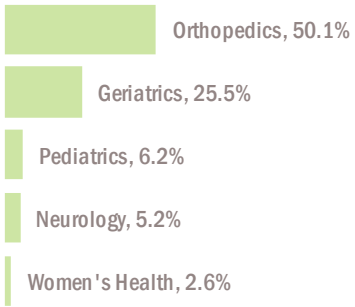
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS

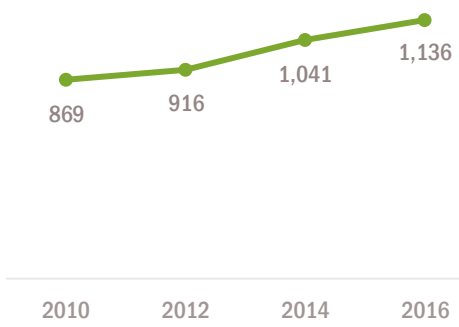


TOP 5 SPECIALTIES



Physical Therapy Assistants (PTA)

PTAS LICENSED IN OREGON



ESTIMATED NUMBER OF PTAS WORKING IN OREGON:

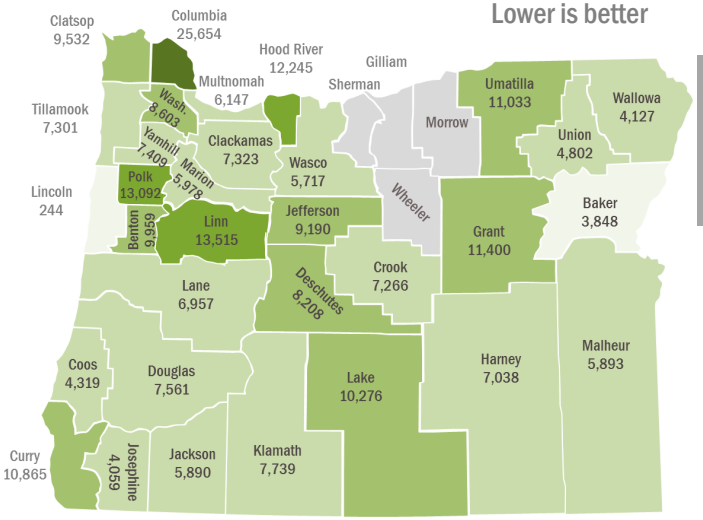
840

ESTIMATED PATIENT CARE FTE IN OREGON:

569

ESTIMATED POPULATION-TO-PROVIDER RATIO*

Lower is better

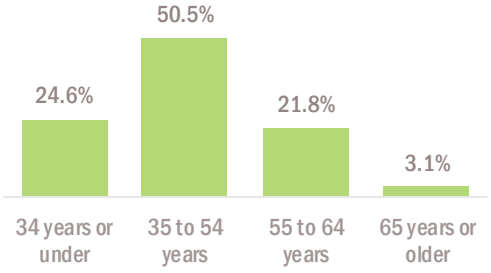


*Ratio based on total estimated direct patient care FTE in county

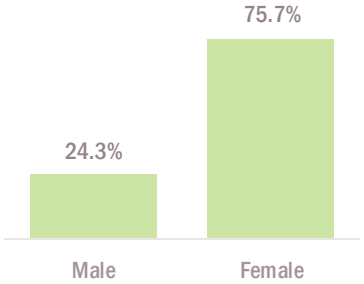
All subsequent data presented are from physical therapy assistants who completed the Health Care Workforce Survey and are working in Oregon (n=812).

WORKFORCE DEMOGRAPHICS

AGE

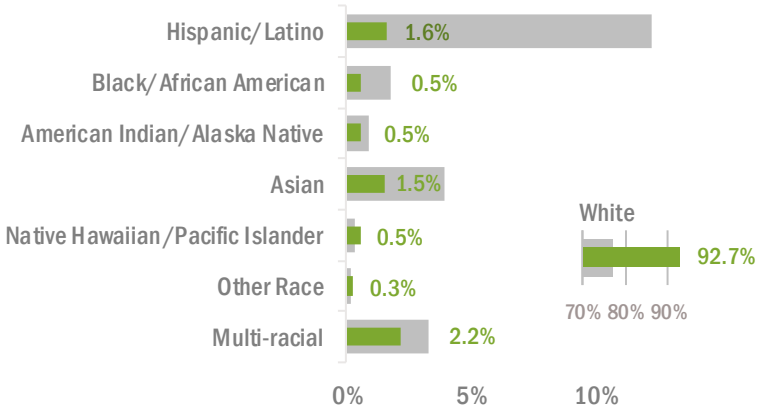


GENDER



RACE & ETHNICITY

WORKFORCE VS POPULATION*



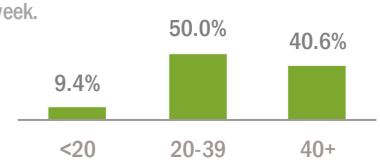
* Licensees who did not report race and ethnicity data are excluded from this chart. 10.1% of workforce are either missing data (0.0%) or declined to answer (10.1%). Racial categories exclude Hispanic.

Physical Therapy Assistants (PTA)

WORKFORCE SUPPLY

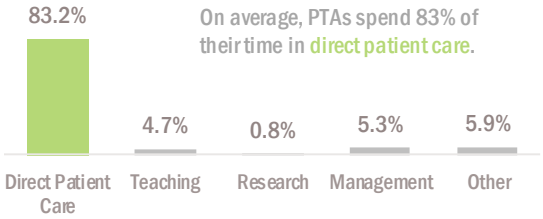
HOURS WORKED PER WEEK

41% of PTAs work at least 40 hours each week.

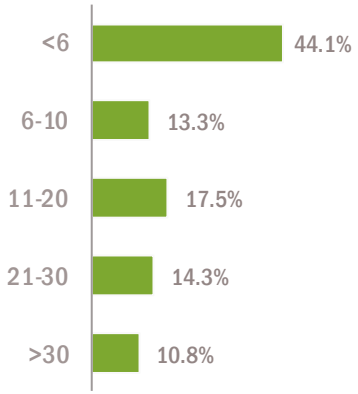


HOW PTAS SPEND THEIR TIME

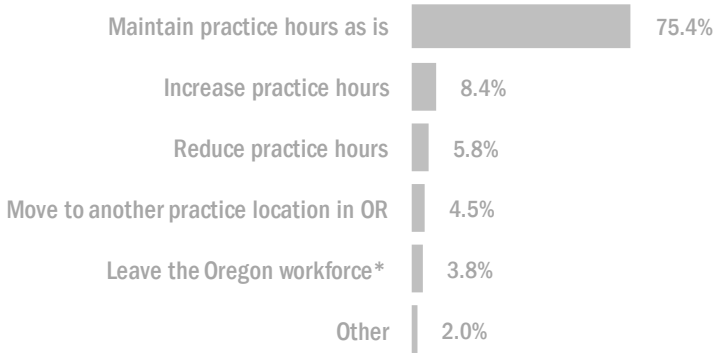
On average, PTAs spend 83% of their time in direct patient care.



NUMBER OF YEARS LICENSED



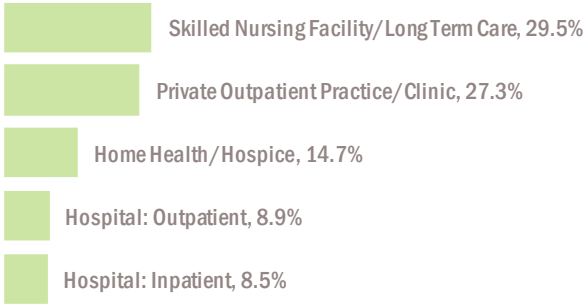
PRACTICE PLANS IN THE NEXT TWO YEARS



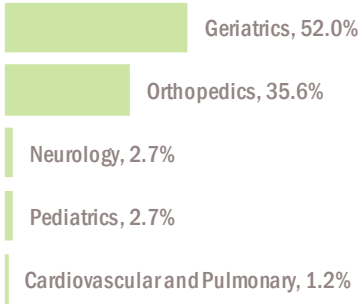
* Leave the Oregon workforce includes those planning to retire, move to practice out of state, or leave the occupation.

PRACTICE SETTINGS & SPECIALTIES

TOP 5 PRACTICE SETTINGS



TOP 5 SPECIALTIES



Appendix A: Estimated count, FTE in direct patient care, and population-to-provider FTE ratio by county

		PT				PTA			
County	Population	Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio		Estimated Count	Est. Patient Care FTE	Pop-to-Prov Ratio	
BAKER	16,510	9	6.8	2,428		6	4.3	3,848	
BENTON	91,320	92	66.5	1,374		12	9.2	9,959	
CLACKAMAS	404,980	260	183.9	2,202		80	55.3	7,323	
CLATSOP	38,225	31	21.1	1,812		6	4.0	9,532	
COLUMBIA	50,795	10	8.9	5,707	🟡	3	2.0	25,654	🟡
COOS	63,190	40	32.4	1,950		19	14.6	4,319	
CROOK	21,580	6	5.1	4,248	🟡	4	3.0	7,266	
CURRY	22,600	9	6.5	3,477	🟡	4	2.1	10,865	🟡
DESCHUTES	176,635	227	147.2	1,200		34	21.5	8,208	
DOUGLAS	110,395	59	46.5	2,373		22	14.6	7,561	
GILLIAM	1,980	0	0.0	-	🔴	0	0.0	-	🔴
GRANT	7,410	4	2.9	2,520		1	0.7	11,400	🟡
HARNEY	7,320	2	2.0	3,716	🟡	1	1.0	7,038	
HOOD RIVER	24,735	32	17.9	1,386		4	2.0	12,245	🟡
JACKSON	213,765	215	149.1	1,434		50	36.3	5,890	
JEFFERSON	22,790	7	6.4	3,583	🟡	3	2.5	9,190	
JOSEPHINE	84,675	58	46.4	1,827		31	20.9	4,059	
KLAMATH	67,410	35	26.8	2,512		11	8.7	7,739	
LAKE	8,015	7	4.9	1,646		1	0.8	10,276	
LANE	365,940	326	221.3	1,654		89	52.6	6,957	
LINCOLN	47,735	29	21.6	2,214		4	3.1	244	🟢
LINN	122,315	46	32.0	3,820	🟡	16	9.1	13,515	🟡
MALHEUR	31,705	16	11.0	2,895	🟡	7	5.4	5,893	
MARION	333,950	228	165.3	2,021		78	55.9	5,978	
MORROW	11,745	1	0.8	14,151	🟡	0	0.0	-	🔴
MULTNOMAH	790,670	771	497.4	1,590		192	128.6	6,147	
POLK	79,730	24	17.4	4,572	🟡	9	6.1	13,092	🟡
SHERMAN	1,795	0	0.0	-	🔴	0	0.0	-	🔴
TILLAMOOK	25,920	15	12.6	2,060		4	3.6	7,301	
UMATILLA	79,880	44	31.7	2,521		9	7.2	11,033	🟡
UNION	26,745	23	17.5	1,527		7	5.6	4,802	
WALLOWA	7,140	6	5.5	1,298		2	1.7	4,127	
WASCO	26,700	34	20.4	1,309		7	4.7	5,717	
WASHINGTON	583,595	487	318.4	1,833		99	67.8	8,603	
WHEELER	1,465	1	0.5	2,713		0	0.0	-	🔴
YAMHILL	104,990	78	51.5	2,039		21	14.2	7,409	
STATEWIDE	4,076,350	3,234	2,206	1,848		840	569	7,166	

Note: Circles indicate whether county has no providers (red) or is above (yellow) or below (green) the statewide ratio by 50%.

Population-to-provider ratios are based on the estimated patient care FTE in the county. Values greater than the county population are due to less than 1.0 FTE in county.

About these fact sheets:

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:

- 2016 State and county population estimates come from Portland State University Population Research Center (https://www.pdx.edu/prc/population-reports-estimates)
- Statewide race & ethnicity data comes from five-year ACS estimates (data collected over 60-month period, 2011–2015)

Suggested Citation:

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

2018

Examining the Health Care Workforce Needs for Communities and Patients in Oregon

Oregon Health Authority

HEALTH POLICY AND ANALYTICS DIVISION

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- Background on needs assessment 3
- What this is and isn't — an overview 3
- Assessing health care workforce needs — three lenses 4
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Examining the Health Care Workforce Needs for Communities and Patients in Oregon

Background on needs assessment

In 2017, the Oregon Legislature enacted House Bill 3261 that, among other directives, requires the Oregon Health Policy Board to conduct regular assessments of the health care workforce needs of the state. Specifically, the legislation requires the assessment to consider the needs that result from increased health insurance coverage in Oregon, workforce needs to address health disparities among medically underserved populations in Oregon, and the specific workforce needs of rural communities across Oregon. The needs assessment required by the bill is also designed to inform state investments to improve the diversity and capacity of Oregon's health care workforce through the Health Care Provider Incentive Fund.

The legislation requires an initial needs assessment report to be submitted to the Legislature by Feb. 1, 2018. After this initial report, and beginning in 2019, the needs assessment will be created every two years, in advance of session of the Oregon Legislature that takes place in odd-numbered years. Because the timeframe for the initial needs assessment is much shorter than for future reports, this report includes a discussion of future goals and analysis that should be undertaken for the 2019 and future year reports.

Charge from HB 3261

1. **The Oregon Health Policy Board, in consultation with the Oregon Health and Science University and the Office of Rural Health, shall conduct an assessment of the health care workforce needs in this state, including but not limited to the health care workforce needed to address:**
    a. **The continuing expansion in commercial and publicly funded health care coverage;**
    b. **Health disparities among medically underserved populations; and**
    c. **The need for health care providers in rural communities.**
2. **The board shall report to the Legislative Assembly no later than February 1 in each odd-numbered year on the health care workforce needs in this state and proposals for addressing those needs with programs funded by the Health Care Provider Incentive Fund established under ORS 676.450.**

What this is and isn't – an overview

The requirement in HB 3261 for a workforce needs assessment is designed in part to inform state policy efforts to help identify and address gaps in Oregon's health care workforce and the needs of communities lacking health care resources. In particular, the legislative charge envisions this report as a key resource to inform the operation of the Health Care Provider Incentive Fund also included in HB 3261.

This initial report, however, is not intended to serve as *the* definitive recommendation or declaration as to the number of health care providers required in each Oregon community and/or the type of health care providers that each community should have. Instead, this report provides data and insight to highlight workforce needs in communities across Oregon in order to examine provider types where needs are most significant, and provide general guidance for decision-making related to distributing health care provider incentives.

While producing concrete and declarative recommendations for Oregon's health care workforce in specific communities is a laudable goal, there are several barriers to producing such a report. For instance:

- Clear, consensus recommendations for how many health care providers (and the types of providers) a community needs based on their population, demographics or health status are limited if not nonexistent.
- The evolution of team-based health care delivery, the increasing proliferation of tele-health services and the ability of different types of practitioners to serve patients complicate creating target ratios.
- Population needs vary considerably, even within a county. As a result, creating thoughtful and quantifiable target population-to-provider ratios that account for unique community characteristics would be challenging and potentially very time consuming.

Assessing health care workforce needs — three lenses

The challenges in assessing need

To be certain, defining the needs of the health care system is inherently challenging because different parts of the health care system tend to define their needs in different ways. For instance, the need for a specific service could be defined at either the individual/patient level, the community level, or the health care industry level. As a result, it is important to examine Oregon's health care workforce needs through multiple lenses. At the same time, the workforce needs as viewed from the lens of a hospital or clinic at an organizational level may differ from the needs as viewed from a community or patient lens. These differences should also be acknowledged and accepted to enable policymakers and state officials to best use the information gained from each measurement of need.

A further challenge to the establishment of clear, concrete measurements of the number and type of health providers needs by communities or the state as a whole is the fact that workforce gaps are sometimes better understood at the conceptual level than at the empirical level. This is because there is not a consensus for a target population-to-provider ratio for all communities or provider types. Federal standards do exist, such as one full-time physician for every 3,500 people in a given area.

However, even this standard does not fully account for travel time to the nearest health care provider for the population of a given area, specific health care needs of that community, or the population characteristics that affect need for health care services (such as age or socio-economic factors). Other standards also exist, such as the Kaiser Family Foundation's "gold standard" of a 1,500-to-1 population-to-provider ratio.

Furthermore, an inequitable distribution of health care providers across Oregon means that some communities lack enough practitioners even though statewide (or even countywide) totals do not indicate provider shortages no matter which provider-to-population standard is used. Policy solutions that rely solely on efforts to redistribute the current supply of health care resources will not be viable because they could simply create new shortages in the name of solving current

ones. Instead, strategies should seek to grow overall health care workforce capacity in order to ultimately support areas with identified shortages. In addition, increasing community capacity to address current workforce needs is also important. Both of these strategies can be undertaken at the same time as efforts to improve the overall efficiency of provider distribution for the future.

This document examines Oregon's workforce needs through three lenses that provide both distinct and overlapping views of the health care system. Specifically, these lenses look at:

- Health care workforce needs of the health care industry and the economic demand for health care practitioners and workers
- Patients' access to care and the types of health care services that should be available in communities of different sizes
- Health care provider capacity of communities relative to their population and demographics.

Separating the analysis along these three lenses allows for the consideration of the findings gained from each as well as the strengths and weaknesses of each lens separately. In the end, all the views provide useful information for policymakers seeking to increase the capacity of the Oregon health care workforce to meet the health care needs of Oregon's population and highlight the reality that viewing the state's workforce needs through just one lens will provide an incomplete picture.

Lens one: industry/economic demand for health care workforce

Assessing Oregon's health care workforce needs should entail an examination of the perceived needs of employers in the health care industry and their short- and longer-term objectives to hire and retain health care practitioners to serve both current and anticipated future demand from patients.

One tool that can be used is a biennial analysis and report produced by the Oregon Employment Department that examines occupations in need around Oregon and uses relative demand for workers and potential wages to craft a prioritization for job training efforts. This prioritization is not an exact measure of where workforce needs are the greatest from the perspective of health care employers, nor is it a statistical model of the number of providers needed to meet a specific access-to-care threshold. However, it does provide a useful look at the occupations that are both in high demand by employers and that provide high wages to those who fill them.

As part of this report, 30 high-wage and high-demand occupations are grouped as top priorities for the state. Not surprisingly, occupations in the health care field are prominent on the list due to several separate categories of health care providers being identified. While there is significant overlap in some of the practitioner types, providers identified specifically include:

- Physical therapists, physicians and surgeons, family practitioners, internists, obstetricians and gynecologists, physician assistants, registered nurses, nurse practitioners, anesthesiologists and pediatricians.

Additional occupational categories identified as prioritized health care occupations (statewide) include:

- Mental health counselors, physical therapist assistants, mental health and substance abuse social workers, occupational therapists, dentists, medical and clinical lab technologists and pharmacists.

The Oregon Employment Department's (OED's) overall occupation prioritizations are based on several factors: projected job openings over the coming decade, projected openings relative to the size of the occupational category, median wage for the occupational category, employer demand for occupation in a recent year (statewide measure), and the supply of workers from education and training programs relative to employer demand for the occupation (statewide measure). This prioritization emphasizes high-demand and high-wage occupational categories. However, examining local need for occupational categories *separately* from the wages paid to those occupations is also an important stand-alone measure of industry demand.

To this end, we examine Oregon Employment Department data on projected job openings for occupational categories at the county/local level. The table below lists the health care occupations that OED measured in the highest two thresholds of projected job openings in each community.

County/region	**Occupations in highest tier of projected job openings, 2014–2024**	**Occupations in second highest tier of projected job openings, 2014–2024**
Clackamas	Registered nurse, home health aide, medical assistant, medical secretary	Physical therapist, nursing assistant, dispensing optician, pharmacist, dental assistant, massage therapist, pharmacy technician, other physician and surgeon*
East Cascades (Crook, Deschutes, Gilliam, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco, Wheeler)	Registered nurse, nursing assistant, medical assistant, medical secretary	Physical therapist, medical and health services manager, dental hygienist, pharmacist, home health aide, dental assistant, child, family and school social worker, pharmacy technician, other physician and surgeon*
Eastern Oregon (Baker, Grant, Harney, Malheur, Morrow, Umatilla, Union, Wallowa)	Registered nurse, nursing assistant, medical secretary	Physical therapist, medical assistant, dental assistant, mental health counselor, pharmacy technician
Lane	Registered nurse, nursing assistant, medical assistant, medical secretary	Physical therapist, medical and health services manager, dental hygienist, home health aide, dental assistant, clinical counseling and school psychologist, mental health and substance abuse social worker, other physician and surgeon*
Mid Valley (Linn, Marion, Polk, Yamhill)	Registered nurse, nursing assistant, medical assistant, medical secretary, home health aide	Physical therapist, medical and health services manager, dental hygienist, dental assistant, mental health and substance abuse social worker, child family and school social worker, pharmacy technician, licensed practical and vocational nurse, other physician and surgeon*

Northwest Oregon (Benton, Clatsop, Columbia, Lincoln, Tillamook)	Registered nurse, nursing assistant, medical secretary, home health aide	Physical therapist, medical and health services manager, medical assistant, dental assistant, EMT/paramedic, other physician and surgeon*
Portland Metro (Multnomah, Washington)	Registered nurse, nursing assistant, medical assistant, medical secretary, other physician and surgeon*	Home health aide, dental assistant, medical and health services manager
Rogue Valley (Jackson, Josephine)	Registered nurse, nursing assistant, medical assistant, medical secretary, home health aide, other physician and surgeon*	Physical therapist, medical and health services manager, dental hygienist, pharmacist, dental assistant, licensed practical/vocational nurse, pharmacy technician, phlebotomist
Southwestern Oregon (Coos, Curry, Douglas)	Registered nurse, nursing assistant, medical assistant, medical secretary	Medical and health services manager, dental assistant, home health aide, mental health counselor, child family and school social worker, licensed practical/vocational nurse, pharmacy technician, phlebotomist, EMT/paramedic, other physician and surgeon*

* Occupational categories within the Oregon Employment Department do not match with provider categories from the legislatively authorized Workforce Data Reporting Program in OHA. For instance, the "other physicians and surgeons" category includes osteopathic physicians.

Limitations to the use of industry and economic demand for health care workers

While industry-focused data can be useful to show expected future demand for the health care workforce, there are limitations to the data's value for policymakers. For instance, some communities with high industry demand for practitioners could be high in some areas that already have very robust practitioner supply and where residents generally have substantial access to a wide variety of health care services. Furthermore, industry demand for practitioners can at times be driven by financial incentives and may not always indicate increased system capacity to serve patients who are not currently able to receive services. Finally, industry demand may not account for whether new practitioners or services will be widely available to a community's residents or whether traditionally underserved populations will benefit from new practitioners. However, the industry demand is one critical piece of a larger view of the capacity of Oregon's health care workforce and can help provide insight into where policy efforts should focus in the coming years.

Lens two: Measuring workforce needs by examining patients' access to care and the array of health care services that should be available in communities of various types

Patients' access to necessary health care services is another important way to measure whether the state's health care workforce is meeting the needs of the state's residents and, if not, where the gaps are most pronounced. While access to services can depend on many factors including a patient's specific health insurance coverage, measuring the existence and proximity of specific services provides a helpful insight to measure of access.

One initiative, "Creating a Blueprint for Health in Rural Oregon," undertaken in 2015–2016, provides a powerful method of identifying need for Oregon communities. This project surveyed community members, researchers and other stakeholders on the type and level of services deemed *minimally* necessary for various types of Oregon communities based on their hospital configuration. The configurations identified were communities without a hospital, communities with a small/critical access hospital and communities with a multi-specialty/regional hospital. This effort acknowledges that not all communities can expect the same service levels. However, it also acknowledges that defining some minimal standard for communities of various sizes and capacities is possible and advantageous.

This exercise did not take a comprehensive look at *all* health care service categories; nor did it seek to establish what an *ideal* array of services for all Oregon communities. For instance, the project did not examine long-term and residential care needs of communities of various sizes, nor did it examine the availability of specialty services outside the realm of primary care. Still this analysis can prove useful.

Below is a summary of the blueprint's findings related to service type and the desired ability to access these services in consistency and method, categorized by whether the community has a larger (regional) hospital, a critical access (small) hospital or no hospital:

Summary of minimal access to services standards (full-time, part-time or referral-only) for various service categories, by community type

Service type	Regional hospital	Small hospital	No hospital
Primary care generalist	Full-time	Full-time	Full-time or part-time
Primary care specialist	Full-time	Part-time or full-time	Part-time or referral
Oral health generalist	Full-time	Full-time	Part-time
Oral health specialist (periodontics/surgery)	Full-time	Part-time or referral	Referral
Prenatal care — low risk	Full-time	Part-time	Part-time
Prenatal care — high risk	Full-time	Part-time	Part-time or referral
Hospital deliveries — low risk	Full-time	Full-time	N/A
Behavioral health — outpatient counseling and therapy	Full-time	Full-time	Full-time or part-time
Behavioral health — psychiatric services	Full-time	Part-time	Referral or part-time
Behavioral health — alcohol/drug treatment	Full-time	Full-time	Full-time or part-time

The following table summarizes how communities as distinguished by these three categories fare against a minimal service standard in the areas defined above. Overall, communities with regional hospitals more consistently met the minimal service standards, while communities without hospitals were less likely to meet minimum standards identified during the blueprint process.

The number of communities meeting the minimal standards set forth by the blueprint for each service category, grouped by community type

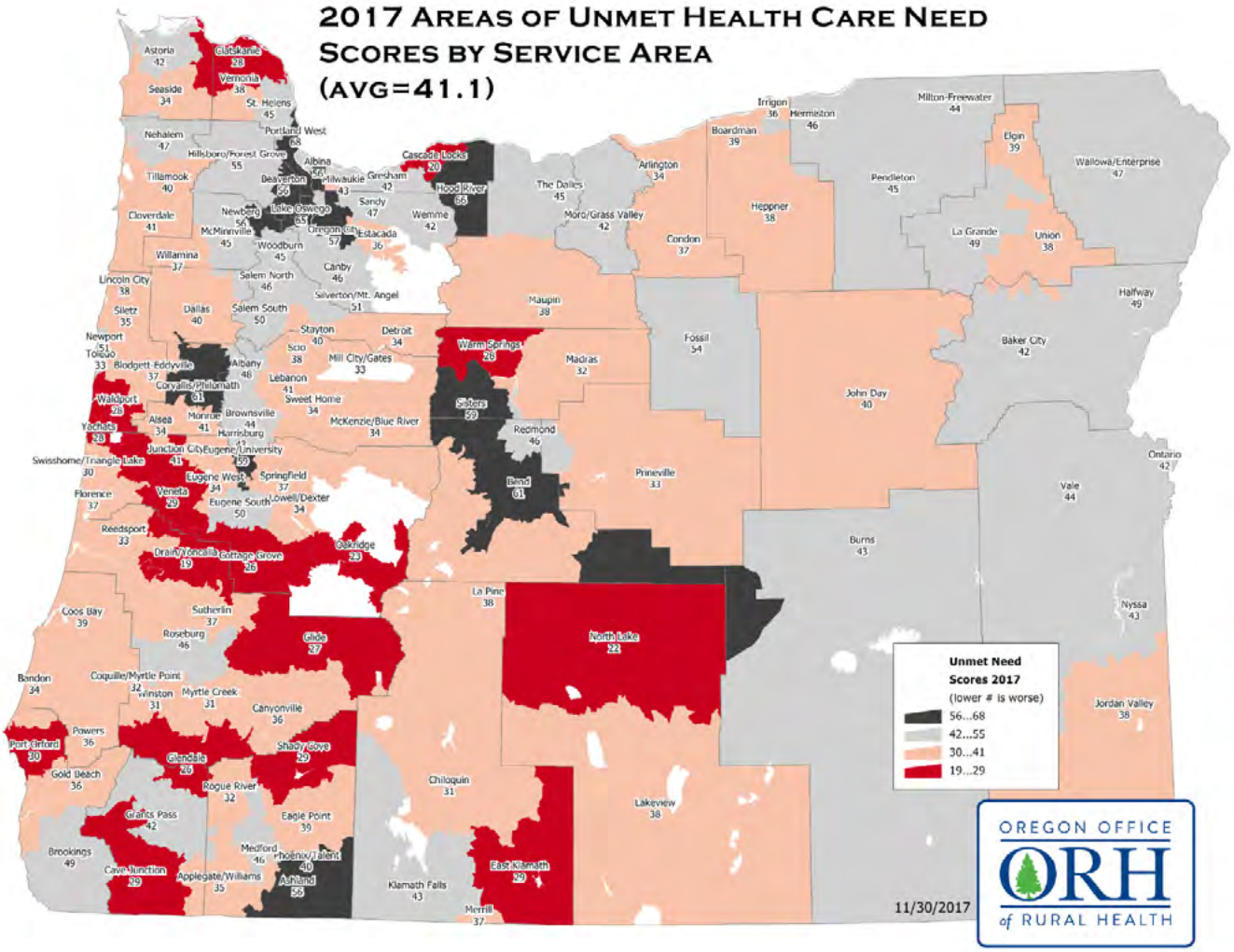
Community type and total number	Primary care generalist	Primary care specialist	Oral health generalist	Oral health specialist	Hospital deliveries (low risk)	Behavioral. health: outpatient counseling and therapy	Behavioral health: psychiatric services	Behavioral health: alcohol / drug treatment
Regional hospital - 5	5/5	5/5	5/5	2/5	5/5	5/5	5/5	5/5
Small hospital - 31	31/31	26/31	31/31	4/31	24/31	31/31	20/31	31/31
No hospital - 68	56/68	17/68	34/68	N/A	N/A	4/68	16/68	45/68
All rural primary care service areas - 104	92/104	48/104	70/104	6/36	29/36	40/104	56/104	81/104

Note: This analysis does not attempt to measure "referral" capability of non-hospital communities nor their ability to accommodate non-hospital deliveries for residents seeking those services.

Another report from the Oregon Office of Rural Health, "Areas of Unmet Health Care Need (AUHCN) in Oregon," is also useful to illuminate workforce gaps related to patients' access to care. This annual report examines several measures of access to primary care services for physical, oral and behavioral health needs. The report combines nine different measures to produce an overall score, which can be used to group communities into areas of relative access and thus need. Furthermore, the report examines communities at the primary care service area level, which is a sub-county distinction that can be an especially useful way to examine counties with urbanized and rural communities.

Across the state, the AUHCN report calculated overall scores that ranged from 19 (which represented the most unmet need) to 68 (the lowest level of unmet need). The average score for the state in 2017 is 41.1. The average score among rural and frontier communities is much lower, at 38.3 while urban counties' average score is 52.

Figure 1: Unmet need score by primary care service area (courtesy of the Office of Rural Health)



In addition to the overall scores, specific measures can also indicate needs in communities across Oregon. For instance, measures of preventable hospitalizations, emergency department visits for either dental or mental health reasons, and the measure of adequacy of prenatal care can all be viewed as indicators (though not as declarative findings) of the local health care system's adequacy to meet the ongoing health care needs of the communities they serve.

For instance, communities with higher than average levels of the following measures may have an inadequate primary care system: preventable hospitalizations (as measured by ambulatory care sensitive condition discharge rates); births with inadequate prenatal care or emergency department visits as a result or either non-traumatic dental reasons, mental health concerns or substance abuse. Communities that fare poorly on all four of these measures may be most in need.

Figure 2: Ambulatory care sensitive condition discharge rates above the state average

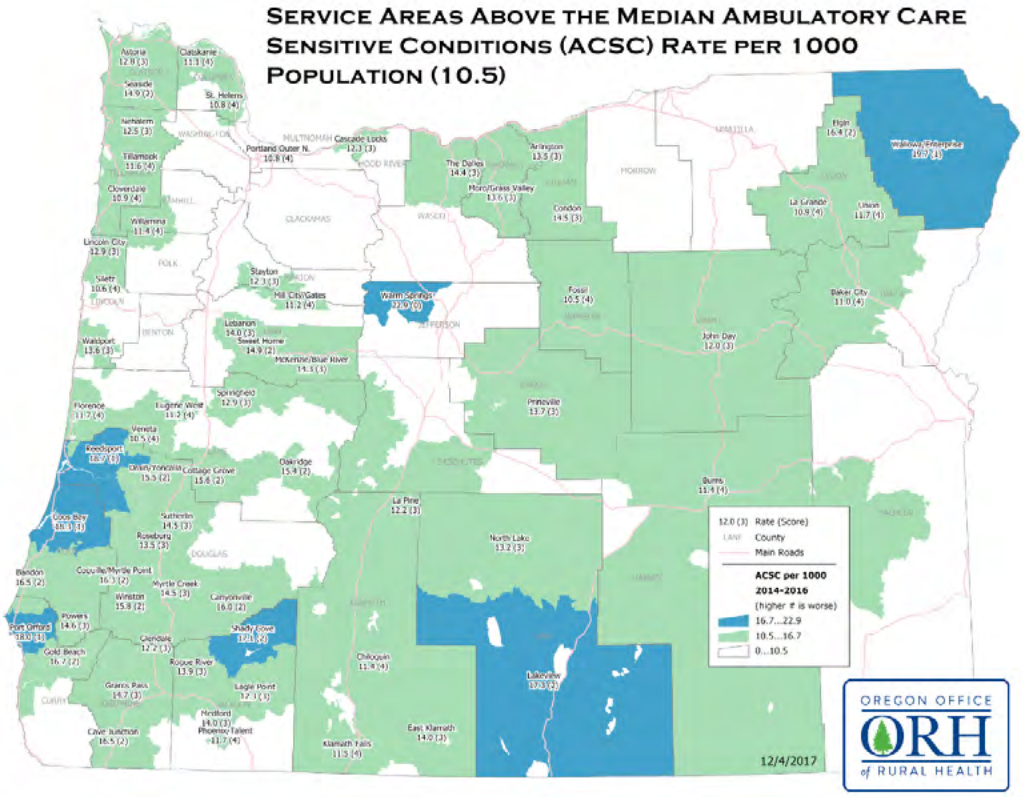


Figure 3: Inadequate prenatal care rate per 1,000 births above state average

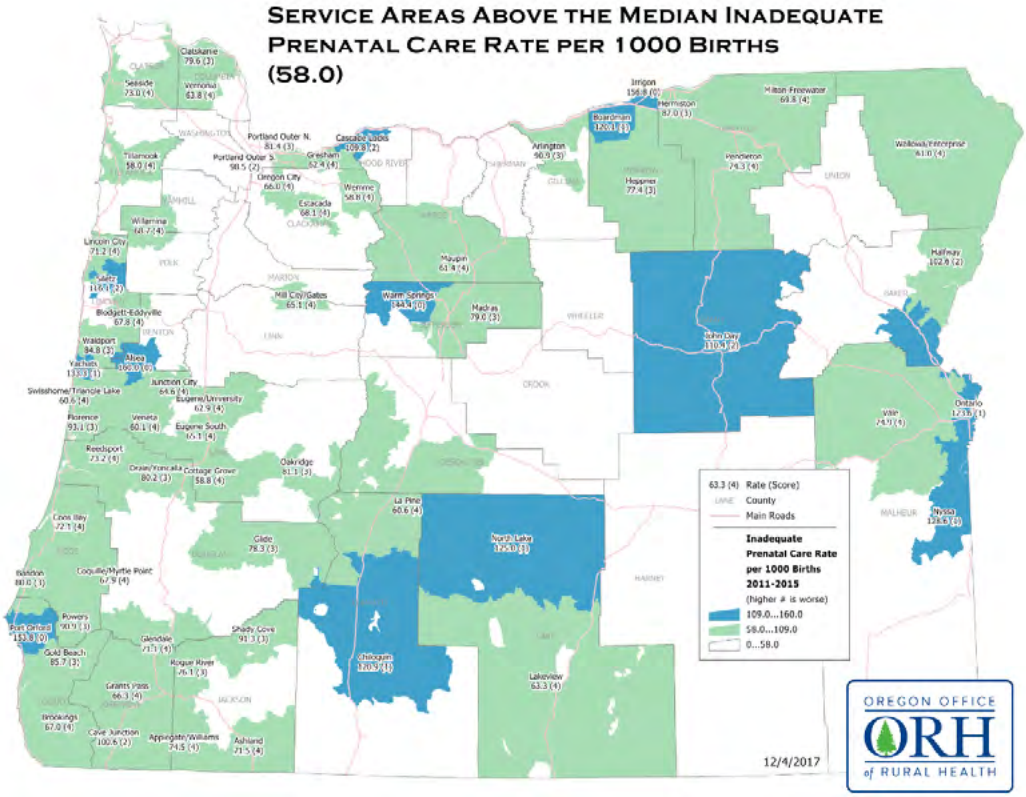


Figure 4: Non-traumatic ED dental visits per 1,000 population above state average

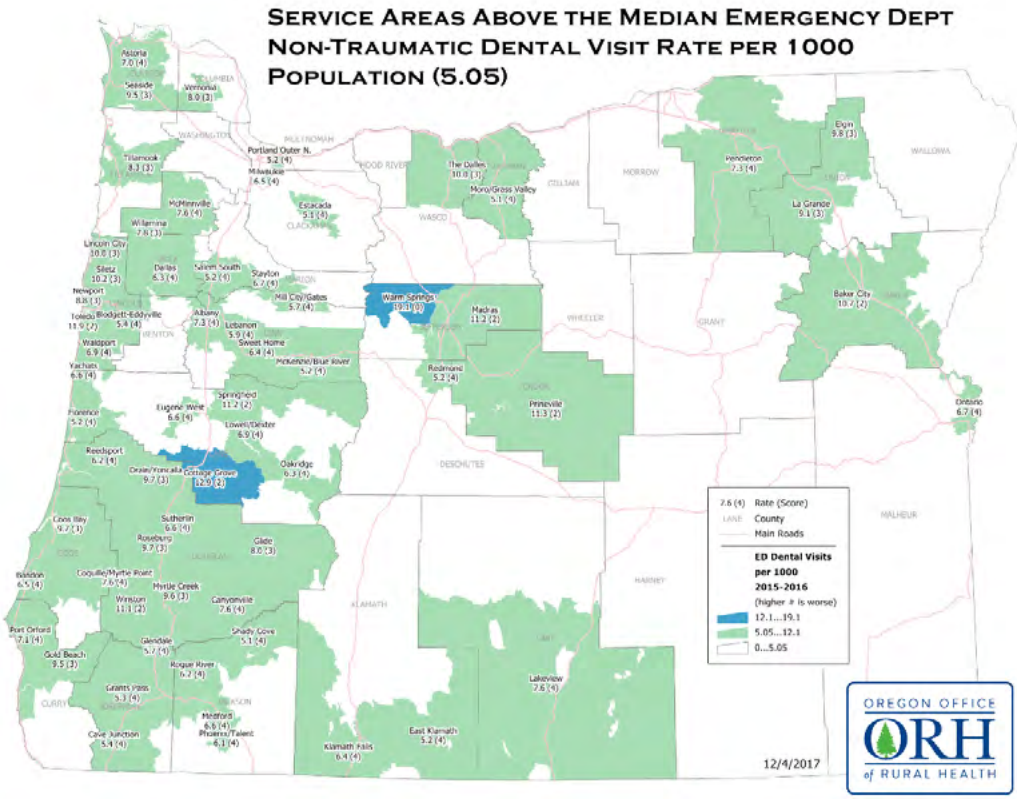
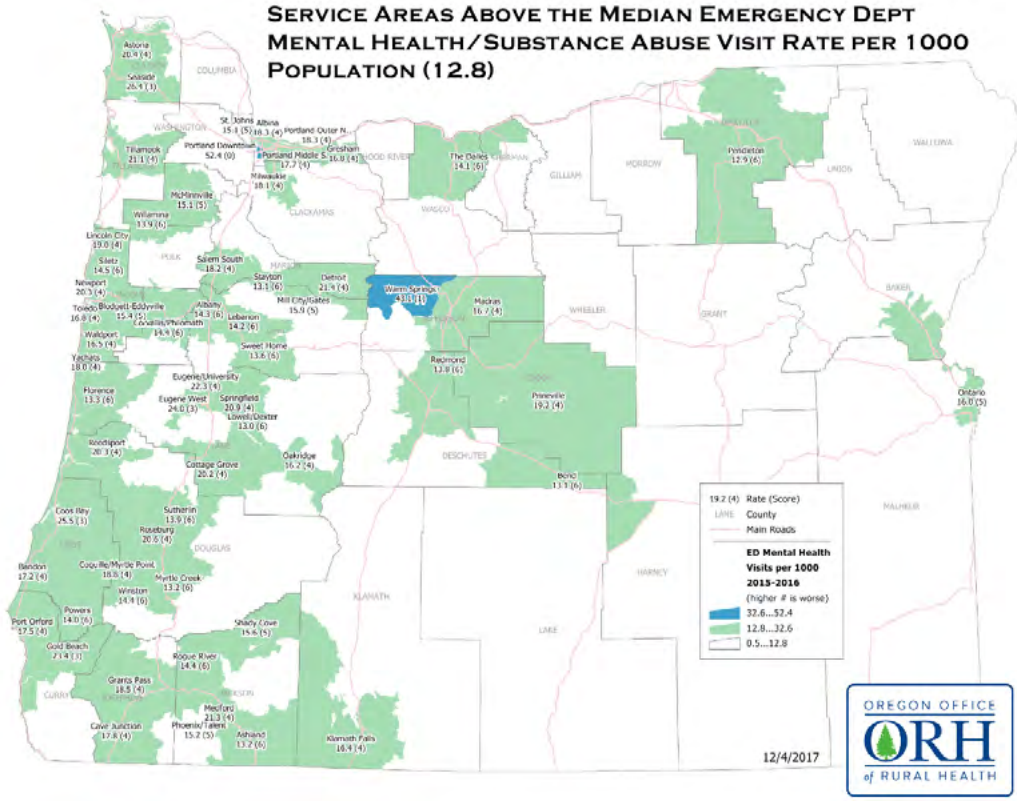


Figure 5: MH/SA ED visits per 1,000 population above statewide average



Limitations to measuring workforce needs by examining patients' access to care and the array of health care services that should be available in communities of various types

As previously mentioned, measuring access to care is difficult because variables beyond the existence of providers affect patients' actual access to health care services. Despite significant gains in insurance coverage in Oregon since the passage of the Affordable Care Act, differences across plans and carriers affect patients' access to specific providers. For example, whether a specific patient's provider is included in that person's insurance plan's network affects whether and how the individual can access care, which can be especially difficult to measure. Transportation barriers, for instance, may affect some Oregonians more than others even within a specific community.

Furthermore, some of the measures above may help indicate workforce gaps but may be exacerbated by other community circumstances that are at least partly out of the control of the health care system. As a result, policymakers and program administrators should take great care to use the data presented above to inform future policy without using them to falsely attribute some issues to the adequacy of the local workforce. Also, many of the measures shown above may persist for some time after workforce capacity is increased above current capacity, and the existence of higher than average rankings may not always be an indicator of poor rankings.

Lens three: Examining workforce capacity at the county level

The Oregon Health Authority collects data from health care licensing boards when practitioners renew their licenses, which enables the state to compile and analyze the number of health care practitioners of different types practicing in different communities. County-level practitioner totals compared to county population can show relative areas of need across the state, though they may not be the definitive measure of whether a given community needs additional providers.

Provider-to-population ratio is one measure to compare the relative provider capacity of counties across Oregon. It highlights the counties whose provider totals rank them well behind the top counties in the state (or the state average) and, as a result, can help inform efforts to increase the supply of practitioners across Oregon. At the same time, the report makes no recommendation on the target ratios that Oregon's counties should strive for, and acknowledges that holding every county in Oregon to the same target would neither be feasible nor appropriate.

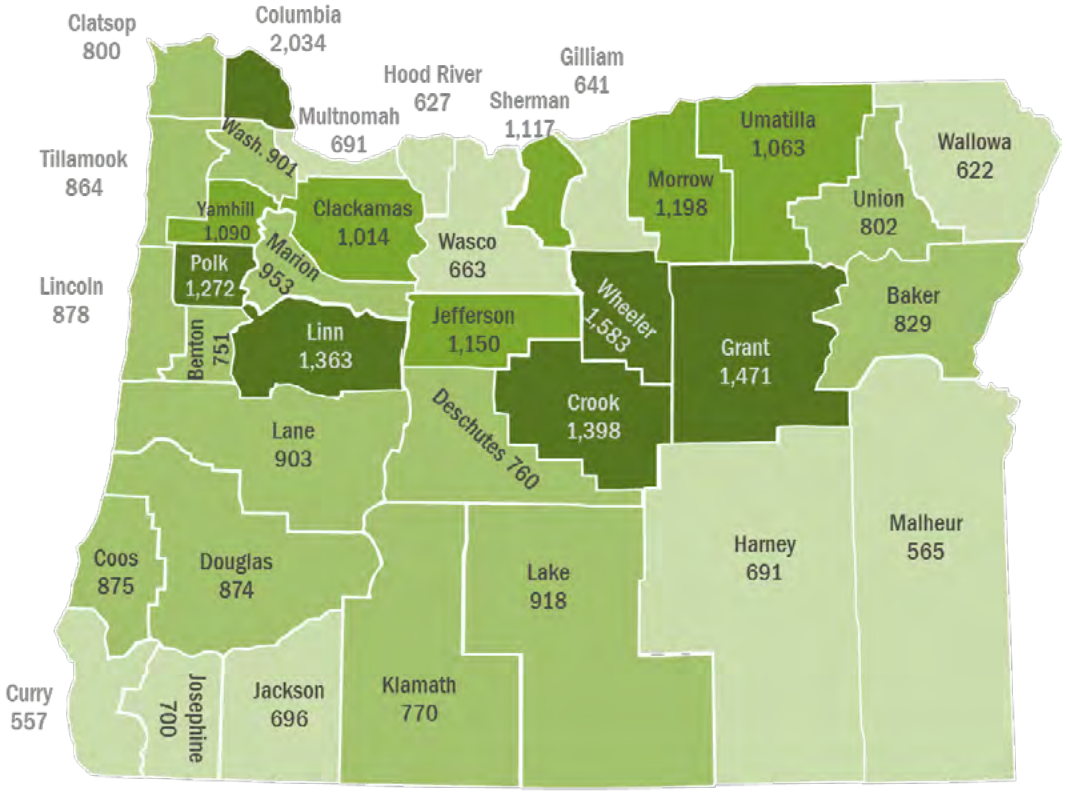
For instance, the populations of Harney and Grant counties are nearly the same, yet Harney County is more than twice the size of Grant County. This could mean that, with a similar number of practitioners in the two counties, Oregonians in Harney County may face greater challenges accessing health care services. Similarly, Umatilla County and Polk County are each home to approximately 80,000 residents, yet Umatilla County's population is spread across more than four times the land area as Polk County's area. Again, the differing sizes of the counties highlight the limitations of creating identical practitioner targets for counties of the same population.

Despite the limitations, examining workforce needs by examining population-to-practitioner ratios can still be useful. Doing so highlights several counties that lag behind the statewide average, and the fact that several of these areas are also very large geographically adds further evidence to the needs in those areas. In the future, additional ZIP code level analysis may be available to help illuminate the health care system's capacity at the sub-county level; however, this more narrow data may not be as reliable as county-level analysis. Similarly, examining the presence of certain medical specialties (such as OB/GYN, pediatrics or gerontology) could also help illustrate health care system capacity, though it also comes with data gaps.

Primary care

Access to primary care services is critical to ensure success of larger health system transformation efforts in Oregon, including the opportunity for better health for Oregonians. At a statewide level, Oregon is home to one primary care provider (physician, physician assistant or nurse practitioner) for every 850 residents. This ratio ranges from fewer than 600 residents per provider in Curry and Malheur counties to more than 1,500 residents per provider in Wheeler and Columbia counties. In total, 20 counties have higher population-to-provider ratios than the statewide ratio, which is driven largely by the fact that 24 of 36 counties have a higher population-to-physician ratio than the statewide ratio. One goal that may be feasible but would require effort could be to raise those areas near the bottom of the list up to the 850 residents-to-provider ratio that the state as a whole currently enjoys.

Figure 6: Population-to-provider ratio (direct patient care primary care practitioners)



Statewide, more than 70 percent of Oregon primary care providers are physicians, while approximately 10 percent are physician assistants and nearly 20 percent are nurse practitioners. Again, this distribution varies significantly:

- In 27 out of Oregon's 36 counties, physicians make up a smaller share of the primary care workforce than the statewide share of 70 percent.
- In 16 counties, nurse practitioners and physician assistants account for more than 40 percent of the primary care workforce.

Nursing providers

Oregon's nurses are vital to the state's health care delivery system and are by far the largest workforce of all occupations. Much like the distribution of other provider types, nursing capacity relative to population varies dramatically from county to county. Statewide, there are approximately 165 residents per registered nurse. At the same time, 29 of Oregon's 36 counties have more residents per nurse than the statewide ratio. The seven counties with a lower ratio of residents per nurse than the statewide ratio are home to about 42 percent of the state's population yet also to 57 percent of the state's nurses. On the other hand, 21 counties whose ratios are at least one-third higher than the statewide ratio are home to just 17 percent of the state's RN workforce despite having 29 percent of the state's population. In seven of these counties, the population-to-registered-nurse ratio is at least double the statewide ratio.

This wide variation is true for other nursing categories as well. Most Oregon counties have population-to-nurse-provider ratios are higher than the statewide ratio.

- Nurse practitioners: 22 of 36 counties have ratios higher than the statewide ratio with six having at least double the statewide ratio.
- Certified nurse anesthetists: 20 of 36 counties have ratios higher than the statewide ratio with 14 having at least double the statewide ratio.
- Clinical nurse specialists: 30 of 36 counties have ratios higher than the statewide ratio with 29 having at least double the statewide ratio.
- Licensed practical nurses: 25 of 36 counties have ratios higher than the statewide ratio with 11 having at least double the statewide ratio.
- Certified nursing assistants: 23 of 36 counties have ratios higher than the statewide ratio with six having at least double the statewide ratio.

Other medical providers

Although the analysis of the previous section of primary care only included physicians and physician assistants, data also show significant variation in provider capacity for podiatrists, medical doctors and doctors of osteopathic medicine, and physician assistants when including non-primary care providers. Across the state there are approximately 428 MDs and DOs (primary and non-primary care) for each Oregon resident. However, only seven of the state's 36 counties boast county-specific ratios this low, while 11 of 36 have ratios that are twice as high as the statewide figure.

Approximately half of all the states' podiatrists are in the tri-county Portland metro area, while 12 of the state's counties have no practicing podiatrists. Just one county lacks any physician

assistants, though 22 of the state's 36 counties have a population-to-PA ratio higher than the statewide ratio of 3,370 residents per PA.

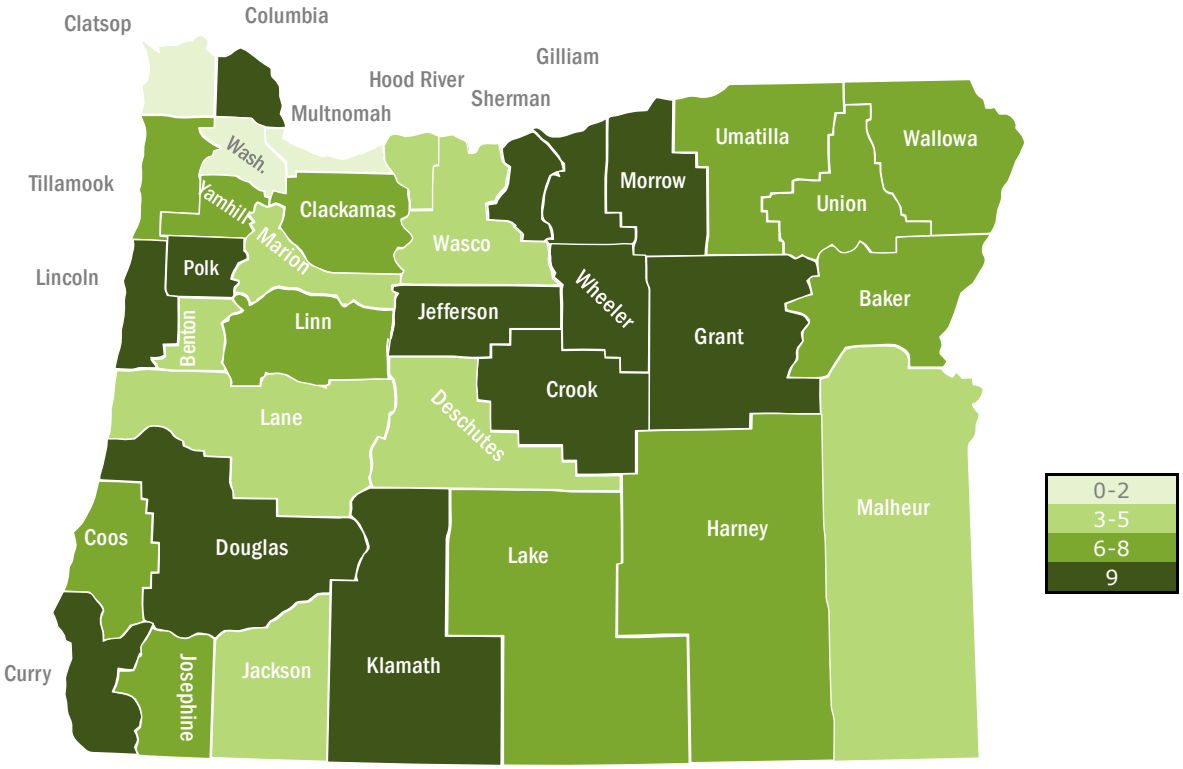
Other provider types

Even more than for primary care providers, the population-to-provider ratios of different provider types vary significantly across the state. In particular, the concentration of some provider types in a small number of counties means that most counties have higher ratios than the statewide ratio:

- Dental providers: 30 of 36 counties have a higher ratio of residents to dentists than the statewide ratio and 28 have a higher ratio for certified hygienists (27 of 36 counties are higher for both).
- Occupational therapy providers: 28 of 36 counties have a higher ratio of residents to occupational therapists than the statewide ratio and 24 have a higher ratio for OT assistants (21 of 36 counties are higher for both).
- Physical therapy providers: 23 of 36 counties have a higher ratio of residents to physical therapists than the statewide ratio and 24 have a higher ratio for PT assistants (18 of 36 counties are higher for both).
- Pharmacy providers: 27 of 36 counties have a higher ratio of residents to pharmacists than the statewide ratio and 29 have a higher ratio for pharmacy technicians (24 of 36 counties are higher for both).
- Dietitians: 29 of 36 counties have a higher ratio of residents to dieticians than the statewide ratio.

Furthermore, 13 of 36 Oregon counties have higher population-to-provider ratios than the statewide ratio in each of the nine provider categories noted above (see Figure 7).

Figure 7: Oregon counties by the number of "other provider type" categories (listed above) with population-to practitioner ratio above statewide ratio



Specialty providers

Examining the distribution of health care practitioners with various specialties can also illuminate Oregon's health care provider capacity and show the workforce needs in communities throughout the state. In particular, obstetrics and gynecological providers, pediatricians and pediatric nurse practitioners, and gerontologists are specialists that are widely relied upon for primary care and other treatment services for women, children and elderly Oregonians. At the same time, the fact that these Oregonians are also served by providers other than these specialists can complicate the use of licensing board data to examine the provider capacity.

In many rural communities, for example, physicians, nurse practitioners and physician assistants with family medicine specialties may be serving children and pregnant women with similar services as providers with pediatric or gynecological specialties. As a result, the number of pediatric providers may not always paint an accurate picture of the availability of health care services for children in a particular community. That said, assuming that all family practice providers are providing the same array of services to all of these populations may similarly overstate the availability of some services.

As a result of these data limitations, this report does not include data on the number of gynecological, pediatric or geriatric providers, despite the assertion that the availability of specialized primary care providers may be lacking in some communities. Future iterations of this

report may be able to better capture and examine the availability and distribution of practitioners serving these populations in order to highlight workforce gaps in these areas.

Data sources and opportunities for better data to be available in future versions of the needs assessment

Data reported in the above section come from self-reported data of health care providers at the time of their license renewal. Respondents provide data on their practice, time spent in direct patient care and demographics. Note that new licensees are excluded until they renew their license. Data from the following boards have been collected since 2009:

- Occupational Therapy Licensing Board
- Oregon Board of Dentistry
- Oregon Board of Licensed Dietitians
- Oregon Board of Pharmacy
- Oregon Medical Board
- Oregon Physical Therapist Licensing Board
- Oregon State Board of Nursing

Beginning with the 2016–2017 license renewals, additional licensing boards have been added, as listed below. Data from these health care professions will provide information for future versions of the needs assessment and other OHA reports. The timing for the availability of data varies depending on renewal schedule. Future data will be available for:

- Oregon Board of Chiropractic Examiners
- Oregon Board of Clinical Social Workers
- Oregon Board of Examiners for Speech-Language Pathology and Audiology
- Oregon Board of Licensed Professional Counselors and Therapists
- Oregon Board of Massage Therapists
- Oregon Board of Medical Imaging
- Oregon Board of Naturopathic Medicine
- Oregon Board of Optometry
- Oregon Board of Psychologist Examiners
- Respiratory Therapist and Polysomnographic Technologist Licensing Board

Limitations to measuring workforce needs at the county level using population-to-provider ratios

While the workforce data presented in this section provide valuable information to measure the state's health care workforce, there are several important limitations that come from measuring the system's capacity by looking at population-to-provider ratios. Ratios give only a partial view of residents' access to health care services because they do not examine whether providers participate in specific health insurance plans, the specific services they provide or the number of patients they serve. Services may also be delivered by different provider types and, in the abstract, communities may accommodate gaps in one provider type (such physician assistants) with higher-than-average numbers of another practitioner type (such as nurse practitioners). As previously discussed, similarly populated counties of vastly different areas may not be equally served by the same number of providers. Furthermore, the specific health care needs of

communities can vary significantly, limiting the use of one-size-fits all ratio recommendations, and making them potentially problematic.

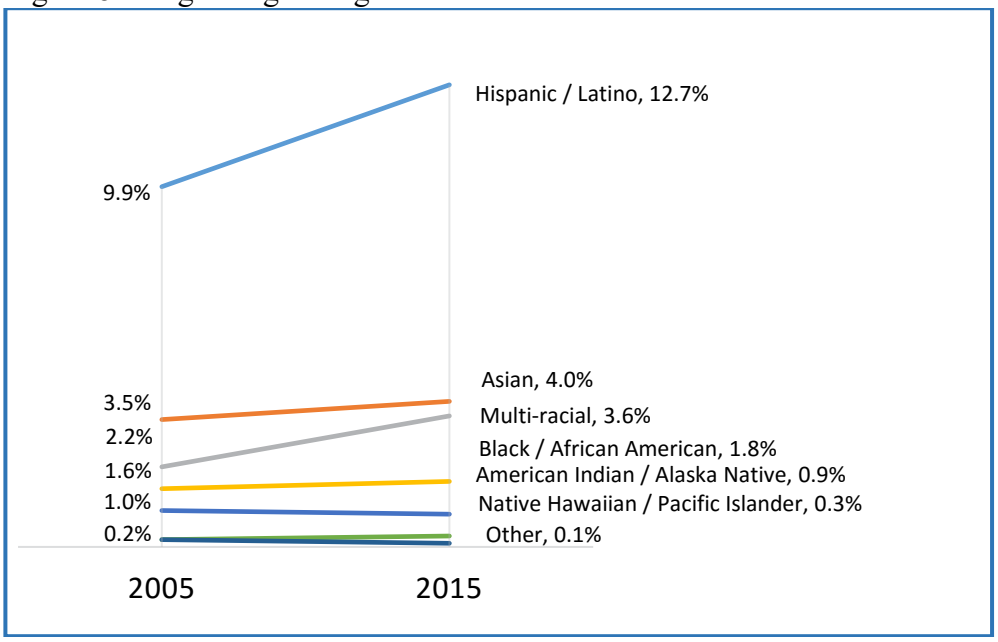
Finally, in large part because of the issues noted above, there are not widely accepted, easy-to-compare targets for what provider ratios communities of different types or sizes should strive to attain. There is no formula for how many additional nurse practitioners can fill the gap in the number of physicians, and developing one would make inappropriate value judgements across practitioner categories. Instead, presenting these ratios provides one of many useful views of what communities may be most in need of additional health care providers and what types of providers are needed in different parts of the state.

Additional considerations:

Addressing the racial, gender and ethnic diversity of Oregon's health care workforce

Oregon's population is becoming more diverse. The state's non-Hispanic White population has declined as a share of the total from more than 81 percent in 2005 as indicated by one-year estimates from the U.S. Census Bureau's 2005 and 2015 American Community Survey.

Figure 8: Oregon is growing more diverse



Oregon's health care workforce is not as racially and ethnically diverse as the state's population. For some occupational categories, the gaps are more pronounced. However, some occupations are actually more diverse, or at least less White, than the state as a whole. This phenomenon can be directly connected to a body of work around the social determinants of health.

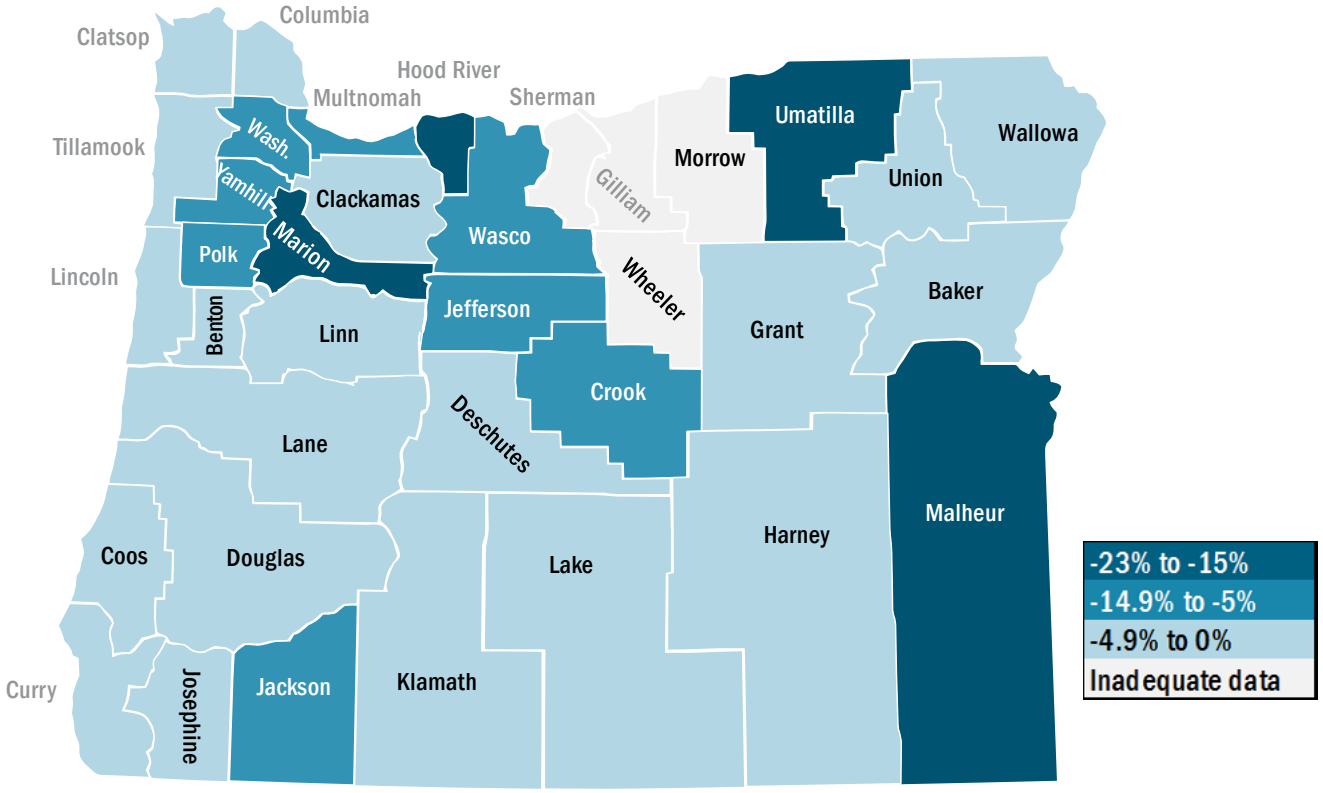
The table below highlights the racial and ethnic distribution of several provider types, as well as the gender breakdown of providers in each category:

Figure 9: Health care workforce demographics by occupation type

		Non-Hispanic								
	Hispanic/ Latino	White	Black/ AA	AI/AN	Asian	NH/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										
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%
Registered nurses	3.3%	88.7%	0.8%	0.6%	3.9%	0.4%	0.4%	1.9%	88.0%	12.0%
Licensed practical nurses	6.6%	80.3%	3.2%	1.2%	4.5%	0.7%	0.5%	3.0%	87.6%	12.4%
Certified nursing assistants	13.3%	69.3%	6.1%	1.2%	5.8%	1.3%	0.6%	2.5%	83.8%	16.2%
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	12.3%	77.2%	1.8%	0.9%	3.9%	0.4%	0.1%	3.3%	51.0%	49.0%

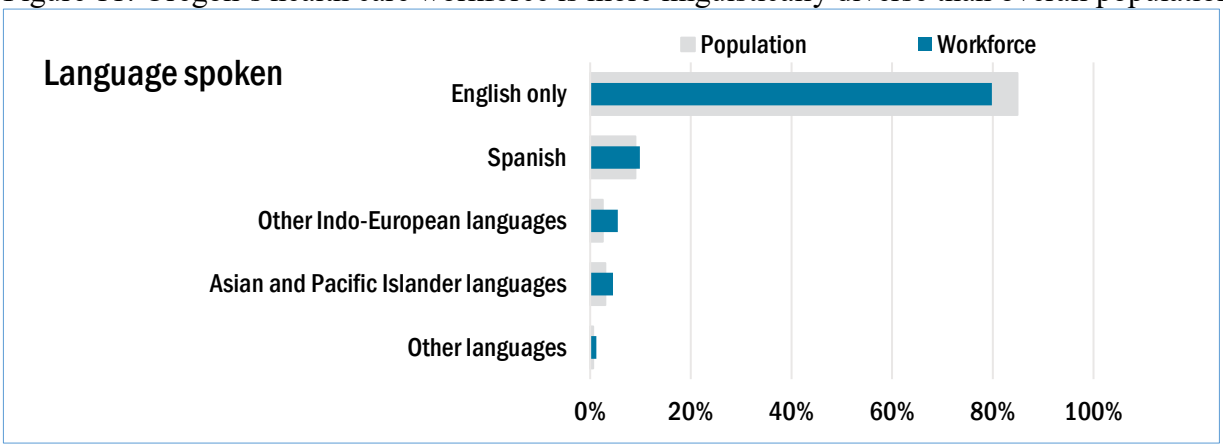
County-level data show a similar pattern as the statewide numbers, but county-level counts of some demographic categories may be too small for accurate analysis. For Oregon's largest non-White demographic group, however, county-level data can be examined for most Oregon counties. As shown below, Hispanic/Latino providers as a share of the county's health care workforce is smaller than the Hispanic/Latino share of the population as a whole. The difference in these percentages varies considerably in the state, and is shown in Figure 10.

Figure 10: Gap in Hispanic/Latino health care professionals compared to county population



One somewhat bright spot for Oregon's health care workforce diversity can be found when examining language capacity of the state's health care workforce. Gaps certainly exist, but compared to the state's population as a whole, the health care workforce has more language diversity and a smaller share of the health care workforce speaks only English compared to the population as a whole.

Figure 11: Oregon's health care workforce is more linguistically diverse than overall population



Although the overall health care workforce is more linguistically diverse than the Oregon population as a whole, this does not mean that the distribution of providers adequately mirrors the distribution of Oregonians speaking these different languages, especially Spanish. Current data limitations prevent high quality county-level analysis of the linguistic diversity of the population and the health care workforce.

Due to the varied distribution of non-English speakers throughout the state, it is possible that the overall health care workforce must be considerably more linguistically diverse than the population as a whole for the workforce to mirror county language-diversity on a consistent basis. As a result, policymakers and administrators should understand that continued improvement is necessary, specifically with increasing cultural competency, ensuring access to interpretive services, and increasing the number of bilingual providers in the state. Future data improvements may also help target language diversity gains in communities with the largest share of residents who speak languages other than English.

Overall, the state's health care provider workforce must make up ground in order to reflect the same levels of diversity as the population as a whole. Oregon has grown more diverse in the last decade and can expect to continue this trend in the coming years. In particular, addressing diversity shortfalls in communities with a larger-than-average share of Hispanic/Latino residents could require new efforts to increase access to the state's health care provider education and training programs. Incentives to future graduates to locate in areas with the greatest needs may also help. Because these gaps are more pronounced for some occupations than for others, efforts to increase the number of practitioners working in underserved areas should consider the racial, ethnic and language makeup of applicants (providers) and sites (clinics, hospitals, etc.) to best serve communities with the greatest needs.

Traditional health workers help connect consumers and health care practitioners

Oregon is one of a handful of states that certifies and registers traditional health workers of various types and allows these providers to be reimbursed for services delivered to Medicaid patients. Specifically, the state has identified community health workers, peer wellness and peer support specialists, personal health navigators, and doulas as providers who can be certified and registered as traditional health workers in Oregon. In order to qualify for Medicaid payment, THWs must operate under the supervision of other licensed health care providers such as physicians, certified nurse practitioners, physician assistants, psychologists, and licensed clinical social workers, therapists or professional counselors.

As of December 2017, there are 2,320 THWs are certified throughout Oregon. Peer support specialists account for approximately 70 percent of the THWs, while community health workers account for nearly a quarter of this workforce. Across the state there are eight personal health navigators, 48 doulas and 67 peer wellness specialists certified through the state's THW program. Ongoing upgrades to the systems housing data on these workers prevent analysis of geographic and demographic data on these workers. That data should be available for future versions of this report, however, which should help identify where THW capacity is strongest in Oregon and where additional resources are most needed.

Behavioral Health Collaborative addressing BH workforce issues

In 2016, the OHA brought together a diverse group of stakeholders to work as part of a Behavioral Health Collaborative (BHC) and develop a set of recommendations to take critical next steps to integrate behavioral health with the state's physical and oral health systems and to ensure that every Oregonian has access to the behavioral health services they need where and when they need them. The recommendations are designed to transform the state's fragmented behavioral health system into one that is integrated and able to provide better health and better care at a lower cost.

A key recommendation of the BHC is to conduct a needs-based analysis of the behavioral health workforce, including both licensed and unlicensed providers. In order to accomplish this task, the OHA is contracting with the Eugene S. Farley Jr. Health Policy Center at the University of Colorado's School of Medicine to complete the assessment.

This behavioral health workforce assessment will be published in mid-2018. It will be a useful resource for future versions of this needs assessment report to the Legislature.

Specifically, the behavioral health workforce assessment seeks to:

- Assess available behavioral health workforce data sources and make recommendations to improve future workforce data collection
- Identify the number, type and settings of providers that are currently providing behavioral health services for Medicaid members
- Quantify the unmet behavioral health needs through a regression analysis
- Stratify identified unmet needs by groupings in order to further understand the current deficits or disparate distribution
- Write a report on findings, including assessment of the behavioral health workforce that serves Medicaid members, the data sources and recommendations to address gaps in the behavioral health workforce
- Provide wage analyses of providers as data allow.

Conclusions and recommendations

There is insufficient primary care capacity across the spectrum.

- Despite real gains made around recruitment and retention in many parts of Oregon, there remain areas that lack primary care providers – including physicians, nurse practitioners and physician assistants – when viewed from any of the three lenses. This report recommends an approach to recruitment and retention where the goal is to increase capacity overall. However, this report recommends those areas with the greatest need, as identified by each lens in the report. This applies to primary medical care, oral health and behavioral health. The service areas in the lowest quartile of unmet need should be prioritized.

Our health care workforce continues to lack needed diversity in many areas.

- As Oregon's population continues to grow more diverse, Oregon should continue to deploy incentives toward attracting and rewarding providers who speak languages other than English.
- This report recommends deploying resources from the Health Care Provider Incentive Fund to help to develop a workforce that approaches parity with the ethnic diversity of the patient population to be served. Program management and administration should work closely with advocacy groups to identify strategies to build a health care workforce pipeline with more health professionals of color and diversity metrics tracked over time.

Additional dental care capacity is needed in much of the state.

- Gaps in access to dental services were identified in each of the three lenses. However, a "deeper dive" into oral health is needed. Future versions of the needs assessment could focus additional analysis on the dental needs in communities across Oregon and how/whether new provider incentives are likely to be effective and useful for dental providers, using existing and future recruitment and retention models.

Behavioral health workforce needs are a growing focus.

- Like oral health, sharper analysis in this area is needed. To address this segment of the population, targets could be set for use of the loan repayment incentives from the Health Care Provider Incentive Fund to go specifically for behavioral health providers, including those working toward licensure.

Data to determine both workforce supply and demand are improving, but further improvements are needed.

- Oregon is fortunate in the level of data and information available to help policymakers and program administrators evaluate the workforce needs of Oregon's communities and residents. However, the robust data we have currently still cannot capture a complete and accurate perspective of the capacity of local health care systems to meet the needs of resident, the gaps that exist, and how best to fill those gaps in the short and long run. This is partially due to the limits of existing survey questions from licensing boards to providers and the dearth of historical data from several boards. The addition of new licensing boards participating in the Health Care Workforce Data Reporting Program, along with OHA's work with the Farley Center should give us better information on behavioral health capacity in future years, particularly around behavioral health. We would like to see the Workforce Committee tackle this issue over the coming year with licensing boards and OHA analytics to ensure we have the data we need to assess the workforce capacity most accurately.

Taking the next steps: Using the needs assessment to inform the operation of new health care provider incentive program and to identify workforce gaps not historically targeted by state or federal incentives

The needs assessment identified in HB 3261 is designed in part to inform the Oregon Health Care Provider Incentive Program, including how funds are allocated across the state and to what provider types receive funds. In order to accomplish this, the needs assessment seeks to illuminate the current gaps in the state's health care workforce from an occupational, geographical and demographic standpoint. In addition, the needs assessment also seeks to provide information necessary to evaluate the effectiveness of past incentive programs and to inform future programmatic changes that could improve their effectiveness.
For instance, the needs assessment should help program administrators and policymakers identify health care workforce gaps in occupations that have not traditionally been eligible for (or targeted by) the state's provider incentives. One key consideration moving forward is whether provider incentives could be targeted in the future at professions not historically eligible for financial incentives in Oregon, or whether separate efforts should be explored to address those gaps.

In some cases, the needs assessment may help identify additional provider types that could be made eligible for the incentives identified in HB 3261, which include loan repayment, loan forgiveness, scholarships and subsidies as well as tax credits. In other cases, future needs assessments could help identify workforce needs in occupations that would be best addressed by new types of incentives, such as support for additional training opportunities for occupation types that do not require advanced degrees.

Historically, funding from Oregon's provider incentive programs have been largely directed to primary care practitioners (including physicians, nurse practitioners and physician assistants) and have been intended to help offset all or a portion of the relatively high costs practitioners face to complete their training. Practitioners have been able to qualify for loan repayment, for instance, in exchange for committing to practice in an underserved area for several years. Future practitioners have received scholarships while still in school. In the short term, we don't expect this situation to change. However, there may be other, more effective opportunities to grow and influence the health care workforce supply in certain areas of the state.

Addressing potential shortages in other occupation categories may require the creation of additional offerings. For instance, job categories that do not require the same type of schooling and debt may be less amenable to loan repayment programs that require recipients to make a multi-year commitment to a community. Short-term stipends, scholarships to training programs or other tools could be more useful for other occupations. Future versions of the needs assessment should look more closely at occupation categories not currently served by incentive programs but for which there are workforce gaps that can be addressed, and could include recommendations as to how incentives should be structured to close the gaps.

Specific areas for additional analysis include:

- Determining whether Oregon's current education and training programs are producing enough providers and whether additional education and training opportunities are needed to close current and/or future workforce gaps.
- Examining gaps in health care occupations not historically eligible for state or federal incentives and whether new state efforts are warranted.
- Identifying opportunities to engage in new collaboration with communities to better identify local workforce needs and help leverage other funding sources targeted toward local economic development, such as federal Workforce Investment Act (WIA) funds, community "seed money" and foundation dollars.
- This report recommends convening stakeholders as early as March 2018 to help expand the models used in this report and provide a more in-depth analysis of service categories and populations. Additional considerations may be made regarding not only the service providers, but best practices for providers to employ to optimize health outcomes for patients.

Oregon Health Authority
HEALTH POLICY AND ANALYTICS DIVISION

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OHA 7855 (01/18)

Attachment M: OHSU

OREGON AREAS OF UNMET HEALTH CARE NEED REPORT

August 2017

The Oregon Office of Rural Health, in response to a mandate from the Oregon Legislature, developed the AUHCN report in 1998 to measure medical underservice in rural areas. The report is published annually and is used:

- *To grant exceptions for medical staff eligibility for Oregon's rural practitioner income tax credit program,*
- *As part of a risk assessment formula for rural hospitals to receive cost-based Medicaid reimbursement (SB 607, passed in 1991; HB 3650, passed in 2011);*
- *As part of the determination of "medically underserved" geographic areas for the Oregon Governor's Health Care Shortage Area Designation.*

The report methodology was revised this year to better align with an integrated health care model. It now includes nine variables that measure access to primary physical, mental and oral health care. This report can be used by state partners to prioritize financial and technical assistance, and by community health care stakeholders to advocate for their unmet needs.

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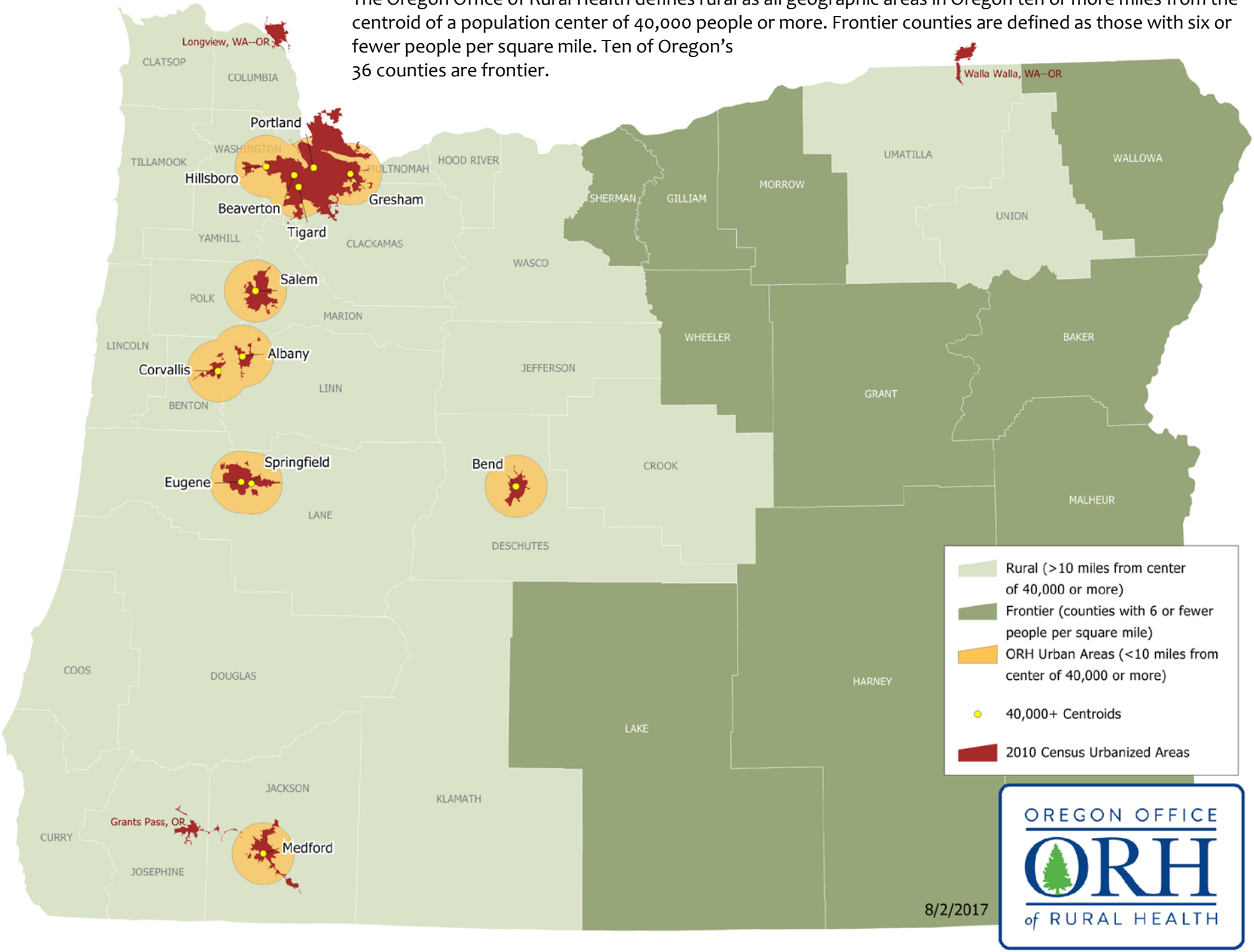
We welcome your feedback. If you have any questions or suggestions on this report, please contact Emerson Ong at onge@ohsu.edu.

WHAT IS CONSIDERED RURAL AND FRONTIER?

The Oregon Office of Rural Health defines rural as all geographic areas in Oregon ten or more miles from the centroid of a population center of 40,000 people or more. Frontier counties are defined as those with six or fewer people per square mile. Ten of Oregon's 36 counties are frontier.



SUMMARY RESULTS

Overview

Nine variables are used to calculate Unmet Need scores for each of Oregon's 130 primary care service areas. The lowest and worst score possible is 0. The highest and best score possible is 90. A low score means high unmet need. For 2017, scores in Oregon ranged from 19 (worst) to 68 (best).

Rural and frontier service areas have greater unmet need than urban areas:

Mean (Average) Score by Geographic Area	
Oregon	41.1
Urban	52
Rural (without Frontier)	37.9
Rural (including Frontier)	38.3
Frontier	40.4

The mean (average) score for Oregon overall is 41.1. The number of service areas by geographic type with scores below the Oregon average include:

Urban:	4 out of 26 (15%)
Rural (without Frontier):	60 out of 86 (70%)
Rural (including Frontier):	69 out of 104 (66%)
Frontier:	9 out of 18 (50%)

The areas with the highest and lowest unmet need:

Highest Unmet Need Areas		***Lowest Unmet Need Areas***	
Drain/Yoncalla	19	*Portland West*	68
Cascade Locks	20	*Portland Inner S.*	66
North Lake	22	*Portland Downtown*	66
Oakridge	23	*Hood River*	66
Cottage Grove	26	*Lake Oswego*	65
Glendale	26	*Tigard*	64
Glide	27	*Corvallis/Philomath*	61
Clatskanie	28	*Bend*	61
Waldport	28	*Eugene/University*	59
Warm Springs	28	*Sisters*	59
Yachats	28	*Portland Middle S.*	58

Highlights

Pages 12 and 13 The average travel time in Oregon to the nearest Patient Centered Primary Care Home (PCPCH) is 13.6 minutes. In urban areas, the travel time is 10 minutes; in rural areas it is 13.1 minutes and in frontier areas it is 18.8 minutes. **Twenty-six rural and frontier service areas do not have a PCPCH and the drive times for these areas can be as long as 81 minutes (Jordan Valley.)**

Pages 14 and 16 The estimated ratio of primary care visits able to be met in Oregon is 1.80. Rural and frontier service areas have lower ratios, meaning there is greater demand than supply. **Twelve rural primary care service areas have 0 primary care providers.**

Pages 17 and 18 There are 1.9 mental health care providers per 1,000 people in Oregon. **Thirty-three rural and frontier service areas have less than 0.5 mental health providers and 25 service areas have 0 mental health providers.**

Pages 19 and 20 Oregon has 0.42 dentist patient care FTE per 1,000 people. **Twenty-four rural and frontier primary care service areas have 0 dentists.**

Pages 21 and 22 The percentage of the population that is above the Medicaid cut off of 138% Federal Poverty Level (FPL) but still below 200% of the FPL (and therefore unlikely able to afford health insurance unless provided by an employer) is 12.3% in Oregon. **Rural and frontier service areas have higher percentages (13.8% and 15.3% respectively.) Cascade Locks, North Lake and Canyonville have percentages as high as 25-27%.**

Pages 23 and 24 Oregon has a preventable hospitalization rate of 9.1 per 1,000 people. **Rural and frontier service are rates are 11.0 or greater. Port Orford, Coos Bay, Reedsport, Wallowa/Enterprise and Warm Springs have the highest rates, ranging from 18.0 to 22.9.**

Pages 25 and 26 Oregon has an average inadequate prenatal care rate of 54.7 per 1,000 births. **The average rate in frontier service areas is 93.6. Port Orford, Irrigon and Alsea have rates greater than 150.0.**

Pages 27 and 28 Oregon has an average non-traumatic dental Emergency Department (ED) visit rate of 4.8 per 1,000 people per year. **The rate in rural Oregon is 6.0. Cottage Grove and Warm Springs have rates more than double the rural average (12.9 and 19.1 respectively).**

Pages 29 and 30 Oregon has an average mental health/substance abuse ED visit rate of 15.6 per 1,000 people per year. **This is the only variable where rural and frontier, on average, do better than urban areas (14.3 and 10.9 respectively.) However Coos Bay, Seaside and Warm Springs have very high rates (25.5 to 43.1.)**

Figure 1.
Overall Scores By Service Area

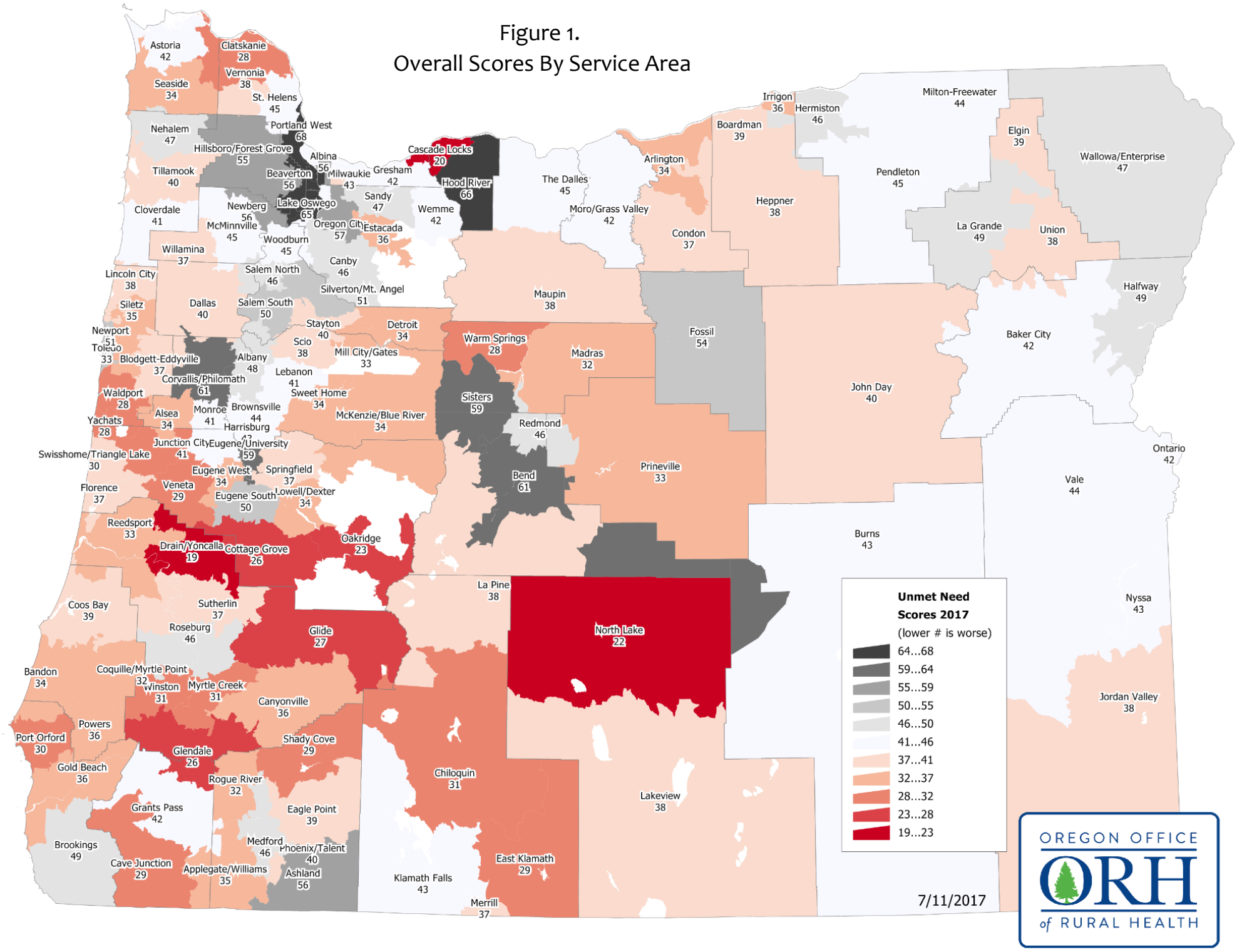


Figure 2. Ranked Service Area Scores (Highest Unmet Need to Lowest)

The worst score in each column is darkest red and the best score is darkest green with graduated shading for the numbers in between the best and worst.

Service Area	Designation	Total Score	Travel Time to Nearest PCPCH	Primary Care Capacity Ratio	Mental Health Providers per 1,000	Dentists per 1,000	138-200% of Federal Poverty Level	Preventable Hospitalizations per 1,000	Inadequate Prenatal Care Rate	Emergency Department Dental Visits per 1,000	Emergency Department Mental Visits per 1,000
Drain/Yoncalla	Rural	19	28	0.09	0.00	0.00	19%	15.5	80.2	9.7	12.4
Cascade Locks	Rural	20	23	0.00	0.00	0.00	25%	12.3	109.8	4.9	9.8
North Lake	Frontier	22	70	0.38	0.00	0.00	27%	13.2	125.0	1.6	7.3
Oakridge	Rural	23	48	0.85	0.22	0.00	11%	15.4	81.1	6.3	16.2
Cottage Grove	Rural	26	24	0.91	0.99	0.23	16%	15.6	58.8	12.9	20.2
Glendale	Rural	26	24	0.00	0.00	0.00	14%	12.2	71.1	5.7	11.5
Glide	Rural	27	19	0.12	0.32	0.00	10%	9.7	78.3	8.0	12.2
Clatskanie	Rural	28	17	0.19	0.08	0.28	17%	11.1	79.6	5.0	11.9
Waldport	Rural	28	10	0.61	0.29	0.08	16%	13.6	84.8	6.9	16.5
Warm Springs	Rural	28	10	2.27	0.60	0.57	14%	22.9	144.4	19.1	43.1
Yachats	Rural	28	13	0.00	0.57	0.12	12%	8.7	133.3	6.6	18.0
Cave Junction	Rural	29	10	0.55	0.46	0.09	15%	16.5	100.6	5.4	17.8
East Klamath	Rural	29	37	0.00	0.00	0.00	12%	14.0	41.4	5.2	11.6
Shady Cove	Rural	29	10	0.34	0.08	0.14	14%	17.1	91.3	5.1	15.6
Veneta	Rural	29	29	0.57	0.23	0.13	13%	10.5	60.1	4.2	12.6
Port Orford	Rural	30	10	0.61	0.00	0.00	5%	18.0	153.8	7.1	17.5
Swisshome/Triangle Lake	Rural	30	28	0.00	0.00	0.00	14%	9.1	60.6	3.3	14.0
Chiloquin	Rural	31	33	0.85	0.00	0.41	17%	11.4	120.9	3.2	12.4
Myrtle Creek	Rural	31	10	0.14	0.15	0.06	17%	14.5	51.1	9.6	13.2
Winston	Rural	31	10	0.47	0.58	0.11	21%	15.8	46.0	11.1	14.4
Coquille/Myrtle Point	Rural	32	10	0.67	0.17	0.34	16%	16.3	67.9	7.6	18.8
Madras	Rural	32	10	1.13	0.73	0.23	18%	10.4	79.0	11.2	16.7
Rogue River	Rural	32	10	0.29	0.08	0.18	15%	13.9	76.1	6.2	14.4
Mill City/Gates	Rural	33	10	0.87	0.00	0.00	14%	11.2	65.1	5.7	15.9
Prineville	Rural	33	10	0.65	0.97	0.24	18%	13.7	44.9	11.3	19.2
Reedsport	Rural	33	10	1.54	0.13	0.22	14%	18.7	73.2	6.2	20.3
Toledo	Rural	33	10	0.48	0.01	0.14	14%	10.0	41.8	11.9	16.8
Arlington	Frontier	34	26	1.12	0.00	0.00	12%	13.5	90.9	4.5	5.1
Alsea	Rural	34	10	0.57	0.88	0.00	17%	7.3	160.0	4.8	11.8
Bandon	Rural	34	10	1.28	1.03	0.35	21%	16.5	80.0	6.5	17.2
Detroit	Rural	34	25	0.00	0.00	0.00	21%	8.5	0.0	2.1	21.4
Lowell/Dexter	Rural	34	24	0.20	1.00	0.18	12%	10.2	36.0	6.9	13.0
McKenzie/Blue River	Rural	34	10	1.13	0.54	0.00	20%	14.3	54.8	5.2	11.9

Service Area	Designation	Total Score	Travel Time to Nearest PCPCH	Primary Care Capacity Ratio	Mental Health Providers per 1,000	Dentists per 1,000	138-200% of Federal Poverty Level	Preventable Hospitalizations per 1,000	Inadequate Prenatal Care Rate	Emergency Department Dental Visits per 1,000	Emergency Department Mental Visits per 1,000
Seaside	Rural	34	10	1.68	0.48	0.31	16%	14.9	73.0	9.5	26.4
Sweet Home	Rural	34	10	0.40	0.20	0.11	15%	14.9	52.1	6.4	13.6
Eugene West	Urban	34	10	0.93	0.63	0.21	14%	11.2	56.9	6.6	24.0
Applegate/Williams	Rural	35	13	0.00	0.43	0.22	11%	10.2	74.5	4.1	9.2
Siletz	Rural	35	14	2.22	0.71	0.66	21%	10.6	116.1	10.2	14.5
Irrigon	Frontier	36	10	0.26	0.00	0.00	13%	6.3	156.8	4.3	7.0
Canyonville	Rural	36	10	0.95	0.56	0.39	27%	16.0	51.5	7.6	10.7
Estacada	Rural	36	10	0.32	0.09	0.14	14%	8.6	68.1	5.1	10.9
Gold Beach	Rural	36	10	2.18	1.63	0.18	17%	16.7	85.7	9.5	23.4
Powers	Rural	36	10	0.00	0.00	0.00	10%	14.6	90.9	3.4	14.0
Condon	Frontier	37	22	0.85	1.04	0.00	24%	14.5	23.3	2.6	5.2
Blodgett-Eddyville	Rural	37	14	0.00	0.83	0.00	8%	3.6	67.8	5.4	15.4
Florence	Rural	37	10	1.45	0.53	0.19	16%	11.7	93.1	5.2	13.3
Merrill	Rural	37	27	0.44	0.00	0.00	18%	8.9	34.5	2.5	7.5
Sutherlin	Rural	37	10	0.24	0.07	0.28	15%	14.5	36.8	6.6	13.9
Willamina	Rural	37	10	0.65	0.52	0.35	16%	11.4	68.7	7.8	13.9
Portland Outer S.	Urban	37	10	1.37	1.01	0.40	16%	10.0	98.5	7.2	24.1
Springfield	Urban	37	10	2.61	0.72	0.25	14%	12.9	59.9	11.2	20.9
Heppner	Frontier	38	10	1.22	0.66	0.00	20%	9.6	77.4	3.3	7.1
Jordan Valley	Frontier	38	81	0.00	0.00	0.00	23%	0.0	32.3	0.0	4.1
Lakeview	Frontier	38	10	1.39	0.70	0.32	18%	17.3	63.3	7.6	12.5
La Pine	Rural	38	10	0.59	0.36	0.28	14%	12.2	60.6	4.0	9.8
Lincoln City	Rural	38	10	1.47	0.79	0.34	13%	12.9	71.2	10.0	19.0
Maupin	Rural	38	10	0.30	0.31	0.31	16%	10.4	61.4	4.7	8.3
Scio	Rural	38	12	0.00	0.19	0.00	14%	8.8	47.4	3.5	8.0
Union	Rural	38	10	0.05	0.37	0.08	14%	11.7	49.4	4.8	6.2
Vernonia	Rural	38	10	0.35	0.00	0.19	13%	8.5	63.8	8.0	11.3
Boardman	Frontier	39	10	0.76	0.23	0.09	22%	3.5	120.1	2.0	9.7
Coos Bay	Rural	39	10	1.63	1.53	0.34	12%	18.3	72.1	9.7	25.5
Eagle Point	Rural	39	10	0.49	0.40	0.07	15%	12.3	50.2	3.8	11.9
Elgin	Rural	39	10	0.66	0.00	0.13	12%	16.4	31.5	9.8	6.8
John Day	Frontier	40	10	0.91	0.40	0.43	16%	12.0	110.4	3.1	10.4
Dallas	Rural	40	10	0.69	0.63	0.15	13%	8.7	54.3	6.3	12.8
Stayton	Rural	40	10	0.97	0.18	0.26	12%	12.3	40.6	6.7	13.1
Tillamook	Rural	40	10	1.50	1.31	0.35	15%	11.6	58.0	8.3	21.1
Phoenix/Talent	Urban	40	10	0.63	0.91	0.10	9%	11.7	48.0	6.1	15.2
Cloverdale	Rural	41	10	0.58	0.22	0.14	16%	10.9	18.6	4.8	9.3
Junction City	Rural	41	10	0.43	0.56	0.22	12%	9.4	64.6	3.9	12.0
Lebanon	Rural	41	10	1.32	0.30	0.28	12%	14.0	39.5	5.9	14.2

Service Area	Designation	Total Score	Travel Time to Nearest PCPCH	Primary Care Capacity Ratio	Mental Health Providers per 1,000	Dentists per 1,000	138-200% of Federal Poverty Level	Preventable Hospitalizations per 1,000	Inadequate Prenatal Care Rate	Emergency Department Dental Visits per 1,000	Emergency Department Mental Visits per 1,000
Monroe	Rural	41	10	0.00	0.67	0.00	11%	9.6	39.4	4.2	11.8
Oregon		**41.1**	**13.3**	**1.80**	**1.90**	**0.42**	**12%**	**9.1**	**54.7**	**4.8**	**15.6**
Baker City	Frontier	42	10	1.57	1.44	0.23	15%	11.0	52.3	10.7	11.1
Moro/Grass Valley	Frontier	42	10	1.51	0.00	0.00	18%	13.6	0.0	5.1	8.5
Ontario	Frontier	42	10	3.47	0.97	0.50	12%	9.9	123.6	6.7	16.0
Astoria	Rural	42	10	2.11	1.83	0.28	14%	12.8	56.8	7.0	20.4
Grants Pass	Rural	42	10	1.81	1.34	0.41	16%	14.7	66.3	5.3	18.5
Wemme	Rural	42	10	0.15	0.37	0.13	11%	6.9	58.8	4.2	10.3
Gresham	Urban	42	10	1.28	0.96	0.38	12%	9.1	62.4	4.9	16.8
St. Johns	Urban	42	10	0.60	1.06	0.16	11%	9.2	50.2	4.4	15.1
Burns	Frontier	43	10	1.36	0.82	0.20	16%	11.4	40.3	4.3	12.6
Nyssa	Frontier	43	10	0.46	0.00	0.40	13%	6.9	128.6	2.5	10.4
Harrisburg	Rural	43	10	0.22	0.19	0.00	11%	5.9	44.9	3.1	11.4
Klamath Falls	Rural	43	10	1.80	1.16	0.44	14%	11.5	57.0	6.4	16.4
Milwaukie	Urban	43	10	0.78	1.65	0.39	13%	9.8	50.8	6.5	18.1
Vale	Frontier	44	10	0.83	0.00	0.11	15%	7.8	74.9	2.5	6.2
Brownsville	Rural	44	10	0.50	0.00	0.19	15%	8.3	48.9	3.3	7.7
Milton-Freewater	Rural	44	18	0.25	0.31	0.29	17%	0.4	69.8	0.2	0.5
McMinnville	Rural	45	10	1.29	1.37	0.30	13%	9.7	31.8	7.6	15.1
Pendleton	Rural	45	10	1.65	1.25	0.38	14%	7.6	74.3	7.3	12.9
St. Helens	Rural	45	10	0.72	0.72	0.21	11%	10.8	53.1	2.2	12.3
The Dalles	Rural	45	10	1.57	1.43	0.40	13%	14.4	42.8	10.0	14.1
Woodburn	Rural	45	10	0.91	0.43	0.20	16%	7.7	57.9	2.1	8.1
Portland Outer N.	Urban	45	10	1.81	1.42	0.63	13%	10.8	81.4	5.2	18.3
Canby	Rural	46	10	0.56	0.27	0.31	12%	7.9	49.5	2.9	10.1
Hermiston	Rural	46	10	1.54	0.45	0.32	14%	5.2	87.0	4.2	10.5
Redmond	Rural	46	10	0.98	0.63	0.35	12%	8.2	35.3	5.2	13.8
Roseburg	Rural	46	10	2.54	1.84	0.46	15%	13.5	40.6	9.7	20.6
Medford	Urban	46	10	2.79	1.97	0.52	16%	14.0	55.9	6.6	21.3
Salem North	Urban	46	10	0.91	0.79	0.31	15%	8.2	51.9	3.9	11.2
Wallowa/Enterprise	Frontier	47	10	2.01	1.37	0.40	13%	19.7	61.0	4.3	8.7
Nehalem	Rural	47	10	0.97	1.49	0.17	12%	12.5	33.1	1.4	12.6
Sandy	Rural	47	10	0.45	0.49	0.19	11%	7.8	41.1	3.1	11.2
Albany	Urban	48	10	1.19	1.27	0.37	13%	7.6	33.7	7.3	14.3
Halfway	Frontier	49	10	1.77	0.00	0.37	15%	8.7	102.6	1.2	4.7
Brookings	Rural	49	10	1.30	0.98	0.43	20%	6.8	67.0	1.2	10.1
La Grande	Rural	49	10	2.45	1.46	0.42	13%	10.9	51.4	9.1	9.5
Eugene South	Urban	50	10	0.46	1.77	0.44	11%	7.4	65.1	3.1	11.7
Salem South	Urban	50	10	2.36	2.71	0.61	14%	8.8	58.0	5.2	18.2

Service Area	Designation	Total Score	Travel Time to Nearest PCPCH	Primary Care Capacity Ratio	Mental Health Providers per 1,000	Dentists per 1,000	138-200% of Federal Poverty Level	Preventable Hospitalizations per 1,000	Inadequate Prenatal Care Rate	Emergency Department Dental Visits per 1,000	Emergency Department Mental Visits per 1,000
Newport	Rural	51	10	2.27	3.41	0.57	11%	10.5	51.5	8.8	20.3
Silverton/Mt. Angel	Rural	51	10	1.74	0.69	0.20	13%	8.2	41.7	2.7	7.8
Fossil	Frontier	54	10	0.85	0.00	0.33	9%	10.5	43.5	0.7	3.2
Hillsboro/Forest Grove	Urban	55	10	1.70	1.41	0.40	11%	6.0	45.6	4.2	11.8
Ashland	Rural	56	10	1.97	4.76	0.46	11%	6.0	71.5	4.1	13.2
Newberg	Rural	56	10	1.67	1.70	0.34	10%	8.2	25.2	4.2	10.4
Albina	Urban	56	10	3.92	4.24	0.21	9%	8.9	40.4	3.8	18.3
Beaverton	Urban	56	10	0.81	1.16	0.53	11%	6.1	42.3	2.2	10.5
Oregon City	Urban	57	10	3.37	2.34	0.57	10%	7.6	66.0	4.3	14.0
Portland Middle S.	Urban	58	10	2.30	3.20	0.44	10%	7.9	41.2	3.4	17.7
Sisters	Rural	59	10	0.72	0.81	0.34	9%	6.4	21.5	1.0	7.4
Eugene/University	Urban	59	10	3.94	7.05	0.92	9%	8.3	62.9	4.0	22.3
Bend	Urban	61	10	2.74	2.70	0.48	12%	6.7	32.0	2.9	13.1
Corvallis/Philomath	Urban	61	10	2.60	2.64	0.40	10%	4.4	49.6	2.1	14.4
Tigard	Urban	64	10	1.96	1.73	0.62	8%	6.4	36.0	1.8	10.3
Lake Oswego	Urban	65	10	1.03	2.02	0.60	7%	6.0	34.8	1.3	8.8
Hood River	Rural	66	10	2.60	1.95	0.63	9%	5.9	28.3	2.6	8.0
Portland Downtown	Urban	66	10	10.93	15.89	1.33	7%	10.0	44.4	3.6	52.4
Portland Inner S.	Urban	66	10	2.04	7.77	0.69	10%	5.2	46.1	1.7	15.3
Portland West	Urban	68	10	2.45	2.51	0.44	7%	4.9	31.7	1.0	9.2

METHODOLOGY

Primary Care Service Areas

County geographies in most of the United States are relatively small and homogenous, so county-level data is widely used to analyze information. Oregon's 36 counties, however, vary greatly in size, geography, and population. As a result, sub-county geographies needed to be developed to more accurately represent community use of health care services.

Among the established small geographic boundaries, only postal ZIP Code areas follow transportation and market patterns. ZIP Codes are also linked to a large amount of demographic, socioeconomic and health status information. In 1985, the Oregon Office of Rural Health, with the help of other state and local agencies, chose ZIP Codes to be the building blocks of sub-county service areas and grouped all of Oregon's 470+ ZIP Codes into Oregon "Primary Care Service Areas" using the following criteria:[1]

1) Health resources are generally located within 30 to 40 minutes travel time.
2) Defined areas are not smaller than a single ZIP Code and ZIP Codes used are geographically contiguous and/or follow main roads.
3) Defined areas contain a population of at least 800 to 1,000 or more people.
4) Defined areas constitute a "rational" medical trade or market area considering topography, social and political boundaries, and travel patterns.
5) Additional considerations for service areas are boundaries that:
   a) Are congruent with existing special taxing districts (e.g., health or hospital districts); and
   b) Include a population which has a local perception that it constitutes a "community of need" for primary health care services, or demonstrates demographic or socioeconomic homogeneity. The population should be large enough (800-1000 or more) to be financially capable of supporting at least a single midlevel health care provider.

The criteria remain the same, but the areas are updated when necessary according to changes in population and health utilization. The last change was made to Lakeview in 2013.

There are 130 Oregon Primary Care Service Areas:
Urban: 26 | Rural + Frontier[2]: 104 | Rural Only: 86 | Frontier Only: 18

Six-page demographic, socioeconomic, and health status profiles for each of the rural and frontier service areas are updated continuously and available for free. A sample profile, and more information, are available here.

[1] Van Eck, Ethan; Bennett, Marge et. al. *Strategic Plan for Primary Health Care in Rural Oregon*, 1985-1990. September 30, 1985. (Available through the Office of Rural Health)
[2] Using the Oregon Office of Rural Health's definition —Rural is a geographic area 10 or more miles from the centroid of a city of 40,000 or more. Frontier areas are those in counties with 6 or fewer people per square mile.

The Variables Used in the AUHCN Calculation

The Oregon Office of Rural Health researched academic publications and collected studies from other State Offices of Rural Health to determine the measures that would be used for the new report. This data was brought to a stakeholder group with knowledge of health utilization, hospital data, primary care, dental, and mental health services (list of individuals and members below).

Data Limitations:

- Data points must be available at the ZIP Code geographic level.
- Data must be updated annually, at minimum.
- Data must be available to the Oregon Office of Rural Health.

The following 9 variables were identified as the best currently available to measure access to primary care, dental and mental health services. More detail on the sources and methodology for each variable is included in the following pages.

Category One: Availability of Providers *Are needed providers available locally?*

1) Travel Time to Nearest Patient Centered Primary Care Home (PCPCH)
2) Primary Care Capacity (Percent of Primary Care Visits Able to Be Met)
3) Mental Health Providers per 1,000 Population
4) Dentists per 1,000 Population

Category Two: Ability to Afford Care *Is it affordable to see these providers?*

5) Percent of Population Between 138% and 200% of Federal Poverty Level (FPL)

Category Three: Utilization *Is primary physical, mental and oral health care being used?*

6) Ambulatory Care Sensitive Conditions (ACSC)/ Preventable Hospitalizations per 1,000 Population
7) Inadequate Prenatal Care Rate per 1,000 Births
8) Emergency Department Non-Traumatic Dental Visits per 1,000 Population
9) Emergency Department Mental Health/Substance Abuse Visits per 1,000 Population

The Oregon Office of Rural Health would like to thank the stakeholder group for their participation:

Greater Oregon Behavioral Health Inc.
Paul McGinnis, CCO Integration Director

Oregon Association of Hospitals & Health Systems
Katie Harris, Director of Program Management
Andy Van Pelt, Executive Vice President

Oregon Health Authority
Jackie Fabrick, Behavioral Health Policy Analyst
Marc Overbeck, Primary Care Office Director
Amanda Peden, Health Policy Analyst
Jeffery Scroggin, Policy Analyst

Oregon Health & Science University
Eli Schwarz, Chair of Department of Community Dentistry

CATEGORY ONE: AVAILABILITY OF PROVIDERS

1) TRAVEL TIME TO NEAREST PATIENT CENTERED PRIMARY CARE HOME (PCPCH)

Description:
PCPCHs are health care clinics that have been officially recognized by the Oregon Health Authority (OHA) for providing high quality, patient-centered care. All PCPCHs have to pass a minimum set of 11 criteria. For this report, three criteria were considered good indicators of community access to primary care and in preventing misuse of the emergency room. These include: screening and referral for mental health and substance abuse, 24/7 access to live clinical advice by telephone, and ongoing management of chronic diseases.

Data Source:
Patient-Centered Primary Care Home Program, Oregon Health Authority (May 2017)

Methodology:
Google Maps to determine driving times from the largest town in the Primary Care Service Area to the town where the nearest PCPCH is located. Locations that already have a PCPCH in the largest town are defaulted to a drive time of 10 minutes.

V_1 = Drive time in minutes

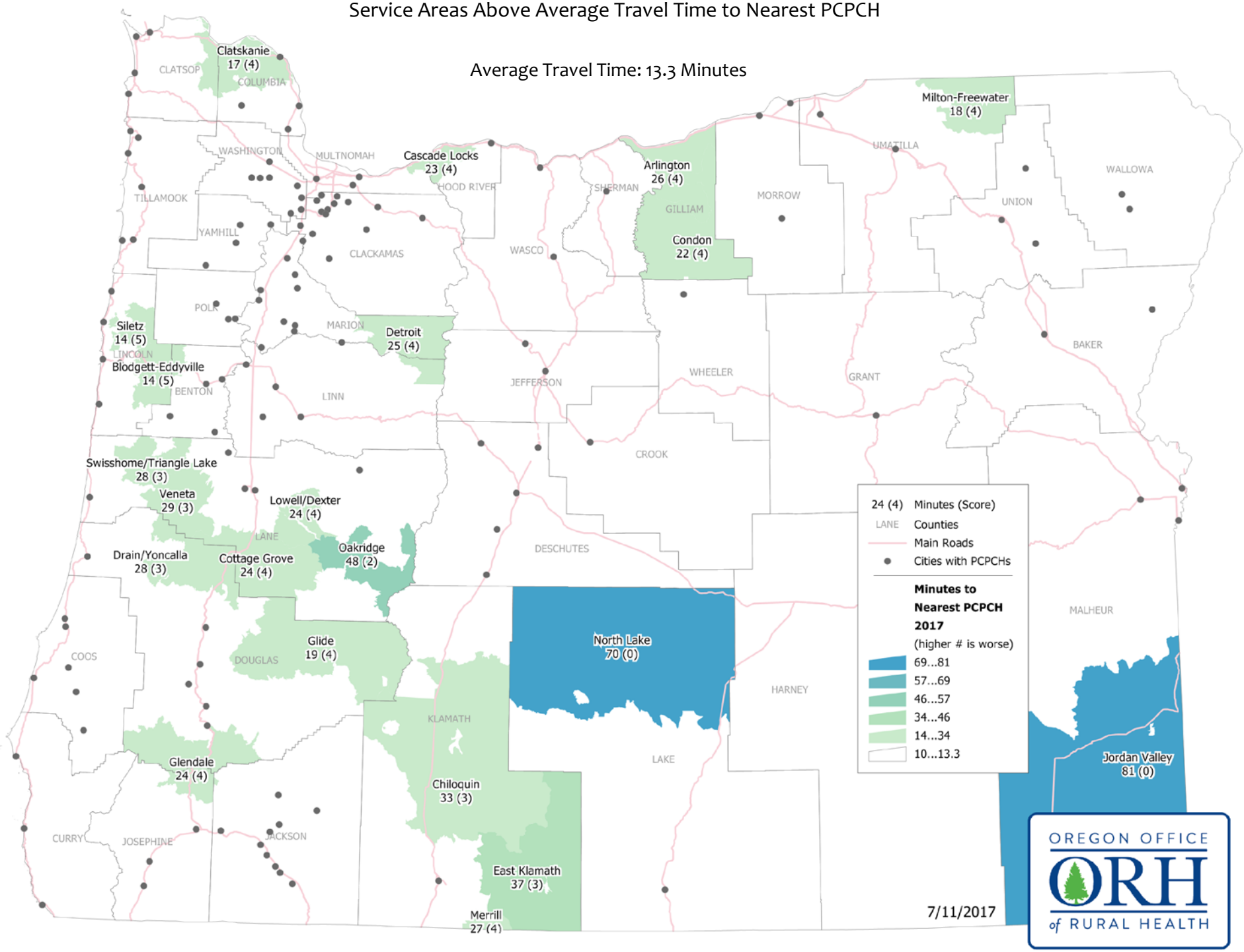
Results:
Average drive time to the nearest PCPCH for all 130 Primary Care Service Areas in Oregon is 13.6 minutes. Twenty-six service areas do not have a PCPCH, and the drive times for these areas range from 12 (Scio) to 81 minutes (Jordan Valley).

Overall Results	***In Minutes***
Oregon	13.6
Urban	10
Rural (without Frontier)	13.1
Rural (including Frontier)	14.5
Frontier	18.8

5 Longest Travel Times to PCPCH	
Jordan Valley	81
North Lake	70
Oakridge	48
East Klamath	37
Chiloquin	33

Figure 3.
Service Areas Above Average Travel Time to Nearest PCPCH

Average Travel Time: 13.3 Minutes



2) Primary Care Capacity (Percent of Primary Care Visits Able to Be Met)

Description:
This measure compares the estimated visits the primary care providers in the service area should be able to supply, with the estimated primary care visits needed by the local population. Primary care providers include general and family physicians, pediatricians, obstetrician-gynecologists, internists, physician assistants, and nurse practitioners.

Data Sources:
Estimated Primary Care Visits Provided:
Physician and physician assistant patient care FTE: Oregon Medical Board licensure survey (2016)

Nurse practitioner patient care FTE: Oregon Health Authority's Health Care Workforce Reporting Program Database: licensure survey (2016)[3]

Primary Care Visits Needed:
Annually adjusted rates from the National Ambulatory Medical Care Survey: State and National Summary Tables, National Center for Health Statistics (2013)[4]

Local population data: Claritas (2017)

Methodology:

a) Estimated primary care visits provided:

Specialty	Estimated Number of Visits Provided Per Year
General and family physicians	2753[5]
Pediatricians	2991[6]
Obstetrician-gynecologists	2702[7]
Internists	2421[8]
Physician assistants	2714[9]
Nurse practitioners	2883[10]

Total Visits Provided = $p_1(2753) + p_2(2991) + p_3(2702) + p_4(2421) + p_5(2714) + p_6(2883)$ where:

p_1 = FTE of General and family physicians
p_2 = FTE of pediatricians
p_3 = FTE of Obstetrician-gynecologists
p_4 = FTE of internists

[3] Data from the Oregon Health Authority's Health Care Workforce Reporting Program Database was used to produce this product. Statements contained herein are solely those of the OHA authors and the OHA author assumes responsibility for the accuracy and completeness of the analyses contained in the product.
[4] http://www.cdc.gov/nchs/data/ahcd/namcs_summary/2013_namcs_web_tables.pdf
[5] Estimate based on: Hing E, Burt CW. *Characteristics of office-based physicians and their practices: United States, 2005-06*. National Center for Health Statistics. Vital Health Stat 13(166) 2008: 14, 15.
[6] Ibid.
[7] Ibid.
[8] Ibid.
[9] Estimate based on: Young, S, Valley, J, Soenen T, et al. *Oregon Federally Certified Rural Health Clinics, 2011 Report*. Oregon Office of Rural Health. (2011): 41
[10] Ibid.

p_5 = FTE of Physician assistants
p_6= FTE of Nurse practitioners

b) Primary care visits needed:

Total # of Primary Care Visits Needed = 0.8[11] x
(([Female Population 0-14] x 2.1) +
([Female Population 15-24] x 1.9) +
([Female Population 25-44] x 2.9) +
([Female Population 45-64] x 3.8) +
([Female Population 65-74] x 6) +
([Female Population 75+] x 6.7) +
([Male Population 0-14] x 2.2) +
([Male Population 15-24] x 1.2) +
([Male Population 25-44] x 1.5) +
([Male Population 45-64] x 3.1) +
([Male Population 65-74] x 5.3) +
([Male Population 75+] x 6.8))

c) Total visits provided is divided by the total number of primary care visits needed. The final variable is a ratio of need being met, using the following formula:

$$V_2 = \frac{\text{Total Visits Provided}}{\text{Total \# of Primary Care Visits Needed}}$$

Results:
The estimated ratio of primary care visits being met for the state of Oregon is 1.80. A ratio of 1 means that supply should be equal to demand, if access and affordability were equal for everyone. A lower ratio means more demand. A higher ratio means more supply. There are 12 service areas (all rural) that don't have any primary care providers, with the highest ratios located in urban areas: Portland Downtown (10.93), and Eugene/University (3.94).

Primary Care Service Areas with no primary care providers:
Applegate/Williams, Blodgett-Eddyville, Cascade Locks, Detroit, East Klamath, Glendale, Jordan Valley, Monroe, Powers, Scio, Swisshome/Triangle Lake, Yachats

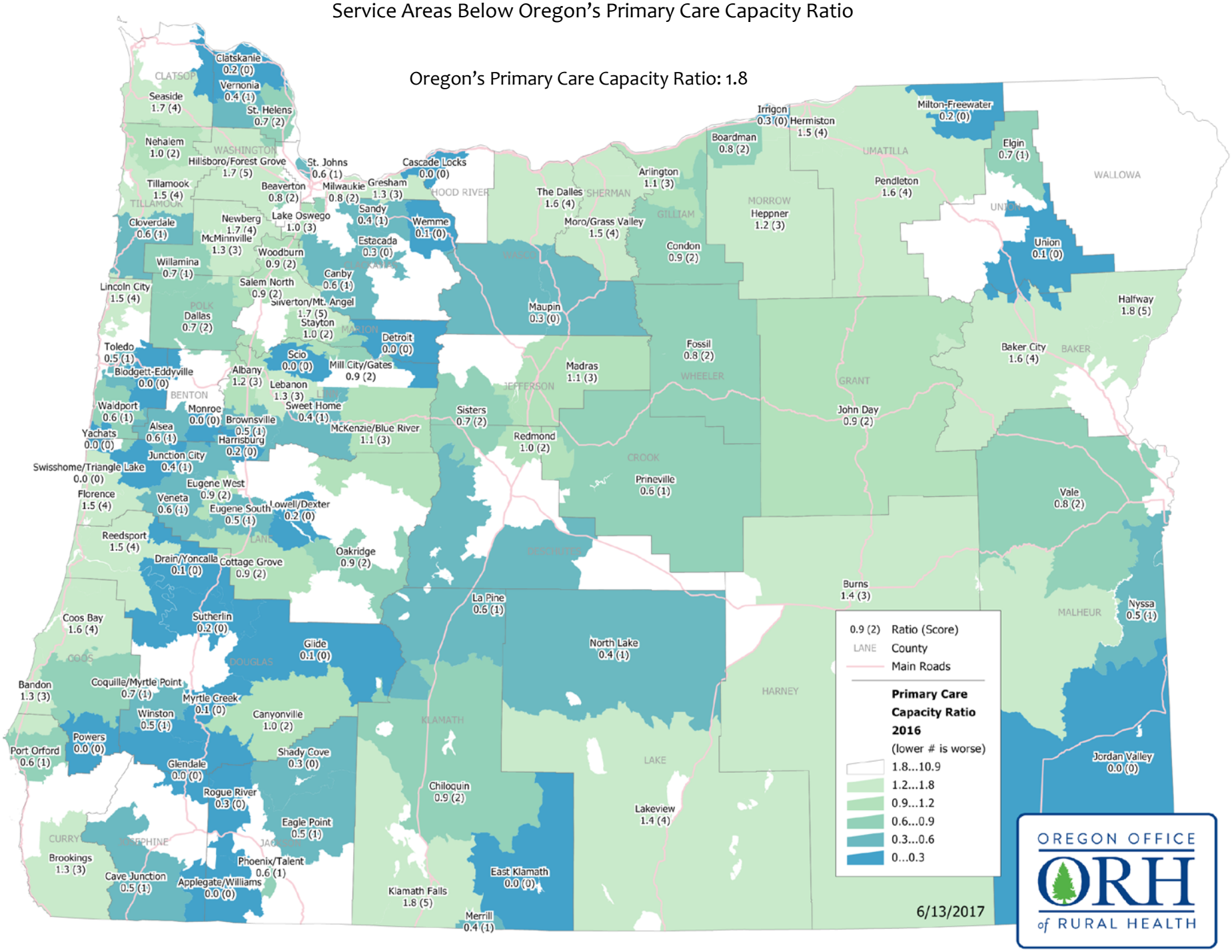
Overall Results

Oregon	1.80
Urban	2.14
Rural (without Frontier)	1.18
Rural (including Frontier)	1.20
Frontier	1.62

[11] All multipliers are from the National Ambulatory Medical Care Survey; which estimates visits to ALL types of physicians. Since primary care in rural areas accounts for 80% of those visits, the calculation here is multiplied by 0.8.

Figure 4.
Service Areas Below Oregon's Primary Care Capacity Ratio

Oregon's Primary Care Capacity Ratio: 1.8



3) Mental Health Providers Per 1,000 Population

Description:
Count of Psychiatrists, Psychiatric Nurse Practitioners, Psychologists, Marriage and Family Therapists, and Clinical Social Workers compared to local population.

Data Sources:
Psychiatrist patient care FTE: Oregon Medical Board licensure survey (2016)

Psychiatric nurse practitioner patient care FTE: Oregon Health Authority's Health Care Workforce Reporting Program: licensure survey (2016)

Psychologist active licensure count: Oregon Board of Psychologist Examiners (2016)

Marriage and family therapist active licensure count: Oregon Board of Licensed Professional Counselors and Therapists (2016)

Clinical social worker active licensure count: Oregon Board of Clinical Social Workers (2016)

Local population data: Claritas (2017)

Methodology:

$$V_3 = \frac{\text{Sum of 5 mental health providers}}{\text{Local population}} \times 1000$$

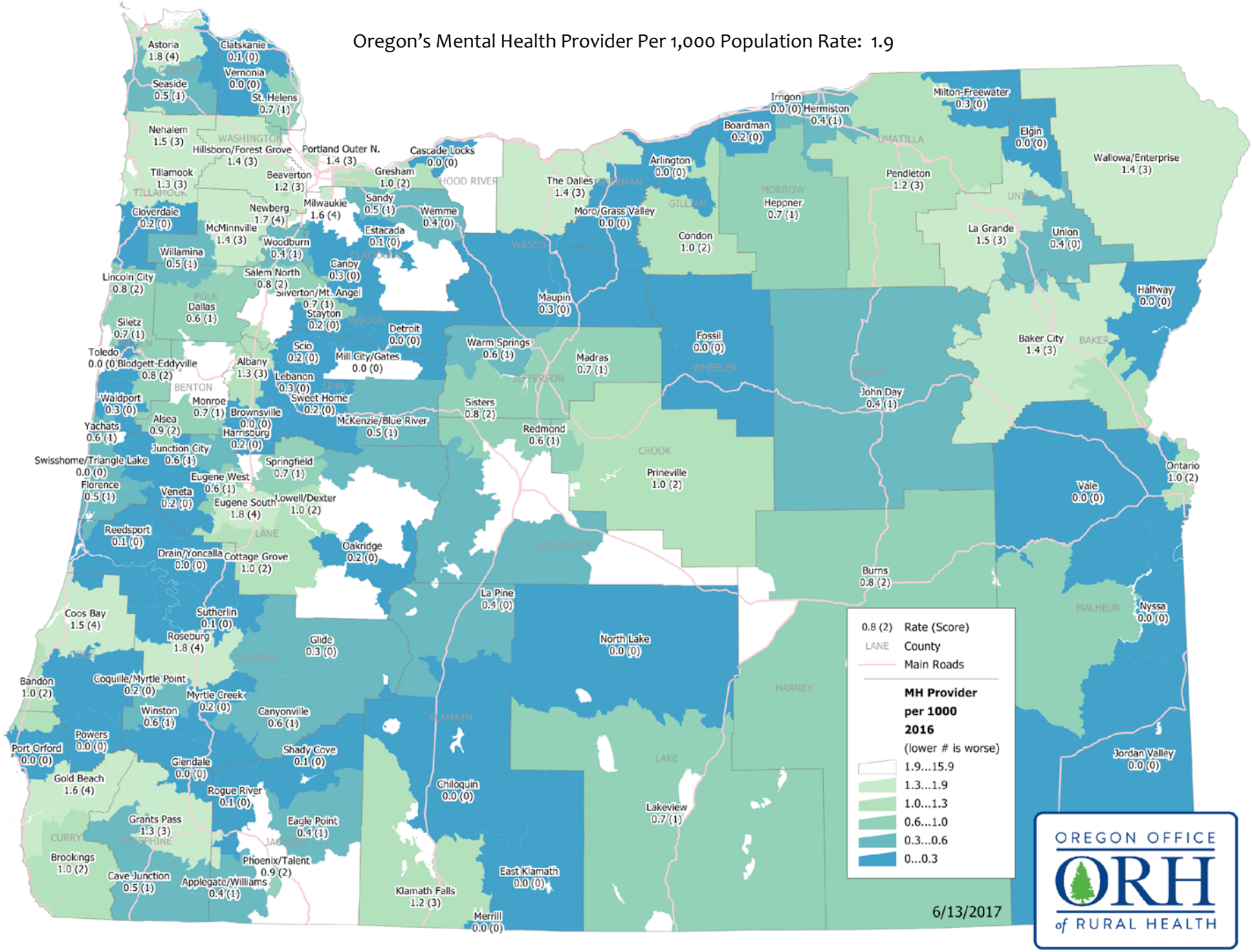
Results:
There are 1.9 mental health providers per 1,000 people in Oregon. Twenty-four of 130 service areas (all rural) had no mental health providers. An additional 33 service areas (all rural) have 0.5 or fewer mental health providers per 1,000 people. The highest numbers per 1,000 are in the urban areas of Portland Downtown (15.9), Portland Inner South (7.8) and Eugene/University (7.1).

Primary Care Service Areas with no mental health providers:
Alsea, Arlington, Blodgett-Eddyville, Cascade Locks, Condon, Detroit, Drain/Yoncalla, East Klamath, Glendale, Glide, Harrisburg, Heppner, Irrigon, Jordan Valley, McKenzie/Blue River, Merrill, Mill City/Gates, Monroe, Moro/Grass Valley, North Lake, Oakridge, Port Orford, Powers, Scio, Swisshome/Triangle Lake

Overall Results	***Per 1,000 Population***
Oregon	1.9
Urban	2.5
Rural (without Frontier)	0.9
Rural (including Frontier)	0.9
Frontier	0.7

Figure 5.
Service Areas Below Oregon's Mental Health Provider Per 1,000 Population Rate

Oregon's Mental Health Provider Per 1,000 Population Rate: 1.9



4) Dentists Per 1,000 Population

Description:
Patient care FTE of local dentists compared to local population.

Data Sources:
Dentist patient care FTE: Oregon Health Authority's Health Care Workforce Reporting Program: licensure survey (2016)

Local population: Claritas (2017)

Methodology:

$$V_4 = \frac{\text{Dentist patient care FTE}}{\text{Local population}} \times 1{,}000$$

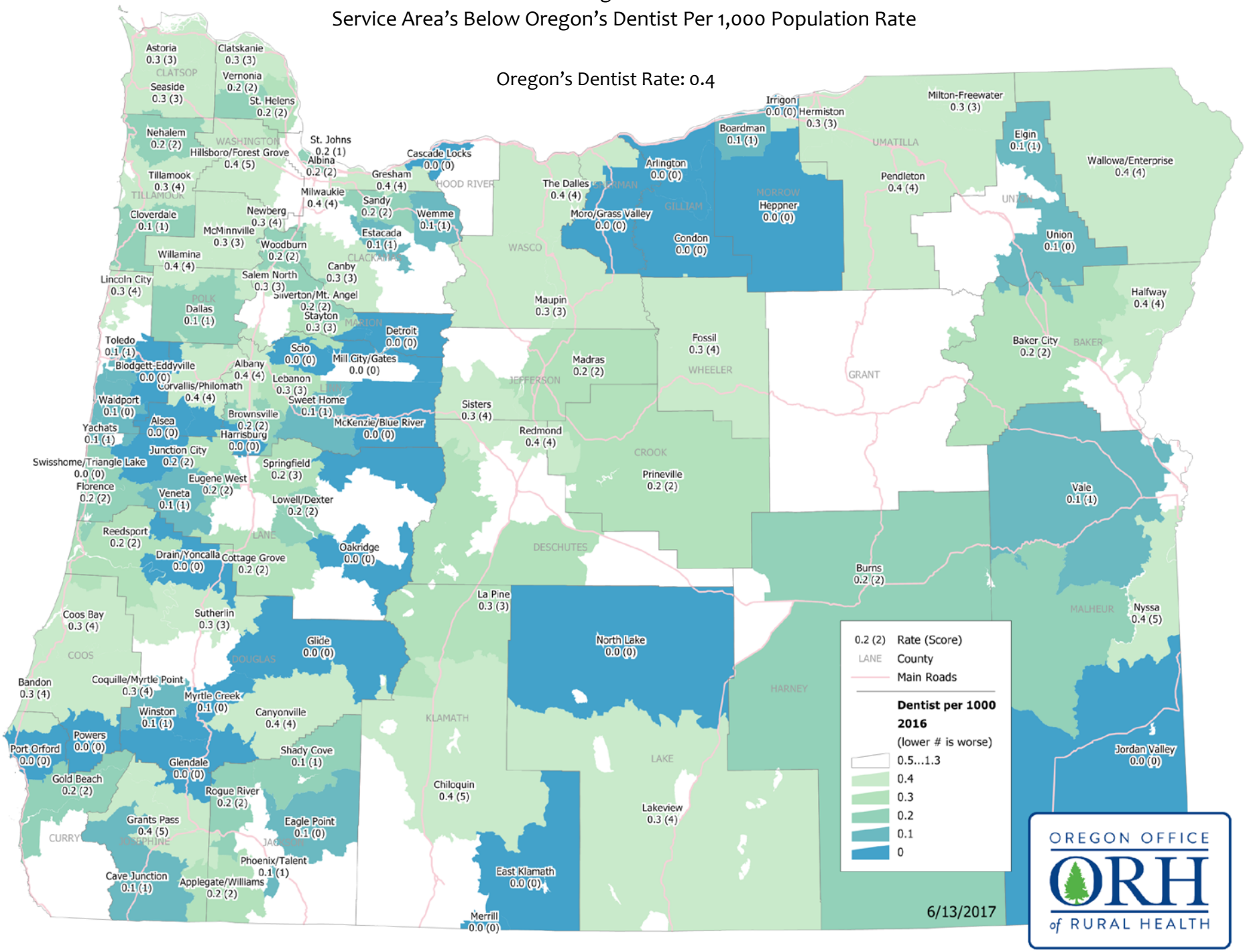
Results:
Oregon has 0.42 dentist patient care FTE per 1,000 people. Twenty-four primary care service areas (all rural) have no dentists. The urban areas of Portland Downtown (1.3) and Eugene/University (0.92) have the highest numbers of dentists per 1000 people.

Primary Care Service Areas with no dentists:
Alsea, Arlington, Blodgett-Eddyville, Cascade Locks, Condon, Detroit, Drain/Yoncalla, East Klamath, Glendale, Glide, Harrisburg, Heppner, Irrigon, Jordan Valley, McKenzie/Blue River, Merrill, Mill City/Gates, Monroe, Moro/Grass Valley, North Lake, Oakridge, Port Orford, Powers, Scio, Swisshome/Triangle Lake

Overall Results	***Per 1,000 Population***
Oregon	0.42
Urban	0.49
Rural (without Frontier)	0.29
Rural (including Frontier)	0.29
Frontier	0.29

Figure 6.
Service Area's Below Oregon's Dentist Per 1,000 Population Rate

Oregon's Dentist Rate: 0.4



CATEGORY TWO: ABILITY TO AFFORD CARE

5) PERCENT OF POPULATION BETWEEN 138% AND 200% OF THE FEDERAL POVERTY LEVEL

Description:
The percentage of the local population that is above the Medicaid cutoff of 138% of Federal Poverty Level (FPL), but still too poor to get health insurance on their own (unless they have jobs that provide health insurance).

Data Source:
American Community Survey (2011-2015)

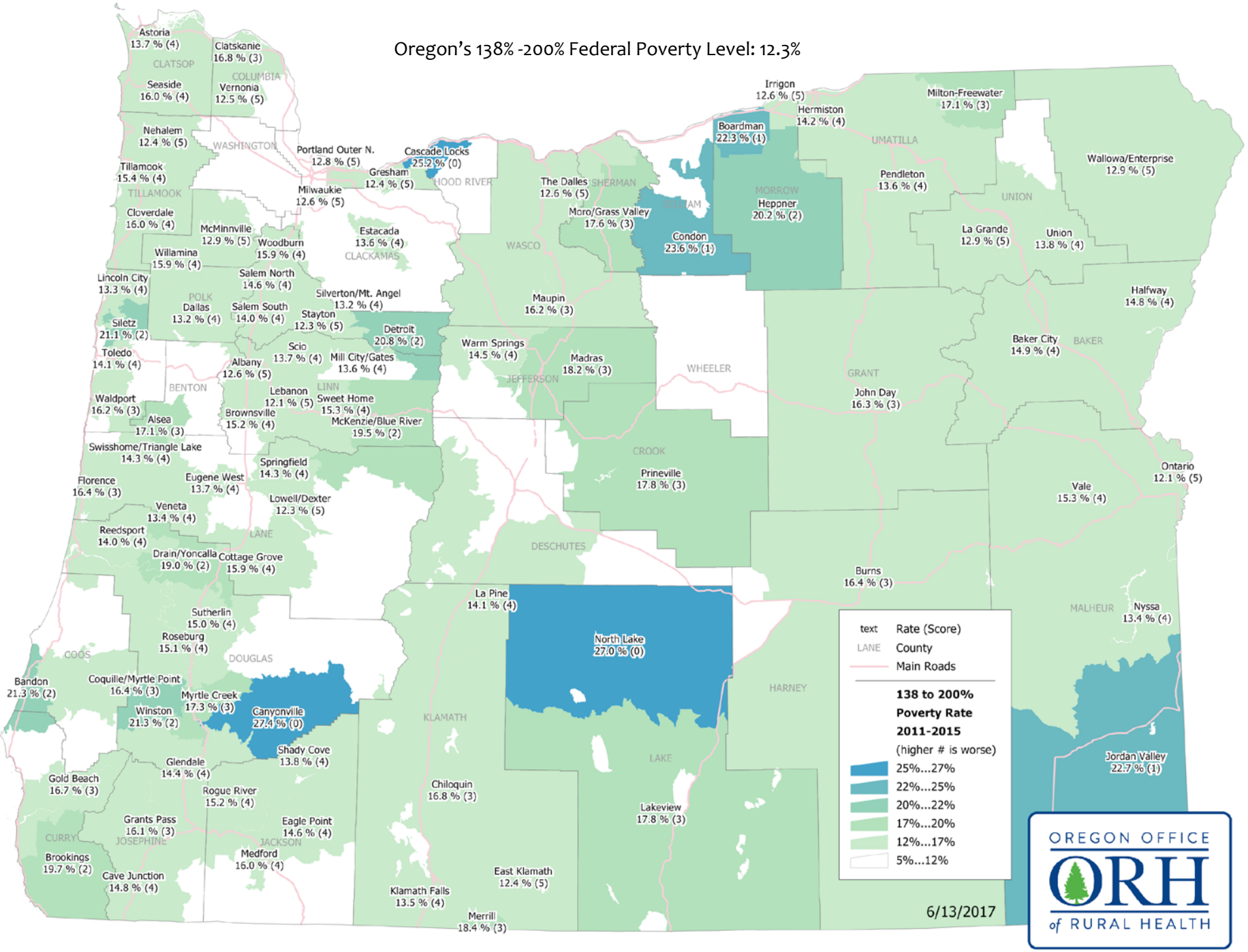
Methodology:
V_5 = 200% FPL – 138% FPL

Results:
12.3% of the population in Oregon are between 138% and 200% of the Federal Poverty Level. The rate ranges from 5% in Port Orford and 7% in Portland West, Lake Oswego, and Portland Downtown, to a high of 27% in North Lake and Canyonville.

Overall Results	
Oregon	12.3%
Urban	11.4%
Rural (without Frontier)	13.8%
Rural (including Frontier)	13.9%
Frontier	15.3%

5 Highest 138-200% Federal Poverty Level Rates	
Canyonville	27%
North Lake	27%
Cascade Locks	25%
Condon	24%
Jordan Valley	23%

Figure 7.
Service Areas Above Oregon's 138% - 200% Federal Poverty Level Rate



CATEGORY THREE: UTILIZATION

6) AMBULATORY CARE SENSITIVE CONDITIONS/PREVENTABLE HOSPITALIZATIONS PER 1,000 POPULATION

Description:
Ambulatory Care Sensitive Conditions (ACSC), also known as preventable hospitalizations, are a set of inpatient discharges that may have been preventable had they been treated with timely and effective primary care. These include common conditions such as asthma, diabetes, hypertension, and pneumonia.

Data Sources:
All Oregon hospital inpatient discharges for the latest 3 calendar years (2014-2016) from Apprise Health Insights.

Primary diagnoses filtered using the ACSC ICD-9 and ICD-10 codes introduced and updated by John Billings.[12-13]

Local population: Claritas (2017)

Methodology:

$$V_6 = \frac{\text{Average ACSC Discharges per Year}}{\text{Local population}} \times 1{,}000$$

Results:
Oregon has an ACSC rate of 9.1 per 1,000 people. Since only Oregon hospital data is collected, any Oregon residents who go to hospitals in other states are not counted in this calculation. For a few communities near the Oregon border whose closest hospital is in the adjacent state, this means that only part of their hospital usage is captured, and is most likely higher than reported here. This is true for Jordan Valley (0.0), Milton-Freewater (0.4)—the two lowest results—and Brookings (6.8).

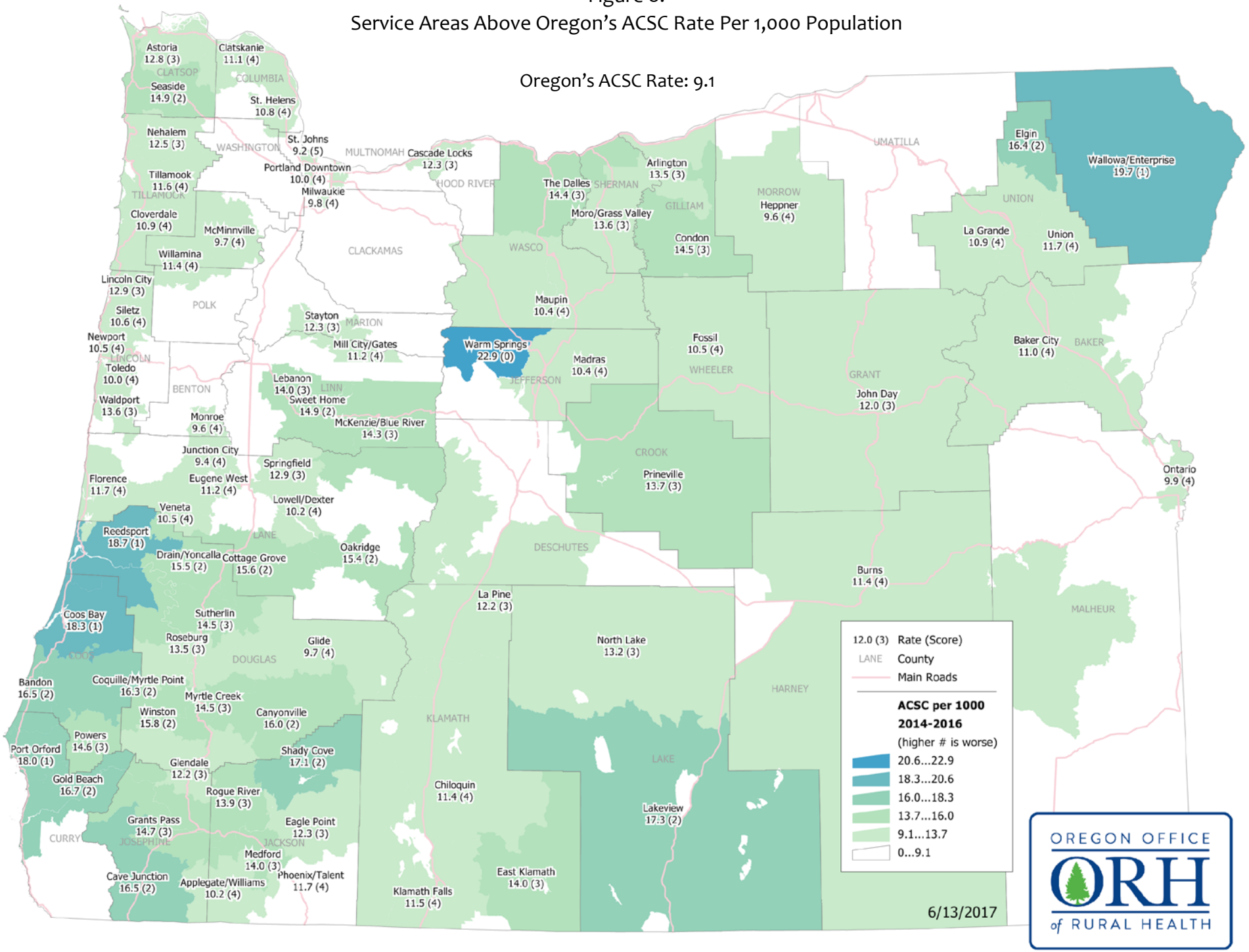
Overall Results	***Per 1,000 Population***
Oregon	9.1
Urban	8.1
Rural (without Frontier)	11.1
Rural (including Frontier)	11.1
Frontier	11.0

5 Highest ACSC Rates	
Warm Springs	22.9
Wallowa/Enterprise	19.7
Reedsport	18.7
Coos Bay	18.3
Port Orford	18.0

[12] Introduced: Billings J., Zeitel L., Lukomnik J., et al. Impact of socioeconomic status on hospital use in New York City. Health Affairs (Spring 1993): 162-173.
[13] Updates available at: https://wagner.nyu.edu/faculty/billings/acs-algorithm

Figure 8.
Service Areas Above Oregon's ACSC Rate Per 1,000 Population

Oregon's ACSC Rate: 9.1



7) Inadequate Prenatal Care Rate Per 1,000 Births

Description:
Inadequate prenatal care is defined in Oregon as care that began in the third trimester or consisted of less than 5 prenatal visits. In addition to revealing frequency of primary care utilization, low birthweight rates are much higher for women who received inadequate prenatal care.[14]

Data Sources:
Latest 5 years (2011-2015) of inadequate prenatal care data from Oregon Health Authority Center for Health Statistics.

Methodology:

$$V_7 = \frac{\text{5 years of inadequate prenatal care births}}{\text{5 years of total births}} \times 1000$$

Results:
Oregon has an average inadequate prenatal care rate of 54.7 per 1,000 births. Detroit and Moro/Grass Valley have no inadequate prenatal care births in the last 5 years, likely because of the few births that occur there (5 per year in Detroit and 9 per year in Moro/Grass Valley).

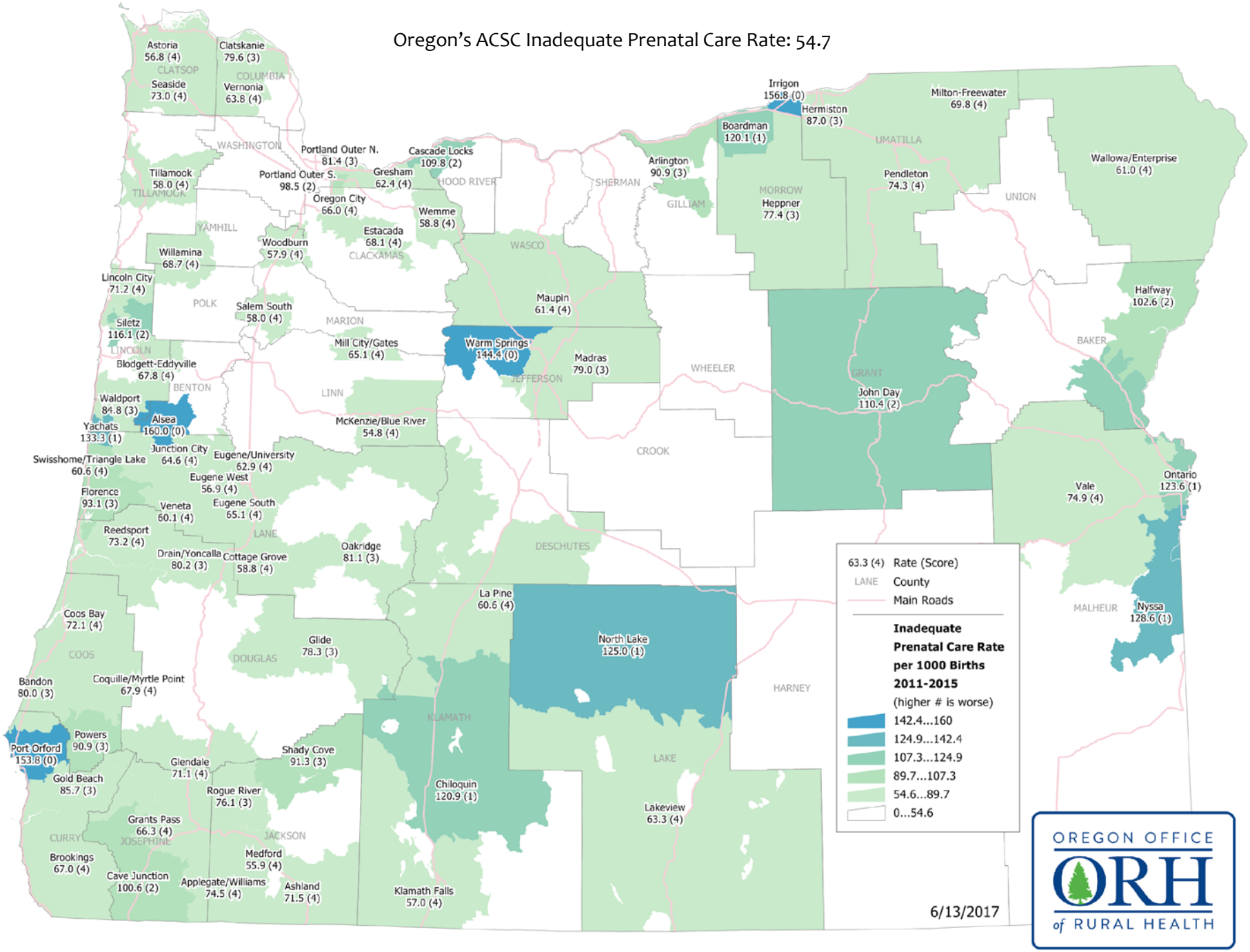
Overall Results	***Per 1,000 Births***
Oregon	54.7
Urban	52.5
Rural (without Frontier)	56.0
Rural (including Frontier)	58.7
Frontier	93.6

5 Highest Inadequate Prenatal Care Rates	
Alsea	160.0
Irrigon	156.8
Port Orford	153.8
Warm Springs	144.4
Yachats	133.3

[14] *Oregon Vital Statistics Annual Report 2015, Volume 1.* Oregon Health Authority, Public Health Division. 2-10

Figure 9.
Service Areas Above Oregon's ACSC Inadequate Prenatal Care Rate Per 1,000 Births

Oregon's ACSC Inadequate Prenatal Care Rate: 54.7



8) Emergency Department Non-Traumatic Dental Visits Per 1,000 Population

Description:
Visits to the Emergency Department (ED) with a primary diagnosis of dental problems that are not a result of trauma. ED visits for oral health conditions are often a result of limited access to dental care.[15] Most of these visits resulted in opioid and antibiotic prescriptions rather than definitive dental care.[16]

Data Sources:
All Oregon hospital inpatient and outpatient ED visits for the latest 2 calendar years (2015-2016) from Apprise Health Insights.

Primary diagnoses filtered for non-traumatic dental ICD-9 and ICD-10 codes used in the published article: "Emergency Department Visits for Non traumatic Dental Problems: A Mixed-Methods Study."[17]

Local population: Claritas (2017)

Methodology:

$$V_8 = \frac{\text{Per Year Average Non-Traumatic Dental ED Visits} \times 1000}{\text{Local Population}}$$

Results:
Oregon has an average non-traumatic dental ED visit rate of 4.8 per 1,000 per year. Only Oregon hospital data is collected, so any Oregon residents who go to hospitals in other states are not counted in this calculation. For a few communities near the Oregon border whose closest hospital is in the adjacent state, this means that only part of their hospital usage is captured, and is most likely higher than reported here. This is true for Jordan Valley (0.0), Milton-Freewater (0.2)—the two best results—and Brookings (1.2).

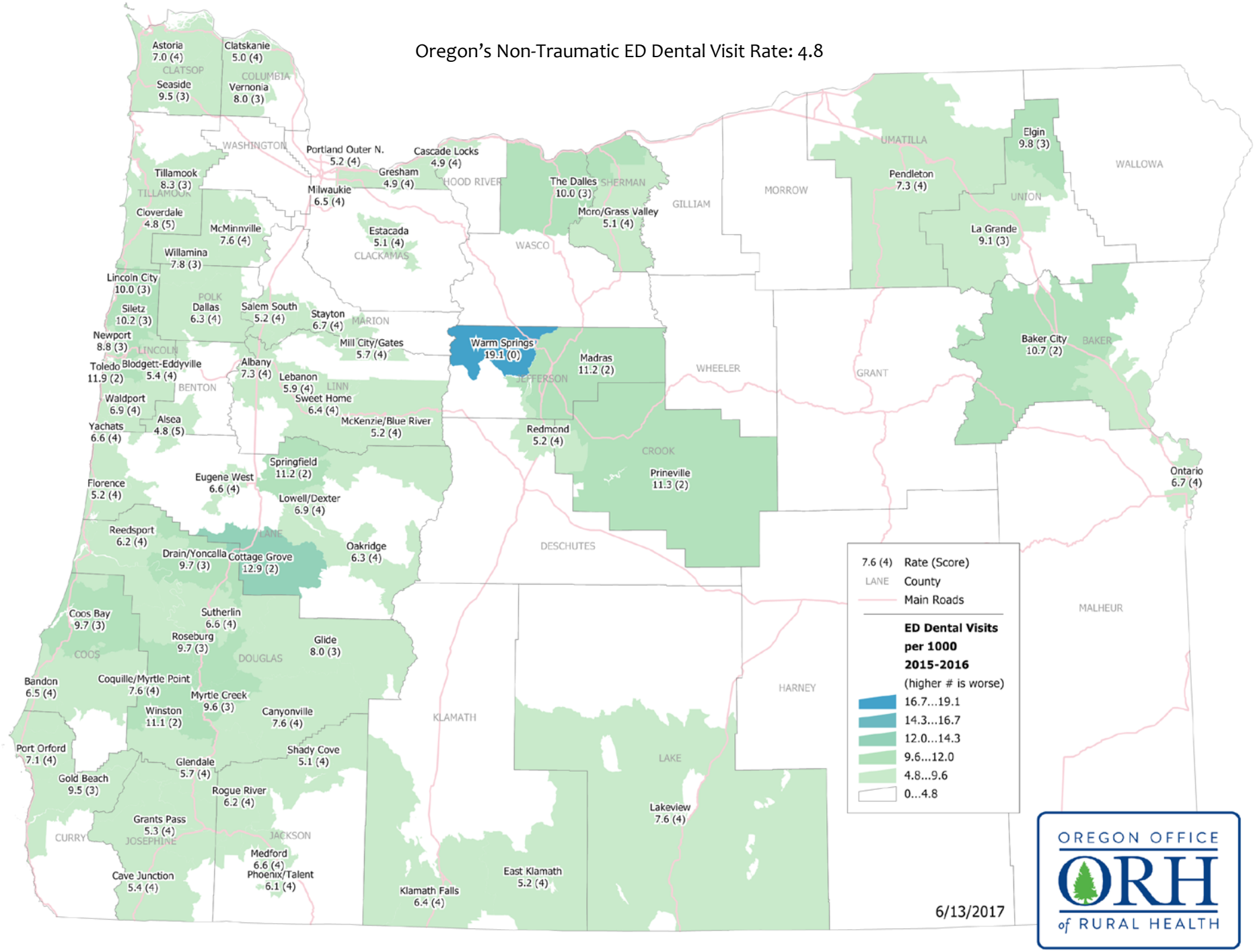
Overall Results	***Per 1,000 Population***
Oregon	4.8
Urban	4.2
Rural (without Frontier)	6.0
Rural (including Frontier)	6.0
Frontier	5.3

5 Highest ED Dental Visit Rates	
Warm Springs	19.1
Cottage Grove	12.9
Toledo	11.9
Prineville	11.3
Madras and Springfield	11.2

[15] Sun BC, Chi DL, Schwarz E, et al. Emergency Department Visits for Non traumatic Dental Problems: A Mixed-Methods Study. *American Journal of Public Health*. 2015;105(5):947-955. doi:10.2105/AJPH.2014.302398.
[16] Ibid.
[17] Ibid.

Figure 10.

Service Areas Above Oregon's Non-Traumatic Emergency Department Dental Visit Rate Per 1,000 Population



9) Emergency Department Mental Health/Substance Abuse Visits Per 1,000 Population

Description:
Visits to the Emergency Department (ED) with a primary diagnosis of mood disorders, anxiety, alcohol, drug use, and schizophrenia and other psychoses. ED visits for Mental Health/Substance Abuse (MHSA) conditions are potentially preventable with adequate primary care.[18] They are twice as likely to result in a hospital admission[19], and the increasing rate of MHSA ED visits in the past few years is highest among low-income populations.[20]

Data Sources:
All Oregon hospital inpatient and outpatient ED visits for the latest 2 calendar years (2015-2016) from Apprise Health Insights.

Primary diagnoses filtered for the top 5 mental health diagnosis grouping codes (ICD-9 and ICD-10)[21]

Local population: Claritas (2017)

Methodology:
V_9 = Per Year Average ED Mental Health/Substance Abuse Visits x 1000
Local Population

Results:
Oregon has an average mental health/substance abuse ED visit rate of 15.6 per 1,000 population per year. This is the only variable where urban areas do worse than rural areas. Only Oregon hospital data is collected. For communities near the Oregon border, only part of their hospital usage is captured, and is most likely higher. This is true for Jordan Valley (4.1), Milton-Freewater (0.5), and Brookings (10.1).

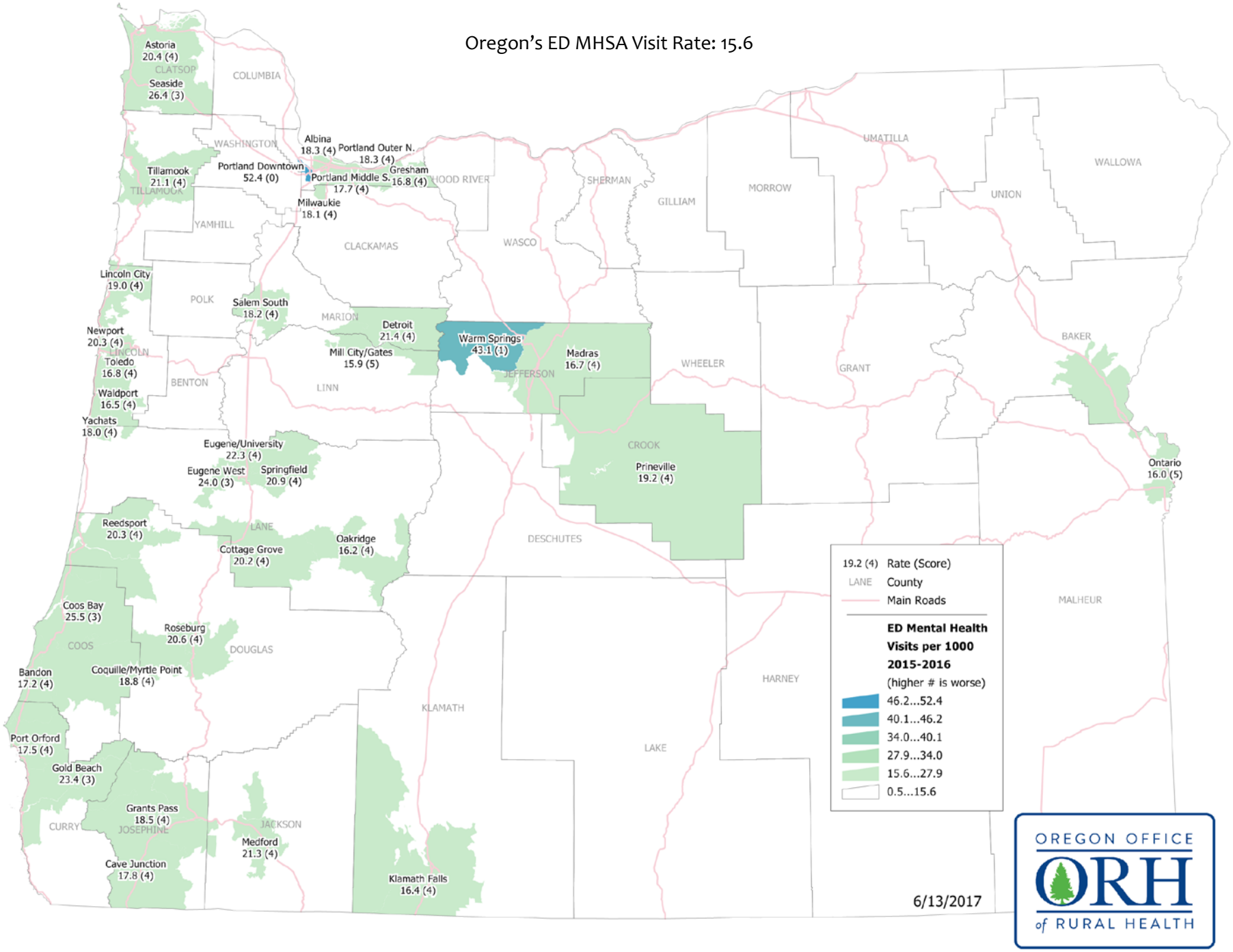
Overall Results	***Per 1,000 Population***
Oregon	15.6
Urban	16.4
Rural (without Frontier)	14.3
Rural (including Frontier)	14.1
Frontier	10.9

5 Highest ED MHSA Rates	
Portland Downtown	52.4
Warm Springs	43.1
Seaside	26.4
Coos Bay	25.5
Portland Outer South	24.1

[18] Rockett IRH, Putnam SL, Jia H, Chang C, Smith GS. Unmet substance abuse treatment need, health services utilization, and cost: a population-based emergency department study. *Annals of Emergency Medicine*. 2005; 45(2):118–27.
[19] Owens PL, Mutter R, Stocks C. Mental Health and Substance Abuse-Related Emergency Department Visits Among Adults, 2007. HCUP Statistical Brief #92. July 2010. Agency for Healthcare Research and Quality, Rockville, MD.
[20] Weiss AJ, Barrett ML, Heslin KC, Stocks C. Trends in Emergency Department Visits Involving Mental and Substance Use Disorders, 2006–2013. HCUP Statistical Brief #216. 2016. Agency for Healthcare Research and Quality, Rockville, MD.
[21] Owens PL, et al. Mental Health and Substance Abuse-Related Emergency Department Visits Among Adults, 2007.

Figure 11.

Service areas Above Oregon's Emergency Department Mental Health/Substance Abuse Visit Rate Per 1,000 Population



TOTAL SCORES

Methodology:
A score of between 0 (worst) and 10 (best) is calculated for each of the variables, depending on the variances of the lowest and highest numbers from the mean. The scores are then added together to produce a final Unmet Need Total Score:

$V_1 + V_2 + V_3 + V_4 + V_5 + V_6 + V_7 + V_8 + V_9$ = Unmet Need Total Score (0 to 90)

Results:
The highest scoring primary care service area is Portland West (68 out of 90), and the highest scoring rural service area is Hood River (66). Drain/Yoncalla has the lowest score of 19. Only 4 (15.3%) of the state's 26 urban areas fall below the mean total score of 41.1. The other 69 areas below the mean comprise 66.3% of all (104) rural service areas. Only 3 (20%) of the top 15 performing service areas are rural.

One caveat about the ranking is that 3 of the 9 variables utilize hospital data from Oregon facilities only. Three rural service areas—Brookings, Jordan Valley, and Milton-Freewater—mostly use hospitals that are located in adjacent states, so their visit numbers for these variables are incomplete and give the impression that they are in better shape than reality. Their respective total scores (49, 38, and 44) should be interpreted with this in mind.

Mean (Average) Score by Geographic Area

Oregon	41.1
Urban	52
Rural (without Frontier)	37.9
Rural (including Frontier)	38.3
Frontier	40.4

Top 10 Areas With the Lowest Total Unmet Need Scores

Drain/Yoncalla	19
Cascade Locks	20
North Lake	22
Oakridge	23
Cottage Grove	26
Glendale	26
Glide	27
Waldport	28
Warm Springs	28
Yachats	28
Clatskanie	28

Oregon State Board of Nursing Approved Nursing Education Program List 2018

Oregon Approved Practical Nursing Programs

BEAVERTON
Pioneer Pacific College Beaverton
Website: https://pioneerpacific.edu
Barbara Lew, MPH, MSN-FNP
E-mail: barbara.lew@pioneerpacific.edu
4145 SW Watson Avenue #300
Beaverton, OR 97005
County: Washington
(503) 688-2130

BEND
Central Oregon Community College
Website: http://www.cocc.edu
Jane Morrow, Nurse Administrator
E-mail: jmorrow1@cocc.edu
2600 Northwest College Way
Bend, OR 97701
County: Deschutes
(541) 383-7417
Practical Nurse curriculum during the first year of the Associate Degree in Nursing Program.

EUGENE
Lane Community College
Website: http://www.lanecc.edu/hp/nursing
Margaret McHugh, Program Administrator
E-mail: mchughm@lanecc.edu
4000 East 30th Avenue
Eugene, OR 97405
County: Lane
(541) 463-5730

GRESHAM
Mt Hood Community College
Website: http://www.mhcc.cc.or.us
Linda Fleshman, RN, MSNHCE, MST, Program Director/Nurse Educator
E-mail: linda.fleshman@mhcc.edu
26000 Southeast Stark Street
Gresham, OR 97030
County: Multnomah
(503) 491-6727

NEWPORT
Oregon Coast Community College
Website: http://www.occc.cc.or.us/programs/nursing/index.html
Linda Mollino RN, MSN Director of Nursing and Health Occupational Programs
E-mail: lmollino@oregoncoastcc.org
400 Southeast College Way
Newport, OR 97366
County: Lincoln
(541) 867-8513
Practical Nurse curriculum during the first year of the Associate Degree in Nursing Program.

PORTLAND
Concorde Career College
Website: http://www.concorde.edu/programs/practical-nursing.asp
Gwen Collins, MSN, RN, Director of Nursing
E-mail: gcollins@concorde.edu
1425 Northeast Irving Street Building 300
Portland, OR 97232
County: Multnomah
503-488-6129

PORTLAND
Sumner College PN
Website: http://www.sumnercollege.edu
Jeanine Olson, Nursing Department Chair
E-mail: jolson@sumnercollege.edu
15115 SW Sequoia Parkway
Portland, OR 97224
County: Washington
(503) 223-5100

ROSEBURG
Umpqua Community College
Website: http://www.umpqua.edu
April Myler, MSN, RN, Department Chair/Director
E-mail: april.myler@umpqua.edu
1140 College Road
PO BOX 967
Roseburg, OR 97470
County: Douglas
(541) 440-7684

SALEM
Chemeketa Community College
Website: http://www.chemeketa.edu
Sandra Kellogg, RN, MSN
E-mail: sandi.kellogg@chemeketa.edu
4000 Lancaster Drive Northeast
PO BOX 14007
Salem, OR 97309
County: Marion
(503) 399-5058
Practical Nurse curriculum during the first year of the Associate Degree in Nursing Program.

SALEM
Institute of Technology
Website: http://www.it-colleges.edu
Bobbi Marugg, MSN, RN, Program Administrator
E-mail: bmarugg@iot.edu
4707 Silverton Road Northeast
Salem, OR 97305
County: Marion
(503) 363-9001

SPRINGFIELD
Pioneer Pacific College Springfield
Website: http://www.pioneerpacific.edu/Nursing.htm
Carmen Angel, MSN, RN, Nurse Administrator
E-mail: carmen.angel@pioneerpacific.edu
3800 Sports Way
Springfield, OR 97477
County: Lane
(866)772-4636

WHITE CITY
Rogue Community College
Website: http://learn.roguecc.edu/Nursing/practicalnursing/home.htm.
Linda Wagner, RN, MN, Nursing Department Chair
E-mail: lwagner@roguecc.edu
7800 Pacific Avenue
White City, OR 97503
County: Jackson
(541) 245-7752

Oregon Approved Registered Nurse Associate Degree Programs

ASTORIA
Clatsop Community College
Website: http://www.clatsopcc.edu
Allison Sansom, RN, MSN Nursing Program Administrator
E-mail: asansom@clatsopcc.edu
1651 Lexington Avenue
Astoria, OR 97103
County: Clatsop
(503) 338-2436
Accepted students for 2016 forward are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

BEND
Central Oregon Community College
Website: http://www.cocc.edu
Jane Morrow, Nurse Administrator
E-mail: jmorrow1@cocc.edu
2600 Northwest College Way
Bend, OR 97701
County: Deschutes
(541) 383-7546
Enrolled nursing students are co-admitted to Linfield-Good Samaritan School of Nursing Bachelor of Science in Nursing Program.

COOS BAY
Southwestern Oregon Community College
Website: http://www.socc.edu
Susan Walker, RN, MSN, Director of Nursing and Allied Health
E-mail: swalker@socc.edu
1988 Newmark Avenue
Coos Bay, OR 97420
County: Coos
(541) 888-7298
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

EUGENE
Lane Community College
Website: http://www.lanecc.edu/hp/nursing
Margaret McHugh, Program Administrator
E-mail: mchughm@lanecc.edu
4000 East 30th Avenue
Eugene, OR 97405
County: Lane
(541) 463-5730
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

GRANTS PASS
Rogue Community College
Website: http://learn.roguecc.edu/nursing/home.htm
Linda Wagner, RN, MN, Nursing Department Chair
E-mail: lwagner@roguecc.edu
3345 Redwood Highway
Grants Pass, OR 97527
County: Josephine
(541) 956-7313
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

GRESHAM
Mt Hood Community College
Website: http://www.mhcc.cc.or.us
Janie Griffin, RN, MSN, Dean of Nursing
E-mail: griffinj@mhcc.edu
26000 Southeast Stark Street
Gresham, OR 97030
County: Multnomah
(503) 491-6701
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

KLAMATH FALLS
Klamath Community College
Website: https://www.klamathcc.edu
Lori James, RN, MNA, Administrative Director
E-mail: james@klamathcc.edu
7390 South 6th Street
Klamath Falls, OR 97601
County: Klamath
(541) 880-2223

LEBANON
Linn-Benton Community College
Website: http://www.linnbenton.edu
Sheryl Oakes Caddy, RN, JD, MSN, Program Director
E-mail: caddys@linnbenton.edu
300 Mullins Drive
Lebanon, OR 97355
County: Linn
(541) 917-4840

MILWAUKIE
Clackamas Community College - Harmony Campus
Website: http://www.clackamas.edu
Carol Dodson, Nurse Administrator
E-mail: carold@clackamas.edu
7738 SE Harmony Road
Milwaukie, OR 97222
County: Clackamas
(503) 594-0654
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

NEWPORT
Oregon Coast Community College
Website: http://www.occc.cc.or.us/programs/nursing/index.html
Linda Mollino RN, MSN, Director of Nursing and Health Occupations
E-mail: lmollino@oregoncoastcc.org
400 Southeast College Way
Newport, OR 97366
County: Lincoln
(541) 867-8513

ONTARIO
Treasure Valley Community College
Website: http://www.tvcc.cc/Nursing/index.htm
Mendy Stanford, RN, MSN/Ed, CNE, Executive Director of Nursing and Allied Health
E-mail: mstanfor@tvcc.cc
650 College Boulevard
Ontario, OR 97914
County: Malheur
(541) 881-5944
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

PENDLETON
Blue Mountain Community College
Website: http://www.bluecc.edu
Laurie Post, RN, MSN, Nursing Program Director/Nurse Administrator
E-mail: lpost@bluecc.edu
2411 Northwest Cardin Avenue
PO BOX 100
Pendleton, OR 97801
County: Umatilla
(541) 278-5882
Accepted students are co-admitted to the OHSU Bachelor of Science with a major in Nursing program.

PORTLAND
Portland Community College
Website: http://www.pcc.edu
Heather Reynolds, MSN, RN, Interim Director
E-mail: heather.reynolds2@pcc.edu
12000 Southwest 49th Street
PO BOX 19000
Portland, OR 97280
County: Multnomah
(971) 722-4205 Marilyn McGuire's # as Dean
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

PORTLAND
Sumner College RN
Website: http://www.sumnercollege.edu/
Jeanine Olson, Nursing Department Chair
E-mail: jolson@sumnercollege.edu
Cascade Station Campus
8338 NE Alderwood
Portland, OR 97220
County: Multnomah
(503) 223-5100

ROSEBURG
Umpqua Community College
Website: http://www.umpqua.edu
April Myler, MSN, RN, Department Chair/Director
E-mail: april.myler@umpqua.edu
1140 College Road
PO BOX 967
Roseburg, OR 97470
County: Douglas
(541) 440-4614
Accepted students are co-admitted to the OHSU Bachelor of Science Program with a major in Nursing.

SALEM
Chemeketa Community College
Website: http://www.chemeketa.edu
Sandra Kellogg, RN, MSN
E-mail: sandi.kellogg@chemeketa.edu
4000 Lancaster Drive Northeast
PO BOX 14007
Salem, OR 97309
County: Marion
(503) 399-5041
Enrolled nursing students are co-admitted to Linfield-Good Samaritan School of Nursing Bachelor of Science in Nursing Program.

THE DALLES
Columbia Gorge Community College
Website: http://www.cgcc.edu
Doris Jepson, RN, MSN, Director of Nursing and Health Occupations
E-mail: djepson@cgcc.edu
400 East Scenic Drive
The Dalles, OR 97058
County: Wasco
(541) 506-6140
Enrolled nursing students are co-admitted to OHSU Bachelor of Science in Nursing Program.

Oregon Approved Registered Nurse Baccalaureate Degree Programs

ASHLAND
OHSU at Southern Oregon University
Website: http://www.sou.edu/nursing
Joanne Noone, RN, PhD, FNP-BC, CNE, Campus Associate Dean
E-mail: noonej@ohsu.edu
1250 Siskiyou Boulevard
Ashland, OR 97520
County: Jackson
(541) 552-8453

KLAMATH FALLS
OHSU at Oregon Institute of Technology
Website: http://www.oit.edu/academic
Tamara Rose, RN, BSN, MSN, Campus Associate Dean
E-mail: roset@ohsu.edu
3201 Campus Drive
Klamath Falls, OR 97601
County: Klamath
(800) 422-2017

LA GRANDE
OHSU at Eastern Oregon University
Website: http://www.eou.edu/ohsu
Carla Hagen, PhD, MPH, RN, Campus Associate Dean
E-mail: hagenc@ohsu.edu
1 University Boulevard
La Grande, OR 97850
County: Union
(541) 962-3383

MONMOUTH
OHSU at Western Oregon University
Website: http://www.ohsu.edu/son
Angela Docherty, NursD, MPH, RN, Campus Associate Dean
E-mail: docherty@ohsu.edu
345 North Monmouth Avenue
Monmouth, OR 97361
County: Polk

NEWBERG
George Fox University
Website: http://www.georgefox.edu/academics/undergrad/departments/nursing/index.html
Pamela Fifer, MS, RN, CNE, Director of Nursing
E-mail: pfifer@georgefox.edu
414 North Meridian Street Suite 6238
Newberg, OR 97132
County: Yamhill
(503) 554-2951

PORTLAND
Concordia University
Website: http://www.cu-portland.edu/hhs/undergraduate/nursing/welcome.cfm
Lisa Presnall, Interim Director of Nursing
E-mail: lpresnall@cu-portland.edu
2811 Northeast Holman Street
Portland, OR 97211
County: Multnomah
(503) 280-8602

PORTLAND
Linfield-Good Samaritan School of Nursing
Website: http://www.linfield.edu/portland
Dr. Joanna Rowe, PhD, RN
E-mail: jrowe@linfield.edu
2255 Northwest Northrup Room 304
Portland, OR 97210
County: Multnomah
503-413-8072

PORTLAND
OHSU Oregon Health & Science University
Website: http://www.ohsu.edu/son
Ann Nielsen, MN, PhD, RN
E-mail: nielsena@ohsu.edu
3455 SW U.S. Veterans Hospital Road (SN-ADM)
Portland, OR 97239
County: Multnomah

PORTLAND
University of Portland School of Nursing
Website: http://www.nursing.up.edu
Joane Moceri, RN, PhD, Dean
E-mail: moceri@up.edu
5000 North Willamette Boulevard
Portland, OR 97203
County: Multnomah
(503) 943-7509

PORTLAND
Walla Walla University School of Nursing
Website: http://www.wallawalla.edu/nursing
Lucille Krull, RN, PhD, Dean School of Nursing
E-mail: lucy.krull@wallawalla.edu
10345 Southeast Market Street
Portland, OR 97216
County: Multnomah
(503) 251-6115 x 7302

Oregon Approved Graduate Programs

PORTLAND
OHSU Oregon Health & Science University
Website: http://www.ohsu.edu/son
Susan Bakewell-Sachs, RN, MSN, PhD, Dean and VP for Nursing Affairs
E-mail: bakewels@ohsu.edu
3455 SW U.S. Veterans Hospital Road (SN-ADM)
Portland, OR 97239
County: Multnomah
(503) 494-4206

PORTLAND
University of Portland School of Nursing
Website: http://www.nursing.up.edu
Joane Moceri, RN, PhD, Dean
E-mail: moceri@up.edu
5000 North Willamette Boulevard
Portland, OR 97203
County: Multnomah
(503) 943-7509

August 2018

Oregon Center for NURSING

Healthcare Workforce & Education Program Evaluation Report

Over the past decade, public debate and new policies about access to healthcare has focused on ensuring all residents have the ability to pay for quality care when needed. However, this is only one element of a complex puzzle. Ensuring a sufficient workforce is another important component to consider when working to provide adequate access to care.

Multiple studies have shown that an inadequate supply of healthcare workers decreases the ability to provide high quality healthcare and increases the risk to patient safety. Higher patient loads are associated with higher hospital readmission rates, and in nursing homes, workforce shortages often result in increased mortality among those aged 85 and older.

Like other states, Oregon faces challenges to bolstering its healthcare workforce. The population of Oregon is aging, health care workers are retiring, and the expanded health care coverages means more patients seeking care. Employers, educators, and lawmakers are searching for solutions that will provide a high-quality workforce for the healthcare needs of all Oregonians in the future.

In early 2018, the Rural Medical Training Workgroup approached staff at the Oregon Center for Nursing (OCN) to conduct an evaluation of the nursing and allied healthcare workforce across Oregon as part of their efforts to determine the feasibility of locating a new school of allied health in Southern Oregon. This evaluation examined select healthcare occupations by region across Oregon, with geographic regions defined by the Oregon Employment Department (OED).

Healthcare occupations: Registered Nurse, Nurse Practitioner, Physical Therapist, Licensed Professional Counselor, Licensed Clinical Social Worker, Medical Clinical Laboratory Technologists, and Radiological Technologist.

Table 1 – Oregon Employment Department Regions

OED Region	Counties
East Cascades	Crook, Deschutes, Gilliam, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco, Wheeler
Eastern Oregon	Baker, Grant, Harney, Malheur, Morrow, Umatilla, Union, Wallowa
Lane	Lane
Mid-Valley	Linn, Marion, Polk, Yamhill
Northwest Oregon	Benton, Clatsop, Columbia, Lincoln, Tillamook
Portland Tri-County	Clackamas, Multnomah, Washington
Rogue Valley	Jackson, Josephine
Southwestern Oregon	Coos, Curry, Douglas

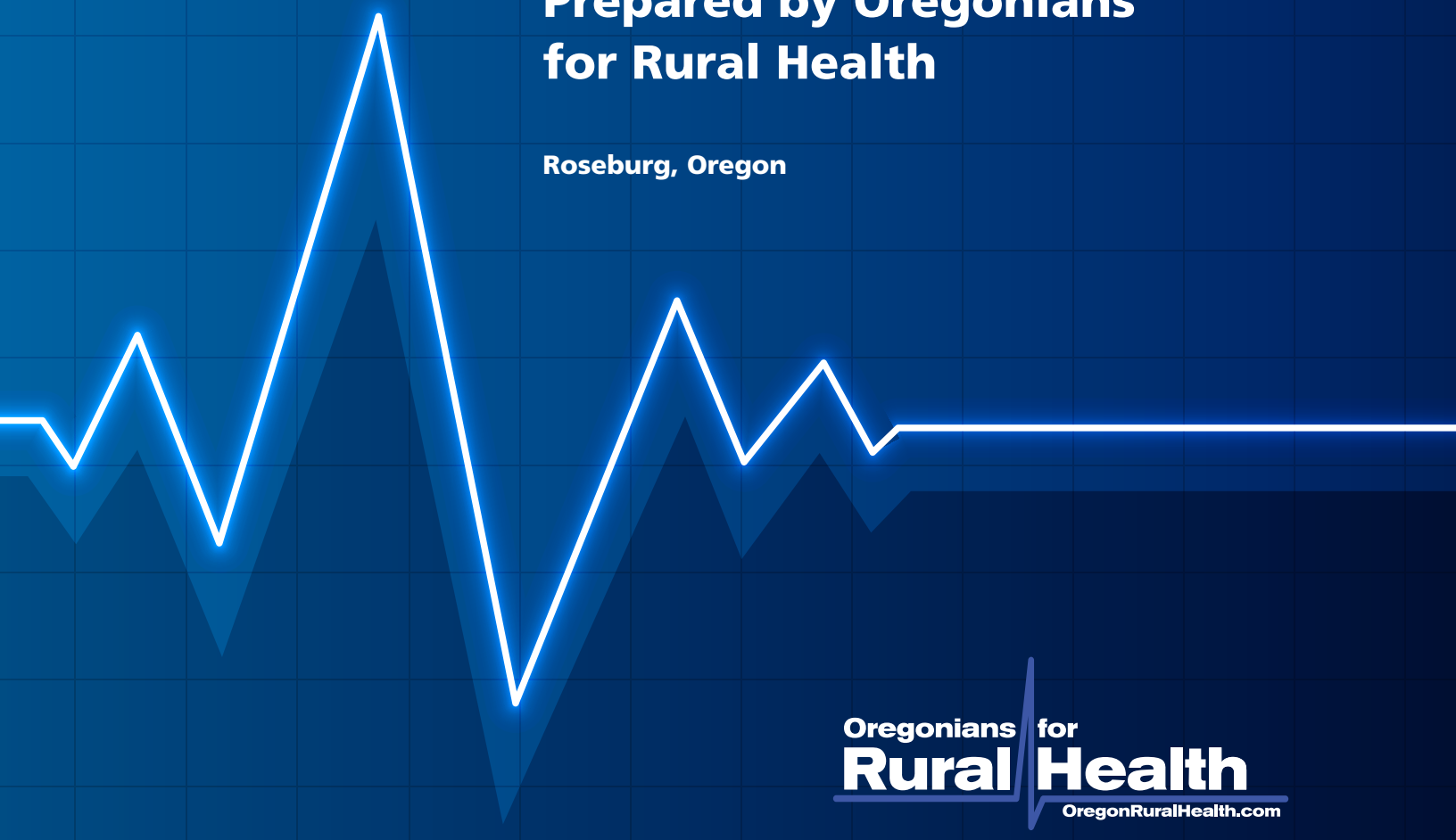
Attachment P

September 15, 2018

SOUTHERN OREGON ALLIED & MENTAL HEALTH COLLEGE BUSINESS PLAN

Prepared by Oregonians for Rural Health

Roseburg, Oregon



Oregonians for Rural Health
OregonRuralHealth.com

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I. EXECUTIVE SUMMARY

I. EXECUTIVE SUMMARY

The demand for healthcare in Southern Oregon, like many areas across the state, has steadily grown over the last decade. Hospitals, clinics and other providers have continued to expand services to keep up with demand. Yet, workforce shortages in a broad range of allied and mental health fields make expanding, let alone maintaining, healthcare services increasingly difficult despite aggressive and often costly recruiting efforts. Rural communities are currently facing acute workforce shortages that pose serious equitable healthcare delivery and access issues.

Today's healthcare challenges, particularly in rural areas and among our veteran population, will not simply resolve over time without proactively seeking solutions to address underlying problems:

- Healthcare demand is projected to keep growing;
- Community and veteran healthcare access issues will only get worse as demand continues to grow;
- Our aging population is driving up demand for chronic care and other services;
- Mental health services remain inadequate, especially for veterans;
- Widespread workforce shortages exist today in multiple allied health and mental health fields;
- Rejection rates of qualified applicants into existing allied and mental health academic programs are high despite growing workforce demand.

What does this mean? Understaffed hospitals and clinics means both the quantity and the quality of care decreases. It means longer wait times and less time per patient. It means certain services may not be possible because a qualified professional is not on site. News about increasing wait times at the doctors' office in rural communities and among veterans has already made headlines.

Expansion of existing programs is often called upon to be the solution. But, hospitals and clinics can only expand so much. Expansion is not possible without staff; and acquiring and retaining staff in rural medical hospitals and clinics is a long-standing challenge.

What about adding more healthcare professionals to the labor pool? Limited allied and mental health academic programs in the state are not keeping up with healthcare workforce needs. Many key degree programs are not offered outside of the Portland metro area, or at Oregon's flagship public universities. There are only a limited number programs operating in rural Oregon. This includes a Radiologic Technology program at the Oregon Institute of Technology in Klamath Falls and a mental health counseling program in Ashland. There are no publicly-offered degree programs in Physical Therapy or Clinical Psychology.

According to 2017 data from Oregon Employment Department, 2,664 BSN-educated nurses will be needed in the state annually through 2027, but only 791 are projected to graduate from Oregon-based academic institutions. A total of 222 Physical Therapists jobs are projected to be open each year, with only 92 graduates anticipated – and all of those graduates are coming from two private universities located in the Portland metro area. There are thousands of people across the U.S. and Oregon desiring to be students, but there are simply not enough seats. Acceptance rates for Oregon's two PT schools is a combined 6%, with nearly 1,600 applicants turned away each year. In nursing, the acceptance rate for all in-state nursing programs (including community college associate degrees) is at 22%, with over 6,000 prospective students denied each year.

There is an obvious demand for allied and mental health professionals in multiple fields/occupations and an obvious desire from residents to obtain healthcare degrees. Out of this landscape, a significant part of the solution arises: untapped potential exists to lessen workforce shortages by building an allied and mental health college in Roseburg to educate and train students with a focus on rural and veteran healthcare. This unique opportunity would create a reliable pipeline of skilled allied and mental health providers who are more likely to stay in rural settings upon graduation.

Vision for the college:

- Build a top-rated college providing advanced instruction in multiple high-demand fields/occupations;
- Serve as a reliable pipeline of skilled and specialized allied and mental health providers for both the private sector (particularly in Southern/rural Oregon) and U.S. Department of Veterans Affairs (VA);
- Partner with state-of-the-art regional hospitals and clinics to provide scholarship opportunities and critical hands-on learning through clinical rotations;
- Collaborate with associate level health programs at multiple regional community colleges;
- Provide new accelerated program pathway with priority placement for veterans with active service medical training to obtain allied and/or mental health degrees and practice at the VA or in the private sector;
- Offer advanced-level (Bachelor, Master and PhD level) degrees in multiple high-demand allied health fields, including mental health;
- Integrate physical and behavioral instruction across degree programs; and
- Ensure ongoing access to local quality healthcare for our communities and veterans

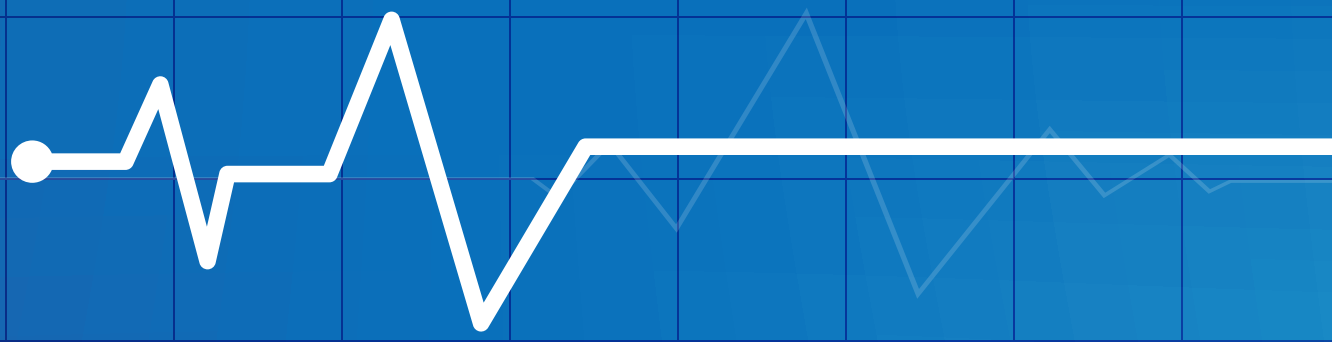
Imagine what a college like that would do for the state of Oregon, especially for its rural residents and veterans? Imagine nearly 1,000 graduates joining the workforce who are more likely to stay and want to settle in rural areas than their counterparts educated in Portland or other large metro areas? This will be part of the solution; but in order for it to be a public initiative, we need statewide support. This business plan demonstrates not only the existing and future need for this college, but also the financial feasibility.

Loan forgiveness and other recruitment and retention programs are current initiatives targeted at addressing or alleviating the issue of maldistribution in healthcare practitioners, but are they effective? Most rural Oregon healthcare executives would say no. Perhaps there is a more effective way to encourage growth in the healthcare workforce quantity in rural areas of the state? Perhaps there is a more permanent, long-term solution? A solution that not only addresses the need for more healthcare workers in rural Oregon, but that provides career opportunities for those in rural communities that do not previously exist, and positively impacts the economy of a once-prosperous timber town.

An allied health school located in a rural setting would serve as a long-term, permanent solution. We have all read the studies that students who grew up in a rural setting are more likely to want to settle back down into that same type of life. There is a need for developing rural education opportunities – to train our own professionals – providing key career opportunities to rural residents and veterans alike.

A pathway needs to be developed for rural residents and veterans to obtain higher education in allied health fields, with the ability to be trained and then employed, serving the communities they grew up in. Where there is no path, this college would create one. It would be opportunity for veterans, and residents alike; it would feed the struggling local economy; it would serve rural Oregon. We ask you to support this initiative.

This initiative already has the support of the City of Roseburg and surrounding communities, Douglas County, the Roseburg VA and the entire VISN 20 region; and hospitals and health care providers throughout rural Oregon. This project is still in need of an academic partner, and it is our goal that by demonstrating in the following plan that this allied health college is a viable solution an academic partner will come on board. This is a preliminary business plan to demonstrate feasibility and to serve as an initial framework for degree offerings and programs to be confirmed and finalized by the academic institution/institutions secured to administer the college.



II. ACADEMIC PROGRAMS / DEGREES

II. ACADEMIC PROGRAMS / DEGREES

After an initial internal assessment of need for specific academic programs, it was decided by the Oregonians for Rural Health with the support of the Roseburg VA and VISN 20 that an approach of tackling the most critical programs in the initial phase of the college was the most viable. The following programs were decided upon and we contracted with the Oregon Center for Nursing to provide data to support these degrees due to that they are in the most need and that they have the most capacity for job placements.

- Nursing
  - Registered Nurse (Bachelor and Master of Nursing Level)
  - Nurse Practitioner (Doctorate Level)
- Physical Therapist (Doctoral Level)
- Mental Health
  - Clinical Mental Health Counseling (Master Levels)
  - Clinical Social Worker (Bachelor and Master Level)
- Radiological Technologist (Bachelor Level)
- Medical/Clinical Laboratory Technologist (Bachelor Level)

Academic Degrees
Bachelor of Science in Nursing (BSN)
Master of Science in Nursing (MSN)
Doctor of Nursing Practice (DNP)
Doctor of Physical Therapy (DPT)
Master of Arts in Clinical Mental Health Counseling
Bachelor of Arts in Social Work (BSW)
Master of Arts in Social Work (MSW)
Bachelor of Science in Radiologic Technology (BSRT)
Bachelor of Science in Medical Laboratory Science (BMLS)

III. OREGON HEALTHCARE WORKFORCE AND EDUCATIONAL PROGRAM EVALUATION

III. OREGON HEALTHCARE WORKFORCE AND EDUCATIONAL PROGRAM EVALUATION

Oregonians for Rural Health contracted with the Oregon Center for Nursing (OCN) to evaluate the current and projected workforce demand for the selected allied and mental health fields/ occupations both statewide and in rural counties, in addition to state-based educational program capacity. The following is the full report.

The full data tables can be found in Appendix A.

Healthcare Workforce and Educational Program Evaluation Report Summary

Over the past decade, public debate and new policies about access to healthcare has focused on ensuring all residents have the ability to pay for quality care when needed. However, this is only one element of a complex puzzle. Ensuring a sufficient workforce is another important component to consider when working to provide adequate access to care.

Multiple studies have shown that an inadequate supply of healthcare workers decreases the ability to provide high quality healthcare, and increases the risk to patient safety. Higher patient loads are associated with higher hospital readmission rates, and in nursing homes, workforce shortages often result in increased mortality among those aged 85 and older.

Like other states, Oregon faces challenges to bolstering its healthcare workforce. The population of Oregon is aging, health care workers are retiring, and the expanded health care coverages means more patients seeking care. Employers, educators, and lawmakers are searching for solutions that will provide a high-quality workforce for the healthcare needs of all Oregonians in the future.

In early 2018, the Rural Medical Training Workgroup approached staff at the Oregon Center for Nursing (OCN) to conduct an evaluation of the nursing and allied healthcare workforce across Oregon as part of their efforts to determine the feasibility of locating a new school of allied health in Southern Oregon. This evaluation examined select healthcare occupations by region across Oregon, with geographic regions defined by the Oregon Employment Department (OED).

Healthcare occupations: Registered Nurse, Nurse Practitioner, Physical Therapist, Licensed Professional Counselor, Licensed Clinical Social Worker, Medical Clinical Laboratory Technologists, and Radiological Technologist.

Table 1 – Oregon Employment Department Regions

OED Region	Counties
East Cascades	Crook, Deschutes, Gilliam, Hood River, Jefferson, Klamath, Lake, Sherman, Wasco, Wheeler
Eastern Oregon	Baker, Grant, Harney, Malheur, Morrow, Umatilla, Union, Wallowa
Lane	Lane
Mid-Valley	Linn, Marion, Polk, Yamhill
Northwest Oregon	Benton, Clatsop, Columbia, Lincoln, Tillamook
Portland Metro	Clackamas, Multnomah, Washington
Rogue Valley	Jackson, Josephine
Southwestern Oregon	Coos, Curry, Douglas

This evaluation study examined three different components of the nursing and allied health workforce: current supply, future need, and educational opportunities and capacity. Understanding these three factors is crucial to ensuring an adequate supply of well-trained healthcare professionals are present in each Oregon community.

Regarding registered nurses, the Rural Medical Training Workgroup requested this analysis focus on baccalaureate-level education for nurses as opposed to associate degree in nursing (ADN) education. Data from the OED does not report nursing workforce by level of education. Therefore, supply and need information do not explore the differences in education level for nurses. However, registered nurses are qualified to work after passing the NCLEX test, whether they are conferred an ADN or a BSN. Therefore, aggregated data from ADN programs are included in the educational opportunity and capacity section of this report. These data were included to provide a comprehensive picture of nursing educational capacity from all of the nursing programs in Oregon.

Current Supply

To understand the future need for healthcare workers, it is necessary to first identify the current workforce across the state. Data from the 2017 Oregon Employment Projections report prepared by the OED was used to illustrate the current supply of nursing and allied health workers. Table 2 illustrates the number of healthcare workers by occupation in Oregon during 2017.

Table 2 – Statewide Supply of Healthcare Workers in 2017

Occupation	Number of Workers
Registered Nurse	37,353
Nurse Practitioner	1,762
Physical Therapist	3,052
Radiologic Technologists	2,254
Med/Clinical Laboratory Technologists	2,281
Mental Health Counselors	3,158
Mental Health/Substance Abuse Social Workers	2,304

The number of workers in each occupation across all OED regions were tabulated and normalized by dividing each count by the population of the region. This allows a direct comparison of the supply of each occupation across all OED regions. The use of population to healthcare provider ratios is commonly used by researchers to assess the relative density of the healthcare workforce as compared to the population it serves. The full supply table is available in Appendix A. The results, shown below in Table 3, highlight regions where the supply for each occupation shows at least a 20 percent deficit from the statewide supply.

Table 3 – Occupation Deficits by OED Region	
Occupation	**OED Regions with 20% Deficit**
Registered Nurse	Eastern Oregon, Mid-Valley, Northwest Oregon, Southwestern Oregon
Nurse Practitioner	East Cascades, Mid-Valley
Physical Therapy	Mid-Valley
Radiologic Tech	Mid-Valley
Med Lab Tech	Eastern Oregon, Mid-Valley, Northwest Oregon, Southwestern Oregon
MH Counselors	Mid-Valley, Northwest Oregon, Rogue Valley
MHSA Social Worker	Eastern Oregon, Northwest Oregon

These data clearly show the current supply of healthcare occupations is not uniformly distributed across the state. For example, the Mid-Valley OED Region shows a healthcare workforce deficit for all occupations except MHSA Social Workers. While these data do not indicate whether a workforce shortage exists, it does show where fewer per capita healthcare workers are located. In this case, these data show some regions tend to have fewer healthcare workers, and in many cases, have fewer workers across multiple occupations.

The use of population per worker ratios tend to show where there are fewer healthcare workers. However, this ratio alone does not shed light on the nature of the deficit as many factors can influence the ratio, such as the presence of hospitals or other healthcare facilities that employ large numbers of healthcare workers.

Future Need

Two data sources were used to assess the future need of the nursing and allied healthcare workforce. These are the 2027 Oregon Employment Projections report and the 2014 Jobs Opening Survey, both prepared by the OED. The Employment Projections report shows the projected number of workers for each occupation by 2027, while the Job Openings Survey estimates the annual number of job openings for each occupation. These reports also project the number of workers needed due to growth in the occupation and the number due to attrition. For the purposes of this evaluation, most of the emphasis in this section of the evaluation will focus on the job openings survey. It is important here to clarify the distinction between need and demand. For purposes of this study, demand is used to describe the demand by employers for workers, while need is used to describe the societal need for an occupation to be present in the community.

Table 4 – Estimated and Projected Employment and Job Openings by Occupation (2017 – 2027)					
Program	**2017 Employment**	**2027 Employment**	**Total Openings**	**Openings Due to Growth**	**Openings Due to Attrition**
Registered Nurse	37,353	43,600	26,635	6,247	20,388
Nurse Practitioner	1,762	2,376	1,608	614	994
Physical Therapist	3,052	3,885	2,222	833	1,389
Radiologic Tech.	2,254	2,551	1,517	297	1,220
Med/Cln Lab Tech	2,281	2,521	1,693	240	1,453
MH Counselor	3,158	3,715	4,068	557	3,511
MHSA Social Worker	2,304	2,684	2,861	380	2,481

The Job Openings Survey categorize each occupation based on the entry level of education needed for the occupation, as defined by the OED. These categories for each of the occupations examined in this report can be seen in Table 5.

Table 5 – Occupations by Entry Level Education Category	
Education Category	Occupations
Graduate Degree	Nurse Practitioner, Physical Therapist, Mental Health Counselor, MHSA Social Worker
Bachelor's Degree	Registered Nurse, Med/Clinical Laboratory Technologist
Associate Degree	Radiologic Technologist

Note: Radiologic Technologist is a baccalaureate degree; this table simply reflects OED's categorization of this occupation.

Within each entry-level education category, the number of job openings were ranked against all occupations, including non-healthcare related occupations, so that a qualitative assessment can be made for each occupation within and across regions. The results of this analysis show registered nurses, physical therapists, and radiologic technologists consistently rank very high in the relative number of annual job openings. Additionally, medical clinical laboratory technologist openings ranked consistently low across all regions. Table 6 shows the number of regions where an occupation ranked in the top 10 for job openings. The full list of job openings and ranking can be found in Appendix A.

Table 6 – Number of Regions* with a Top 10 Ranking	
Occupation	**Number of Regions**
Register Nurse	8
Nurse Practitioner	3
Physical Therapist	8
Radiologic Technologist	7
Med/Clinical Laboratory Technologist	0
Mental Health Counselor	4
MHSA Social Worker	3

**There are eight OED regions in the state.*

Table 7 shows the median job opening rankings across all nine OED regions. As can be seen, many of the occupations included in this study have a median ranking that falls within the top 10 for all job openings. Taken together, these two lines of evidence strongly indicate that a high level of need exists for these occupations.

Table 7 – Median Job Opening Ranking	
Occupation	**Median Ranking**
Register Nurse	1
Nurse Practitioner	11
Physical Therapist	4
Radiologic Technologist	7
Med/Clinical Laboratory Technologist	35
Mental Health Counselor	11
MHSA Social Worker	8

One surprising finding from this study is the high level of need for registered nurses despite an unprecedented increase in the number of nurses licensed in the state. There are currently more than 51,000 licensed registered nurses in Oregon, and it appears we are in a period of rapid growth of the nursing workforce. Between 2014 and 2016, the number of licensed registered nurses grew by a little more than nine percent, which is almost three times faster than population growth. In addition, there has been a rapid influx of out-of-state nurses applying for an Oregon nursing license. Beginning in 2013, most registered nurses applying for an Oregon nursing license have been from out-of-state. Almost 70 percent of all new licenses issued in 2015 were to nurses from outside Oregon. While not all nurses licensed in Oregon physically work in the state, the current rapid growth in the nursing field is somewhat counterintuitive to the reported need for nurses from employers.

Educational Opportunities and Capacity

The educational pipeline is considered to be the key element in ensuring an adequate, qualified workforce is present in the state or local community. If educational opportunities are limited, either by number of schools or limited enrollment, then it is very difficult to find enough workers to meet the need for those occupations. For this evaluation, three metrics were used to determine an adequate educational pipeline for each occupation. The first metric used in the number of schools or programs within the state to meet the projected need. The second metric is the number of graduates from each program within the occupation, and third, the acceptance rate, which is the percent of applicants admitted into the school or program. Taken together and combined with other measures, such as the number of annual job openings, it is possible to assess whether adequate capacity exists in the current educational system to meet the need for allied healthcare occupations. The data used to illustrate educational capacity for all schools included in this evaluation can be found in Appendix A.

Table 8 – Number of Schools, Admission, and Applicants (2016-2017 Academic Year)				
Program	**Number of Schools**	**Number Admitted**	**Number of Applicants**	**Acceptance Rates**
Registered Nurse*	23	1,740	1,740	22%
Nurse Practitioner	2	29	81	36%
Physical Therapist	2	94	1,645	6%
Radiologic Tech.	1	48	100	48%
Med/Cln Lab Tech	1	50	82	61%
MH Counselor	11	208	767	25%
MHSA Social Work	4	343	810	35%

**Note: Data from the 17 associate degree nursing programs in Oregon are included.*

As can be seen in Table 8, applicants for many of the occupations being investigated have few choices of where to study. Four of the seven fields of study have only one or two schools available in Oregon and many are extremely competitive for admission. While this provides one way to look at the adequacy of the education system, it does not provide a gauge as to whether the schools are graduating enough potential healthcare workers to meet the need for those occupations. By examining the relationship between the number of graduate and the annual job openings, it can be determined if the current system is adequate to meet future need.

Table 9 clearly shows that for most occupations, there are not enough graduates each year to fill all projected job openings. The one exception is for nurse practitioners. Based on these statewide figures, it is apparent that Oregon's education system is not matriculating enough graduates to meet projected need alone. This would indicate that many jobs will not be filled and employers and the community must rely on other means to meet their need, either by migration from other states or the use of non-permanent workers.

Table 9 – Number of Annual Graduates and Job Openings		
Occupation	**Annual Graduates (2016-2017)**	**OED Estimated Annual Job Openings**
Registered Nurse*	1,570	2,664
Nurse Practitioner	89	161
Physical Therapist	92	222
Radiologic Technologist	45	152
Med/Cln Laboratory Tech	47	169
MH Counselor	166	407
MHSA Social Worker	313	286

**Note: Data from the 17 associate degree nursing programs in Oregon are included.*

However, this does not tell the whole story, as these data do not address the distribution of schools across the state. As can be seen in Table 10, most of the schools examined as part of this evaluation are in the Portland metro area, which can limit the likelihood of graduates moving to other parts of the state for employment. The lack of local educational capacity in many regions of the state may be a factor in the inability to find and retain allied healthcare workers.

Table 10 – Number of Schools by Location				
Program	**Number of Schools**	**Number in Portland Metro**	**Number in Willamette Valley**	**Number in Rest of State**
Registered Nurse	6	6	0	0
*OHSU		1	1	3
Nurse Practitioner	2	2	0	0
Physical Therapist	2	2	0	0
Radiologic Tech.	1	0	0	1
Med/Cln Lab Tech	1	1	0	0
MH Counselor	11	6	4	1
MHSA Social Worker	4	3	1	0

** Note: Only BSN program schools are included. OHSU has four satellite campuses; Ashland, Klamath Falls, La Grande, and Monmouth, plus the main campus in Portland. OHSU enrollment figures are aggregated across all campuses. (see Table 8)*

Summary of Findings and Conclusions

The results of this analysis clearly show the current supply of healthcare workers is inadequate to provide critical access to healthcare in many of regions across Oregon. While these data do not directly address whether a statewide shortage of healthcare workers exist, it does point to a mal-distribution of workers within the state. That is, the current supply of healthcare professionals is not uniformly spread across the state, and many regions show a deficit of qualified workers.

Projections of future industry growth and current job openings strongly suggest there is a need for more healthcare workers. For each occupation examined, the OED projects continued job growth, and reports healthcare as one of the fastest growing industries. Additionally, most of the occupations included in this study have relatively more job openings. When the number of job openings is directly compared with openings from all other occupations, healthcare ranked high in most regions. The need for certain healthcare professionals is most acute for registered nurses, physical therapists, and radiologic technologists. Thus, these two lines of evidence suggest a need exists for more healthcare workers, but more importantly, that the level of need varies across regions and across occupations. These findings should also caution policy makers that rapid growth in the number of licensed healthcare workers, such as that currently seen with registered nurses, does not preclude the need for even more healthcare professions across Oregon

Ample educational opportunities are critical to ensuring an adequate supply of qualified healthcare workers. However, the data presented in this study indicate an opportunity to gain the required education to become a healthcare profession is not available to all Oregon residents. Few schools provide the necessary education for most of the studied healthcare occupations, and consequently, admission to these schools is very competitive. These data also show almost all programs examined are located within urban centers of the state. For example, of the two schools in Oregon that train physical therapists, both have acceptance rates of less than 10 percent and both schools are located with the Portland Metro area.

Lastly, but maybe most importantly, the schools are simply not graduating enough qualified healthcare workers to meet current and projected need. Based on the current supply, projected need, and a limited educational pipeline, Oregon's current educational capacity alone will not meet the need for healthcare workers regionally or across the state. Unless capacity can be increased, employers will need to rely on sources outside of the state, such as travelers or using other recruitment efforts, to fill the gap. The inability to meet this demonstrated need will affect everyone in the state seeking healthcare, but will likely have a larger impact on older residents and those who live in rural areas of Oregon.

Veteran Affairs VISN 20 Job Vacancies

Oregonians for Rural Health also obtained similar data from the Roseburg VA and VISN 20 (encompassing Alaska, Washington, Oregon and Idaho, see map on Page 16). We received a job vacancies report for the past two years from the VA, which we have included in the letter from the VA in Appendix C. A quick summary of the openings/need for the following allied positions was collected from that report:

20 MEDICAL POSITION – VACANCIES		
Position	**VISN 20**	**Rural Areas of VISN 20**
Registered Nurse	803	323
Family Nurse Practitioner	19	8
Nurse Practitioner	84	35
Physical Therapist	27	11
Clinical Social Worker	286	115
Radiological Technologist	38	15
Medical Technologist	139	56

VISN 20 – MAP

VISN Headquarters
VISN 20: Northwest Network (Vancouver, WA)

VA Health Care System
Alaska VA Healthcare System (Anchorage, AK)
Portland VA Medical Center (Portland, OR)
VA Puget Sound Health Care System (Seattle, WA)
VA Puget Sound Health Care System - American Lake Division (Lakewood, WA)
VA Puget Sound Health Care System - Seattle Division (Seattle, WA)

VA Medical Center
Boise VA Medical Center (Boise, ID)
Jonathan M. Wainwright Memorial VA Medical Center (Walla Walla, WA)
Mann-Grandstaff VA Medical Center (Spokane, WA)
Roseburg VA Health Care System (Roseburg, OR)
VA Portland Health Care System - Vancouver Campus (Vancouver, WA)
White City or VA Southern Oregon Rehabilitation Center (White City, OR)

Outpatient Clinic
Burns Oregon Outpatient Clinic (Burns, OR)
Juneau VA Outreach Clinic (Juneau, AK)
Libby RHC (Libby, MT)
Mountain Home Idaho Outpatient Clinic (Mountain Home, ID)
Newport Outreach Clinic (Newport, OR)
Salmon Idaho Outpatient Clinic (Salmon, ID)
Sandpoint RHC (Sandpoint, ID)
The Dalles Outreach Clinic (The Dalles, OR)
West Linn CBOC (West Linn, OR)

Integrated Clinical Facility
Yakima Valley Vet Center (Yakima, WA)

Community Based Outpatient Clinic
Bend CBOC (Bend, OR)
BHRRS - Behavioral Health Recovery & Reintegration Services (Eugene, OR)
Bremerton CBOC (Bremerton, WA)
Brookings VA Clinic (Brookings, OR)
Caldwell Idaho Outpatient Clinic (Caldwell, ID)
Community Resource and Referral Center (CRRC) (Portland, OR)
Eugene Health Care Center (Eugene, OR)
Fairbanks VA Community Based Outpatient Clinic (Fort Wainwright, AK)
Fairview Clinic (Fairview, OR)
Grangeville (ID) VA Outpatient Clinic (Grangeville, ID)
Grants Pass West VA CBOC (Grants Pass, OR)
Hillsboro CBOC (Hillsboro, OR)
Kenai VA Community Based Outpatient Clinic (Kenai, AK)
Klamath Falls CBOC (Klamath Falls, OR)
La Grande (OR) Community Based Outpatient Clinic (La Grande, OR)
Lewiston (ID) Community Based Outpatient Clinic (Lewiston, ID)
Lincoln City Clinic (Lincoln City, OR)
Mat-Su VA Community Based Outpatient Clinic (Wasilla, AK)
Morrow County VA Telehealth Clinic (Boardman OR) (Boardman, OR)
Mount Vernon CBOC (Mount Vernon, WA)
North Bend VA Clinic (North Bend, OR)
North Coast CBOC (Warrenton, OR)
North Idaho CBOC (Coeur d 'Alene, ID)
North Olympic Peninsula (Port Angeles, WA)
Richland (WA) Community Based Outpatient Clinic (Richland, WA)
Salem CBOC (Salem, OR)
South Sound CBOC (Chehalis, WA)
Twin Falls Idaho Outpatient Clinic (Twin Falls, ID)
Valor CBOC Bellevue (Bellevue, WA)
Valor CBOC Federal Way (Federal Way, WA)
Valor CBOC North Seattle (Seattle, WA)
Wallowa County VA Telehealth Clinic (Enterprise OR) (Enterprise, OR)
Wenatchee CBOC (Wenatchee, WA)
Yakima (WA) Community Based Outpatient Clinic (Yakima, WA

Roseburg VA Data

The following document was submitted to the ODVA from the Roseburg VA by Lisa Yop in July 2018:

"At the Roseburg VA we employ 269 Registered Nurses, we have a current need for 42 Registered Nurses which is 16% vacancy rate. Additional data is below. Clearly there is a need for these professionals in the VA, and is also important that we continue to grow as we will need to consider further losses through attrition, retirements, etc., and we are concerned about this. I would like to be able to be able to clarify the VA data for the report which will be sent to the legislature. I see the needs assessment which is supported by data, the needs supported by education, and the alternatives for resolving these issues. One alternative for resolving these issues is the business plan.

Roseburg VA Health Care System			
Occupation	**Positions**	**Vacancies**	**Vacancy Rate**
Registered Nurse	269	42	16%
Nurse Practitioner	37	6	16%
Physical Therapist	11	1	9%
Radiologic Technologist	17	5	29%
Med/Cln Laboratory Tech	17	1	6%
MH Counselor	0	0	N/A
MHSA Social Worker	55	11	20%

As mentioned in last week's meeting the VA data for the numbers of Registered Nurses and Nurse Practitioners practicing in the state of Oregon were not considered. In the VA it is not necessary to have a license within the state where practicing. In the Roseburg VA Healthcare System there are 37 Nurse Practitioners, 18 of them are not licensed in the state of Oregon. There are 227 Registered Nurses and 53 are not licensed in the state of Oregon. I suspect with numbers from Portland VA and White City VA that there are likely between 400-500 RN's and NP's that are not accounted for in the numbers of those currently practicing in the state of Oregon."

Mercy Medical Center — Job Openings

Allied Health Openings			
Specialty	**Current Staff**	**Annual Hires/ Vacancies**	**Vacancy Rate**
Registered Nurse	338	54	16%
Nurse Practitioner	10	4	40%
Physical Therapist	26	5	19%
Radiology**	54	12	22%
Med Tech	9	6	67%
LCSW	3	1	33%

*** Radiology includes:*
Nuclear Medicine Tech
Sonographer
Cardiac Sonographer
EP Procedural Specialist
CT Technician
Mammography Tech
MRI Tech
Radiology Tech
Special Procedures Tech

The above data includes only Mercy Medical Center and related clinics. It does not include non-affiliated clinics, federally qualified health centers, rural health centers, or school districts nor any openings for the Reedsport area, including lower Umpqua Hospital.

IV. SCOPE

IV. SCOPE

Analysis of workforce demand in multiple allied and mental health fields clearly shows that the current and projected supply of workers is inadequate to meet healthcare demand, as outlined in the data evaluation. Following the data collection phase from OCN and the VA, the next step we took was to assess the number of students in the first five years of the college. The report findings (which can be found in Section III) confirmed the need for these positions and helped us to arrive at an estimated number of annual graduates and total enrollment.

To see the full breakdown of enrollment and estimated tuition, refer to Appendix B.

Enrollment					
Program	**Total Number of Students**				
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Bachelor of Science in Nursing (BSN)	64	144	176	192	192
Master of Science in Nursing (MSN)	24	48	48	48	48
Doctor of Nursing Practice (DNP)	24	48	72	72	72
Doctor of Physical Therapy (DPT)	20	50	80	90	90
MA in Clinical Mental Health Counseling	15	45	60	60	60
Bachelor of Arts in Social Work (BSW)	30	75	105	120	120
Master of Arts in Social Work (MSW)	15	45	60	60	60
Bachelor of Science in Radiologic Tech (BSRT)	15	45	75	90	90
BS in Medical Laboratory Science (BMLS)	15	45	75	90	90
TOTAL ENROLLMENT	**222**	**545**	**751**	**822**	**822**

Annual Graduates					
Program	**Total Number of Students**				
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Bachelor of Science in Nursing (BSN)	0	64	80	96	96
Master of Science in Nursing (MSN)	0	24	24	24	24
Doctor of Nursing Practice (DNP)	0	0	24	24	24
Doctor of Physical Therapy (DPT)	0	0	20	30	30
MA in Clinical Mental Health Counseling	0	15	30	30	30
Bachelor of Arts in Social Work (BSW)	0	10	45	60	60
Master of Arts in Social Work (MSW)	0	15	30	30	30
Bachelor of Science in Radiologic Tech (BSRT)	0	0	15	30	30
BS in Medical Laboratory Science (BMLS)	0	15	30	45	45
TOTAL ENROLLMENT	**0**	**163**	**298**	**369**	**369**

Budget Summary

A preliminary assessment of costs to build, open and operate an Allied & Mental Health College in Roseburg was undertaken in the spring of 2018. The Oregonians for Rural Health worked with industry expert Stephen Short to assess space needs and construction costs and longtime academic institution financial assessor Mike Kulig on the operating budget. Local Roseburg engineering firm i.e. Engineering provided the drawings for the following site assessment.
The following is a projection of start-up funds needed:

- Initial estimates for land and capital costs = approximately $86 million
- Operating funds before the college becomes solvent in Year 3 of student enrollment = approximately $23 million
- Total Start-Up Funding Needed = approximately $109 million over 5 years

Initial projections have the college breaking even in Year 3 of its operation. The start-up costs include hard and soft costs for the construction of the college, along with land acquisition. For the full facility space needs executive summary, see page 26.

Financial estimates to operate the nine academic programs outlined in Section II (page 9) can be found in the following Revenue and Expenses sheet. All supporting documentation can be found in Appendix B.

Operating Budget: Revenue & Expenses

The following is the estimated Revenue & Expenses sheet to operate an allied health college from start-up to Year 8 (including five years with students). All supporting documentation for Enrollment & Tuition, Personnel Costs and all assumptions can be found in Appendix B.

Allied Health College *Roseburg, Oregon Proposal*									
OP EXPENSES	***Year -2***	***Year -1***	***Year 0***	***Year 1***	***Year 2***	***Year 3***	***Year 4***	***Year 5***	***Total Operating Subsidy***
Personnel (incl. fringe)	1,000,000	3,050,000	5,330,000	6,280,000	8,630,000	9,910,000	10,450,000	10,720,000	
M&S	50,000	152,500	266,500	314,000	431,500	495,500	522,500	536,000	
IT services	50,000	152,500	266,500	314,000	431,500	495,500	522,500	536,000	
Rent	270,000	270,000	270,000						
Plant Ops & Maintenance				1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
Lab class supplies			40,000	80,000	80,000	80,000	80,000	80,000	
Travel	12,000	64,000	110,000	154,000	230,000	282,000	302,000	306,000	
Marketing		500,000	1,000,000	500,000	250,000	250,000	250,000	250,000	
Books & Subscriptions	15,000	75,000	200,000	200,000	200,000	200,000	200,000	200,000	
Accreditation Fees		100,000	200,000	50,000	50,000	150,000	50,000	50,000	
Insurance	20,000	O	50,000	150,000	150,000	150,000	150,000	150,000	
Legal	125,000	200,000	250,000	250,000	250,000	250,000	250,000	250,000	
Recruitment (executive)	100,000	75,000	50,000						
Recruitment faculty	50,000	250,000	350,000	600,000	400,000	400,000	225,000	225,000	
7.5% Contingency	115,650	342,300	598,725	696,900	877,725	994,725	1,033,275	1,055,850	
Total:	1,807,650	5,231,300	8,981,725	10,588,900	12,980,725	14,657,725	15,035,275	15,358,850	
OP REVENUES									
Gross tuition				5,035,000	11,807,500	16,127,500	17,400,000	17,400,000	
Gross fees				66,600	163,500	225,300	246,600	246,600	
Financial aid				(251,750)	(590,375)	(806,375)	(870,000)	(870,000)	
Net tuition				4,849,850	11,380,625	15,546,425	16,776,600	16,776,600	
Student enrollment				222	545	751	822	822	
Operating Subsidy	**1,807,650**	**5,231,300**	**8,981,725**	**5,739,050**	**1,600,100**	**(888,700)**	**(1,741,325)**	**(1,417,750)**	**23,359,825**
Operating Profit/(Loss)	**(1,807,650)**	**(5,231,300)**	**(8,981,725)**	**(5,739,050)**	**(1,600,100)**	**888,700**	**1,741,325**	**1,417,750**	
ALL FUNDS EXPENSES									
Capital Outlay									
Operating Subsidy	(1,807,650)	(5,231,300)	(8,981,725	(5,739,050)	(1,600,100)	888,700	1,741,325	1,417,750	
Interest Payments									
Fundraising Costs									
OTHER REVENUES									
Fund Balance									
Grant/donations									
Public contributions									
Debt proceeds									
Building Depreciation				TBD	TBD	TBD	TBD	TBD	

Capital Budget: Facility Needs Executive Summary

Allied Health College — *Facility Needs Executive Summary*

Roseburg, Oregon Proposal

Capital Costs for the 822 Student Campus				7/8/2018	Remarks
Phase 1 Project Construction Costs					
1. Administrative & Student Services Facilities	30,940	SF @	$ 305	$ 9,442,269	
2. Core Academic Facilities	56,700	SF @	$ 305	$ 17,303,706	
3. Student Union and Services Facilities	22750	SF @	$ 305	$ 6,942,845	
4. Faculty Office Facilities	17,360	SF @	$ 305	$ 5,297,925	
5. The Support Services and HVAC Facilities	24,750	SF @	$ 305	$ 7,553,205	
Subtotal Building Construction =	152,500	SF	$ 305	$ 46,539,950	
Site Construction Costs (including surface parking)				$ 4,000,000	
Leased building T.I. Renovations	37,118	SF @	$ 5	$ 185,590	Short Term Space for Operations
Parking Garage Construction	$ -		$ -	$ -	Future Phase 2 Project
Overall Construction Costs =				$ 50,725,540	
Contingency @ 15% =				$ 7,608,831	
Escalation @ 5% =				$ 2,536,277	
Grand Total Construction Costs =				$ 60,870,648	
Project Soft Costs					
Land Acquis. & Pre Con. Costs				$ 2,800,000	
Agency Project Permits & Fees				$ 1,250,000	
Hazardous Materials Mitigation Allowance				$ 500,000	
Off-Site Infrastructure Conditions of Approval				$ 1,000,000	
Construction Testing and Inspection @ 1.0%				$ 608,706	
Professional Fees @ 7%				$ 4,260,945	
Owners Insurance @ 1%				$ 608,706	
Furnishings & General Academic Equipment Budget				$ 2,500,000	
Imaging Equipment Budget				$ 7,500,000	
Overall Soft Costs =				$ 21,028,358	
Contingency @ 15% =				$ 3,154,254	
Escalation @ 5% =				$ 1,051,418	
Grand Total Soft Costs =				$ 25,234,030	

2018 Grand Total Capital Project Budget =	$ 86,104,678

Parking Needs Summary	7/11/2018
Phase 1 Surface Parking	100
Top Floor of the existing adjacent City Parking Garage may be availabl	100
Total Parking to support Phase 1 Medical Campus =	200

Key Facility Planning and Design Principals

1. The College has been planned to serve 822 Students in Phase 1.
2. The College would be ideally located on the largely vacant downtown Block contiguous to Jackson Street and SE Washington Street.
3. The Phase 1 College will be a Single Building 4 to 5 Stories high with visibility from I-5 and respectful of Jackson Street Architecture.
4. The College will be expandable in a future contiguous Phase 2 Building Wing.
5. Phase 1 Parking needs will be met with surface parking as well as a dedicated Transit Bus Stop.
6. Phase 2 Parking Needs will be met on a second level parking deck.
7. Student Housing and Recreation Facilities will be encouraged and likely developed by the Private Sector.

Construction Cost Estimating Source Data

The Square Foot Cost Estimating Multiplier was derived from 3 separate Sourcing Documents:

	National San Francisco Base	Oregon Adjustment
1. Saylor Current Construction Costs / 2018 Data / Walnut Creek, CA Seismic Zone 2-B	$ 290.35	$ 249.70
2.. R S Means	Pending	Pending
3. HGA Architects and Engineers / 2018 Data / Minneapolis, MN	$ 320.00	$ 320.00
Average Cost per SF used in this Preliminary Budget Analysis =	$ 305.18	$ 284.85

Allied Health College — Facility Space Needs Summary

Roseburg, Oregon Proposal

Space Needs Grouping # 1: The Administrative & Student Services Facilities

		Year -2 Estimated ASF Space		Year -1 Estimated ASF Space		Year -0 Estimated ASF Space		Year 1 Estimated ASF Space		Year 2 Estimated ASF Space		Year 3 Estimated ASF Space		Year 4 Estimated ASF Space		Year 5 Estimated ASF Space	
	Campus Administrative Services	3 Yr. Leased Facilty w/ 2 Yr. Option to Renew						New Facility in Place within Permanent Campus									
1	Public Common & Shared Areas	2,000		2,000		2,000		4,000		4,000		4,000		4,000		4,000	
2	Office of President & Board	2,000		2,000		2,000		3,000		3,000		3,000		3,000		3,000	
3	Campus Senior Management Team	1,500		1,500		1,500		2,500		2,500		2,500		2,500		2,500	
4	Registrar's Office & Service Center	1,200		1,200		1,200		1,500		1,500		1,500		1,500		1,500	
5	Campus Personnel Office	1,000		1,000		1,000		1,500		1,500		1,500		1,500		1,500	
6	Campus Financial Services Ofc.	1,000		1,000		1,000		1,500		1,500		1,500		1,500		1,500	
7	Alumni Assoc. & Foundation	1,000		1,000		1,000		1,500		1,500		1,500		1,500		1,500	
8	Shared Conf. / Copying & Supply Hub	2,000		2,000		2,000		2,000		2,000		2,000		2,000		2,000	
	Sub Total ASF Space =	11,700		11,700		11,700		17,500		17,500		17,500		17,500		17,500	
	Campus Student Services																
1	Student Orientation Center.	2,500		2,500		2,500		2,000		2,000		2,000		2,000		2,000	
2	Bursar's Ofc. & Fin. Counseling	1,500		1,500		1,500		1,800		1,800		1,800		1,800		1,800	
3	Student Housing Assistance Office	500		500		500		800		800		800		800		800	
	Sub Total ASF Space =	4,500		4,500		4,500		4,600		4,600		4,600		4,600		4,600	
	Admin. & Student Serv. Bldg. Grand Totals																
	Total Assignable Space (ASF) =	16,200		16,200		16,200		22,100		22,100		22,100		22,100		22,100	
	ASF to DGSF Conversion Factor =	1.25		1.25		1.25		1.25		1.25		1.25		1.25		1.25	
	Departmental Gross Sq. Ft. (DGSF) =	20,250		20,250		20,250		27,625		27,625		27,625		27,625		27,625	
	DGSF to BGSF Conversion Factor =	1.12		1.12		1.12		1.12		1.12		1.12		1.12		1.12	
	Grand Total Building Space Needs =	22,680		22,680		22,680		30,940		30,940		30,940		30,940		30,940	

Space Needs Grouping # 2: The Core Academic Facilities

		Year -2 Estimated ASF Space		Year -1 Estimated ASF Space		Year -0 Estimated ASF Space		Year 1 Estimated ASF Space		Year 2 Estimated ASF Space		Year 3 Estimated ASF Space		Year 4 Estimated ASF Space		Year 5 Estimated ASF Space	
	Central Shared Classroom Facilities	Under Design and Construction						New Building in Operation.									
1	Classroom Spaces (24)							12,000		12,000		12,000		12,000		12,000	
2	Lecture Hall Spaces (2)							5,000		5,000		5,000		5,000		5,000	
3	Shared Lab Spaces							8,000		8,000		8,000		8,000		8,000	
4	Shared Simulation Lab Spaces							3,000		3,000		3,000		3,000		3,000	
5	Shared Skills Labs							2,500		2,500		2,500		2,500		2,500	
6	Imaging Modality Services Suite							10,000		10,000		10,000		10,000		10,000	
	Total Assignable Space (ASF) =							40,500		40,500		40,500		40,500		40,500	
	ASF to DGSF Conversion Factor =							1.25		1.25		1.25		1.25		1.25	
	Departmental Gross Sq. Ft. (DGSF) =							50,625		50,625		50,625		50,625		50,625	
	DGSF to BGSF Conversion Factor =							1.12		1.12		1.12		1.12		1.12	
	Grand Total Building Space Needs =							56,700		56,700		56,700		56,700		56,700	

Space Needs Grouping # 3: The Student Union and Services Facilities

Allied Health College — Facility Space Needs Summary

Roseburg, Oregon Proposal

		Year -2 Estimated ASF Space	Year -1 Estimated ASF Space	Year -0 Estimated ASF Space	Year 1 Estimated ASF Space	Year 2 Estimated ASF Space	Year 3 Estimated ASF Space	Year 4 Estimated ASF Space	Year 5 Estimated ASF Space
	Student Union and Services Facilities	Under Design and Construction			New Building in Operation.				
1	Public Common & Shared Areas				4,000	4,000	4,000	4,000	4,000
2	Campus Food Court and Vending				2,500	2,500	2,500	2,500	2,500
4	Campus Book Store & Sundry Sales				2,500	2,500	2,500	2,500	2,500
5	Health Sciences Library & Study Ctr.				6,000	6,000	6,000	6,000	6,000
6	Student Counseling Center				1,200	1,200	1,200	1,200	1,200
8	ATM's				50	50	50	50	50
	Total Assignable Space (ASF) =				16,250	16,250	16,250	16,250	16,250
	ASF to DGSF Conversion Factor =				1.25	1.25	1.25	1.25	1.25
	Departmental Gross Sq. Ft. (DGSF) =				20,313	20,313	20,313	20,313	20,313
	DGSF to BGSF Conversion Factor =				1.12	1.12	1.12	1.12	1.12
	Grand Total Building Space Needs =				22,750	22,750	22,750	22,750	22,750

Space Needs Grouping # 4: The Faculty Office Facilities

		Year -2 Estimated ASF Space	Year -1 Estimated ASF Space	Year -0 Estimated ASF Space	Year 1 Estimated ASF Space	Year 2 Estimated ASF Space	Year 3 Estimated ASF Space	Year 4 Estimated ASF Space	Year 5 Estimated ASF Space
	Faculty Office Facilities	Under Design and Construction			New Building in Operation.				
1	Public Common & Shared Areas				1,500	1,500	1,500	1,500	1,500
2	Full Time Faculty Offices (Private)				4,000	4,000	4,000	4,000	4,000
3	Part Time Faculty Offices (2 per Office)				2,000	2,000	2,000	2,000	2,000
4	Shared Support Staff Work Stations				2,500	2,500	2,500	2,500	2,500
5	Shared Student Private Counseling Offices				1,200	1,200	1,200	1,200	1,200
6	Shared Supply and Copy Work Room				1,200	1,200	1,200	1,200	1,200
	Total Assignable Space (ASF) =				12,400	12,400	12,400	12,400	12,400
	ASF to DGSF Conversion Factor =				1.25	1.25	1.25	1.25	1.25
	Departmental Gross Sq. Ft. (DGSF) =				15,500	15,500	15,500	15,500	15,500
	DGSF to BGSF Conversion Factor =				1.12	1.12	1.12	1.12	1.12
	Grand Total Building Space Needs =				17,360	17,360	17,360	17,360	17,360

Space Needs Grouping # 5: The Support Services and HVAC Concept

		Year -2 Estimated ASF Space	Year -1 Estimated ASF Space	Year -0 Estimated ASF Space	Year 1 Estimated ASF Space	Year 2 Estimated ASF Space	Year 3 Estimated ASF Space	Year 4 Estimated ASF Space	Year 5 Estimated ASF Space
	Support Services and CEP Facilities	Under Design and Construction			New Building in Operation.				
1	Materials Management & Purchasing				4,000	4,000	4,000	4,000	4,000
2	Environmental Services				2,500	2,500	2,500	2,500	2,500
4	Plant Operations & Maintenance				3,000	3,000	3,000	3,000	3,000
5	Grounds Maintenance				1,500	1,500	1,500	1,500	1,500
6	Safety & Security				1,000	1,000	1,000	1,000	1,000
7	Rooftop Package System + lower Level Mech. Equip.				2,000	2,000	2,000	2,000	2,000
8	Information Technology Services				4,000	4,000	4,000	4,000	4,000
	Total Assignable Space (ASF) =				18,000	18,000	18,000	18,000	18,000

Allied Health College — Facility Space Needs Summary

Roseburg, Oregon Proposal

ASF to DGSF Conversion Factor =				1.25		1.25		1.25		1.25		1.25	
Departmental Gross Sq. Ft. (DGSF) =				22,500		22,500		22,500		22,500		22,500	
DGSF to BGSF Conversion Factor =				1.10		1.10		1.10		1.10		1.10	
Grand Total Building Space Needs =				24,750		24,750		24,750		24,750		24,750	

Parking Needs Estimated by Year:

	Year -2 Estimated Parking Needs	Year -1 Estimated Parking Needs	Year -0 Estimated Parking Needs	Year 1 Estimated Parking Needs	Year 2 Estimated Aparking Needs	Year 3 Estimated Parking Needs	Year 4 Estimated Parking Needs	Year 5 Estimated Parking Needs
Total FTE Medical College Staffing =	6	26	51	73	110	142	154	156
Total Full Time Students Enrolled =	0	0	0	214	529	727	806	822
Daily Visitors Parking Estimate =	20	30	30	30	30	30	30	30
Grand Total Parking Needs Estimated by Year =	26	56	81	105	221	297	327	333

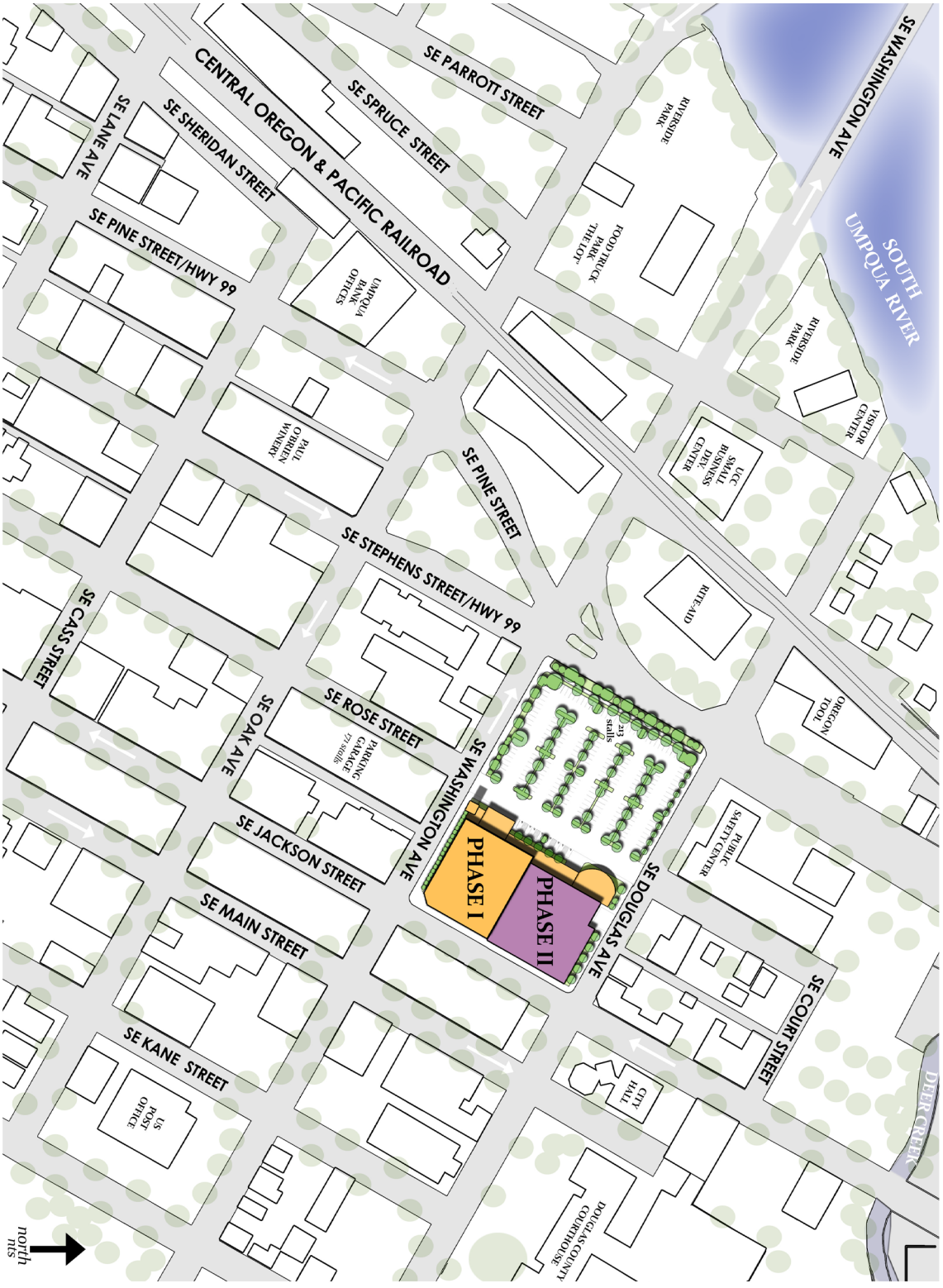
Location Option: Downtown Roseburg

As the project team began to outline general goals, objectives, and overall criteria as related to locating and siting the college, the initial search for a campus location focused specifically on downtown Roseburg. Such a location would instantly revitalize the entire downtown area and be a much-needed economic boom for what once was a thriving area of town that had struggled over recent years to keep up with the local strip malls and big box developments. From the standpoint of the college, the downtown area still has numerous amenities that would greatly benefit both staff and students of the college. These amenities include but are not limited to affordable housing located within walking distance, excellent public transportation, shopping, restaurants, pubs, bars, banks, pharmacies, a public library, parks, recreational opportunities, and ample infrastructure that would function to support the college as a whole.

Data was initially gathered on all downtown properties. This data was analyzed, and six potential sites came out of that initial search. The six initial sites were a mix of vacant lots, unoccupied buildings, or sites that were planned for some type of redevelopment. These sites were then toured and data for each site, specifically in reference to the developability of the site, was assembled into an evaluation matrix.

The team also established the importance of developing a site that had a “wow” factor to it. A “wow” factor was determined as a site that had some natural beauty to it, potentially with scenic views from the site in several different directions, and in general would be attractive to anyone visiting the site. Many of the future students of this college will be from areas outside of Douglas County. It will be important for the overall success of this facility for students first visiting the site to be able to envision living in a rural community like Roseburg for the duration of their college experience.

As the project team nailed down the space requirements for the site, the following downtown site was determined to be the preferable site.



PROPOSED ALLIED HEALTH COLLEGE
DOWNTOWN ROSEBURG CAMPUS

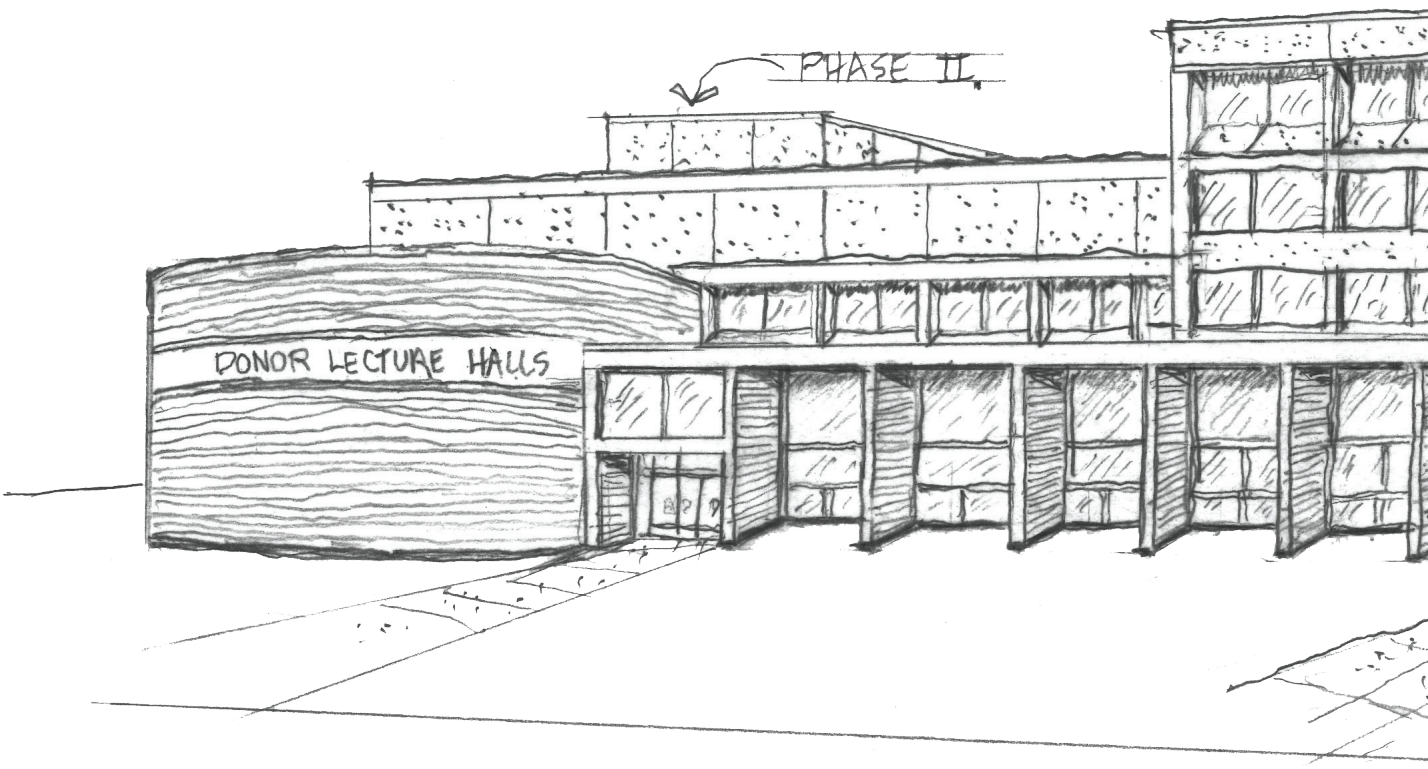
ISSUE: Conceptual Layout

SJS PLANNING, LLC
Stephen Short

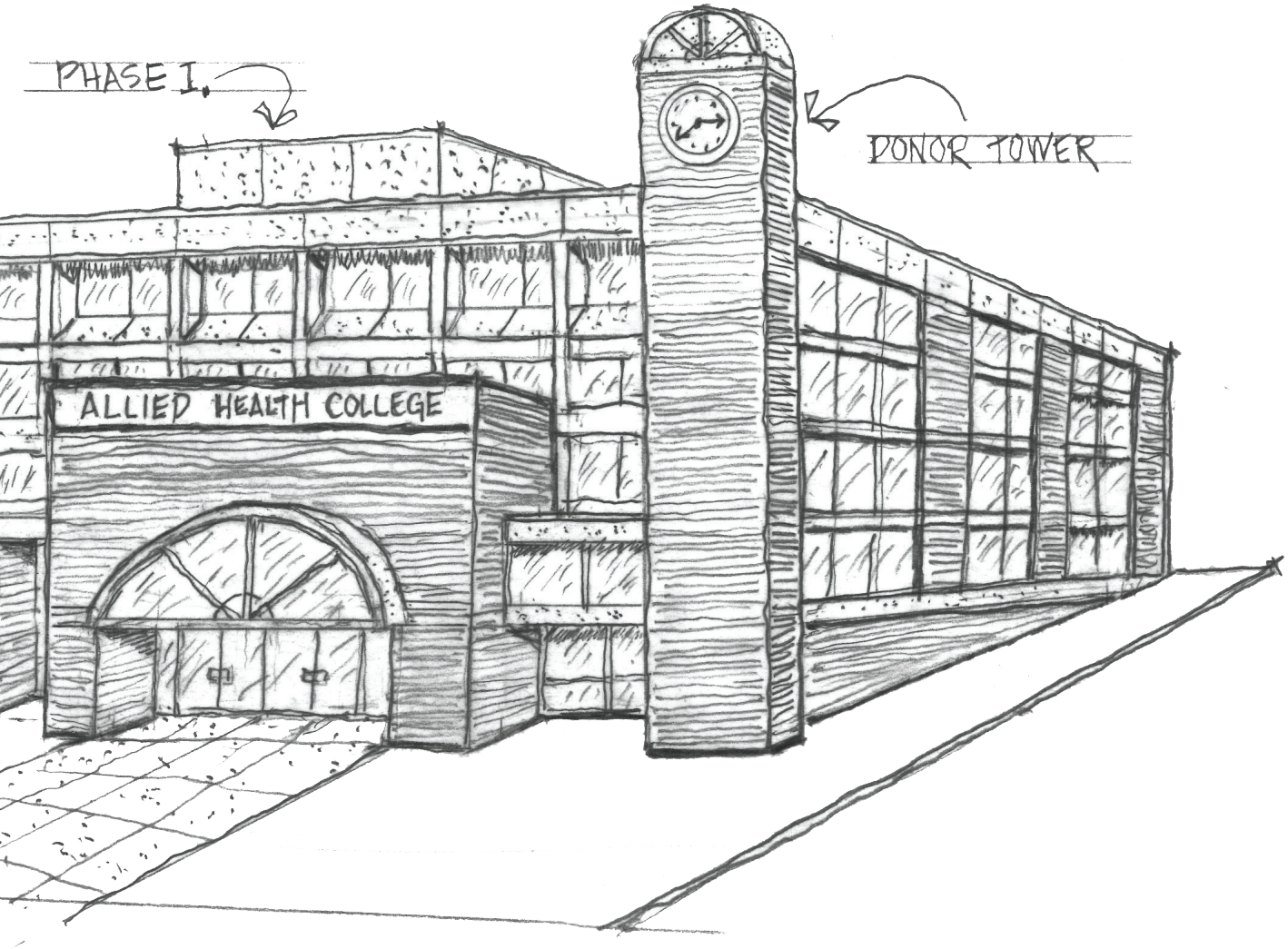
AHM BRANDS

i.e. Engineering, Inc.
809 SE Pine St
Roseburg, OR
ieengineering.com

i.e. civil structural surveying architecture planning



PROPOSED ROSEBURG DOWNTOWN CAMPUS



(NO SCALE / SJS 7-7-18)

V. BUILDING BLOCKS

V. Building Blocks

Overview

Our vision is to build a top-rated college that provides advanced instruction in multiple high-demand allied and mental health fields in the centrally located Southern Oregon city of Roseburg. This will create a reliable pipeline of skilled and specialized healthcare professionals for providers in the region and beyond, including the U.S. Department of Veterans Affairs. The college will focus exclusively on advanced (Bachelor, Master and PhD level) degree programs in the fields of nursing (BSN, MSN and DNP), physical therapy, radiology, medical/clinical lab technology, mental health counseling and social work.

As future need arises, other degree programs can be phased in over time, depending on demand. The college will complement and collaborate with existing two-year community colleges and other academic institutions in the state. Students will be recruited from the region and other rural areas of the state, as well as among veterans who have active service medical training.

This section of the business plan outlines the key building blocks of college operations and programs.

Community College Pathway Program

It will be a crucial part of the success of this college model to establish partnerships with community colleges throughout the state of Oregon. This college initiative will provide advanced-level degrees (Bachelor, Master and PhD level) degrees in multiple high-demand allied and mental health fields, so it will not compete with community colleges. What it will do is provide a pathway for students to advance their education upon receiving their associates degree and pre-requisite training in pre-health fields.

In the early stages of planning for this college, it will be our goal to reach articulation agreements with regional community colleges that have established associate level allied health programs. It is our intention that these colleges would serve as key feeder-schools, in addition to other institutions with pre-health programs.

Joint instructional programs would be set up to provide students with pathways into specific programs at the allied health college, as well as to better equip them for academic success in advanced areas of study. Additionally, synergies would be sought with community colleges in a range of different areas such as sharing faculty, support staff and equipment, in addition to developing key programs and curriculum. The details of this part of the college initiative are still being finalized, but it is our intention to work with community colleges on all fronts to the end of benefitting students, faculty and the future healthcare workforce in Oregon.

Veteran Pathway Program

It is also a significant part of our vision to have a robust VA presence at this college. Through our ongoing work with the VISN 20 and the Roseburg VA we have ascertained that the VA's workforce shortages mirror the needs facing other rural Oregon hospitals and clinics.

An allied and mental health college set in rural Southern Oregon can not only serve as a tool to impact that level of demand in the future, but it can also serve as a pathway for veterans who are leaving the service with medical training, but no professional certification to work as a healthcare professional in the civilian world. Veterans with active service medical training face challenges in applying their skills in civilian settings as no accelerated pathway exists for veterans to qualify for admission into civilian degree/training programs. Active service medical training/experience is not recognized for admissions and experienced veterans cannot test out of basic foundational coursework.

We would work with the VA through existing programs – like the GI Bill and others (i.e. the 2014 Choice Act) – to create a practical and affordable route for veterans to advance their education and go on to serve their community and other veterans. A total of 50-percent of more student seats will be reserved for veterans who meet college application requirements.

It is also our intent that alignment at the federal level can be utilized to access federal funding. As mandated by the Choice Act in 2014, the VA Office of Inspector General identifies annually the top five occupations with the largest staffing shortages in the VA. In 2017, the following five positions: Medical Officer, Nurse, Psychologist, Physician Assistant, and Medical Technologist. Additionally, the 2017 report stated that in each of our previous three rankings of staffing shortages, Medical Officer and Nurse have been the two largest critical need occupations. The VA is the second-largest federal payer for medical training after Medicare, which subsidizes graduate medical education (GME) at teaching hospitals. So, with staffing shortages in two key allied health fields, we hope that programs like this might be extended to not only doctors but other healthcare professionals.

Faculty Recruitment & Support

The quality of instruction at any academic institution depends in large part on securing and maintaining well-trained educators. One recognized challenge for building this college is the shortage of educators in nursing and a number of allied health fields. A key issue is often low compensation compared to the pay scales of counterparts practicing in the clinical setting. Nurse faculty, in particular, earn significantly less than practicing nurses. A recent study conducted in 2017 by the Oregon Center for Nursing (OCN) found that 70 percent of nurse educators in the state had left their teaching positions within a three-year period from 2014 to 2017. A total of 53 percent of those surveyed by OCN cited low compensation as the main reason for leaving nursing education. Difficulties in repaying student loans and earning a living wage are frequently reported as challenges to accepting nursing education positions.

In addition to low compensation, high workload is another key issue in retaining educators. More than a third of former nurse educators who responded to OCN's survey in 2017 had cited an unexpected and unrealistic workload had played a major role in their decision to leave. As well, a total of 22 percent indicated insufficient mentoring was a key factor. In contrast, only 17 percent cited a desire to return to patient centered care as the main reason for their departure. Notably, most nurse educators had arranged new employment in clinical settings prior to resigning their faculty positions.

The following are key strategies to recruit and retain nursing and allied health faculty at the college, many of which are expected to require state policy support to fully achieve.

- Offer competitive salaries
- Secure qualified regional hospital, clinic, and VA staff to serve as teaching faculty
- Reduce the cost burden of becoming an educator for those fields that lack adequate educators (especially nursing)
- Maintain reasonable teaching loads that work for part and full-time faculty
- Provide professional development programs that include coaching/mentoring for new faculty

Partnerships for Student Recruitment, Scholarships & Clinical Rotations

Through partnerships with state-of-the-art regional hospitals and clinics (including within the VA VISN 20 Network, covering Oregon, Washington, Idaho and Alaska) we will work to provide both scholarship opportunities and clinical rotation slots – ideally with the majority of them being in rural areas of Oregon. Alongside an affordable tuition model, it is our intent that work with an academic partner will create a model that is both viable for students and beneficial to hospitals.

Hospitals and clinics, including those within the VA, can also encourage their employees to seek advanced job training by enrolling. Additionally, high schools and workforce training programs would be engaged to promote interest in health care jobs and drive student applications. And, a recruitment program specifically designed for veterans with medical training who want to develop their skills for VA and civilian health careers would also be set up. It is projected that veterans could make up to 50 percent or more of the college's student population.

And, to further propel student recruitment, scholarships would be set up for students—many who would have no way to finance their education—funded by the Oregon medical community through what otherwise would be spent on recruiting. Plus, students who are veterans can make use of the GI Bill to cover a broad range of their expenses from tuition and books to living costs.

These regional hospitals and clinics would also provide externships and clinical rotations for students at the college. This would provide enriching, hands-on educational experiences at top-performing medical facilities in both urban and rural settings. Students would have the opportunity to be part of multi-disciplinary teams, working under highly-skilled and experienced medical professionals—many who are recognized leaders in their fields.

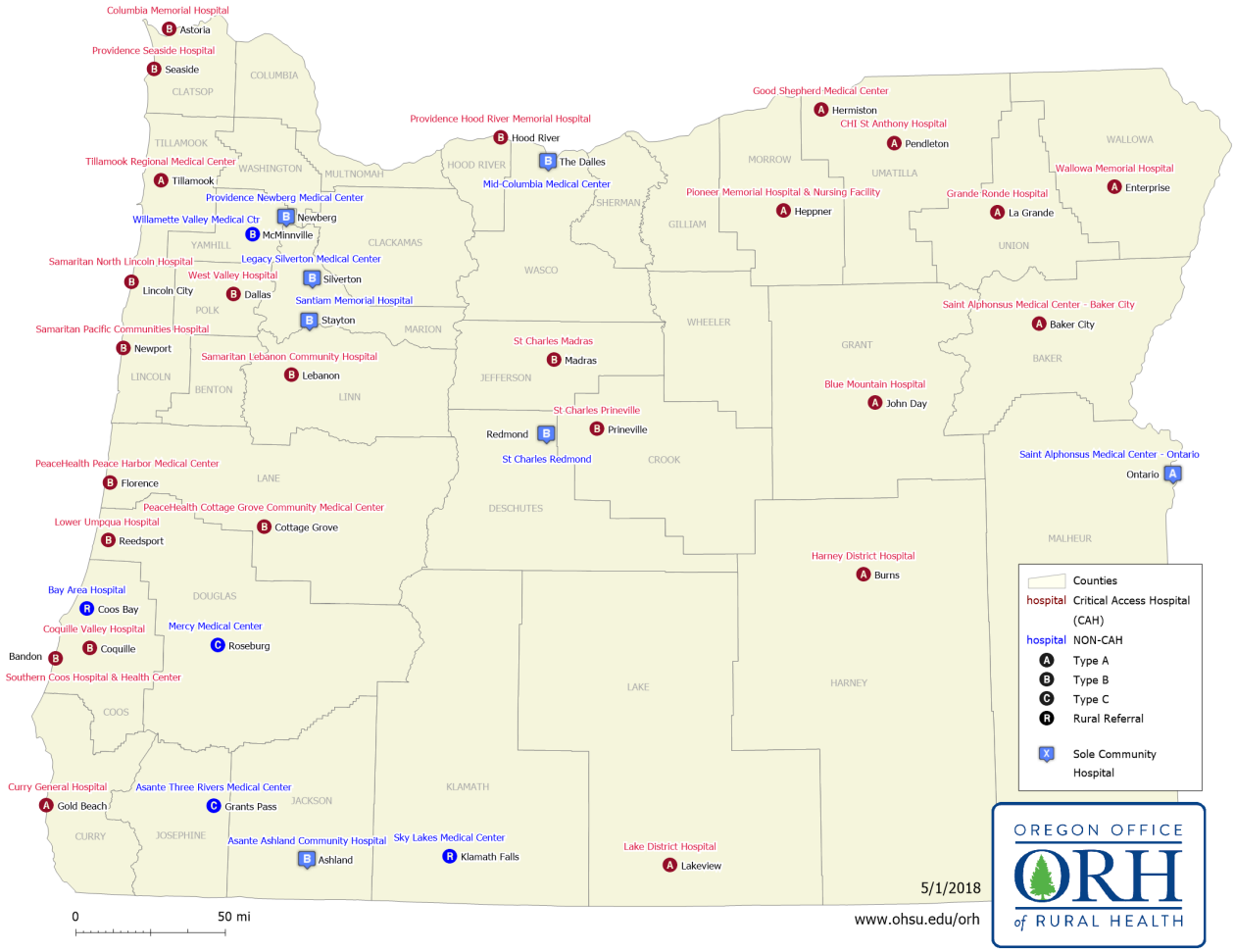
Clinical rotations would also give students first-hand exposure to leading industry practices and state-of-the-art medical technologies, plus serve as pathways into professional jobs. And, to further ensure students connect with jobs post-graduation, placement programs would be coordinated with health care providers and occupational organizations/associations.

For reference, maps of rural hospitals and clinics throughout Oregon, as well as medical centers, hospitals and clinics throughout the VISN 20 region can be found on the following pages.

We are in the process of reveiving commitments and letters of support from hospitals and healthcare providers across Oregon. Already we have received letters from the following supporters (see Appendix C): Roseburg VA, CHI Mercy Health, Bay Area Hospital.

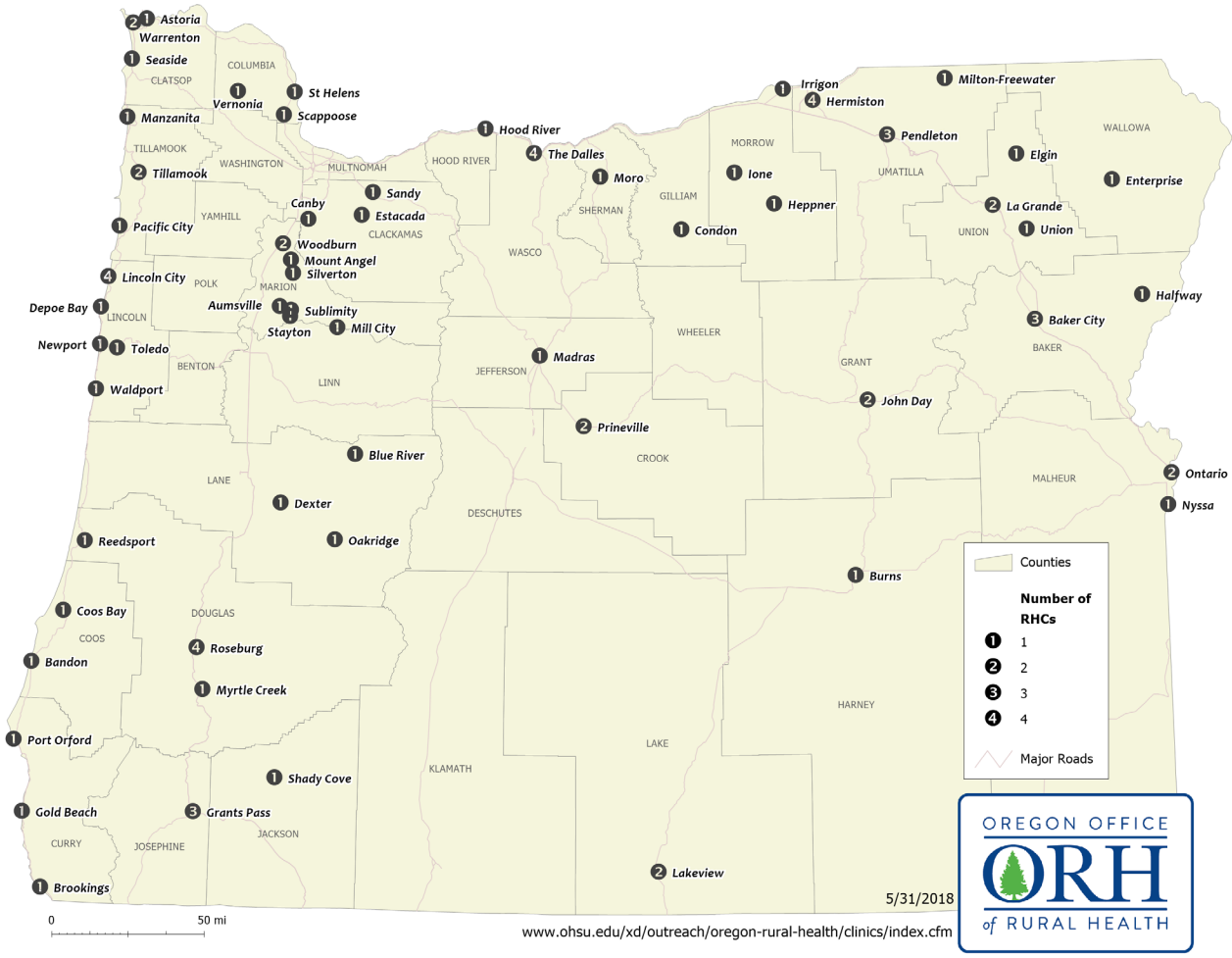
Oregon Rural Hospitals

**map created by the Office of Rural Health*



Oregon Rural Health Clinics

**map created by the Office of Rural Health*



VISN 20 Map of Medical Centers, Hospitals & Clinics

VISN Headquarters
VISN 20: Northwest Network (Vancouver, WA)

VA Health Care System
Alaska VA Healthcare System (Anchorage, AK)
Portland VA Medical Center (Portland, OR)
VA Puget Sound Health Care System (Seattle, WA)
VA Puget Sound Health Care System - American Lake Division (Lakewood, WA)
VA Puget Sound Health Care System - Seattle Division (Seattle, WA)

VA Medical Center
Boise VA Medical Center (Boise, ID)
Jonathan M. Wainwright Memorial VA Medical Center (Walla Walla, WA)
Mann-Grandstaff VA Medical Center (Spokane, WA)
Roseburg VA Health Care System (Roseburg, OR)
VA Portland Health Care System - Vancouver Campus (Vancouver, WA)
White City or VA Southern Oregon Rehabilitation Center (White City, OR)

Outpatient Clinic
Burns Oregon Outpatient Clinic (Burns, OR)
Juneau VA Outreach Clinic (Juneau, AK)
Libby RHC (Libby, MT)
Mountain Home Idaho Outpatient Clinic (Mountain Home, ID)
Newport Outreach Clinic (Newport, OR)
Salmon Idaho Outpatient Clinic (Salmon, ID)
Sandpoint RHC (Sandpoint, ID)
The Dalles Outreach Clinic (The Dalles, OR)
West Linn CBOC (West Linn, OR)

Integrated Clinical Facility
Yakima Valley Vet Center (Yakima, WA)

Community Based Outpatient Clinic
Bend CBOC (Bend, OR)
BHRRS - Behavioral Health Recovery & Reintegration Services (Eugene, OR)
Bremerton CBOC (Bremerton, WA)
Brookings VA Clinic (Brookings, OR)
Caldwell Idaho Outpatient Clinic (Caldwell, ID)
Community Resource and Referral Center (CRRC) (Portland, OR)
Eugene Health Care Center (Eugene, OR)
Fairbanks VA Community Based Outpatient Clinic (Fort Wainwright, AK)
Fairview Clinic (Fairview, OR)
Grangeville (ID) VA Outpatient Clinic (Grangeville, ID)
Grants Pass West VA CBOC (Grants Pass, OR)
Hillsboro CBOC (Hillsboro, OR)
Kenai VA Community Based Outpatient Clinic (Kenai, AK)
Klamath Falls CBOC (Klamath Falls, OR)
La Grande (OR) Community Based Outpatient Clinic (La Grande, OR)
Lewiston (ID) Community Based Outpatient Clinic (Lewiston, ID)
Lincoln City Clinic (Lincoln City, OR)
Mat-Su VA Community Based Outpatient Clinic (Wasilla, AK)
Morrow County VA Telehealth Clinic (Boardman OR) (Boardman, OR)
Mount Vernon CBOC (Mount Vernon, WA)
North Bend VA Clinic (North Bend, OR)
North Coast CBOC (Warrenton, OR)
North Idaho CBOC (Coeur d 'Alene, ID)
North Olympic Peninsula (Port Angeles, WA)
Richland (WA) Community Based Outpatient Clinic (Richland, WA)
Salem CBOC (Salem, OR)
South Sound CBOC (Chehalis, WA)
Twin Falls Idaho Outpatient Clinic (Twin Falls, ID)
Valor CBOC Bellevue (Bellevue, WA)
Valor CBOC Federal Way (Federal Way, WA)
Valor CBOC North Seattle (Seattle, WA)
Wallowa County VA Telehealth Clinic (Enterprise OR) (Enterprise, OR)
Wenatchee CBOC (Wenatchee, WA)
Yakima (WA) Community Based Outpatient Clinic (Yakima, WA

Future Need

One of the positive features in developing this college initiative is the ability to expand as demand in specific healthcare fields arises. It is our intention to work with an academic partner to create a college institution model that would be able to adhere to future demands by adding degree programs when needed and when achievable.

Future academic degree programs in allied health fields that the Oregonians for Rural Health have explored for a second phase of the college are as follows:

- Master of Science Physician Assistant (MSPA)
- Doctor of Pharmacy (Pharm-D)
- Doctor of Clinical Psychology (Psy-D)
- Master of Science in Rehabilitation Counseling (MSRC)
- Doctor of Occupational Therapy (OTD)
- Master of Science Speech-Language Pathology
- Bachelor of Science Cardiology Technician (BSCT)
- Bachelor of Science Health Education
- Bachelor of Science Health Information Management (BSHIM)
- Master of Health Services Administration (MHSA)

VI. CONCLUSION

VI. Conclusion

Healthcare demand is projected to increase across Oregon. Yet, workforce shortages in multiple allied and mental health fields make expanding, let alone maintaining, services increasingly difficult despite aggressive and often costly recruiting efforts. A proactive and innovative approach is needed to ensure access to local quality healthcare in our communities and for our veterans. A unique opportunity exists to create a reliable pipeline of skilled and specialized healthcare professionals in Roseburg that can better ensure long-term access to care.

This college will be beneficial on many fronts. It will create a viable pathway for veterans and residents alike to advance their careers in fields where job vacancies are only growing; it will feed the struggling local economy; it will serve rural Oregon. The initiative already has widespread support throughout the region, but this project is still in need of an academic partner, State government commitment and public and private funding.

The Oregonians for Rural Health would like to work with the ODVA and all members of the Rural Medical Training Workgroup to further develop this college model. We ask you to support this initiative.

VII. APPENDICES

Appendix A: Oregon Center for Nursing – Data Tables

Appendix B: Operating Budget Supporting Documents

Appendix C: Letters of Support

Appendix A: Estimated and Projected Employment by Occupation, including Population Ratios, 2017-2027

State of Oregon

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	37,353	43,600	16.7%	6,247	20,388	26,635
Nurse Practitioner	1,762	2,376	34.9%	614	994	1,608
Physical Therapist	3,052	3,885	27.3%	833	1,389	2,222
Radiologic Technologist	2,254	2,551	13.2%	297	1,220	1,517
Medical Clinical Laboratory Technologist	2,281	2,521	10.5%	240	1,453	1,693
Mental Health Counselors (LPC)	3,158	3,715	17.6%	557	3,511	4,068
MHSA Social Workers	2,304	2,684	16.5%	380	2,481	2,861

East Cascades OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	nc	nc	nc	nc	nc	nc
Nurse Practitioner	102	134	31.4%	32	56	88
Physical Therapist	nc	nc	nc	nc	nc	nc
Radiologic Technologist	193	216	11.9%	23	103	126
Medical Clinical Laboratory Technologist	nc	nc	nc	nc	nc	nc
Mental Health Counselors (LPC)	nc	nc	nc	nc	nc	nc
MHSA Social Workers	211	237	12.3%	26	222	248

Eastern Oregon OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	1,122	1,279	14.0%	157	605	762
Nurse Practitioner	70	90	28.6%	20	39	59
Physical Therapist	147	176	19.7%	29	66	95
Radiologic Technologist	100	107	7.0%	7	52	59
Medical Clinical Laboratory Technologist	67	72	7.5%	5	44	49
Mental Health Counselors (LPC)	177	211	19.2%	34	198	232
MHSA Social Workers	36	38	5.6%	2	37	39

Lane OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	2,873	3,264	13.6%	391	1,546	1,937
Nurse Practitioner	136	184	35.3%	48	77	125
Physical Therapist	317	387	22.1%	70	141	211
Radiologic Technologist	206	235	14.1%	29	112	141
Medical Clinical Laboratory Technologist	176	186	5.7%	10	110	120
Mental Health Counselors (LPC)	270	333	23.3%	63	308	371
MHSA Social Workers	243	276	13.6%	33	258	291

Mid-Valley OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	4,308	5,167	19.9%	859	2,386	3,245
Nurse Practitioner	151	204	35.1%	53	85	138
Physical Therapist	398	513	28.9%	115	183	298
Radiologic Technologist	263	299	13.7%	36	143	179
Medical Clinical Laboratory Technologist	191	214	12.0%	23	122	145
Mental Health Counselors (LPC)	177	198	11.9%	21	192	213
MHSA Social Workers	568	637	12.2%	69	600	669

Appendix A: Estimated and Projected Employment by Occupation, including Population Ratios, 2017-2027

Northwest Oregon OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	1,594	1,762	11.8%	188	850	1,038
Nurse Practitioner	124	148	19.4%	24	65	89
Physical Therapist	178	207	16.3%	29	77	106
Radiologic Technologist	147	157	6.8%	10	77	87
Medical Clinical Laboratory Technologist	109	116	6.4%	7	68	75
Mental Health Counselors (LPC)	52	56	7.7%	4	55	59
MHSA Social Workers	81	94	16.1%	13	87	100

Portland Tri-County OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	20,104	24,233	20.5%	4,129	11,166	15,295
Nurse Practitioner	889	1,191	34.0%	302	500	802
Physical Therapist	1,242	1,609	29.6%	367	572	939
Radiologic Technologist	997	1,140	14.3%	143	542	685
Medical Clinical Laboratory Technologist	1,271	1,430	12.5%	159	818	977
Mental Health Counselors (LPC)	2,118	2,474	16.8%	356	2,346	2,702
MHSA Social Workers	911	1,100	20.8%	189	1,000	1,189

Rogue Valley OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	2,534	2,943	16.1%	409	1,379	1,788
Nurse Practitioner	147	207	40.8%	60	85	145
Physical Therapist	231	285	23.4%	54	104	158
Radiologic Technologist	185	212	14.6%	27	100	127
Medical Clinical Laboratory Technologist	149	167	12.1%	18	96	114
Mental Health Counselors (LPC)	149	162	8.7%	13	159	172
MHSA Social Workers	nc	nc	nc	nc	nc	nc

Southwestern Oregon OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	1,497	1,662	11.0%	165	795	960
Nurse Practitioner	94	124	31.9%	30	52	82
Physical Therapist	78	87	11.5%	9	33	42
Radiologic Technologist	112	121	8.0%	9	59	68
Medical Clinical Laboratory Technologist	83	87	4.8%	4	52	56
Mental Health Counselors (LPC)	135	140	3.7%	5	141	146
MHSA Social Workers	128	135	5.5%	7	131	138

Note: "nc" means that estimate or projection and associated metrics could not be calculated.

Source: Oregon Employment Department, Oregon Occupational Projections, 2017-2027.

Prepared by: Oregon Center for Nursing, August 2018

Appendix A: Estimated and Projected Employment by Occupation, including Population Ratios, 2017-2027

Registered Nurse

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	37,353	110	100%	43,600	106	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	1,122	170	155%	1,279	160	151%
Lane OED Region	2,873	128	117%	3,264	123	116%
Mid-Valley OED Region	4,308	152	139%	5,167	147	139%
Northwest Oregon OED Region	1,594	160	145%	1,762	156	148%
Portland Tri-County OED Region	20,104	88	81%	24,233	83	79%
Rogue Valley OED Region	2,534	119	109%	2,943	117	110%
Southwestern Oregon OED Region	1,497	133	121%	1,662	128	121%

Nurse Practitioner

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	1,762	2,327	100%	2,376	1,942	100%
East Cascades OED Region	102	3,426	147%	134	2,956	152%
Eastern Oregon OED Region	70	2,721	117%	90	2,278	117%
Lane OED Region	136	2,707	116%	184	2,179	112%
Mid-Valley OED Region	151	4,345	187%	204	3,716	191%
Northwest Oregon OED Region	124	2,051	88%	148	1,861	96%
Portland Tri-County OED Region	889	2,001	86%	1,191	1,699	87%
Rogue Valley OED Region	147	2,059	89%	207	1,657	85%
Southwestern Oregon OED Region	94	2,117	91%	124	1,715	88%

Physical Therapist

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	3,052	1,343	100%	3,885	1,188	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	147	1,296	96%	176	1,165	98%
Lane OED Region	317	1,161	86%	387	1,036	87%
Mid-Valley OED Region	398	1,648	123%	513	1,478	124%
Northwest Oregon OED Region	178	1,429	106%	207	1,331	112%
Portland Tri-County OED Region	1,242	1,432	107%	1,609	1,257	106%
Rogue Valley OED Region	231	1,310	98%	285	1,204	101%
Southwestern Oregon OED Region	78	2,551	190%	87	2,445	206%

Radiologic Technologist

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	2,254	1,819	100%	2,551	1,809	100%
East Cascades OED Region	193	1,811	100%	216	1,834	101%
Eastern Oregon OED Region	100	1,904	105%	107	1,916	106%
Lane OED Region	206	1,787	98%	235	1,706	94%
Mid-Valley OED Region	263	2,495	137%	299	2,535	140%
Northwest Oregon OED Region	147	1,730	95%	157	1,754	97%
Portland Tri-County OED Region	997	1,784	98%	1,140	1,775	98%
Rogue Valley OED Region	185	1,636	90%	212	1,618	89%
Southwestern Oregon OED Region	112	1,777	98%	121	1,758	97%

Appendix A: Estimated and Projected Employment by Occupation, including Population Ratios, 2017-2027

Medical Clinical Laboratory Tech.	2017			2027		
Geographic Region	Employment	Population Ratio	Reg / State Deviation	Employment	Population Ratio	Reg / State Deviation
State of Oregon	2,281	1,797	100%	2,521	1,831	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	67	2,842	158%	72	2,847	156%
Lane OED Region	176	2,091	116%	186	2,156	118%
Mid-Valley OED Region	191	3,435	191%	214	3,542	193%
Northwest Oregon OED Region	109	2,333	130%	116	2,374	130%
Portland Tri-County OED Region	1,271	1,400	78%	1,430	1,415	77%
Rogue Valley OED Region	149	2,032	113%	167	2,054	112%
Southwestern Oregon OED Region	83	2,397	133%	87	2,445	134%

Mental Health Counselor	2017			2027		
Geographic Region	Employment	Population Ratio	Reg / State Deviation	Employment	Population Ratio	Reg / State Deviation
State of Oregon	3,158	1,298	100%	3,715	1,242	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	177	1,076	83%	211	972	78%
Lane OED Region	270	1,363	105%	333	1,204	97%
Mid-Valley OED Region	177	3,707	286%	198	3,828	308%
Northwest Oregon OED Region	52	4,891	377%	56	4,918	396%
Portland Tri-County OED Region	2,118	840	65%	2,474	818	66%
Rogue Valley OED Region	149	2,032	157%	162	2,117	170%
Southwestern Oregon OED Region	135	1,474	114%	140	1,519	122%

MHSA Social Worker	2017			2027		
Geographic Region	Employment	Population Ratio	Reg / State Deviation	Employment	Population Ratio	Reg / State Deviation
State of Oregon	2,304	1,779	100%	2,684	1,719	100%
East Cascades OED Region	211	1,656	93%	237	1,671	97%
Eastern Oregon OED Region	36	5,290	297%	38	5,395	314%
Lane OED Region	243	1,515	85%	276	1,453	84%
Mid-Valley OED Region	568	1,155	65%	637	1,190	69%
Northwest Oregon OED Region	81	3,140	176%	94	2,930	170%
Portland Tri-County OED Region	911	1,953	110%	1,100	1,839	107%
Rogue Valley OED Region	nc	nc	nc	nc	nc	nc
Southwestern Oregon OED Region	128	1,555	87%	135	1,576	92%

Note: "nc" means that estimate or projection and associated metrics could not be calculated.

Source:
Oregon Employment Department, Oregon Occupational Projections, 2017-2027.
Oregon Department of Administrative Services, Office of Economic Analysis, County Population Forecast, 2010-2050

Prepared by: Oregon Center for Nursing, August 2018

Appendix A: Annual Job Openings and Rank[§], 2014

Registered Nurse**

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	33,421	1,284	1
Clackamas	2,159	89	2
East Cascades	2,709	126	1
Eastern Oregon	1,080	37	1
Lane	3,017	133	1
Mid-Valley	4,111	164	1
Northwest Oregon	1,427	51	1
Portland Metro	14,433	508	2
Rogue Valley	2,290	82	1
Southwestern Oregon	1,500	50	1

Nurse Practitioner*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	1,447	84	9
Clackamas	149	10	4
East Cascades	101	6	8
Eastern Oregon	41	2	11
Lane	89	6	17
Mid-Valley	174	10	15
Northwest Oregon	73	3	16
Portland Metro	621	33	11
Rogue Valley	113	6	6
Southwestern Oregon	58	3	8

Physical Therapist*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,750	177	3
Clackamas	249	16	3
East Cascades	287	15	1
Eastern Oregon	119	5	2
Lane	279	14	3
Mid-Valley	346	17	4
Northwest Oregon	168	9	4
Portland Metro	941	54	6
Rogue Valley	233	10	3
Southwestern Oregon	92	4	4

Appendix A: Annual Job Openings and Rank[§], 2014

Radiologic Technologist***

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,095	64	9
Clackamas	176	6	9
East Cascades	159	5	7
Eastern Oregon	106	3	2
Lane	204	8	6
Mid-Valley	236	8	7
Northwest Oregon	126	3	7
Portland Metro	773	21	11
Rogue Valley	154	4	7
Southwestern Oregon	112	3	3

Medical Clinical Laboratory Technologist**

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,157	83	45
Clackamas	79	3	58
East Cascades	152	5	33
Eastern Oregon	78	3	21
Lane	154	7	37
Mid-Valley	209	7	46
Northwest Oregon	102	3	41
Portland Metro	1,157	43	47
Rogue Valley	126	4	28
Southwestern Oregon	75	2	21

Mental Health Counselor*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,635	114	5
Clackamas	122	4	9
East Cascades	80	4	14
Eastern Oregon	142	5	3
Lane	250	10	7
Mid-Valley	277	10	14
Northwest Oregon	14	0	37
Portland Metro	1,497	61	4
Rogue Valley	--	--	--
Southwestern Oregon	142	4	1

Appendix A: Annual Job Openings and Rank[§], 2014

MHSA Social Worker*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,103	91	8
Clackamas	--	--	--
East Cascades	210	8	6
Eastern Oregon	26	1	22
Lane	291	13	5
Mid-Valley	552	18	3
Northwest Oregon	93	4	12
Portland Metro	649	31	12
Rogue Valley	104	4	10
Southwestern Oregon	101	3	7

[§]Job Opening Rank based on rank within entry level education category as defined below:
*Graduate degree
**Bachelor's Degree
***Associate Degree

Source: Oregon Employment Department, Job Opening Survey, 2014

Prepared by: Oregon Center for Nursing, May 2018

Appendix A: Educational Opportunities and Capacity by Occupation

Registered Nurse

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Concordia University	Portland	69	97	28	92	75%
George Fox University	Newberg	48	142	46	82	59%
Linfield College	Portland	198	342	186	671	30%
OHSU	Portland	344	798	374	1,735	20%
University of Portland	Portland	265	614	185	2,194	12%
Walla Walla University	Portland	72	174	64	141	51%
BSN Program Subtotal	Statewide	996	2,167	883	4,915	20%
RN to BSN Program Subtotal	Statewide	109	199	104	109	100%
ADN Program Subtotal	Statewide	635	1,238	583	2,852	22%
Registered Nurse		1,740		1,570	7,876	22%

Nurse Practitioner

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
OHSU (Master's Advanced Prac)	Portland	10	10	15	45	22%
OHSU (DNP)	Portland	10	29	45	10	100%
Univerity of Portland (DNP)	Portland	9	11	29	26	35%
Nurse Practitioner		29		89	81	36%

Physical Therapist

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
George Fox University	Newberg	44	130	44	500	9%
Pacific University	Forest Grove	50	145	48	1,145	4%
Physical Therapist		94		92	1,645	6%

Radiologic Technologist

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Oregon Institute of Technology	Klamath Falls	48	152	45	100	48%
Radiologic Technologist		48		45	100	48%

Medical Clinical Laboratory Technologist

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Oregon Institute of Technology	Wilsonville	50	196	47	82	61%
MCLT		50		47	82	61%

Appendix A: Educational Opportunities and Capacity by Occupation

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Mental Health Counseling (MA)						
Corban University	Salem	18	n/a	15	24	75%
George Fox University	Newberg	50	62	36	80	63%
Lewis & Clark College	Portland	40	80	41	125	32%
Multnomah University	Portland	n/a	n/a	n/a	n/a	
Northwest Christian Univ	Eugene	n/a	n/a	n/a	n/a	
Oregon State University	Corvallis	18	13		51	35%
Portland State University	Portland	15	50	12	159	9%
Southern Oregon University	Ashland	22	40	21	63	35%
University of Oregon	Eugene	10	50	6	225	4%
Western Seminary	Portland	35	100	35	40	88%
Doctor of Psychology (PsyD)						
George Fox	Newberg	28	n/a	24	125	22%
Pacific University	Hillsboro	55	n/a	56	280	20%
Mental Health Counselor		291	395	246	1,172	25%

Mental Health/Substance Abuse Social Worker

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
George Fox University	Newberg	58	90	44	n/a	
Pacific University	Eugene	25	40	n/a	n/a	
Portland State University	Portland	275	560	260	800	34%
Warner Pacific College	Portland	10	18	9	10	100%
MHSA Social Worker		368		313	810	35%

Note: For Registered Nurses; BSN = Bachelor's of Science in Nursing, ADN = Associates Degree in Nursing.
Note: For Registered Nurses only BSN schools are individually listed with OCNE degrees listed under OHSU.
Note: For MHSA Social Worker, the number admitted to George Fox Univeristy and Pacific Univeristy were not included in the acceptance rate calculation.

Source: Data were collected via website or phone call to each educational institution.

Prepared by: Oregon Center for Nursing August 2018

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*									
OP EXPENSES	***Year -2***	***Year -1***	***Year 0***	***Year 1***	***Year 2***	***Year 3***	***Year 4***	***Year 5***	***Total Operating Subsidy***
Personnel (incl. fringe)	1,000,000	3,050,000	5,330,000	6,280,000	8,630,000	9,910,000	10,450,000	10,720,000	
M&S	50,000	152,500	266,500	314,000	431,500	495,500	522,500	536,000	
IT services	50,000	152,500	266,500	314,000	431,500	495,500	522,500	536,000	
Rent	270,000	270,000	270,000						
Plant Ops & Maintenance				1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
Lab class supplies			40,000	80,000	80,000	80,000	80,000	80,000	
Travel	12,000	64,000	110,000	154,000	230,000	282,000	302,000	306,000	
Marketing		500,000	1,000,000	500,000	250,000	250,000	250,000	250,000	
Books & Subscriptions	15,000	75,000	200,000	200,000	200,000	200,000	200,000	200,000	
Accreditation Fees		100,000	200,000	50,000	50,000	150,000	50,000	50,000	
Insurance	20,000	O	50,000	150,000	150,000	150,000	150,000	150,000	
Legal	125,000	200,000	250,000	250,000	250,000	250,000	250,000	250,000	
Recruitment (executive)	100,000	75,000	50,000						
Recruitment faculty	50,000	250,000	350,000	600,000	400,000	400,000	225,000	225,000	
7.5% Contingency	115,650	342,300	598,725	696,900	877,725	994,725	1,033,275	1,055,850	
Total:	1,807,650	5,231,300	8,981,725	10,588,900	12,980,725	14,657,725	15,035,275	15,358,850	
OP REVENUES									
Gross tuition				5,035,000	11,807,500	16,127,500	17,400,000	17,400,000	
Gross fees				66,600	163,500	225,300	246,600	246,600	
Financial aid				(251,750)	(590,375)	(806,375)	(870,000)	(870,000)	
Net tuition				4,849,850	11,380,625	15,546,425	16,776,600	16,776,600	
Student enrollment				222	545	751	822	822	
Operating Subsidy	**1,807,650**	**5,231,300**	**8,981,725**	**5,739,050**	**1,600,100**	**(888,700)**	**(1,741,325)**	**(1,417,750)**	**23,359,825**
Operating Profit/(Loss)	**(1,807,650)**	**(5,231,300)**	**(8,981,725)**	**(5,739,050)**	**(1,600,100)**	**888,700**	**1,741,325**	**1,417,750**	
ALL FUNDS EXPENSES									
Capital Outlay									
Operating Subsidy	(1,807,650)	(5,231,300)	(8,981,725)	(5,739,050)	(1,600,100)	888,700	1,741,325	1,417,750	
Interest Payments									
Fundraising Costs									
OTHER REVENUES									
Fund Balance									
Grant/donations									
Public contributions									
Debt proceeds									
Building Depreciation				TBD	TBD	TBD	TBD	TBD	

Appendix B: Operating Budget Supporting Documents

Allied Health College

Roseburg, Oregon Proposal

Program Name	Tuition	Degree Type	Program Length Years @ AMC	Students Year1	Tuition	Students Year 2	Tuition	Students Year 3	Tuition	Students Year 4	Tuition	Students Year 5	Tuition
Band 1 Enrollment: (Targeted for Launch in AY 1)													
BSN		Bachelors	2	64		64							
BSN		Bachelors	2			80		80					
BSN		Bachelors	2			144		96		96			
BSN		Bachelors	2					176		96		96	
BSN		Bachelors	2							192		96	
BSN		Bachelors	2									192	
	22500				1,440,000		3,240,000		3,960,000		4,320,000		4,320,000
MSN		Masters	2	24		24							
MSN		Masters	2			24		24					
MSN		Masters	2			48		24		24			
MSN		Masters	2					48		24		24	
MSN		Masters	2							48		24	
MSN		Masters	2									48	
	30000				720,000		1,440,000		1,440,000		1,440,000		1,440,000
Nurse Practitioner, DNP		Doctorate	3	24		24		24					
Nurse Practitioner, DNP		Doctorate	3			24		24		24			
Nurse Practitioner, DNP		Doctorate	3			48		24		24		24	
Nurse Practitioner, DNP		Doctorate	3					72		24		24	
Nurse Practitioner, DNP		Doctorate	3							72		24	
Nurse Practitioner, DNP		Doctorate	3									72	
	40000				960,000		1,920,000		2,880,000		2,880,000		2,880,000
Physical Therapist		Doctorate	3	20		20		20					
Physical Therapist		Doctorate	3			30		30		30			
Physical Therapist		Doctorate	3			50		30		30		30	
Physical Therapist		Doctorate	3					80		30		30	
Physical Therapist		Doctorate	3							90		30	
Physical Therapist		Doctorate	3									90	
	35000				700,000		1,750,000		2,800,000		3,150,000		3,150,000
BSW		Bachelors	2	30		30							
BSW		Bachelors	2			45		45					
BSW		Bachelors	2			75		60		60			
BSW		Bachelors	2					105		60		60	
BSW		Bachelors	2							120		60	
BSW		Bachelors	2									120	
	12500				375,000		937,500		1,312,500		1,500,000		1,500,000
MSW		Masters	2	15		15							
MSW		Masters	2			30		30					
MSW		Masters	2			45		30		30			
MSW		Masters	2					60		30		30	
MSW		Masters	2							60		30	
MSW		Masters	2									60	
	15500				232,500		697,500		930,000		930,000		930,000
MA in Clinical MH Counseling		Masters	2	15		15							
MA in Clinical MH Counseling		Masters	2			30		30					
MA in Clinical MH Counseling		Masters	2			45		30		30			
MA in Clinical MH Counseling		Masters	2					60		30		30	
MA in Clinical MH Counseling		Masters	2							60		30	
MA in Clinical MH Counseling		Masters	2									60	
	15500				232,500		697,500		930,000		930,000		930,000
Radiological Technologist		Bachelors	3	15		15		15					
Radiological Technologist		Bachelors	3			30		30		30			
Radiological Technologist		Bachelors	3			45		30		30		30	
Radiological Technologist		Bachelors	3					75		30		30	
Radiological Technologist		Bachelors	3							90		30	
Radiological Technologist		Bachelors	3									90	
	12500				187,500		562,500		937,500		1,125,000		1,125,000
Med & Clin Lab Technologist		Bachelors	2	15		15							
Med & Clin Lab Technologist		Bachelors	2			30		30					
Med & Clin Lab Technologist		Bachelors	2			45		45		45			
Med & Clin Lab Technologist		Bachelors	2					75		45		45	
Med & Clin Lab Technologist		Bachelors	2							90		45	
Med & Clin Lab Technologist		Bachelors	2									90	
	12500				187,500		562,500		937,500		1,125,000		1,125,000
Total				**222**	**5,035,000**	**545**	**11,807,500**	**751**	**16,127,500**	**822**	**17,400,000**	**822**	**17,400,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*							
		AY-2	# Faculty	# Support	# Admin	#Specialists	Total
		FTE or # Data					
Leadership, Faculty & Support Staff							
3	**Faculty Team**						
	* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)						
	* MSN (Master of Sciences Nursing) (120 ASF / FTE)						
	* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)						
	* Physical Therapist (PhD)						
	* Clinical Mental Health Counseling (MA)						
	* MSW (MS)						
	* BSW (BS)						
	* Radiological Technologist (BS)						
	* Medical & Clinical Lab Technologist (BS)						
	Subtotal Faculty FTE and ASF by Year =						
4	**Support Staff**						
	* Faculty Support Staff (100 ASF/FTE)						
	Subtotal Support Staff FTE & ASF by Year =						
5	**Leadership Team**						
	* Dean's Office						
	* Program Directors and Support Staff						
	Subtotal Leadership FTE & ASF by Year=						
Leadership, Faculty & Support Staff Grand Totals							
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE							
Campus Administrative Services							
1	**Public Common & Shared Areas**						
2	**Office of President & Board**						
	* College President	1.00			**1.00**		**350,000**
	* Executive Assistant to the President	1.00				**1.00**	**100,000**
3	**Campus Senior Management Team**						
	* VP Office / Academic Affairs and Provost	0.00			**0.00**		-
	* VP / External Affairs	0.00			**0.00**		-
	* VP / Business and Regulatory Affairs	0.00			**0.00**		-
	* Administrative Support Staff	0.00		**0.00**			-
	* Facilities/Capital Proj Director	1.00			**1.00**		**150,000**
4	**Registrar's Office & Service Center**						
	* Office of the Registrar	0.00				**0.00**	-
	* Registrar Staff	0.00		**0.00**			-
	* Dir. Of Admissions	0.00			**0.00**		-
5	**Campus Personnel Office**						
	* Faculty/Staff Recruitment	1.00				**1.00**	**100,000**
	* Employee Benefits Coordination	0.00					
6	**Campus Financial Services Ofc.**						
	* Student Accounting	0.00					
	* General Accounting	0.00					
	* Accounts Payable	0.00					
	* Accounts Receivable	0.00					
	* Payroll	0.00					
	* Alumni Assoc./Foundation Accounting	0.00					
	* Decision Support	0.00					
	* Internal Audit	0.00					
	* Shared Administrative Support Staff	0.00					
	* Other ?	0.00					
7	**Alumni Assoc. & Foundation**						
	* Departmental Staff	0.00					
8	**IT**						
	* Dir of IT	0.00					
	* Departmental Staff	0.00					
	Sub Total FTE Staffing & DGSF Space =	**4.00**					**700,000**
Campus Student Services							
	* Director of Student Services	1.00			**1.00**		**150,000**
1	**Student Orientation Center.**						
	* Departmental Staff	0.00					-
2	**Bursar's Ofc. & Fin. Counseling**						
	* Dir. Of Financial Aid	1.00			**1.00**		**150,000**
	* Departmental Staff	0.00					-
3	**Student Housing Ofc. & Assistance**						
	* Departmental Staff	0.00					-
4	**Student Health**	0.00					
	* Departmental Staff	0.00					-
	Sub Total FTE Staffing & DGSF Space =	**2.00**					**300,000**
	TOTAL PERSONNEL COSTS	**6.00**					**1,000,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College
Roseburg, Oregon Proposal

		AY-1	# Faculty	# Support	# Admin	#Specialists	Total
		FTE or # Data					
Leadership, Faculty & Support Staff							
3	**Faculty Team**						
	* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)						
	* MSN (Master of Sciences Nursing) (120 ASF / FTE)						
	* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)						
	* Physical Therapist (PhD)						
	* Clinical Mental Health Counseling (MA)						
	* MSW (MS)						
	* BSW (BS)						
	* Radiological Technologist (BS)						
	* Medical & Clinical Lab Technologist (BS)						
	Subtotal Faculty FTE and ASF by Year =						
4	**Support Staff**						
	* Faculty Support Staff (100 ASF/FTE)						
	Subtotal Support Staff FTE & ASF by Year =						
5	**Leadership Team**						
	* Dean's Office	1.00			1.00		150,000
	* Program Directors and Support Staff	1.00		1.00			50,000
	Subtotal Leadership FTE & ASF by Year=	**2.00**	**0.00**	**1.00**	**1.00**		**200,000**
Leadership, Faculty & Support Staff Grand Totals							**200,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE		**2.00**					**200,000**
Campus Administrative Services							
1	**Public Common & Shared Areas**						
2	**Office of President & Board**						
	* College President	1.00			**1.00**		**350,000**
	* Executive Assistant to the President	1.00				**1.00**	**100,000**
3	**Campus Senior Management Team**						
	* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
	* VP / External Affairs	1.00			**1.00**		**150,000**
	* VP / Business and Regulatory Affairs	0.00					-
	* Administrative Support Staff	2.00		**2.00**			**100,000**
	* Facilities/Capital Proj Director	1.00			**1.00**		**150,000**
4	**Registrar's Office & Service Center**						
	* Office of the Registrar	1.00			**1.00**		**150,000**
	* Registrar Staff	1.00		**1.00**			**50,000**
	* Dir. Of Admissions	1.00			**1.00**		**150,000**
5	**Campus Personnel Office**						
	* Faculty/Staff Recruitment	2.00			**1.00**	**1.00**	**250,000**
	* Employee Benefits Coordination	0.00					
6	**Campus Financial Services Ofc.**						
	* Student Accounting	0.00					
	* General Accounting	1.00				**1.00**	**100,000**
	* Accounts Payable	0.00					
	* Accounts Receivable	0.00					
	* Payroll	0.00					
	* Alumni Assoc./Foundation Accounting	0.00					
	* Decision Support	0.00					
	* Internal Audit	0.00					
	* Shared Administrative Support Staff	0.00					
	* Other ?	0.00					
7	**Alumni Assoc. & Foundation**						
	* Departmental Staff	0.00					
8	**IT**						
	* Dir of IT	1.00			**1.00**		**150,000**
	* Departmental Staff	1.00				**1.00**	**100,000**
	Sub Total FTE Staffing & DGSF Space =	**15.00**					**1,950,000**
Campus Student Services							
	* Director of Student Services	2.00		**1.00**	**1.00**		**200,000**
1	**Student Orientation Center.**						
	* Departmental Staff	1.00				**1.00**	**100,000**
2	**Bursar's Ofc. & Fin. Counseling**						
	* Dir. Of Financial Aid	3.00		**1.00**	**1.00**	**1.00**	**300,000**
	* Departmental Staff	1.00		**1.00**			**50,000**
3	**Student Housing Ofc. & Assistance**						
	* Departmental Staff	1.00				**1.00**	**100,000**
4	**Student Health**						
	* Departmental Staff	1.00			**1.00**		**150,000**
	Sub Total FTE Staffing & DGSF Space =	**9.00**					**900,000**
	TOTAL PERSONNEL COSTS	**26.00**					**3,050,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*						
	AY0	# Faculty	# Support	# Admin	#Specialists	Total
	FTE or # Data					
Leadership, Faculty & Support Staff						
3 Faculty Team						
* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)		1.00				120,000
* MSN (Master of Sciences Nursing) (120 ASF / FTE)		1.00				120,000
* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)		1.00				120,000
* Physical Therapist (PhD)		1.00				120,000
* Clinical Mental Health Counseling (MA)		1.00				120,000
* MSW (MS)		1.00				120,000
* BSW (BS)		1.00				120,000
* Radiological Technologist (BS)		1.00				120,000
* Medical & Clinical Lab Technologist (BS)		1.00				120,000
Subtotal Faculty FTE and ASF by Year =	9.00					**1,080,000**
4 Support Staff						
* Faculty Support Staff (100 ASF/FTE)	2.00		2.00			100,000
Subtotal Support Staff FTE & ASF by Year =						**100,000**
5 Leadership Team						
* Dean's Office	1.00			1.00		150,000
* Program Directors and Support Staff	5.00		1.00		4.00	450,000
Subtotal Leadership FTE & ASF by Year=	**17.00**	**9.00**	**3.00**	**1.00**	**4.00**	**600,000**
Leadership, Faculty & Support Staff Grand Totals						**1,780,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE	**17.00**					**1,780,000**
Campus Administrative Services						
1 Public Common & Shared Areas						
2 Office of President & Board						
* College President	1.00			**1.00**		**400,000**
* Executive Assistant to the President	1.00				**1.00**	**100,000**
3 Campus Senior Management Team						
* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
* VP / External Affairs	1.00			**1.00**		**150,000**
* VP / Business and Regulatory Affairs	1.00			**1.00**		**150,000**
* Administrative Support Staff	3.00		**3.00**			**150,000**
* Facilities/Capital Proj Director	1.00			**1.00**		**150,000**
4 Registrar's Office & Service Center						
* Office of the Registrar	1.00			**1.00**		**150,000**
* Registrar Staff	1.00		**1.00**			**50,000**
* Dir. Of Admissions	1.00			**1.00**		**150,000**
5 Campus Personnel Office						
* Faculty/Staff Recruitment	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Employee Benefits Coordination	1.00		**1.00**			**50,000**
6 Campus Financial Services Ofc.						
* Student Accounting	0.00					-
* General Accounting	1.00				**1.00**	**100,000**
* Accounts Payable	0.00					-
* Accounts Receivable	0.00					-
* Payroll	2.00		**1.00**		**1.00**	**150,000**
* Alumni Assoc./Foundation Accounting	0.00					-
* Decision Support	0.00					-
* Internal Audit	0.00					-
* Shared Administrative Support Staff	0.00					-
* Other ?	0.00					-
7 Alumni Assoc. & Foundation						
* Departmental Staff	0.00					-
8 IT						
* Dir of IT	2.00		**1.00**	**1.00**		**150,000**
* Departmental Staff	1.00				**1.00**	**100,000**
Sub Total FTE Staffing & DGSF Space =	**22.00**					**2,450,000**
Campus Student Services						
* Director of Student Services	4.00		**2.00**	**1.00**	**1.00**	**350,000**
1 Student Orientation Center.						
* Departmental Staff	1.00				**1.00**	**100,000**
2 Bursar's Ofc. & Fin. Counseling						
* Dir. Of Financial Aid	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Departmental Staff	1.00		**1.00**			**50,000**
3 Student Housing Ofc. & Assistance						
* Departmental Staff	2.00		**1.00**		**1.00**	**150,000**
4 Student Health						
* Departmental Staff	1.00			**1.00**		**150,000**
Sub Total FTE Staffing & DGSF Space =	**12.00**					**1,100,000**
TOTAL PERSONNEL COSTS	**51.00**					**5,330,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*						
	AY1	# Faculty	# Support	# Admin	#Specialists	Total
	FTE or # Data					
Leadership, Faculty & Support Staff						
3 **Faculty Team**						
* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)		5.00				600,000
* MSN (Master of Sciences Nursing) (120 ASF / FTE)		2.00				240,000
* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)		2.00				240,000
* Physical Therapist (PhD)		2.00				240,000
* Clinical Mental Health Counseling (MA)		1.00				120,000
* MSW (MS)		1.00				120,000
* BSW (BS)		2.00				240,000
* Radiological Technologist (BS)		1.00				120,000
* Medical & Clinical Lab Technologist (BS)		1.00				120,000
Subtotal Faculty FTE and ASF by Year =	17.00					**1,080,000**
4 **Support Staff**						
* Faculty Support Staff (100 ASF/FTE)	4.00		4.00			200,000
Subtotal Support Staff FTE & ASF by Year =						**200,000**
5 **Leadership Team**						
* Dean's Office	1.00			1.00		150,000
* Program Directors and Support Staff	5.00		1.00		4.00	450,000
Subtotal Leadership FTE & ASF by Year=	**27.00**	**17.00**	**5.00**	**1.00**	**4.00**	**600,000**
Leadership, Faculty & Support Staff Grand Totals						**1,880,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE	**27.00**					**1,880,000**
Campus Administrative Services						
1 **Public Common & Shared Areas**						
2 **Office of President & Board**						
* College President	1.00			**1.00**		**400,000**
* Executive Assistant to the President	1.00				**1.00**	**100,000**
3 **Campus Senior Management Team**						
* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
* VP / External Affairs	1.00			**1.00**		**150,000**
* VP / Business and Regulatory Affairs	1.00			**1.00**		**150,000**
* Administrative Support Staff	3.00		**3.00**			**150,000**
* Facilities/Capital Proj Director	2.00		**1.00**	**1.00**		**200,000**
4 **Registrar's Office & Service Center**						
* Office of the Registrar	1.00			**1.00**		**150,000**
* Registrar Staff	1.00		**1.00**			**50,000**
* Dir. Of Admissions	2.00		**1.00**	**1.00**		**200,000**
5 **Campus Personnel Office**						
* Faculty/Staff Recruitment	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Employee Benefits Coordination	1.00		**1.00**			**50,000**
6 **Campus Financial Services Ofc.**						
* Student Accounting	1.00				**1.00**	**100,000**
* General Accounting	2.00		**1.00**		**1.00**	**150,000**
* Accounts Payable	1.00		**1.00**			**50,000**
* Accounts Receivable	1.00		**1.00**			**50,000**
* Payroll	2.00		**1.00**		**1.00**	**150,000**
* Alumni Assoc./Foundation Accounting	0.00					-
* Decision Support	0.00					-
* Internal Audit	0.00					-
* Shared Administrative Support Staff	2.00		**2.00**			**100,000**
* Other ?	2.00		**2.00**			**100,000**
7 **Alumni Assoc. & Foundation**						
* Departmental Staff	0.00					-
8 **IT**						
* Dir of IT	2.00		**1.00**	**1.00**		**200,000**
* Departmental Staff	1.00				**1.00**	**100,000**
Sub Total FTE Staffing & DGSF Space =	**32.00**					**3,050,000**
Campus Student Services						
* Director of Student Services	4.00		**2.00**	**1.00**	**1.00**	**350,000**
1 **Student Orientation Center.**						
* Departmental Staff	1.00				**1.00**	**100,000**
2 **Bursar's Ofc. & Fin. Counseling**						
* Dir. Of Financial Aid	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Departmental Staff	1.00		**1.00**			**50,000**
3 **Student Housing Ofc. & Assistance**						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
4 **Student Health**						
* Departmental Staff	2.00			**1.00**	**1.00**	**250,000**
Sub Total FTE Staffing & DGSF Space =	**14.00**					**1,350,000**
TOTAL PERSONNEL COSTS	**73.00**					**6,280,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*						
	AY2	# Faculty	# Support	# Admin	#Specialists	Total
	FTE or # Data					
Leadership, Faculty & Support Staff						
3 Faculty Team						
* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)		11.00				1,320,000
* MSN (Master of Sciences Nursing) (120 ASF / FTE)		4.00				480,000
* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)		4.00				480,000
* Physical Therapist (PhD)		5.00				600,000
* Clinical Mental Health Counseling (MA)		3.00				360,000
* MSW (MS)		3.00				360,000
* BSW (BS)		5.00				600,000
* Radiological Technologist (BS)		3.00				360,000
* Medical & Clinical Lab Technologist (BS)		3.00				360,000
Subtotal Faculty FTE and ASF by Year =	41.00					**2,280,000**
4 Support Staff						
* Faculty Support Staff (100 ASF/FTE)	10.00		10.00			500,000
Subtotal Support Staff FTE & ASF by Year =						**500,000**
5 Leadership Team						
* Dean's Office	1.00			1.00		150,000
* Program Directors and Support Staff	1.00		1.00		4.00	450,000
Subtotal Leadership FTE & ASF by Year=	**53.00**	**41.00**	**11.00**	**1.00**	**4.00**	**600,000**
Leadership, Faculty & Support Staff Grand Totals						**3,380,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE	**53.00**					**3,380,000**
Campus Administrative Services						
1 Public Common & Shared Areas						
2 Office of President & Board						
* College President	1.00			**1.00**		**450,000**
* Executive Assistant to the President	1.00				**1.00**	**100,000**
3 Campus Senior Management Team						
* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
* VP / External Affairs	1.00			**1.00**		**150,000**
* VP / Business and Regulatory Affairs	1.00			**1.00**		**150,000**
* Administrative Support Staff	3.00		**3.00**			**150,000**
* Facilities/Capital Proj Director	2.00		**1.00**	**1.00**		**200,000**
4 Registrar's Office & Service Center						
* Office of the Registrar	2.00		**1.00**	**1.00**		**200,000**
* Registrar Staff	1.00		**1.00**			**50,000**
* Dir. Of Admissions	2.00		**1.00**	**1.00**		**200,000**
5 Campus Personnel Office						
* Faculty/Staff Recruitment	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Employee Benefits Coordination	1.00		**1.00**			**50,000**
6 Campus Financial Services Ofc.						
* Student Accounting	1.00				**1.00**	**100,000**
* General Accounting	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Accounts Payable	1.00		**1.00**			**50,000**
* Accounts Receivable	1.00		**1.00**			**50,000**
* Payroll	2.00		**1.00**		**1.00**	**150,000**
* Alumni Assoc./Foundation Accounting	0.00					-
* Decision Support	0.00					-
* Internal Audit	1.00				**1.00**	**100,000**
* Shared Administrative Support Staff	2.00		**2.00**			**100,000**
* Other ?	2.00		**2.00**			**100,000**
7 Alumni Assoc. & Foundation						
* Departmental Staff	1.00				**1.00**	**100,000**
8 IT						
* Dir of IT	2.00		**1.00**	**1.00**		**200,000**
* Departmental Staff	2.00		**1.00**		**1.00**	**150,000**
Sub Total FTE Staffing & DGSF Space =	**37.00**					**3,550,000**
Campus Student Services						
* Director of Student Services	6.00		**3.00**	**1.00**	**2.00**	**500,000**
1 Student Orientation Center.						
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
2 Bursar's Ofc. & Fin. Counseling						
* Dir. Of Financial Aid	4.00		**2.00**	**1.00**	**1.00**	**350,000**
* Departmental Staff	1.00		**1.00**			**50,000**
3 Student Housing Ofc. & Assistance						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
4 Student Health						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
Sub Total FTE Staffing & DGSF Space =	**20.00**					**1,700,000**
TOTAL PERSONNEL COSTS	**110.00**					**8,630,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*						
	AY3	# Faculty	# Support	# Admin	#Specialists	Total
	FTE or # Data					
Leadership, Faculty & Support Staff						
3 **Faculty Team**						
* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)		13.00				1,560,000
* MSN (Master of Sciences Nursing) (120 ASF / FTE)		4.00				480,000
* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)		6.00				720,000
* Physical Therapist (PhD)		8.00				960,000
* Clinical Mental Health Counseling (MA)		4.00				480,000
* MSW (MS)		4.00				480,000
* BSW (BS)		7.00				840,000
* Radiological Technologist (BS)		5.00				600,000
* Medical & Clinical Lab Technologist (BS)		5.00				600,000
Subtotal Faculty FTE and ASF by Year =	56.00					**2,760,000**
4 **Support Staff**						
* Faculty Support Staff (100 ASF/FTE)	14.00		14.00			700,000
Subtotal Support Staff FTE & ASF by Year =						**700,000**
5 **Leadership Team**						
* Dean's Office	1.00			1.00		150,000
* Program Directors and Support Staff	5.00		1.00		4.00	450,000
Subtotal Leadership FTE & ASF by Year=	**76.00**	**56.00**	**15.00**	**1.00**	**4.00**	**600,000**
Leadership, Faculty & Support Staff Grand Totals						**4,060,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE	**76.00**					**4,060,000**
Campus Administrative Services						
1 **Public Common & Shared Areas**						
2 **Office of President & Board**						
* College President	1.00			**1.00**		**450,000**
* Executive Assistant to the President	1.00				**1.00**	**100,000**
3 **Campus Senior Management Team**						
* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
* VP / External Affairs	1.00			**1.00**		**150,000**
* VP / Business and Regulatory Affairs	1.00			**1.00**		**150,000**
* Administrative Support Staff	3.00		**3.00**			**150,000**
* Facilities/Capital Proj Director	2.00		**1.00**	**1.00**		**200,000**
4 **Registrar's Office & Service Center**						
* Office of the Registrar	2.00		**1.00**	**1.00**		**200,000**
* Registrar Staff	2.00		**2.00**			**100,000**
* Dir. Of Admissions	2.00		**1.00**	**1.00**		**200,000**
5 **Campus Personnel Office**						
* Faculty/Staff Recruitment	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Employee Benefits Coordination	2.00		**2.00**			**100,000**
6 **Campus Financial Services Ofc.**						
* Student Accounting	2.00		**1.00**		**1.00**	**150,000**
* General Accounting	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Accounts Payable	1.00		**1.00**			**50,000**
* Accounts Receivable	1.00		**1.00**			**50,000**
* Payroll	2.00		**1.00**		**1.00**	**150,000**
* Alumni Assoc./Foundation Accounting	0.00					-
* Decision Support	1.00				**1.00**	**100,000**
* Internal Audit	1.00				**1.00**	**100,000**
* Shared Administrative Support Staff	4.00		**4.00**			**200,000**
* Other ?	4.00		**2.00**		**2.00**	**300,000**
7 **Alumni Assoc. & Foundation**						
* Departmental Staff	1.00				**1.00**	**100,000**
8 **IT**						
* Dir of IT	2.00		**1.00**	**1.00**		**200,000**
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
Sub Total FTE Staffing & DGSF Space =	**46.00**					**4,150,000**
Campus Student Services						
* Director of Student Services	6.00		**3.00**	**1.00**	**2.00**	**500,000**
1 **Student Orientation Center.**						
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
2 **Bursar's Ofc. & Fin. Counseling**						
* Dir. Of Financial Aid	4.00		**2.00**	**1.00**	**1.00**	**350,000**
* Departmental Staff	1.00		**1.00**			**50,000**
3 **Student Housing Ofc. & Assistance**						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
4 **Student Health**						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
Sub Total FTE Staffing & DGSF Space =	**20.00**					**1,700,000**
TOTAL PERSONNEL COSTS	**142.00**					**9,910,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*						
	AY4	# Faculty	# Support	# Admin	#Specialists	Total
	FTE or # Date					
Leadership, Faculty & Support Staff						
3 Faculty Team						
* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)		15.00				1,800,000
* MSN (Master of Sciences Nursing) (120 ASF / FTE)		4.00				480,000
* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)		6.00				720,000
* Physical Therapist (PhD)		9.00				1,080,000
* Clinical Mental Health Counseling (MA)		4.00				480,000
* MSW (MS)		4.00				480,000
* BSW (BS)		8.00				960,000
* Radiological Technologist (BS)		7.00				840,000
* Medical & Clinical Lab Technologist (BS)		7.00				840,000
Subtotal Faculty FTE and ASF by Year =	64.00					**3,000,000**
4 Support Staff						
* Faculty Support Staff (100 ASF/FTE)	16.00		16.00			800,000
Subtotal Support Staff FTE & ASF by Year =						**800,000**
5 Leadership Team						
* Dean's Office	1.00			1.00		150,000
* Program Directors and Support Staff	5.00		1.00		4.00	450,000
Subtotal Leadership FTE & ASF by Year=	**86.00**	**64.00**	**17.00**	**1.00**	**4.00**	**600,000**
Leadership, Faculty & Support Staff Grand Totals						**4,400,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE	**86.00**					**4,400,000**
Campus Administrative Services						
1 Public Common & Shared Areas						
2 Office of President & Board						
* College President	1.00			**1.00**		**500,000**
* Executive Assistant to the President	2.00		**1.00**		**1.00**	**150,000**
3 Campus Senior Management Team						
* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
* VP / External Affairs	1.00			**1.00**		**150,000**
* VP / Business and Regulatory Affairs	1.00			**1.00**		**150,000**
* Administrative Support Staff	3.00		**3.00**			**150,000**
* Facilities/Capital Proj Director	2.00		**1.00**	**1.00**		**200,000**
4 Registrar's Office & Service Center						
* Office of the Registrar	2.00		**1.00**	**1.00**		**200,000**
* Registrar Staff	2.00		**2.00**			**100,000**
* Dir. Of Admissions	2.00		**1.00**	**1.00**		**200,000**
5 Campus Personnel Office						
* Faculty/Staff Recruitment	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Employee Benefits Coordination	2.00		**2.00**			**100,000**
6 Campus Financial Services Ofc.						
* Student Accounting	2.00		**1.00**		**1.00**	**150,000**
* General Accounting	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Accounts Payable	1.00		**1.00**			**50,000**
* Accounts Receivable	1.00		**1.00**			**50,000**
* Payroll	2.00		**1.00**		**1.00**	**150,000**
* Alumni Assoc./Foundation Accounting	1.00				**1.00**	**100,000**
* Decision Support	1.00				**1.00**	**100,000**
* Internal Audit	1.00				**1.00**	**100,000**
* Shared Administrative Support Staff	4.00		**4.00**			**200,000**
* Other ?	4.00		**2.00**		**2.00**	**300,000**
7 Alumni Assoc. & Foundation						
* Departmental Staff	1.00				**1.00**	**100,000**
8 IT						
* Dir of IT	2.00		**1.00**	**1.00**		**200,000**
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
Sub Total FTE Staffing & DGSF Space =	**48.00**					**4,350,000**
Campus Student Services						
* Director of Student Services	6.00		**3.00**	**1.00**	**2.00**	**500,000**
1 Student Orientation Center.						
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
2 Bursar's Ofc. & Fin. Counseling						
* Dir. Of Financial Aid	4.00		**2.00**	**1.00**	**1.00**	**350,000**
* Departmental Staff	1.00		**1.00**			**50,000**
3 Student Housing Ofc. & Assistance						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
4 Student Health						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
Sub Total FTE Staffing & DGSF Space =	**20.00**					**1,700,000**
TOTAL PERSONNEL COSTS	**154.00**					**10,450,000**

Appendix B: Operating Budget Supporting Documents

Allied Health College *Roseburg, Oregon Proposal*						
	AY5	# Faculty	# Support	# Admin	#Specialists	Total
	FTE or # Date					
Leadership, Faculty & Support Staff						
3 Faculty Team						
* BSN (Bachelor of Sciences Nursing) (120 ASF / FTE)		16.00				1,920,000
* MSN (Master of Sciences Nursing) (120 ASF / FTE)		4.00				480,000
* DNP (Nurse Practitioner Doctorate) (120 ASF / FTE)		6.00				720,000
* Physical Therapist (PhD)		9.00				1,080,000
* Clinical Mental Health Counseling (MA)		4.00				480,000
* MSW (MS)		4.00				480,000
* BSW (BS)		8.00				960,000
* Radiological Technologist (BS)		7.00				840,000
* Medical & Clinical Lab Technologist (BS)		7.00				840,000
Subtotal Faculty FTE and ASF by Year =	65.00					**3,120,000**
4 Support Staff						
* Faculty Support Staff (100 ASF/FTE)	16.00		16.00			800,000
Subtotal Support Staff FTE & ASF by Year =						**800,000**
5 Leadership Team						
* Dean's Office	1.00			1.00		150,000
* Program Directors and Support Staff	5.00		1.00		4.00	450,000
Subtotal Leadership FTE & ASF by Year=	**87.00**	**65.00**	**17.00**	**1.00**	**4.00**	**600,000**
Leadership, Faculty & Support Staff Grand Totals						**4,520,000**
TOTAL LEADERSHIP, FACULTY & SUPPORT FTE	**87.00**					**4,520,000**
Campus Administrative Services						
1 Public Common & Shared Areas						
2 Office of President & Board						
* College President	1.00			**1.00**		**500,000**
* Executive Assistant to the President	2.00		**1.00**		**1.00**	**150,000**
3 Campus Senior Management Team						
* VP Office / Academic Affairs and Provost	1.00			**1.00**		**150,000**
* VP / External Affairs	1.00			**1.00**		**150,000**
* VP / Business and Regulatory Affairs	1.00			**1.00**		**150,000**
* Administrative Support Staff	3.00		**3.00**			**150,000**
* Facilities/Capital Proj Director	1.00			**1.00**		**150,000**
4 Registrar's Office & Service Center						
* Office of the Registrar	2.00		**1.00**	**1.00**		**200,000**
* Registrar Staff	2.00		**2.00**			**100,000**
* Dir. Of Admissions	2.00		**1.00**	**1.00**		**200,000**
5 Campus Personnel Office						
* Faculty/Staff Recruitment	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Employee Benefits Coordination	2.00		**2.00**			**100,000**
6 Campus Financial Services Ofc.						
* Student Accounting	2.00		**1.00**		**1.00**	**150,000**
* General Accounting	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Accounts Payable	1.00		**1.00**			**50,000**
* Accounts Receivable	1.00		**1.00**			**50,000**
* Payroll	2.00		**1.00**		**1.00**	**150,000**
* Alumni Assoc./Foundation Accounting	1.00				**1.00**	**100,000**
* Decision Support	1.00				**1.00**	**100,000**
* Internal Audit	1.00				**1.00**	**100,000**
* Shared Administrative Support Staff	4.00		**4.00**			**200,000**
* Other ?	4.00		**2.00**		**2.00**	**300,000**
7 Alumni Assoc. & Foundation						
* Departmental Staff	1.00				**1.00**	**100,000**
8 IT						
* Dir of IT	2.00		**1.00**	**1.00**		**200,000**
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
Sub Total FTE Staffing & DGSF Space =	**47.00**					**4,300,000**
Campus Student Services						
* Director of Student Services	6.00		**3.00**	**1.00**	**2.00**	**500,000**
1 Student Orientation Center.						
* Departmental Staff	3.00		**2.00**		**1.00**	**200,000**
2 Bursar's Ofc. & Fin. Counseling						
* Dir. Of Financial Aid	3.00		**1.00**	**1.00**	**1.00**	**300,000**
* Departmental Staff	4.00		**2.00**		**2.00**	**300,000**
3 Student Housing Ofc. & Assistance						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
4 Student Health						
* Departmental Staff	3.00		**1.00**	**1.00**	**1.00**	**300,000**
Sub Total FTE Staffing & DGSF Space =	**22.00**					**1,900,000**
TOTAL PERSONNEL COSTS	**156.00**					**10,720,000**

DEPARTMENT OF VETERANS AFFAIRS
ROSEBURG HEALTHCARE SYSTEM
913 NW Garden Valley Blvd.
Roseburg, Oregon 97471-6513

In Reply Refer To: 653/00

Ms. Laurie Skillman
Senior Policy Advisor
700 Summer Street
NE Salem, OR 97301-1285

Sent via – mail: laurie.skillman@state.or.us

The purpose of this document is to outline the benefit of the Allied Health College proposal to the VA Roseburg Healthcare System and to offer support as this moves forward. As a major employer of medical personnel, the VA's interest is in having a pipeline of future employees who can care for the Nation's heroes. In addition, I hope to provide additional information about VA programs in which our returning Veterans utilizing college benefits as well as current VA staff seeking to upgrade their clinical skills could benefit from a local allied health medical college. As you complete your analysis of the need for this proposal, I wanted to share additional information that you may find useful.

The Veterans Administration has the statutory mission to provide health professions education, resulting in beneficial outcomes for Veterans, trainees, VA, and the nation. Excellent health professions training results in the development of future health professionals who are well prepared to care for Veterans, enhances VA's own recruitment and retention of highly qualified staff, and creates an environment of teaching, learning and inquiry that fosters the delivery of high quality, evidence-based care.

Academic partnerships are designed to provide clinical training opportunities for health care trainees. Throughout the decades since its inception, these partnerships continue to improve health care for Veterans, enhance the nationwide supply of health professionals, assist in recruitment and retention of quality staff at VA health care facilities, and create patient care environments enhanced by clinical research and scholarship.

In partnership with academic affiliates, VA serves as the largest provider of advanced clinical training for medical, nursing, and associated health professions in the nation. VA offers clinical training to associated health trainees in a wide range of professions, emphasizing clinical training in areas that specifically relate to the needs of Veterans. Some advanced associated health trainees receive a stipend; however, approximately 85 percent of associated health professions trainees participate on a without compensation (WOC) basis.

Education of health professionals is a core VA mission, and VA's commitment to quality training is addressed in its strategic plan. As a result, VA is dedicated to the training of associated health trainees, to recognizing the professional commitment of practitioners who provide health professions training, and to administering associated health clinical training programs.

The VA strongly promotes a policy of cooperation and collaboration with educational institutions, especially those supporting research. This policy is based on the premise that the best health care is provided in an environment in which the spirit of inquiry and investigation exists in combination with teaching and learning.

VHA / VBA / DOD Support of Education

The federal government provides substantial assistance to Veterans and current employees in pursuit of furthering education in support of the medical profession.

The Post-9/11 GI Bill® is an education benefit program for those who served on active duty after September 10, 2001. The program offers benefits to Service members and Veterans. It also enables Service members (officer or enlisted, Active Duty or Selected Reserve) to transfer benefits to a spouse or child. Post-9/11 GI Bill education benefits Veterans with three years of more of eligible service come out of the military with 36 months of Post 9/11 GI Bill entitlement. It pays tuition and fees up to the resident rate for 36 months at public schools; if attending a private or foreign school, it can pay up to $21,085.89 per year

The VA can help cover the cost of furthering a Veteran's education and skills through benefit programs that may pay tuition, housing, training, and other costs. Service members and Veterans are eligible for many VA-approved education benefits. The VA website offers a wealth of information and resources for potential and active students and this should be part of the proposal since many of the students will be Veterans.

In addition, the VA pays for employees who need additional instruction as part of continuing education. Many of our physicians, nursing leaders and senior technicians also teach after hours to remain involved in educating the next generation of clinical providers. Some of our staff may be interested in part time, after hours opportunities as instructors.

We have a medical education service at the Roseburg VA which is responsible for all health professions training. We have several staff that provide oversight of all trainees, including graduate medical; management of all clinical training program affiliations; education activities for graduate training programs. This is an important activity, especially considering the VA mission in training the nation's doctors through various residency programs. We also have dedicated SimLearn space and the possibility of rotations for some students.

Prospective VA Jobs – Roseburg, VISN 20 and Rural areas of VISN 20

Please see below a summary of positions the Roseburg VA will recruit for because of current or pending vacancies. In addition, I've identified the total number of vacancies across the VA Northwest Health Network (VISN 20) which includes the states of Alaska, Washington, Oregon, Idaho, and one county each in California and Montana. There are approximately 1.1 million Veterans living in the Pacific Northwest and Alaska. Our medical centers currently operate 1,601 inpatient beds for acute medical/surgical, mental health, nursing home and rehabilitative care. VISN 20 facilities recorded 3.5 million patient visits last year.

MEDICAL POSITION - VACANCIES

Position	Roseburg	VISN 20 Totals	Rural Areas of VISN 20 ONLY
Assistant Nurse Manager	3	28	13
Bio Med Specialist	2	18	7
CAC- Education	1	9	4
CLC - Nurse Manager	2	17	8
Clinical Pharmacist	6	55	22
Connected Care Nurse Mgr.	1	8	4
Dental Assistant	8	74	30
Diagnostic Rad Tech	4	38	15
Dietitian	2	18	7
Dietitian/Educator	1	8	4
Ed. Nurse Mgr	1	9	4
Family Nurse Practitioner	2	19	8
Infectious Preventionist	1	8	4
Inpatient Pharm Tech	2	18	7
Lead Medical Technologist	1	8	3
LPN	17	158	64
Medical Admin Specialist	1	10	4
Medical Records Admin	1	9	4
Medical Records Tech	2	18	7
Medical Technologist	15	139	56
MIT (Diagnostic Ultrasound)	1	8	4
MRT Coder	4	38	15
Nuclear Med Technologist	3	28	12
Nurse Anesthetist	2	18	7
Nurse Manager	9	81	33
Nurse Practitioner	9	84	35
Nursing Assistant	19	176	71
Occupational Therapist	2	18	8
Physical Therapist	3	27	11
Recreation Therapist	2	18	8
Respiratory Therapist	3	29	11

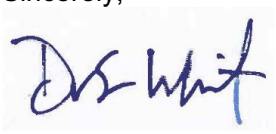
Position	Roseburg	VISN 20 Totals	Rural Areas of VISN 20 ONLY
Safety & Occup Hlth Spec	1	9	4
Soc Sci Tech - MH	1	7	3
Social Services Assistant	2	17	7
Social Worker	31	286	115
Supervisory Vocational Rehab Specialist	1	7	3
Totals	**253**	**2323**	**945**

Access to a full and comprehensive spectrum of quality physical and mental health care services is a central challenge facing many rural communities like Roseburg. Veteran access to primary, specialty and mental health care can be increased if we could establish and maintain a professional work force of health care workers. Today, we have many allied health positions that are hard to fill, including physical and occupational therapists, nurses, medical and diagnostic technologists.

The Roseburg VA Healthcare system wishes to be a partner with the community to leverage local infrastructure to provide health care to rural veterans. An allied health medical college that would provide trained professionals to help treat our veterans and provide opportunity for our current employees to sharpen their skills for career advancement.

I am happy to discuss this further and provided additional information to support this initiative through the Oregon legislature.

Sincerely,



David L. Whitmer, FACHE
Interim Director
Roseburg VA Health Care System

CHI Mercy Health
Imagine better health.®

2700 Stewart Parkway
Roseburg, OR 97471

chimercyhealth.com

Oregonians for Rural Health
522 SE Washington Ave., Ste. 107
Roseburg, OR 97470

September 12, 2018

Dear Oregonians for Rural Health:

The demand for healthcare in our communities has steadily grown over the last decade. As healthcare providers here in Southern Oregon, we have continued to expand services to keep up with the needs of our communities. Yet, workforce shortages in many allied and mental health fields make expanding, let alone maintaining services increasingly difficult despite aggressive and often costly recruiting efforts.

Building a regional allied and mental health college in Southern Oregon will provide a reliable pipeline of skilled healthcare professionals to ensure local access to care. Those who train in rural areas are more likely to stay and work in rural areas than those trained in urban areas.

CHI Mercy Health fully supports the development of the college and is committed to providing the following support and resources to advance the college initiative forward:

- Input and counsel on program and training needs
- Funding student scholarships tied to the reservation of student seats each academic year
- Recruitment of existing staff to pursue and secure advanced degrees
- Support of qualified staff to serve as teaching faculty at the college
- Facilitating clinical rotations, in addition to intern/externships, at CHI Mercy Health
- Job placement of college graduates

Healthcare is vital to our local communities. Innovative solutions are needed to address growing allied and mental health workforce shortages to ensure our communities have reliable access of local care.

Sincerely,

Kelly C. Morgan
President & CEO
CHI Mercy Health

Bay Area Hospital

September 6, 2018

CHI Mercy Health
Kelly Morgan, CEO
2700 Stewart Parkway
Roseburg, OR 97470

Dear Kelly:

Thank you for your work to reduce workforce shortages in rural Oregon. Access to care is a key component of Coos County's Community Health Improvement Plan as well as Bay Area Hospital's organizational strategic plan. Annually, our organization is spending millions of dollars supplemental labor from outside our area to fill vacant healthcare positions at our organization. Building a regional allied and mental health college in Southern Oregon will provide a reliable pipeline of skilled healthcare professionals to ensure local access to care.

We completely support the development of a college that will focus exclusively on degree programs in high demand health care fields. We particularly value the plan to complement and collaborate with existing two-year community colleges and other academic institutions in the state.

Bay Area Hospital is committed to being an active partner in this valuable project. We commit to providing the following support and resources to advance the college initiative forward:

- Input and counsel on program and training needs
- Funding student scholarships tied to the reservation of student seats each academic year
- Recruitment of existing staff to pursue and secure advanced degrees
- Support of qualified staff to serve as teaching faculty at the college
- Facilitating clinical rotations in our facility
- Job placement of college graduates

Quality healthcare is vital to our community. Innovative solutions like development of a regional allied and mental health college in Southern Oregon will provide a reliable pipeline of skilled healthcare professionals to ensure access to care for the communities that we serve.

Sincerely,

Paul Janke
President/CEO
541-269-8480
Paul.janke@bayareahospital.org

Oregonians for
Rural Health
OregonRuralHealth.com

This evaluation study examined three different components of the nursing and allied health workforce: current supply, future need, and educational opportunities and capacity. Understanding these three factors is crucial to ensuring an adequate supply of well-trained healthcare professionals are present in each Oregon community.

Regarding registered nurses, the Rural Medical Training Workgroup requested this analysis focus on baccalaureate-level education (BSN) for nurses as opposed to associate degree in nursing (ADN) education. Data from the OED does not report nursing workforce by level of education. Therefore, supply and need information do not explore the differences in education level for nurses. However, registered nurses are qualified to work after passing the NCLEX test, whether they are conferred an ADN or a BSN. Therefore, aggregated data from ADN programs are included in the educational opportunity and capacity section of this report. These data were included to provide a comprehensive picture of nursing educational capacity from all of the nursing programs in Oregon.

Current Supply

To understand the future need for healthcare workers, it is necessary to first identify the current workforce across the state. Data from the 2017 Oregon Employment Projections report prepared by the OED was used to illustrate the current supply of nursing and allied health workers. Table 2 illustrates the number of healthcare workers by occupation in Oregon during 2017.

Table 2 – Statewide Supply of Healthcare Workers in 2017

Occupation	Number of Workers
Registered Nurse	37,353
Nurse Practitioner	1,762
Physical Therapist	3,052
Radiologic Technologists	2,254
Med/Clinical Laboratory Technologists	2,281
Mental Health Counselors	3,158
Mental Health/Substance Abuse Social Workers	2,304

The number of workers in each occupation across all OED regions were tabulated and normalized by dividing each count by the population of the region. This allows a direct comparison of the supply of each occupation across all OED regions. The use of population to healthcare provider ratios is commonly used by researchers to assess the relative density of the healthcare workforce as compared to the population it serves. The full supply table is available in Appendix A. The results, shown below in Table 3, highlight regions where the supply for each occupation shows at least a 20 percent deficit from the statewide supply.

Table 3 – Occupation Deficits by OED Region

Occupation	OED Regions with 20% Deficit
Registered Nurse	Eastern Oregon, Mid-Valley, Northwest Oregon, Southwestern Oregon
Nurse Practitioner	East Cascades, Mid-Valley
Physical Therapy	Mid-Valley
Radiologic Tech	Mid-Valley
Med Lab Tech	Eastern Oregon, Mid-Valley, Northwest Oregon, Southwestern Oregon
MH Counselors	Mid-Valley, Northwest Oregon, Rogue Valley
MHSA Social Worker	Eastern Oregon, Northwest Oregon

These data clearly show the current supply of healthcare occupations is not uniformly distributed across the state. For example, the Mid-Valley OED Region shows a healthcare workforce deficit for all occupations except MHSA Social Workers. While these data do not indicate whether a workforce shortage exists, it does show where fewer per capita healthcare workers are located. In this case, these data show some regions tend to have fewer healthcare workers, and in many cases, have fewer workers across multiple occupations.

The use of population per worker ratios tend to show where there are fewer healthcare workers. However, this ratio alone does not shed light on the nature of the deficit as many factors can influence the ratio, such as the presence of hospitals or other healthcare facilities that employ large numbers of healthcare workers.

Future Need

Two data sources were used to assess the future need of the nursing and allied healthcare workforce. These are the 2027 Oregon Employment Projections report and the 2014 Jobs Opening Survey, both prepared by the OED. The Employment Projections report shows the projected number of workers for each occupation by 2027, while the Job Openings Survey estimates the annual number of job openings for each occupation. These reports also project the number of workers needed due to growth in the occupation and the number due to attrition. For the purposes of this evaluation, most of the emphasis in this section of the evaluation will focus on the job openings survey. It is important here to clarify the distinction between need and demand. For purposes of this study, demand is used to describe the demand by employers for workers, while need is used to describe the societal need for an occupation to be present in the community.

Table 4 – Estimated and Projected Employment and Job Openings by Occupation (2017 – 2027)

Program	2017 Employment	2027 Employment	Total Openings	Openings Due to Growth	Openings Due to Attrition
Registered Nurse	37,353	43,600	26,635	6,247	20,388
Nurse Practitioner	1,762	2,376	1,608	614	994
Physical Therapist	3,052	3,885	2,222	833	1,389
Radiologic Tech.	2,254	2,551	1,517	297	1,220
Med/Clinical Lab Tech	2,281	2,521	1,693	240	1,453
MH Counselor	3,158	3,715	4,068	557	3,511
MHSA Social Worker	2,304	2,684	2,861	380	2,481

The Job Openings Survey categorize each occupation based on the entry level of education needed for the occupation, as defined by the OED. These categories for each of the occupations examined in this report can be seen in Table 5.

Table 5 – Occupations by Entry Level Education Category as defined by OED

Education Category	Occupations
Graduate Degree	Nurse Practitioner, Physical Therapist, Mental Health Counselor, MHSA Social Worker
Bachelor's Degree	Registered Nurse, Med/Clinical Laboratory Technologist
Associate Degree	Radiologic Technologist

Note: Radiologic Technologist is a baccalaureate degree; this table simply reflects OED's categorization of this occupation.

Within each entry-level education category, the number of job openings were ranked against all occupations, including non-healthcare related occupations, so that a qualitative assessment can be made for each occupation within and across regions. The results of this analysis show registered nurses, physical therapists, and radiologic technologists consistently rank very high in the relative number of annual job openings. Additionally, medical clinical laboratory technologist openings ranked consistently low across all regions. Table 6 shows the number of regions where an occupation ranked in the top 10 for job openings. The full list of job openings and ranking can be found in Appendix B.

Table 6 – Number of Regions* with a Top 10 Ranking

Occupation	Number of Regions
Register Nurse	8
Nurse Practitioner	3
Physical Therapist	8
Radiologic Technologist	7
Med/Clinical Laboratory Technologist	0
Mental Health Counselor	4
MHSA Social Worker	3

*There are eight OED regions in the state.

Table 7 shows the median job opening rankings across all nine OED regions. As can be seen, many of the occupations included in this study have a median ranking that falls within the top 10 for all job openings. Taken together, these two lines of evidence strongly indicate that a high level of need exists for these occupations.

Table 7 – Median Job Opening Ranking

Occupation	Median Ranking
Register Nurse	1
Nurse Practitioner	11
Physical Therapist	4
Radiologic Technologist	7
Med/Clinical Laboratory Technologist	35
Mental Health Counselor	11
MHSA Social Worker	9

One surprising finding from this study is the high level of need for registered nurses despite an unprecedented increase in the number of nurses licensed in the state. In 2016, more than 51,000 registered nurses were licensed in Oregon, and it appears we are in a period of rapid growth of the nursing workforce. Between 2014 and 2016, the number of licensed registered nurses grew by a little more than nine percent, which is almost three times faster than population growth. In addition, there has been a rapid influx of out-of-state nurses applying for an Oregon nursing license. Beginning in 2013, most registered nurses applying for an Oregon nursing license have been from out-of-state. Almost 70 percent of all new licenses issued in 2015 were to nurses from outside Oregon. While not all nurses licensed in Oregon physically work in the state, the current rapid growth in the nursing field is somewhat counterintuitive to the reported need for nurses from employers.

Educational Opportunities and Capacity

The educational pipeline is considered to be the key element in ensuring an adequate, qualified workforce is present in the state or local community. If educational opportunities are limited, either by number of schools or limited enrollment, then it is very difficult to find enough workers to meet the need for those occupations. For this evaluation, three metrics were used to determine

an adequate educational pipeline for each occupation. The first metric used in the number of schools or programs within the state to meet the projected need. The second metric is the number of graduates from each program within the occupation, and third, the acceptance rate, which is the percent of applicants admitted into the school or program. Taken together and combined with other measures, such as the number of annual job openings, it is possible to assess whether adequate capacity exists in the current educational system to meet the need for allied healthcare occupations. The data used to illustrate educational capacity for all schools included in this evaluation can be found in Appendix C.

Table 8 – Number of Schools, Admission, and Applicants (2016-2017 Academic Year)

Program	Number of Schools	Number Admitted	Number of Applicants	Acceptance Rates
Registered Nurse*	23	1,740	7,876	22%
Nurse Practitioner	2	29	81	36%
Physical Therapist	2	94	1,645	6%
Radiologic Tech.	1	48	100	48%
Med/Clinical Lab Tech	1	50	82	61%
MH Counselor	11	208	767	25%
MHSA Social Work	4	343	810	35%

*Note: Data from the 17 associate degree nursing programs in Oregon are included.

As can be seen in Table 8, applicants for many of the occupations being investigated have few choices of where to study. Four of the seven fields of study have only one or two schools available in Oregon and many are extremely competitive for admission. While this provides one way to look at the adequacy of the education system, it does not provide a gauge as to whether the schools are graduating enough potential healthcare workers to meet the need for those occupations. By examining the relationship between the number of graduate and the annual job openings, it can be determined if the current system is adequate to meet future need.

Table 9 clearly shows that for most occupations, there are not enough graduates each year to fill all projected job openings. Based on these statewide figures, it is apparent that Oregon's education system is not matriculating enough graduates to meet projected need alone. This would indicate that many jobs will not be filled, and employers and the community must rely on other means to meet their need, either by migration from other states or the use of non-permanent workers.

Table 9 – Number of Annual Graduates and Job Openings

Occupation	Annual Graduates (2016-2017)	OED Estimated Annual Job Openings
Registered Nurse*	1,570	2,664
Nurse Practitioner	89	161
Physical Therapist	92	222
Radiologic Technologist	45	152
Med/Clinical Laboratory Tech	47	169
MH Counselor	166	407
MHSA Social Worker	313	286

*Note: Data from the 17 associate degree nursing programs in Oregon are included.

However, this does not tell the whole story, as these data do not address the distribution of schools across the state. As can be seen in Table 10, most of the schools examined as part of this evaluation are in the Portland metro area, which can limit the likelihood of graduates moving to other parts of the state for employment. The lack of local educational capacity in many regions of the state may be a factor in the inability to find and retain allied healthcare workers.

Table 10 – Number of Schools by Location

Program	Number of Schools	Number in Portland Metro	Number in Willamette Valley	Number in Rest of State
Registered Nurse (BSN)	6	6	0	0
*OHSU		1	1	3
Nurse Practitioner	2	2	0	0
Physical Therapist	2	2	0	0
Radiologic Tech.	1	0	0	1
Med/Clinical Lab Tech	1	1	0	0
MH Counselor	11	6	4	1
MHSA Social Worker	4	3	1	0

*Note: Only BSN program schools are included. OHSU has four satellite campuses; Ashland, Klamath Falls, La Grande, and Monmouth, plus the main campus in Portland. OHSU enrollment figures are aggregated across all campuses. (see Table 8)

Summary of Findings and Conclusions

The results of this analysis clearly show the current supply of healthcare workers is inadequate to provide critical access to healthcare in many of regions across Oregon. While these data do not directly address whether a statewide shortage of healthcare workers exist, it does point to a mal-distribution of workers within the state. That is, the current supply of healthcare professionals is not uniformly spread across the state, and many regions show a deficit of qualified workers.

Projections of future industry growth and current job openings strongly suggest there is a need for more healthcare workers. For each occupation examined, the OED projects continued job growth, and reports healthcare as one of the fastest growing industries. Additionally, most of the occupations included in this study have relatively more job openings. When the number of job openings is directly compared with openings from all other occupations, healthcare ranked high in most regions. The need for certain healthcare professionals is most acute for registered nurses, physical therapists, and radiologic technologists. Thus, these two lines of evidence suggest a need exists for more healthcare workers, but more importantly, that the level of need varies across regions and across occupations. These findings should also caution policy makers that rapid growth in the number of licensed healthcare workers, such as that currently seen with registered nurses, does not preclude the need for even more healthcare professions across Oregon

Ample educational opportunities are critical to ensuring an adequate supply of qualified healthcare workers. However, the data presented in this study indicate an opportunity to gain the required education to become a healthcare professional is not available to all Oregon residents. Few schools provide the necessary education for most of the studied healthcare occupations, and consequently, admission to these schools is very competitive. These data also show almost all programs examined are located within urban centers of the state. For example, of the two schools in Oregon that train physical therapists, both have acceptance rates of less than 10 percent and both schools are located with the Portland Metro area.

Lastly, but maybe most importantly, the schools are simply not graduating enough qualified healthcare workers to meet current and projected need. Based on the current supply, projected need, and a limited educational pipeline, Oregon's current educational capacity alone will not meet the need for healthcare workers regionally or across the state. Unless capacity can be increased, employers will need to rely on sources outside of the state, such as travelers or using other recruitment efforts, to fill the gap. The inability to meet this demonstrated need will affect everyone in the state seeking healthcare, but will likely have a larger impact on those who live in rural areas of Oregon.

Appendix A
Estimated and Projected Employment by Occupation and Oregon Employment Department Region, 2017-2027

State of Oregon

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	37,353	43,600	16.7%	6,247	20,388	26,635
Nurse Practitioner	1,762	2,376	34.9%	614	994	1,608
Physical Therapist	3,052	3,885	27.3%	833	1,389	2,222
Radiologic Technologist	2,254	2,551	13.2%	297	1,220	1,517
Medical Clinical Laboratory Technologist	2,281	2,521	10.5%	240	1,453	1,693
Mental Health Counselors (LPC)	3,158	3,715	17.6%	557	3,511	4,068
MHSA Social Workers	2,304	2,684	16.5%	380	2,481	2,861

East Cascades OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	nc	nc	nc	nc	nc	nc
Nurse Practitioner	102	134	31.4%	32	56	88
Physical Therapist	nc	nc	nc	nc	nc	nc
Radiologic Technologist	193	216	11.9%	23	103	126
Medical Clinical Laboratory Technologist	nc	nc	nc	nc	nc	nc
Mental Health Counselors (LPC)	nc	nc	nc	nc	nc	nc
MHSA Social Workers	211	237	12.3%	26	222	248

Eastern Oregon OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	1,122	1,279	14.0%	157	605	762
Nurse Practitioner	70	90	28.6%	20	39	59
Physical Therapist	147	176	19.7%	29	66	95
Radiologic Technologist	100	107	7.0%	7	52	59
Medical Clinical Laboratory Technologist	67	72	7.5%	5	44	49
Mental Health Counselors (LPC)	177	211	19.2%	34	198	232
MHSA Social Workers	36	38	5.6%	2	37	39

Lane OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	2,873	3,264	13.6%	391	1,546	1,937
Nurse Practitioner	136	184	35.3%	48	77	125
Physical Therapist	317	387	22.1%	70	141	211
Radiologic Technologist	206	235	14.1%	29	112	141
Medical Clinical Laboratory Technologist	176	186	5.7%	10	110	120
Mental Health Counselors (LPC)	270	333	23.3%	63	308	371
MHSA Social Workers	243	276	13.6%	33	258	291

Mid-Valley OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	4,308	5,167	19.9%	859	2,386	3,245
Nurse Practitioner	151	204	35.1%	53	85	138
Physical Therapist	398	513	28.9%	115	183	298
Radiologic Technologist	263	299	13.7%	36	143	179
Medical Clinical Laboratory Technologist	191	214	12.0%	23	122	145
Mental Health Counselors (LPC)	177	198	11.9%	21	192	213
MHSA Social Workers	568	637	12.2%	69	600	669

Appendix A
Estimated and Projected Employment by Occupation and Oregon Employment Department Region, 2017-2027

Northwest Oregon OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	1,594	1,762	11.8%	188	850	1,038
Nurse Practitioner	124	148	19.4%	24	65	89
Physical Therapist	178	207	16.3%	29	77	106
Radiologic Technologist	147	157	6.8%	10	77	87
Medical Clinical Laboratory Technologist	109	116	6.4%	7	68	75
Mental Health Counselors (LPC)	52	56	7.7%	4	55	59
MHSA Social Workers	81	94	16.1%	13	87	100

Portland Tri-County OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	20,104	24,233	20.5%	4,129	11,166	15,295
Nurse Practitioner	889	1,191	34.0%	302	500	802
Physical Therapist	1,242	1,609	29.6%	367	572	939
Radiologic Technologist	997	1,140	14.3%	143	542	685
Medical Clinical Laboratory Technologist	1,271	1,430	12.5%	159	818	977
Mental Health Counselors (LPC)	2,118	2,474	16.8%	356	2,346	2,702
MHSA Social Workers	911	1,100	20.8%	189	1,000	1,189

Rogue Valley OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	2,534	2,943	16.1%	409	1,379	1,788
Nurse Practitioner	147	207	40.8%	60	85	145
Physical Therapist	231	285	23.4%	54	104	158
Radiologic Technologist	185	212	14.6%	27	100	127
Medical Clinical Laboratory Technologist	149	167	12.1%	18	96	114
Mental Health Counselors (LPC)	149	162	8.7%	13	159	172
MHSA Social Workers	nc	nc	nc	nc	nc	nc

Southwestern Oregon OED Region

Occupation	2017 Employment	2027 Employment	Percent Change	Growth Openings	Replacement Openings	Total Openings
Registered Nurse	1,497	1,662	11.0%	165	795	960
Nurse Practitioner	94	124	31.9%	30	52	82
Physical Therapist	78	87	11.5%	9	33	42
Radiologic Technologist	112	121	8.0%	9	59	68
Medical Clinical Laboratory Technologist	83	87	4.8%	4	52	56
Mental Health Counselors (LPC)	135	140	3.7%	5	141	146
MHSA Social Workers	128	135	5.5%	7	131	138

Note: "nc" means that estimate or projection and associated metrics could not be calculated.

Source: Oregon Employment Department, Oregon Occupational Projections, 2017-2027.

Prepared by: Oregon Center for Nursing, August 2018

Appendix A
Estimated and Projected Employment by Occupation, including Population Ratios, 2017-2027

Registered Nurse

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	37,353	110	100%	43,600	106	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	1,122	170	155%	1,279	160	151%
Lane OED Region	2,873	128	117%	3,264	123	116%
Mid-Valley OED Region	4,308	152	139%	5,167	147	139%
Northwest Oregon OED Region	1,594	160	145%	1,762	156	148%
Portland Tri-County OED Region	20,104	88	81%	24,233	83	79%
Rogue Valley OED Region	2,534	119	109%	2,943	117	110%
Southwestern Oregon OED Region	1,497	133	121%	1,662	128	121%

Nurse Practitioner

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	1,762	2,327	100%	2,376	1,942	100%
East Cascades OED Region	102	3,426	147%	134	2,956	152%
Eastern Oregon OED Region	70	2,721	117%	90	2,278	117%
Lane OED Region	136	2,707	116%	184	2,179	112%
Mid-Valley OED Region	151	4,345	187%	204	3,716	191%
Northwest Oregon OED Region	124	2,051	88%	148	1,861	96%
Portland Tri-County OED Region	889	2,001	86%	1,191	1,699	87%
Rogue Valley OED Region	147	2,059	89%	207	1,657	85%
Southwestern Oregon OED Region	94	2,117	91%	124	1,715	88%

Physical Therapist

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	3,052	1,343	100%	3,885	1,188	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	147	1,296	96%	176	1,165	98%
Lane OED Region	317	1,161	86%	387	1,036	87%
Mid-Valley OED Region	398	1,648	123%	513	1,478	124%
Northwest Oregon OED Region	178	1,429	106%	207	1,331	112%
Portland Tri-County OED Region	1,242	1,432	107%	1,609	1,257	106%
Rogue Valley OED Region	231	1,310	98%	285	1,204	101%
Southwestern Oregon OED Region	78	2,551	190%	87	2,445	206%

Radiologic Technologist

Geographic Region	2017 Employment	2017 Population Ratio	2017 Reg / State Deviation	2027 Employment	2027 Population Ratio	2027 Reg / State Deviation
State of Oregon	2,254	1,819	100%	2,551	1,809	100%
East Cascades OED Region	193	1,811	100%	216	1,834	101%
Eastern Oregon OED Region	100	1,904	105%	107	1,916	106%
Lane OED Region	206	1,787	98%	235	1,706	94%
Mid-Valley OED Region	263	2,495	137%	299	2,535	140%
Northwest Oregon OED Region	147	1,730	95%	157	1,754	97%
Portland Tri-County OED Region	997	1,784	98%	1,140	1,775	98%
Rogue Valley OED Region	185	1,636	90%	212	1,618	89%
Southwestern Oregon OED Region	112	1,777	98%	121	1,758	97%

Appendix A
Estimated and Projected Employment by Occupation, including Population Ratios, 2017-2027

Medical Clinical Laboratory Tech.	2017			2027		
Geographic Region	Employment	Population Ratio	Reg / State Deviation	Employment	Population Ratio	Reg / State Deviation
State of Oregon	2,281	1,797	100%	2,521	1,831	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	67	2,842	158%	72	2,847	156%
Lane OED Region	176	2,091	116%	186	2,156	118%
Mid-Valley OED Region	191	3,435	191%	214	3,542	193%
Northwest Oregon OED Region	109	2,333	130%	116	2,374	130%
Portland Tri-County OED Region	1,271	1,400	78%	1,430	1,415	77%
Rogue Valley OED Region	149	2,032	113%	167	2,054	112%
Southwestern Oregon OED Region	83	2,397	133%	87	2,445	134%

Mental Health Counselor	2017			2027		
Geographic Region	Employment	Population Ratio	Reg / State Deviation	Employment	Population Ratio	Reg / State Deviation
State of Oregon	3,158	1,298	100%	3,715	1,242	100%
East Cascades OED Region	nc	nc	nc	nc	nc	nc
Eastern Oregon OED Region	177	1,076	83%	211	972	78%
Lane OED Region	270	1,363	105%	333	1,204	97%
Mid-Valley OED Region	177	3,707	286%	198	3,828	308%
Northwest Oregon OED Region	52	4,891	377%	56	4,918	396%
Portland Tri-County OED Region	2,118	840	65%	2,474	818	66%
Rogue Valley OED Region	149	2,032	157%	162	2,117	170%
Southwestern Oregon OED Region	135	1,474	114%	140	1,519	122%

MHSA Social Worker	2017			2027		
Geographic Region	Employment	Population Ratio	Reg / State Deviation	Employment	Population Ratio	Reg / State Deviation
State of Oregon	2,304	1,779	100%	2,684	1,719	100%
East Cascades OED Region	211	1,656	93%	237	1,671	97%
Eastern Oregon OED Region	36	5,290	297%	38	5,395	314%
Lane OED Region	243	1,515	85%	276	1,453	84%
Mid-Valley OED Region	568	1,155	65%	637	1,190	69%
Northwest Oregon OED Region	81	3,140	176%	94	2,930	170%
Portland Tri-County OED Region	911	1,953	110%	1,100	1,839	107%
Rogue Valley OED Region	nc	nc	nc	nc	nc	nc
Southwestern Oregon OED Region	128	1,555	87%	135	1,576	92%

Note: "nc" means that estimate or projection and associated metrics could not be calculated.

Source:
Oregon Employment Department, Oregon Occupational Projections, 2017-2027.
Oregon Department of Administrative Services, Office of Economic Analysis, County Population Forecast, 2010-2050

Prepared by: Oregon Center for Nursing, August 2018

Appendix B
Annual Job Openings and Rank[§], 2014

Registered Nurse**

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	33,421	1,284	1
Clackamas	2,159	89	2
East Cascades	2,709	126	1
Eastern Oregon	1,080	37	1
Lane	3,017	133	1
Mid-Valley	4,111	164	1
Northwest Oregon	1,427	51	1
Portland Metro	14,433	508	2
Rogue Valley	2,290	82	1
Southwestern Oregon	1,500	50	1

Nurse Practitioner*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	1,447	84	9
Clackamas	149	10	4
East Cascades	101	6	8
Eastern Oregon	41	2	11
Lane	89	6	17
Mid-Valley	174	10	15
Northwest Oregon	73	3	16
Portland Metro	621	33	11
Rogue Valley	113	6	6
Southwestern Oregon	58	3	8

Physical Therapist*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,750	177	3
Clackamas	249	16	3
East Cascades	287	15	1
Eastern Oregon	119	5	2
Lane	279	14	3
Mid-Valley	346	17	4
Northwest Oregon	168	9	4
Portland Metro	941	54	6
Rogue Valley	233	10	3
Southwestern Oregon	92	4	4

Appendix B
Annual Job Openings and Rank[§], 2014

Radiologic Technologist***

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,095	64	9
Clackamas	176	6	9
East Cascades	159	5	7
Eastern Oregon	106	3	2
Lane	204	8	6
Mid-Valley	236	8	7
Northwest Oregon	126	3	7
Portland Metro	773	21	11
Rogue Valley	154	4	7
Southwestern Oregon	112	3	3

Medical Clinical Laboratory Technologist**

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,157	83	45
Clackamas	79	3	58
East Cascades	152	5	33
Eastern Oregon	78	3	21
Lane	154	7	37
Mid-Valley	209	7	46
Northwest Oregon	102	3	41
Portland Metro	1,157	43	47
Rogue Valley	126	4	28
Southwestern Oregon	75	2	21

Mental Health Counselor*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,635	114	5
Clackamas	122	4	9
East Cascades	80	4	14
Eastern Oregon	142	5	3
Lane	250	10	7
Mid-Valley	277	10	14
Northwest Oregon	14	0	37
Portland Metro	1,497	61	4
Rogue Valley	--	--	--
Southwestern Oregon	142	4	1

Appendix B
Annual Job Openings and Rank[§], 2014

MHSA Social Worker*

Geographic Region	2014 Employment	Job Opening Survey	Rank[§]
State of Oregon	2,103	91	8
Clackamas	--	--	--
East Cascades	210	8	6
Eastern Oregon	26	1	22
Lane	291	13	5
Mid-Valley	552	18	3
Northwest Oregon	93	4	12
Portland Metro	649	31	12
Rogue Valley	104	4	10
Southwestern Oregon	101	3	7

[§]Job Opening Rank based on rank within entry level education category as defined below:
*Graduate degree
**Bachelor's Degree
***Associate Degree

Source: Oregon Employment Department, Job Opening Survey, 2014

Prepared by: Oregon Center for Nursing, May 2018

Appendix C
Educational Opportunities and Capacity by Occupation

Registered Nurse

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Concordia University	Portland	69	97	28	92	75%
George Fox University	Newberg	48	142	46	82	59%
Linfield College	Portland	198	342	186	671	30%
OHSU	Portland	344	798	374	1,735	20%
University of Portland	Portland	265	614	185	2,194	12%
Walla Walla University	Portland	72	174	64	141	51%
BSN Program Subtotal	Statewide	996	2,167	883	4,915	20%
RN to BSN Program Subtotal	Statewide	109	199	104	109	100%
ADN Program Subtotal	Statewide	635	1,238	583	2,852	22%
Registered Nurse		1,740		1,570	7,876	22%

Nurse Practitioner

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
OHSU (Master's Advanced Prac)	Portland	10	10	15	45	22%
OHSU (DNP)	Portland	10	29	45	10	100%
Univerity of Portland (DNP)	Portland	9	11	29	26	35%
Nurse Practitioner		29		89	81	36%

Physical Therapist

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
George Fox University	Newberg	44	130	44	500	9%
Pacific University	Forest Grove	50	145	48	1,145	4%
Physical Therapist		94		92	1,645	6%

Radiologic Technologist

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Oregon Institute of Technology	Klamath Falls	48	152	45	100	48%
Radiologic Technologist		48		45	100	48%

Medical Clinical Laboratory Technologist

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Oregon Institute of Technology	Wilsonville	50	196	47	82	61%
MCLT		50		47	82	61%

Appendix C
Educational Opportunities and Capacity by Occupation

Mental Health Counselor

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
Mental Health Counseling (MA)						
Corban University	Salem	18	n/a	15	24	75%
George Fox University	Newberg	50	62	36	80	63%
Lewis & Clark College	Portland	40	80	41	125	32%
Multnomah University	Portland	n/a	n/a	n/a	n/a	
Northwest Christian Univ	Eugene	n/a	n/a	n/a	n/a	
Oregon State University	Corvallis	18	13		51	35%
Portland State University	Portland	15	50	12	159	9%
Southern Oregon University	Ashland	22	40	21	63	35%
University of Oregon	Eugene	10	50	6	225	4%
Western Seminary	Portland	35	100	35	40	88%
Doctor of Psychology (PsyD)						
George Fox	Newberg	28	n/a	24	125	22%
Pacific University	Hillsboro	55	n/a	56	280	20%
Mental Health Counselor		291	395	246	1,172	25%

Mental Health/Substance Abuse Social Worker

School/Program	City	Number Admitted	Total Enrollment	Number Graduated	Number Applications	Acceptance Rate
George Fox University	Newberg	58	90	44	n/a	
Pacific University	Eugene	25	40	n/a	n/a	
Portland State University	Portland	275	560	260	800	34%
Warner Pacific College	Portland	10	18	9	10	100%
MHSA Social Worker		368		313	810	35%

Note: For Registered Nurses; BSN = Bachelor's of Science in Nursing, ADN = Associates Degree in Nursing.
Note: For Registered Nurses only BSN schools are individually listed with OCNE degrees listed under OHSU.
Note: For MHSA Social Worker, the number admitted to George Fox Univeristy and Pacific Univeristy were not included in the acceptance rate calculation.

Source: Data were collected via website or phone call to each educational institution.

Prepared by: Oregon Center for Nursing August 2018